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EVALUATION OF USER EXPERIENCE ONLINE MOBILE APPLICATION FOR ORDERING CINEMA TICKETS USING THE USER EXPERIENCE QUESTIONNAIRE METHOD

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Abstract

The mobile ticketing application makes it easy for film viewers to order movie tickets online without time or location restrictions. In Indonesia, there are three online cinema ticket mobile application which is widely used by audiences cinema namely M-Tix, TIX ID and Mtx. All three are competitors in the market the same, namely the mobile ticketing service for purchasing cinema tickets. Observation results shows that the number of one star reviews for the M-Tix, TIX ID mobile application and there are still quite a lot of Mtx on the Google Play Store, the reviews are generally there related to user experience issues. This research aims to output the results of evaluating user experience on the M-Tix mobile application, TIX ID and Mtx uses the User Experience Questionnaire (UEQ). This research has criteria for respondents who are M-Tix, TIX ID and Mtx mobile application users at least 18 years old. This research shows that the results of experience evaluation users on the M-Tix mobile application, namely the Attractiveness variable (Mean = 2.176), Perspicuity (Mean = 1.150), efficiency (Mean = 2.176), Dependability (Mean = 2.082), Stimulation (Mean = 2.075), and Novelty (Mean = 1.821). Experience evaluation results users on the TIX ID mobile application based on variable UEQ measurements Attractiveness (Mean = 1.786), Perspicuity (Mean = 0.991), efficiency (Mean = 1.920), Dependability (Mean = 1.723), Stimulation (Mean = 1.402), and Novelty (Mean = 1.277). And the results of the evaluation of the Cinopolis user experience Attractiveness (Mean = 2.273), Perspicuity (Mean = 1.159), efficiency (Mean = 2.330), Dependability (Mean = 2.216), Stimulation (Mean = 2.284), and Novelty (Mean = 2.000).

Keywords: Evaluation of User Experience, Cinema Ticket Mobile Application, User Experience Questionnaire (UEQ).

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1. INTRODUCTION (UPPERCASE, 10pt, bold)

Smartphones are one of the most important needs in this rapidly developing era. Apart from that, advances in internet technology have also become a symbol of a way of communication that is free and not limited by space, distance and time. So when combined with smartphones and the internet, all activities and work make people more practical than before. When all work is done more practically, smartphones will not be separated from mobile applications. Apart from that, current technology trends lead to the use of the most widely used mobile applications, such as social media, which reaches 92 million users or 32 percent of Indonesia's population. In fact, currently the population of Indonesia is

dominated by the younger generation and remains updated with the latest technology, so it is very important for us to adapt to current technological developments [1].

Based on survey results from the Indonesian Internet Service Providers Association (APJII), internet users in Indonesia reached 215.63 million people in the 2022-2023 period. This number increased by 2.67% compared to the previous period which was 210.03 million users. The number of internet users is equivalent to 78.19% of Indonesia's total population of 275.77 million people. The percentage is 1.17% points higher than in 2021-2022 which was 77.02%. Based on gender, the internet penetration rate for men in Indonesia is 79.32%. This figure is higher than internet penetration for women which is 77.36%. Meanwhile, the internet penetration

rate in urban areas will be 77.36% in 2022-2023. The percentage is also better than in rural areas which is 79.79% [2].



Figure 1. number of internet users in Indonesia

In the current era of globalization, most of the activities carried out by humans are assisted by technology, starting from basic activities such as shopping for daily necessities to tertiary activities such as enjoying entertainment. Watching films is one of them. Now, people no longer need to go to the cinema just to see what films are currently showing in the cinema and see the film showing schedule and available seats. The existence of various official applications from Indonesian cinema companies makes it very easy for Indonesian film lovers because they can see the titles of films currently showing and their broadcast schedules. In fact, they can also buy tickets online without queuing. This has been proven to increase the interest of Indonesian people in watching films in cinemas because it can save the time they spend ordering cinema tickets [3]. Customers only need to register on the application by filling in their personal data (name, email, telephone number), then customers can order tickets by selecting the show time and seat they want. After ordering tickets, customers can print tickets on the machines provided at the intended cinema.

With economic development, the level of competition for companies in the industry is currently increasing. That is why entrepreneurs are now starting to compete to continue to innovate with online applications for ordering cinema tickets so as not to cause long queues. There are several online applications in Indonesia that provide cinema ticket transaction services, namely, BookMyShow, CGV Cinemas Indonesia, Cinepolis Indonesia, Cinema 21 (MTix), Go Tix and TixID.

With increasing public interest in watching films, cinemas were built. A cinema is a place where you can watch films on the big screen. With the development of information technology, almost all cities in Indonesia have cinemas, also stated that cinemas were originally theater buildings starting to appear in malls now because currently their existence is considered an entertainment center with its own attraction. Especially for Generation Z or families who need entertainment amidst their busy daily activities. Before watching a film, you must first order cinema tickets for the desired film. This ticket ordering can be done directly or indirectly, namely through the online

cinema ticket ordering application which can be used on Android or iOS[4].

The number of cinema screens to date is still 2,088 screens in 417 cinemas. "For example, without a pandemic, the number (2,088) of cinema screens could reach 3,000 screens. Referring to GPBSI data, as of February 2022, the number of cinema layers is still dominated by Cinema XXI with 1,200 screens in 223 cinemas, CGV Indonesia 386 screens in 66 cinemas and Cinepolis with 314 screens in 63 cinemas. There are still 17 other cinemas with an average of less than two layers per cinema [5].

The level of competition between the Cinepolis, M-Tix and TIX ID applications is increasingly high because the three applications are competitors in the same market, namely online ticket booking services. Currently M-TIX has the lowest rating on the Google Play Store (at 3.6) when compared to TIX ID (at 4.6) and Cinepolis (at 4.8).

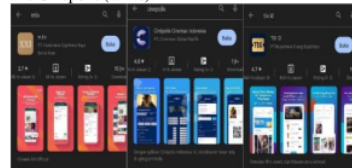


Figure 2. Rating of cinema ticket applications on Play Store

Based on observations of the M-TIX application assessment on the Google Play Store, users complained about problems with payments and top ups on the M-TIX application. The following are examples of complaints experienced by users through reviews on the Google Play Store.

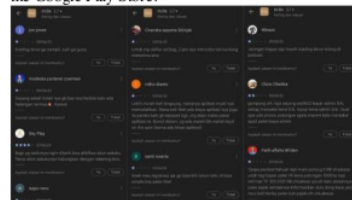


Figure 3. M-tix application user ratings

Therefore, in order for the M-TIX online cinema ticket application to improve user experience, it is necessary to evaluate the level of user experience. Apart from that, this research is the beginning of measuring the user experience of online cinema tickets using UEQ.

User Experience (UX) evaluation is an important basis in product design that serves as a strategy to maintain product superiority in the market. The results of the UX evaluation can be used as comparative data for the application with its competitors in the market. Comparative UX evaluation data is useful for user experience designers (UX designers) to determine

areas for improvement of existing problems. Companies tend to prioritize evaluation results based on real evidence of their product data compared to competitor products compared to evaluations based on assumptions, suggestions or personal opinions.

2. RESEARCH METHOD

D In this research, researchers used M-tix, TIX ID and Cinepolis Indonesia as a research object in evaluating User Experience using User Experience Questionnaire. Research stages use diagrams to make it easy to understand and understood.

Each research step is described as follows:

1. Literature Study

The literature study used in this research is by studying research related to the use of UEQ in particular to find out more about how implementation and measurement of user experience using UEQ. Users The Experience Questionnaire (UEQ) was used to enable assessment quickly done by the end user to get an impression comprehensive user experience.

2. Data Collection

Data collection in this research was carried out using a survey through distributing questionnaires to respondents. Distribution of this questionnaire in do it using social media such as WhatsApp, Instagram with Use Google Form to fill it out. After the questionnaire is distributed, Users fill out a questionnaire according to their opinions and experiences when using it the online cinema ticket application they use.

3. Data Processing

Data processing in this study, researchers used UEQ, to process the data At this stage, use Excel which has been obtained from the UEQ website Finished.

4. Data Analysis

Data analysis carried out in this research used calculations on Questionnaire data collected from cinema ticket application users on line. The collected data was then analyzed using UEQ tools to make calculations easier.

5. Conclusions and Suggestions

2.1 ASSESSMENT INDICATOR

Table 1. Assessment Indicator

Variabel	Indikator	Kode	
Daya Tarik (attractiveness)	Menyusahkan	Menyenangkan	ATT1
	Baik	Buruk	ATT2
	Tidak disukai	Menggemirakan	ATT3
	Tidak nyaman	Nyaman	ATT4
	Atraktif	Tidak atraktif	ATT5
	Ramah	Tidak ramah	ATT6
Kejelasan (perspicuity)	Suguna	pengguna	PER1
	Tidak dapat dipahami	Dapat dipahami	PER2
Efisiensi (efficiency)	Mudah dipelajari	Sulit dipahami	PER3
	Cepat	Sederhana	PER4
	Tidak efisien	Membingungkan	EFF1
	Tidak praktis	Praktis	EFF2
	terorganisasi	Berantakan	EFF3
			EFF4

	Tidak dapat diprediksi	Dapat diprediksi	DEP1
Keandalan (dependability)	Menghalangi	Mendukung	DEP2
	Aman	Tidak aman	DEP3
	Memenuhi eksptasi	Tidak memenuhi eksptasi	DEP4
	Bermanfaat	Kurang bermanfaat	ST11
Simulasi (simulation)	Membosankan	Mengasyikan	ST12
	Tidak menarik	Menarik	ST13
	Memotivasi	Tidak memotivasi	ST14
	Kreatif	Monoton	NOV1
Kebanuan (Novelty)	Berdaya cipta	Konvensional	NOV2
	Lazim	Terdepan	NOV3
	konservatif	Inovatif	NOV4

2.2 Data Analysis

The User Experience Questionnaire is a questionnaire with results can be used in usability testing to measure the level of user experience product quickly.

Researchers collect data by distributing respondent questionnaires. The UEQ questionnaire consists of 26 questions and there are 6 UX factors, namely attractiveness (Attractiveness), clarity (Perspicuity), efficiency (Efficiency), accuracy (Dependability), stimulation (Stimulation) and novelty (Novelty).



Figure 4. UEQ Questionnaire

The UEQ evaluation process begins by asking respondents to use it online cinema ticket booking application and try all the features of the booking application M-tix, TIX.ID and Cinepolis online cinema tickets. This is done so that users can get good feedback from accurate UEQ results. Users can fill in

UEQ corresponds to how they feel when using the website, incl function, color, type of font, layout, and others. After using the app, Users are asked to fill out the UEQ questionnaire using the form provided

3 users. Completion of the questionnaire is based on UEQ provisions, namely Point 7 is not always the highest score in this questionnaire[6].

The data that has been collected from respondents is then entered into UEQ Tools Data Analysis and used as input values to calculate UX values. Testing reliability of questionnaire data with coefficients, describing consistency for the entire scale of UX factors.



Figure 5. Data Collection Process Using UEQ

3. RESULT AND DISCUSSION

When creating a questionnaire, these questions are designed based on indicators found in UEQ. This questionnaire is also accompanied by questions about the data demographic. The following is the questionnaire that used in this research.

A. Respondent Profile

1. Name:
2. Gender: Male Female
3. Age: 18-22 23-27 28-32 33-37 >38
4. Occupation: Student civil servant Private Employees Others

B. General Questions

1. Which cinema ticket application do you often use?
 M-tix Tix ID Cinepolis Cinema Indonesia
2. How many times have you used the application to buy tickets cinema?
 1-3 times 4-8 times > 8 times
3. How long have you been using the application?
 <6 months 6-12 months >8 months

3.1 UEQ Questionnaire

Please evaluate the application you use to order cinema tickets by selecting 1 circle per row item. You can express approval of existing attributes by selecting more circles close to your impression.

1. Troublesome Fun
2. Unintelligible Understandable
3. Creative Monotonous
4. Easy to Learn Hard to Learn
5. Useful Less Useful
6. Boring Exciting
7. Not Interesting Interesting
8. Unpredictable Predictable
9. Fast Slow
10. Creative Power Conventional
11. Hindering Supporting
12. Good Bad
13. Complicated Simple
14. Disliked Exciting

15. Common Leading
16. Uncomfortable Comfortable
17. Safe Not Safe
18. Motivating Not Motivating
19. Meets Expectations Does Not Meet Expectations
20. Inefficient Efficient
21. Obvious Confusing
22. Not Practical Practical
23. Organized Messy
24. Attractive Not Attractive
25. User Home Not User Friendly
26. Conservative Innovative

The diagram in Figure 5 shows that the majority of respondents in this study used Tix ID, namely 70 respondents with a presentation of 59%, respondents who used Mtx were 28 respondents with a presentation of 23%, and those who used Cinepolis were 20 respondents with a presentation of 18%

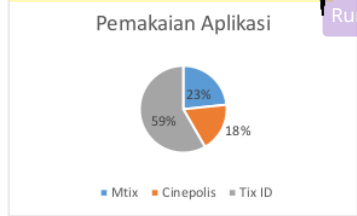


Figure 5. application usage

Based on the results of user experience evaluations carried out with using UEQ, then the recommendations given for cinema ticket applications online Tix ID, Mtx, Cinepolis is providing more online cinema ticket services can be easy to learn, simpler and clearer, so that the value of the variable perspicuity can be better

4. CONCLUSION

Based on the results of the User Experience evaluation on the Tix ID application with using descriptive statistics on each variable measuring user experience with UEQ gets positive results, namely the variables Attractiveness (Mean = 2.176), Perspicuity (Mean = 1.150), efficiency (Mean = 2.176), Dependability (Mean = 2.082), Stimulation (Mean = 2.075), and Novelty (Mean = 1.821). Benchmark results for This application shows that there are 5 variables that go into it excellent category, namely the variables Attractiveness, Perspicuity, efficiency, Dependability, Stimulation, and Novelty. The perspicuity variable goes inside category below average. conclusion there should be no reference.

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User Experience evaluation results on the Mtx application using descriptive statistics on each variable that measures users experience with UEQ obtained positive results, namely variable

Attractiveness (Mean = 1.786), Perspicuity (Mean = 0.991), efficiency (Mean = 1.920), Dependability (Mean = 1.723), Stimulation (Mean = 1.402), and Novelty (Mean = 1.277). The benchmark results for this application show that there are 2 variables that fall into the excellent category, namely efficiency variable, Dependability. Attractiveness, Stimulation, and variables Novelty is included in the good category. Meanwhile, the perspicuity variable fall into the below average category.

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