JIKO (Jurnal Informatika dan Komputer)
Vol. 6, No. 3, December 2023, pp. 203-208
DOI: 10.33387/jiko.v6i3.7015

Accredited KEMENDIKBUD RISTEK, No.105/E/KPT/2022
p-ISSN: 2614-8897
e-ISSN: 2656-1948

EXPERIENCE EVALUATION OF ONLINE CINEMA TICKET APPLICATIONS WITH USER EXPERIENCE QUESTIONNAIRE

Yasmin Nur Choirunisa[1], Muhamad Ryansyah[2]

[1,2]Information Systems, Information Technology Faculty, Nusa Mandiri University
*Email: [1]yasminnurc01@gmail.com , [2]muhamad.mur@nusamandiri.ac.id

(Received: 23 November 2023, Revised: 1 December 2023, Accepted: 8 December 2023)

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 cinemas, namely M-Tix, TX ID and Mtix. 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, TX ID mobile application and there are still quite a lot of Mtix on the Google Play Store, the reviews are generally there related to user experience issues. This research aims to find out the results of evaluating user experience on the M-Tix mobile application, TIX ID and Mtix uses the User Experience Questionnaire (UEQ). This research has criteria for respondents who are M-Tix, TIX ID and Mtix 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 Cinepolis 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*

**Corresponding Author: Muhamad Ryansyah*

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].

Mobile applications are applications designed to run on smartphones or other mobile devices. Mobile applications offer several advantages to their users, namely they are portable, easy to use, and can be accessed from anywhere and everywhere. Users of mobile devices and download mobile applications for free or for a fee over wireless networks from mobile software application stores.[2]

Mobile ticketing is a great way to document the sales process of the customer journey without the need for physical documents or paper tickets.[3]

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% [4].

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 [5]. 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[6].

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 [7].

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).

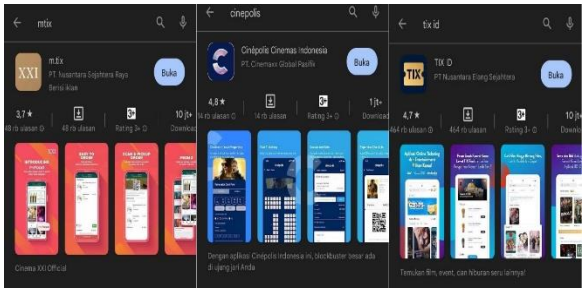

Figure 2. Rating of cinema ticket applications on Play Store

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.

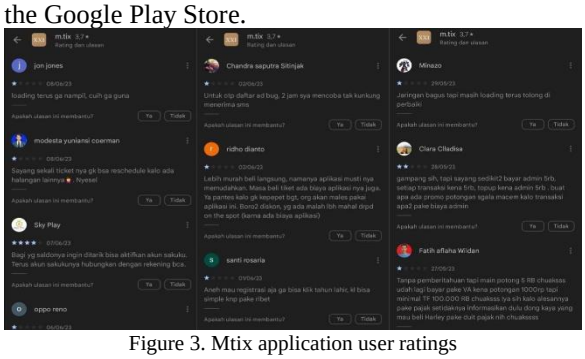

Figure 3. Mtix application user ratings

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.

Evaluation is part of the overall learning process cannot be separated from teaching activities, carrying out evaluations In educational activities it has a very important meaning, because evaluation is measuring tools or processes to determine the level of success that has been achieved students on the teaching materials or materials that have been delivered, so that with With evaluation, the objectives of learning will be seen accurately and convincing.[8]

The user experience questionnaire (UEQ) is a questionnaire that is widely used to measure users' subjective impressions of product user experience. The UEQ is a semantic differential with 26 items. Filling in the UEQ takes approximately 3-5 minutes, that is, the UEQ is quite efficient in terms of the time needed to answer all items.[9]

The success of a software product can not only be used in terms of its function and completeness of the software, but what is no less important is the overall user experience in using the software.[10]

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

In his research, the researcher used quantitative research methods, the quantitative approach method is said to be a traditional method, because this method has been used for quite a long time so that it has become a tradition as a research method. This method is also called a positivistic method because it is based on the philosophy of positivism. This method is used to research certain populations or samples, data collection is carried out using research instruments. Quantitative or statistical data analysis is the aim of testing predetermined hypotheses.[11]

Quantitative research emphasizes objective phenomena and is studied quantitatively. Maximizing the objectivity of this research design was carried out using numbers, statistical processing, structure and controlled experiments.[12]

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 read or 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 methods and tools are the techniques and tools used in research to collect various data which are processed quantitatively or qualitatively, then arranged systematically. Data collection is defined as research activities that aim to collect field data needed to answer research questions in qualitative research or to test hypotheses in quantitative research. Research instruments are tools that use various types of information in research to be collected, processed quantitatively or qualitatively and then arranged systematically.[13]

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 is the manipulation of data into a form that is more useful and more meaningful, in the form of something information using an electronic device, namely a computer.[14]

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

UEQ (User Experience Questionnaire) is an easy and efficient tool or questionnaire for measuring User Experience (UX). UEQ makes it easier for us to measure UX in an application design. UEQ contains 6 assessment scales, including:

Table 1. Assessment Indicator

Variabel	Indikator		Kode
	Menyusahkan	Menyenangkan	ATT1
	Baik	Buruk	ATT2
Daya Tarik	Tidak disukai	Mengembirakan	ATT3

(*attractiveness*)	Tidak nyaman	Nyaman	ATT4
	Atraktif	Tidak atraktif	ATT5
	Ramah pengguna	Tidak ramah pengguna	ATT6
	Tidak dapat dipahami	Dapat dipahami	PER1
Kejelasan (*perspicuity*)	Mudah dipelajari	Sulit dipahami	PER2
	Rumit	Sederhana	PER3
	Jelas	Membingungkan	PER4
	Cepat	Lambat	EFF1
Efisiensi	Tidak efisien	Efisien	EFF2
(*efficiency*)	Tidak praktis terorganisasi	Praktis Berantakan	EFF3
			EFF4
	Tidak dapat diprediksi	Dapat diprediksi	DEP1
Keandalan	Menghalangi	Mendukung	DEP2
(*dependability*)	Aman	Tidak aman	DEP3
	Memenuhi ekspetasi	Tidak memenuhi ekspetasi	DEP4
	Bermanfaat	Kurang bermanfaat	STI1
Simulasi (*simulation*)	Membosankan	Mengasyikan	STI2
	Tidak merarik	Menarik	STI3
	Memotivasi	Tidak memotivasi	STI4
	Kreatif	Monoton	NOV1
Kebaruan	Berdaya cipta	Konvensional	NOV2
(*Novelty*)	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 collected 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).

	1	2	3	4	5	6	7		
menyusahkan	O	O	O	O	O	O	O	menyenangkan	1
tak dapat dipahami	O	O	O	O	O	O	O	dapat dipahami	2
kreatif	O	O	O	O	O	O	O	monoton	3
mudah dipelajari	O	O	O	O	O	O	O	sulit dipelajari	4
bermanfaat	O	O	O	O	O	O	O	kurang bermanfaat	5
membosankan	O	O	O	O	O	O	O	mengasyikkan	6
tidak menarik	O	O	O	O	O	O	O	menarik	7
tak dapat diprediksi	O	O	O	O	O	O	O	dapat diprediksi	8
cepat	O	O	O	O	O	O	O	lambat	9
berdaya cipta	O	O	O	O	O	O	O	konvensional	10
menghalangi	O	O	O	O	O	O	O	mendukung	11
baik	O	O	O	O	O	O	O	buruk	12
rumit	O	O	O	O	O	O	O	sederhana	13
tidak disukai	O	O	O	O	O	O	O	menggembirakan	14
lazim	O	O	O	O	O	O	O	terdepan	15
tidak nyaman	O	O	O	O	O	O	O	nyaman	16
aman	O	O	O	O	O	O	O	tidak aman	17
memotivasi	O	O	O	O	O	O	O	tidak memotivasi	18
memenuhi ekspektasi	O	O	O	O	O	O	O	tidak memenuhi ekspektasi	19
tidak efisien	O	O	O	O	O	O	O	efisien	20
jelas	O	O	O	O	O	O	O	membingungkan	21
tidak praktis	O	O	O	O	O	O	O	praktis	22
terorganisasi	O	O	O	O	O	O	O	berantakan	23
atraktif	O	O	O	O	O	O	O	tidak atraktif	24
ramah pengguna	O	O	O	O	O	O	O	tidak ramah pengguna	25
konservatif	O	O	O	O	O	O	O	inovatif	26

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 Mtix, 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 writing, layout, and others. After using the app, Users are asked to fill out the UEQ questionnaire using the form provided for users. Completion of the questionnaire is based on UEQ provisions, namely Point 7 is not always the highest score in this questionnaire[15].

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 format used in this research.

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

B. General Questions
1. Which cinema ticket application do you often use?
O M-tix O Tix ID
O Cinepolis Cinema Indonesia
2. How many times have you used the application to buy tickets
cinema?
O 1-4 times O 4-8 times O > 8 times
3. How long have you been using the application?
O <6 months O 6-12 months O >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 O O O O O O O Fun
2. Unintelligible O O O O O O O Understandable
3. Creative O O O O O O O Monotonous
4. Easy to Learn O O O O O O O Hard to Learn

5. Useful O O O O O O O Less Useful
6. Boring O O O O O O O Exciting
7. Not Interesting O O O O O O O Interesting
8. Unpredictable O O O O O O O Predictable
9. Fast O O O O O O O Slow
10. Creative Power O O O O O O O Conventional
11. Hindering O O O O O O O Supporting
12. Good O O O O O O O Bad
13. Complicated O O O O O O O Simple
14. Disliked O O O O O O O Exciting
15. Common O O O O O O O Leading
16. Uncomfortable O O O O O O O Comfortable
17. Safe O O O O O O O Not Safe
18. Motivating O O O O O O O Not Motivating
19. Meets Expectations O O O O O O O Does Not Meet Expectations
20. Inefficient O O O O O O O Efficient
21. Obvious O O O O O O O Confusing
22. Not Practical O O O O O O O Practical
23. Organized O O O O O O O Messy
24. Attractive O O O O O O O Not Attractive
25. User Home O O O O O O O Not User Friendly
26. Conservative O O O O O O O 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 Mtix were 28 respondents with a presentation of 23%, and those who used Cinepolis were 20 respondents with a presentation of 18%.

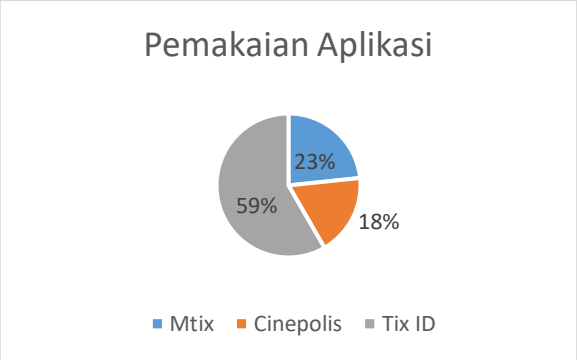

Figure 5. application usage

Based on the results of user experience evaluations carried out withusing UEQ, then the recommendations given for cinema ticket applications online Tix ID, Mtix, 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. User Experience evaluation results on the Mtix 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.

5. REFERENCES

[1] D. Yolanovia and A. D. Indriyanti, "Evaluasi User Experience Aplikasi TIX ID Menggunakan Metode Heuristic Evaluation," *J. Emerg. Inf. Syst. Bus. Intellligence*, vol. 02, no. 03, pp. 8–13, 2021.

[2] S. Sarnita, "Pengguna Internet Indonesia 215,63 juta pada 2022-2023,"Dataindonesia.Id, 2023. https://dataindonesia.id/digital/detail/apjii-penggunainternet-indonesia-21563-juta-pada-20222023

[3] R. A. Murdiono, H. Tolle, and A. P. Kharisma, "Evaluasi User Experience Pada Aplikasi Mobile Penjualan Tiket Online," *J. Pengemb. Teknol. Inf. dan Ilmu Komput.*, vol. 2, no. 5, pp. 2078–2085, 2018, [Online]. Available: http://j-ptiik.ub.ac.id

[4] S. H. Liao and C. H. Ho, "Mobile Payment and Mobile Application (App) Behavior for Online Recommendations," J. Organ. End User Comput., vol. 33, no. 6, 2021, doi: 10.4018/JOEUC.20211101.oa2.

[5] N. Ameniar, H. Prastawa, and Z. F. Rosyada, "Evaluasi User Experience Menggunakan Metode User Experience Questionnaire (Ueq) Dan Penerapan Kansei Engineering Pada Aplikasi Cinepolis Cinemas Indonesia," pp. 1–8, 2022.

[6] I. Adhani, Y. Susilawati, and Ruswianti, "Persepsi Generasi Z Terhadap Aplikasi Pemesanan Tiket Bioskop Secara Online," *Transekonomika Akuntansi, Bisnis dan Keuang.*, vol. 2, no. 5, pp. 121–130, 2022, doi: 10.55047/transekonomika.v2i5.175.

[7] christian willy medi, "Tahun 2023, penonton film indonesia ditargetkan pecahkan rekor baru," kompas.id, 2023. [Online]. Available: https://www.kompas.id/baca/humaniora/2023/01/04/tahun-2023-penonton-filmindonesia ditargetkan-pecahkan

rekorbaru?utm_source=kompasid&utm_medium=link_shared&utm_content=copy_link&utm_campaign=sharinglink

[8] L, Idrus. (2019). Evaluasi Dalam Proses Pembelajaran. Adaara: *Jurnal Manajemen Pendidikan Islam*, 9(2), 920–935. https://doi.org/10.35673/ajmpi.v9i2.427

[9]Schrepp, M., Hinderks, A., & Thomaschewski, J. (2017b). Design and Evaluation of a Short Version of the User Experience Questionnaire (UEQ-S). *International Journal of Interactive Multimedia and Artificial Intelligence*, 4(6), 103. https://doi.org/10.9781/ijimai.2017.09.001

[10]Zarour, M., & Alharbi, M. (2017). User experience framework that combines aspects, dimensions, and measurement methods. *Cogent Engineering*, 4(1). https://doi.org/10.1080/23311916.2017.1421006

[11] Prof. Dr. Sugiyono, Metode Penelitian Kuantitatif, kualitatif dan R&D. 2013.

[12] asep saepul hamdi e. baharudin, Metode Penelitian Kuantitatif Aplikasi dalam Pendidikan. 2015. [Online]. Available: https://www.google.co.id/books/edition/Metode_Penelitian_Kuantitatif_Aplikasi_d/nhwaCgAAQBAJ?hl=id&gbpv=0 https://doi.org/10.55215/jppguseda.v6i1.7527

[13] Salmia, S. S. (2023). Development of Quality Instruments and Data Collection Techniques. *Jurnal Pendidikan Dan Pengajaran Guru Sekolah Dasar (JPPGuseda)*, 6(1), 119–124.

[14] Aniskurlillah, A. S. S. (2016). Perancangan Aplikasi Pembelajaran Elektronik Data Processing Dengan Menggunakan Metode Computer Based Learning. *JURIKOM (Jurnal Riset Komputer)*, 3(1), 42–45. https://ejurnal.stmikbudidarma.ac.id/index.php/jurikom/article/view/49

[15] A. Hinderks, M. Schrepp, and J. Thomaschewski, "A benchmark for the short version of the user experience questionnaire," *WEBIST 2018 - Proc. 14th Int. Conf. Web Inf. Syst. Technol., no. Webist*, pp. 373–377, 2018, doi: 10.5220/0007188303730377.