

User Experience Analysis on Jamsostek Application Using the UEQ Method

Noer Azni Septiani¹, Cindy Olivia²

Abstract

BPJS Ketenagakerjaan developed the Jamsostek Mobile (JMO) application to provide employment social security services in Indonesia. The application has been downloaded by more than 10 million users and maintains a relatively high rating on the Google Play Store. However, users still report several problems related to system performance, feature functionality, and service quality. Common issues include difficulties in updating personal data, checking account balances, and logging into user accounts. These problems indicate the need to evaluate the user experience of the application. Therefore, this study analyzes the user experience of the JMO application and identifies aspects that require improvement. This study applies the User Experience Questionnaire (UEQ) method because it evaluates six key dimensions of user experience: attractiveness, perspicuity, efficiency, dependability, stimulation, and novelty. We collected data from 100 active JMO users and analyzed their responses using the UEQ framework. The results show positive evaluations across all dimensions, with mean scores of 2.140 for attractiveness, 2.283 for perspicuity, 2.280 for efficiency, 1.910 for dependability, 2.145 for stimulation, and 1.790 for novelty. The benchmark analysis places all dimensions in the Excellent category, indicating a highly positive user experience. The findings show that users perceive the JMO application as attractive, easy to understand, efficient, reliable, motivating, and innovative. This paper provides practical insights for developers and supports future improvements to enhance user satisfaction and service quality.

Keywords:

Evaluation, User Experience Analysis, UEQ, Jamsostek Mobile

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1. Introduction

The rapid development of digital technology encourages public service institutions to transform conventional services into mobile-based platforms. BPJS Ketenagakerjaan responds to this transformation by introducing the Jamsostek Mobile (JMO) application, which allows participants to access employment social security services efficiently through smartphones. The application provides various features, including membership information, contribution monitoring, balance checking, claim submission, and service consultations. As the number of users continues to increase, the quality of user interaction with the application becomes a critical factor in determining service success. Users expect not only functional services but also a pleasant, efficient, and satisfying experience when interacting with digital platforms. Therefore, evaluating user experience becomes essential to ensure that JMO effectively meets user expectations and supports the digitalization objectives of BPJS Ketenagakerjaan [1], [2].

Although JMO offers comprehensive digital services, several studies report that users still experience challenges when using the application. Research on JMO user satisfaction demonstrates that perceived ease of use and perceived usefulness significantly influence

overall satisfaction levels. Users tend to feel satisfied when the application provides intuitive navigation, understandable features, and efficient service processes. However, dissatisfaction emerges when users encounter difficulties in accessing services, understanding menus, or completing transactions. These findings indicate that technical functionality alone does not guarantee positive acceptance; instead, the overall experience during system interaction plays an important role in shaping user perceptions. Consequently, organizations need to evaluate experiential aspects beyond conventional measures of system performance [1], [3].

The effectiveness of JMO as a digital public service platform also depends on its ability to deliver services that are responsive, accessible, and convenient for participants. Studies conducted in Bandung reveal that JMO contributes positively to improving employment social security services by reducing administrative barriers and increasing accessibility. Nevertheless, some participants still encounter obstacles related to application usability, service responsiveness, and feature accessibility. Such conditions may affect users' willingness to continuously use the application and potentially reduce the perceived value of digital services. Therefore, service effectiveness should not only be assessed from organizational perspectives but also from the quality of user experiences generated during interaction with the application [2].

User feedback available on digital distribution platforms further highlights the importance of evaluating JMO from a user-centered perspective. Sentiment analysis studies on JMO reviews identify both positive and negative perceptions regarding application performance. Positive reviews generally emphasize convenience and service accessibility, whereas negative reviews frequently mention system errors, complicated processes, login issues, and difficulties in accessing certain features. The presence of these complaints indicates that users evaluate digital services not merely based on service outcomes but also based on the interaction process itself. As a result, understanding user experience becomes increasingly important for identifying strengths and weaknesses that may not be captured through traditional satisfaction measurements alone [4].

In addition to usability issues, complaint management remains an important factor influencing user perceptions of JMO. Effective handling of user complaints contributes significantly to maintaining trust and satisfaction among application users. Studies on complaint-handling strategies in JMO services emphasize the necessity of addressing technical problems quickly and providing responsive support mechanisms. When users experience unresolved difficulties, they may develop negative perceptions toward the application regardless of the quality of the underlying services. This condition suggests that improving user experience requires a comprehensive understanding of how users perceive efficiency, attractiveness, dependability, stimulation, and novelty throughout their interaction with the application [6].

User experience (UX) has emerged as an important research domain because it encompasses emotional, cognitive, and behavioral responses generated during interactions with digital systems. Previous studies demonstrate that positive user experiences significantly influence user satisfaction, loyalty, acceptance, and continued system usage. Research on mobile applications and information systems consistently shows that users are more likely to adopt and recommend applications that provide enjoyable and efficient experiences. Therefore, evaluating UX offers deeper insights than traditional usability assessments because it captures both pragmatic and hedonic dimensions of system interaction. This perspective becomes particularly relevant for public service applications such as JMO, where long-term user engagement is essential for service success. [9], [14].

Among various UX evaluation approaches, the User Experience Questionnaire (UEQ) has become one of the most widely adopted methods for measuring user perceptions. UEQ evaluates six dimensions of user experience, namely attractiveness, perspicuity, efficiency, dependability, stimulation, and novelty. Previous studies successfully apply UEQ to assess diverse systems, including government information systems, digital libraries, mobile banking applications, educational platforms, and entertainment applications. These studies

demonstrate that UEQ provides comprehensive and reliable measurements for identifying strengths and weaknesses in user interactions. Furthermore, UEQ enables benchmarking against established datasets, allowing researchers to compare application performance with broader industry standards. [7], [10], [11], [12], [13], [15], [16], [18], [19], [20], [21], [22].

Despite the growing number of studies related to JMO, most existing research focuses on user satisfaction, service effectiveness, sentiment analysis, complaint management, or usability evaluation. Limited studies specifically investigate JMO from a comprehensive user experience perspective using the UEQ framework. This gap creates an opportunity to examine how users perceive the application across both pragmatic and hedonic dimensions. Therefore, this study analyzes the user experience of the Jamsostek Mobile application using the User Experience Questionnaire method. The findings are expected to provide valuable insights for BPJS Ketenagakerjaan in improving application quality, enhancing user satisfaction, and supporting the continuous development of digital employment social security services in Indonesia. [3], [4], [6], [8].

2. Related Works

Maulana and Ilham investigated the influence of perceived ease of use and perceived usefulness on JMO user satisfaction in Palopo City. They found that both variables significantly affected user satisfaction, indicating that users valued applications that were easy to operate and beneficial for completing employment social security services. The study provided evidence of the importance of user perceptions in digital service adoption. However, the research focused primarily on satisfaction factors and did not evaluate broader user experience dimensions such as stimulation, novelty, or attractiveness. Therefore, the study offered limited insight into the overall quality of interaction between users and the JMO application [1].

Pradiya et al. examined the effectiveness of JMO in improving social security services in Bandung Regency. Their findings showed that JMO increased service accessibility and reduced administrative barriers for participants. The study demonstrated the positive contribution of mobile technology to public service delivery. Its strength lay in assessing service effectiveness from an operational perspective. However, the authors did not investigate users' emotional responses or interaction experiences while using the application. As a result, the study did not fully explain how the application design influenced user perceptions and acceptance [2].

Arisoemaryo and Prasetyo analyzed JMO user satisfaction using the End User Computing Satisfaction (EUCS) method. They reported that users generally expressed positive perceptions regarding content quality, accuracy, format, timeliness, and ease of use. The study provided useful information about user satisfaction with system outputs. Nevertheless, the EUCS framework focused mainly on satisfaction indicators and did not comprehensively assess hedonic and experiential aspects. Consequently, the research could not reveal deeper user experience issues that might affect long-term engagement with the application [3].

Kusuma Dewi et al. conducted sentiment analysis of JMO user reviews collected from the App Store using the Naïve Bayes algorithm. They identified both positive and negative sentiments regarding application performance. Positive reviews highlighted convenience and accessibility, while negative reviews focused on technical errors and service difficulties. The study effectively captured large-scale user opinions from real-world data. However, sentiment analysis only classified perceptions and did not measure specific UX dimensions. Therefore, the findings lacked detailed information about which aspects of the application required improvement from a user experience perspective [4].

Wulanjani explored complaint-handling strategies in JMO services to improve user satisfaction. The study emphasized the importance of responsive complaint management and effective communication between service providers and users. The findings suggested

that prompt problem resolution increased user trust and satisfaction. The research contributed valuable recommendations for service improvement. However, it primarily focused on customer service management rather than evaluating the application interface or interaction quality. Thus, the study did not provide a comprehensive assessment of the user experience generated by the JMO platform [6].

Prayoga et al. analyzed the user experience of the Jogjakita application using the User Experience Questionnaire (UEQ). They measured six UX dimensions, namely attractiveness, perspicuity, efficiency, dependability, stimulation, and novelty. Their results demonstrated that UEQ effectively identified strengths and weaknesses in the application. The study highlighted the capability of UEQ to evaluate both pragmatic and hedonic aspects of user interaction. However, the research focused on a city service application and did not examine employment social security services. Therefore, the findings could not be directly generalized to the JMO context [7].

Wulandari and Putri evaluated the usability of an ASN Management System using the UEQ method. Their results indicated that UEQ provided comprehensive measurements of user perceptions across multiple dimensions. The study demonstrated the effectiveness of UEQ in identifying areas requiring improvement and supporting user-centered system development. Its strength lay in offering structured benchmarking of user experience quality. Nevertheless, the research focused on an internal government information system with different user characteristics and service objectives from JMO. Consequently, the findings offered methodological guidance but limited contextual relevance to employment social security applications [10].

Ardian et al. performed usability testing on the JMO application using the Think Aloud method and Nielsen's usability matrix. They identified several usability issues related to navigation, task completion, and feature accessibility. The study provided detailed insights into user difficulties during task execution and generated practical recommendations for interface improvement. Its strength was the direct observation of user behavior during application usage. However, the evaluation concentrated on usability attributes and did not assess emotional and experiential factors. Therefore, a more comprehensive user experience evaluation remained necessary to understand how users perceived JMO across both functional and affective dimensions [8].

Previous studies examined JMO from perspectives such as satisfaction, effectiveness, sentiment analysis, complaint management, and usability evaluation. Other researchers successfully applied the UEQ method to various information systems and mobile applications. However, limited research specifically evaluated the Jamsostek Mobile application using the UEQ framework. This gap motivated the present study to analyze JMO user experience comprehensively through the six dimensions of the User Experience Questionnaire, thereby providing broader insights into the quality of user interaction and application performance.

3. Proposed Methods

The UEQ is one of the usability testing methods to collect quantitative data on user impressions of the user experience of a product[21]. This method is considered a simple and effective way to measure user experience. To assess the quality of an application, UEQ uses six rating scales: Attractiveness, Clarity, Efficiency, Reliability, Stimulation, and Novelty, to achieve the objectives of this study[22]. The proposed method in this study uses the UEQ as a tool to measure the user experience (User Experience) of the mobile social security application. The UEQ is a method that can be used to analyze and evaluate the quality of user experience of an application. This UEQ method helps to calculate questionnaire data related to the perception of the user experience of an application. Fig. 1 shows 26 questions to obtain subjective information in this study.

	1	2	3	4	5	6	7		
troublesome	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fun	1
incomprehensible	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	understandable	2
Creative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Monotony	3
Easy to learn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Difficult to learn	4
Helpful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Less useful	5
boring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Immersive	6
Unattractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Interesting	7
unpredictable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Predictable	8
Fast	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Slow	9
Inventive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Conventional	10
obstruction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Support	11
Good	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Bad	12
Rumor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Simple	13
Disliked	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Delightful	14
Commonly Used	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Leading the way	15
uncomfortable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Convenient	16
Safe	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Not safe	17
Motivate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Not motivating	18
Meet expectations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Not meeting expectations	19
inefficient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Efficient	20
Clear	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Confusing	21
Impractical	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Practical	22
Organized	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Mess	23
Attractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Unattractive	24
User-friendly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Not user-friendly	25
Conservative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Innovative	26

Fig.1: List of UEQ Questionnaires

In this study, the researcher carried out implementation steps from start to finish to analyze the User Experience on the JMO application using the UEQ method.

4. Experimental Setup

This study targeted active users of the Jamsostek Mobile (JMO) application in Tangerang as the research population. Since the exact number of active JMO users in the region was not publicly available, the population size was considered unknown. To obtain representative respondents, this study employed a non-probability sampling approach using purposive sampling. This technique allowed the researchers to select respondents based on specific criteria that aligned with the objectives of the study. Purposive sampling was considered appropriate because not all members of the general population possessed the characteristics required to provide relevant information regarding their experiences with the JMO application. The calculation of this research sample uses the Lemeshow formula, with the following calculations:

$$n = \frac{Z^2 - \alpha/2 P(1 - P)}{d^2} \quad (1)$$

Description:

n = Sample studied

P = Proportion of unknown population (0.5) d = alpha (0.10) or sampling error (10%)

Z = Standard value 1,960

Based on this formula, the sample number of active users of the JMO application was obtained as follows:

$$\begin{aligned} n &= \frac{1,960^2 (0,5)(1 - 0,5)}{0,1^2} \\ n &= \frac{3,8416 (0,25)}{0,01} \\ n &= 96.04 \rightarrow \text{rounded to 100} \end{aligned}$$

To determine the minimum sample size, this study applied the Lemeshow formula, which is commonly used when the population size is unknown. The calculation used a population proportion (P) of 0.5, a confidence level corresponding to a Z -value of 1.96, and a margin of error (d) of 10% (0.10). The calculation produced a sample size of 96.04 respondents. To facilitate data collection and improve the reliability of the analysis, the resulting value was rounded up to 100 respondents. Therefore, this study collected data from 100 active JMO users who met the predefined selection criteria.

The respondents were selected based on several inclusion criteria. First, they had to be active users of the JMO application and reside in the Tangerang area. Second, they had to own and use the JMO application on their mobile devices. Third, they had to be willing to participate voluntarily by completing the research questionnaire. These criteria ensured that all respondents had sufficient experience with the application and could provide meaningful evaluations regarding their user experience. By selecting respondents who met these requirements, the study aimed to obtain reliable and relevant data for assessing the user experience of the JMO application using the User Experience Questionnaire (UEQ) method.

5. Results and Analysis

The following are the results of the analysis of UEQ data per variable, which can be seen in the following table:

Table 1. Results of UEQ data analysis of *Attraction variable*

Number of Items	Question Indicator		Means	Assessment Description
MLS 1	Inconvenient	Fun	2,1	Positive
MLS 2	Good	Bad	2,4	Positive
ATT 3	Disliked	Delightful	2,2	Positive
MLS 4	Inconvenient	Convenient	2,0	Positive
ATT 5	Attractive	Unattractive	2,2	Positive
ATT 6	User-Friendly	Not User-Friendly	2,0	Positive
Total Appeal			2,140	Positive

Table 1 describe the attraction variable as a user experience *measurement variable* that emphasizes the user's overall impression. The results of the analysis of UEQ data show that the *attractiveness variable* received positive assessment results. The overall indicator of the attractiveness variable obtained a value of >0.8 , which means that the respondents' assessment of the *attractiveness variable* in the JMO application as a whole is good.

Table 2. Results of UEQ data analysis of Perspicuity variables

Number of Items	Question Indicator		Means	Assessment Description
PER 1	Incomprehensible	Understandable	2,4	Positive
PER 2	Easy to Learn	Difficult to Learn	2,1	Positive
PER 3	Rumor	Simple	2,4	Positive
PER 4	Clear	Confusing	2,2	Positive
Total Intelligence			2,283	Positive

Table 2 describes the results of transparency variable (*perspicuity*) as a user experience *measurement variable* that emphasizes the user's overall impression of the ease of using the JMO application. The overall indicator of the clarity variable (*perspicuity*) obtained a score of >0.8 , which means that the respondents' assessment of the clarity variable (*perspicuity*) in the JMO application as a whole is good.

Table 3. Results of UEQ data analysis of efficiency variables

Number of Items	Question Indicator		Means	Assessment Description
EFF 1	Fast	Slow	2,2	Positive
EFF 2	Inefficient	Efficient	2,4	Positive
EFF 3	Impractical	Practical	2,6	Positive
EFF 4	Organized	Mess	2,0	Positive
Total Efficiency			2,280	Positive

Table 3 shows the efficiency variable results as a user experience measurement variable that emphasizes to users that JMO applications can help users' complete tasks or commands quickly and efficiently. All efficiency variable indicators obtained a score of >0.8, which means that respondents' assessment of the efficiency variable in the JMO application as a whole is good.

Table 4. Results of UEQ data analysis of *Dependability variable*

Number of Items	Question Indicator		Means	Assessment Description
DEP 1	Unpredictable	Predictable	2,8	Positive
DEP 2	Obstruction	Support	2,3	Positive
DEP 3	Secure	Not Safe	2,0	Positive
DEP 4	Meeting Expectations	Not Meeting Expectations	2,1	Positive
Total Reliability			1,910	Positive

Table 4 shows the dependability variable results as a user experience measurement variable that emphasizes to users about the security and user interaction with the JMO application. The overall indicator of dependability variables obtained a score of >0.8, which means that respondents' assessment of the dependability variable in the JMO application as a whole is good.

Table 5. Results of UEQ data analysis of *Stimulation variable*

Number of Items	Question Indicator		Means	Assessment Description
STI 1	Helpful	Less Useful	2,0	Positive
STI 2	Boring	Immersive	2,3	Positive
STI 3	Not Interesting	Interesting	2,4	Positive
STI 4	Motivate	Not Motivating	1,9	Positive
Total Stimulation			2,145	Positive

Table 5 shows the stimulation variable results as a user experience measurement variable that emphasizes the user's level of motivation and interest in using the JMO application. The overall indicator of the stimulation variable obtained a score of >0.8, which means that the respondents' assessment of the stimulation variable in the JMO application as a whole is good.

Table 6. Results of UEQ data analysis of *Novelty variables*

Number of Items	Question Indicator		Means	Assessment Description
1 NOV	Creative	Monotony	1,8	Positive
2 NOV	Inventive	Conventional	0,4	Neutral
NOVEMBER 3	Laziness	Leading the way	2,5	Positive
NOVEMBER 4	Conservative	Innovative	2,5	Positive
Total Novelty			1,790	Positive

Table 6 shows the novelty variable results as a variable that measures user experience that emphasizes to users the level of innovation and creativity of the JMO application so as to attract users' attention. Almost all indicators in the novelty variable obtained a value >0.8 which means that the respondents' assessment of the novelty variable in the JMO application as a whole is quite good, except for the NOV 2 indicator (creative/conventional) which obtained a value of 0.4 with a neutral assessment.

The average score for each UEQ variable is presented in a graph to make the results easier to understand and compare. Fig. 2 illustrates the average evaluation results for all UEQ dimensions:

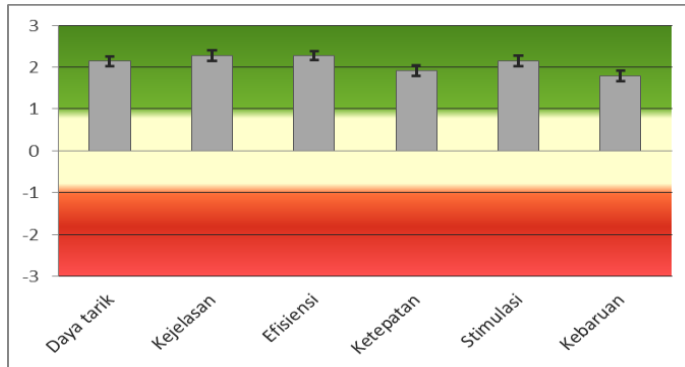


Fig. 2. Results of the UEQ evaluation of the JMO application

Fig. 3. is the result of the evaluation of user experience measurement variables *using* the UEQ *analysis tool* on the JMO application obtained from 100 respondents who use the JMO application. Overall, the variables managed to obtain a *mean* value of >0.8 which indicates that all variables are in a positive assessment marked by a green area. The next analysis is to compare the mean value. of each variable with benchmark data. Comparisons were made to see the quality of JMO's applications when compared to other products. Fig. 3 depicts the results of the benchmark data using the UEQ analysis.

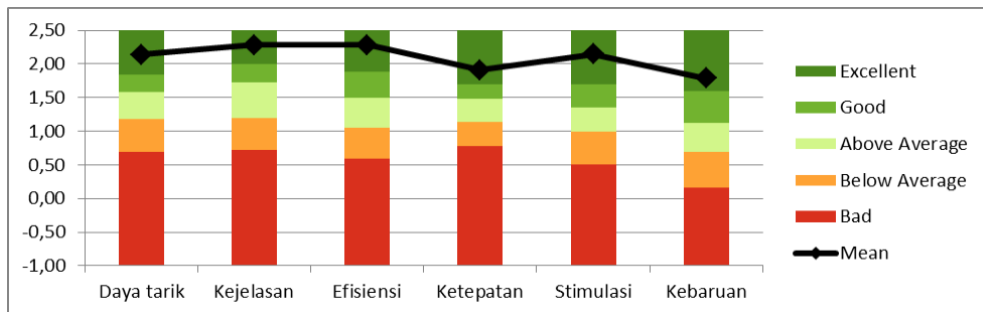


Fig. 3. JMO application benchmark results

Fig. 3 presents the benchmark results of the UEQ analysis for the JMO application. Our analysis shows that the application achieved the Excellent category across all UEQ dimensions when compared with other products included in the UEQ benchmark dataset. The respondents provided positive evaluations for attractiveness, perspicuity, efficiency, dependability, stimulation, and novelty, indicating a highly favorable perception of the application. These findings demonstrate that the JMO application successfully delivers a user experience that meets user expectations across both pragmatic and hedonic quality dimensions.

This study found that users expressed a strong interest in using the application, as reflected by the high attractiveness score. The perspicuity results indicate that users can

easily understand the interface and operate the available features. We also observed that respondents perceived the application as efficient in completing tasks quickly and effectively. Furthermore, users regarded the application as reliable and secure, which contributed to positive dependability scores. Thus, the benchmark evaluation confirms that all UEQ dimensions of the JMO application fall within the Excellent category, highlighting a highly positive user experience and a strong level of user acceptance.

6. Conclusion

This study successfully analyzed the user experience of the Jamsostek Mobile (JMO) application using the UEQ method. We collected and analyzed responses from 100 active JMO users to evaluate six UEQ dimensions: attractiveness, perspicuity, efficiency, dependability, stimulation, and novelty. The results showed that all dimensions received positive evaluations, with mean scores of 2.140 for attractiveness, 2.283 for perspicuity, 2.280 for efficiency, 1.910 for dependability, 2.145 for stimulation, and 1.790 for novelty. These findings indicate that users generally perceive the JMO application as attractive, easy to understand, efficient, reliable, motivating, and innovative. Furthermore, the benchmark analysis performed using the UEQ Data Analysis Tool classified all six dimensions in the Excellent category, demonstrating that the overall user experience of the JMO application is very good when compared with other products in the UEQ benchmark dataset.

Based on the findings, this paper also provides recommendations for enhancing the user experience of the JMO application. Although all dimensions achieved positive results, the novelty dimension obtained the lowest score, particularly on the NOV2 indicator. Therefore, our proposed method identifies novelty as the primary area for improvement. We recommend that the application developers introduce additional features, such as personal data update functionality, a more accurate search feature, an account-saving option during login, enhanced customer service chat capabilities, and biometric photo verification for data updates. These improvements are expected to strengthen the innovative characteristics of the application and further improve user satisfaction and engagement.

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References

- [1] S. Maulana and N. Ilham, "The Influence of Perceived Ease of Use and Usefulness of the JMO (Jamsostek Mobile) Application of BPJS Employment on User Satisfaction in Palopo City," *Integrative Perspectives of Social and Science Journal (IPSSJ)*, vol. 2, pp. 4915–4927, 2025.
- [2] N. P. Pradiya, Rudiana, and Y. Nuryanto, "The Effectiveness of Using the Jamsostek Mobile (JMO) Application in Improving Services for Employment Social Security Participants in Bandung Regency in 2023," *Jurnal Din. Pemerintahan*, vol. 7, no. 2, pp. 290–303, Aug. 2024.
- [3] B. S. Arisoemaryo and R. T. Prasetyo, "Analysis of User Satisfaction Levels of the Jamsostek Mobile Application Using the End User Computing Satisfaction Method," *Jurnal Responsif*, vol. 4, no. 1, pp. 110–117, 2022. [Online]. Available: <https://ejournal.ars.ac.id/index.php/iti>
- [4] K. Kusuma Dewi, I. Kaniawulan, and C. Dewi Lestari, "Sentiment Analysis of Jamsostek Mobile (JMO) Application Users on the App Store Using the Naïve Bayes Method," *Jurnal Sistem Informasi dan Teknik Komputer*, vol. 8, no. 2, pp. 333–338, 2023.
- [5] L. Sari, C. D. G. Subakti, and R. Septiano, "The Influence of Service Quality and Information Quality on User Satisfaction of Accounting Information Systems at Air Dingin Public Health

- Center, Padang City," *Jurnal Ekonomi Manajemen Sistem Informasi (JEMSI)*, vol. 3, no. 4, pp. 396–404, Mar. 2022. [Online]. Available: <https://dinastirev.org/JEMSI>
- [6] P. Wulanjani, "Complaint Handling Strategies in Jamsostek Mobile Application Services to Improve User Satisfaction," *Jurnal Jamsostek*, vol. 3, no. 1, pp. 1–22, Jun. 2025, doi: 10.61626/jamsostek.v3i1.96.
- [7] Prayoga, C. W. Kusuma, M. Christy, and R. Andika, "User Experience Analysis of Jogjakita Using the User Experience Questionnaire (UEQ)," *Teknimedia*, vol. 4, pp. 53–60, Jun. 2023.
- [8] Z. Ardian, K. Nisa, and Armia, "Usability Testing of the Jamsostek (JMO) Application Using the Think Aloud Method and Nielsen Matrix," *Journal of Informatics and Computer Science*, vol. 11, no. 2, pp. 276–281, Oct. 2025.
- [9] N. F. A. Maulidiyah, D. Singasatia, and M. A. S., "Analysis of the Influence of User Experience on VLive Mobile Application User Satisfaction Using the SCSII Model," *MALCOM: Indonesian Journal of Machine Learning and Computer Science*, vol. 2, no. 2, pp. 28–34, Oct. 2022.
- [10] S. Wulandari and S. A. Putri, "Usability Evaluation of ASN Management System Using UEQ Method," *International Journal of Informatics and Computation (IJICOM)*, vol. 8, no. 1, 2026, doi: 10.35842/ijicom.
- [11] H. Nugraha, "Comparative Analysis of User Experience (UX) Between Netflix and Disney+ Hotstar Applications Using the User Experience Questionnaire (UEQ) Method," *Jurnal Penelitian Teknologi Informasi dan Sains*, vol. 2, no. 2, pp. 100–114, Jun. 2024, doi: 10.54066/jptis.v2i2.1944.
- [12] N. K. R. Juniantari, I. N. A. Putra, and T. A. Putra, "Analysis of the DPMPSTP Information System Using the User Experience Questionnaire Method," *Jurnal Informatika dan Komputer*, vol. 4, no. 1, pp. 31–37, 2021, doi: 10.33387/jiko.
- [13] R. A. Agustina and M. A. Gustalika, "User Experience Evaluation of the LinkAja Application Using the User Experience Questionnaire (UEQ) Method," *Bulletin of Information Technology (BIT)*, vol. 3, no. 4, pp. 323–331, 2022, doi: 10.47065/bit.v3i1.
- [14] J. B. Prasetyo and K. D. Irianto, "E-PERPUS: Optimizing User Experience of Digital Library Using the Design Thinking Method," *International Journal of Informatics and Computation (IJICOM)*, vol. 7, no. 2, 2025, doi: 10.35842/ijicom.
- [15] D. S. Fitriansyah and Riwinoto, "User Experience Analysis of WebHalal Batam at the Halal Study Center of Batam State Polytechnic Using the User Experience Questionnaire (UEQ)," *Journal of Applied Multimedia and Networking (JAMN)*, vol. 5, no. 2, pp. 67–76, Dec. 2021. [Online]. Available: <http://jurnal.polibatam.ac.id/index.php/JAMN>
- [16] F. F. Alawiyah and D. S. Canta, "User Experience Evaluation of the Shopee Application Using the User Experience Questionnaire (UEQ) Method," *Journal of Information System Research (JOSH)*, vol. 3, no. 4, pp. 344–350, Jul. 2022, doi: 10.47065/josh.v3i4.1574.
- [17] D. Yolanova and D. A. Indriyanti, "User Experience Evaluation of the TIX ID Application Using the Heuristic Evaluation Method," *JEISBI (Journal of Emerging Information Systems and Business Intelligence)*, vol. 2, pp. 8–13, 2021.
- [18] R. Umar, A. Z. Ifani, F. I. Ammatulloh, and M. Anggriani, "Analysis of the UAD LSP Web Information System Using the User Experience Questionnaire (UEQ)," *METHOMIKA: Jurnal Manajemen Informatika & Komputerisasi Akuntansi*, vol. 4, no. 2, pp. 173–178, Oct. 2020.
- [19] Mardiani and G. Tanjungan, "Analysis of User Experience Quality of the SIMPONI Mobile Application at Universitas Multi Data Palembang Using the User Experience Questionnaire (UEQ)," *JTSI*, vol. 3, no. 1, pp. 25–38, Apr. 2022.
- [20] Noor and E. L. Hadisaputro, "User Experience Analysis of the TIX ID Application Using the User Experience Questionnaire Method," *Journal of Information System Research (JOSH)*, vol. 3, no. 4, pp. 672–677, Jul. 2022, doi: 10.47065/josh.v3i4.1881.
- [21] Putri and D. A. Indriyanti, "Usability Evaluation of the BTN Mobile Application Using the User Experience Questionnaire and Heuristic Evaluation Methods," *JEISBI (Journal of Emerging Information Systems and Business Intelligence)*, vol. 3, pp. 49–59, 2022.
- [22] M. F. R. Alfarizi, P. D. H. Kuncoro, and S. I. Nurfaldini, "User Experience Analysis of the Mobile SIA Application at Universitas Teknologi Yogyakarta Using the User Experience Questionnaire Method," *Teknomatika: Jurnal Informatika dan Komputer*, vol. 17, no. 1, pp. 48–55, May 2024, doi: 10.30989/teknomatika.v17i1.1288.