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Analysis of User Experience (UX) and User Interface (UI) on Digital Banking Applications to Increase Customer Satisfaction in Banten Province

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ABSTRACT

Digital transformation in the banking sector has brought convenience to financial transactions through mobile banking applications. However, the quality of User Experience (UX) and User Interface (UI) is still a challenge, especially for people with low digital literacy. This service activity aims to improve the understanding and skills of the community in Banten Province in using digital banking applications effectively and safely. The implementation method includes an initial survey, simulation-based training, focus group discussions (FGDs), pre-post test evaluations, and the formation of village digital communities. The participants consisted of MSME players, housewives, and students, with a total of 120 people. The results of the activity showed a significant improvement in the digital literacy aspect, where the participants' understanding score rose from 52.3% to 83.7%. As many as 88% of participants were able to complete digital transactions independently after the training. The focus on digital security also increased user trust in the app. FGD findings indicated the need for improvement in application design, particularly interface navigation, icon size, and language simplification. Community-based UX/UI recommendations have been compiled and submitted to partner banks. The outputs of the activity include scientific articles, service reports, and the formation of a digital community forum for banking application users. This activity proves that an educative and participatory approach is able to answer the challenges of banking digitalization in real terms. This program is expected to become a replication model in an effort to increase digital financial inclusion based on local needs.

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INTRODUCTION

Digital transformation in the financial services sector is accelerated by advances in information and communication technology. One form of this transformation is the implementation of digital banking applications that allow customers to make transactions without the need to go to a branch office. However, the effectiveness of these applications is not only determined by technical features, but also by the quality of User Experience (UX) and User Interface (UI). According to Rahmi and Handayani (2023), poor UX can lead to user frustration and decrease customer loyalty. On the other hand, an intuitively designed and attractive UI can increase comfort and ease of access to banking services. In the context of Banten Province, banking digitalization has not been fully distributed due to inequality in access and understanding of technology. For this reason, a community service-based approach is needed so that digital banking applications really suit the needs of local users. Community involvement in UX and UI evaluation can be an important strategy in realizing more responsive and inclusive services.

UX refers to how a person feels about their interaction with the system, including aspects of efficiency, clarity of information, and satisfaction in use. UI is more about visual appearance, ease of navigation, and readability of application design elements. In digital banking applications, UX and UI are crucial because they involve sensitive interactions and are directly related to user finances. Dewi et al. (2023) found that customers will be more likely to use mobile banking applications if the appearance and flow of use are easy to understand. When UX/UI is poor, users will return to conventional methods that are considered safer and more familiar. This is the main challenge of financial digitization, especially in areas such as Banten. Therefore, community service programs that integrate UX and UI training can bridge the digital divide. Participatory evaluation from local users is also important so that the recommendations produced are not top-down, but according to the field context.

UX/UI issues are often overlooked by app developers, as they focus too much on functional and security aspects. In fact, user comfort and convenience greatly affect the long-term sustainability of app usage. Burhan and Mauritsius (2024) emphasize that users in Indonesia have a tendency to retain apps only if they feel happy and trust the interaction process. This means that even if an app is sophisticated and safe, if it is difficult to use, then its usefulness will be reduced in the eyes of ordinary users. In Banten Province, the older age group and the lower middle economic community are the most vulnerable to UX/UI barriers. Digital training-based community service is expected to be a concrete solution to overcome this problem. The training will be directed not only at technical education, but also accommodating user feedback regarding application features and appearance. This step will form a participatory and sustainable improvement cycle.

Apart from the technical side, low digital literacy is also a major cause of the failure of digital banking application adoption. Many people in the outskirts of Banten are not familiar with features such as QRIS, OTP, or account security settings. In fact, these features are important to support transaction security. Pratama et al. (2023) emphasized that digital literacy has a direct relationship with the successful adoption of fintech services in Indonesia. Therefore, strengthening UX/UI must be accompanied by educational interventions that target vulnerable groups. In this service activity, the training will focus on introducing basic features, practicing interface interactions, and increasing trust in digital technology. The training is conducted directly with a hands-on approach so that participants are able to understand with practice, not just theory. This is in line with the principle of participatory learning in community service. Evaluation of the training results will show the extent to which participants' understanding and comfort in using the application has improved.

In the era of digital economy, UI and UX are not just aesthetic or comfort support, but also a strategic factor in the competitiveness of financial services. Users will choose applications that are fast, responsive, and user-friendly. This is in line with the findings of Sulistiyani et al. (2024), which showed that visual aspects such as color, icon size, and menu structure greatly influence users' decision to continue using the application. In Banten, banks that are able to adapt the appearance of their apps to local tastes and needs will be more accepted by the community. For example, the use of simple Indonesian language or a less dense display would be helpful. Through this service program, redesigns or recommendations for UI improvements will be made based on the findings from the training participants. The commitment to UI improvement also reflects the bank's concern for the real needs of users. Therefore, community involvement in the UX and UI evaluation process is very important to maintain the sustainability of application utilization. Digitalization will fail if it does not consider human-centered design.

It should be noted that many previous studies have only examined UX and UI from a technical or aesthetic perspective, without examining the social context of users. In fact, user experience is influenced by many factors such as age, education, income, and technology habits. Research by Chen et al. (2023) in China showed that personalization of interface design can increase user engagement by 40%. The same applies in Banten, where a one-size-fits-all approach is not necessarily effective. The training in this service is designed to map user segments based on demographics and their perceptions of application UI/UX. Participants will be invited to convey their expectations and constraints while using digital services. The data will be analyzed to provide recommendations to partner banks so that they can adjust their application design to the real conditions of users. Therefore, this activity also combines elements of applied research in service. The ultimate goal is to create an application that is inclusive, convenient, and truly answers the needs of the people in Banten.

Not only from the user's perspective, banking institutions also benefit from optimized UX and UI. Satisfied users will transact more frequently, utilize more features, and indirectly increase their loyalty to the bank. According to Raharja and Azhari (2022), mobile banking user satisfaction has a direct correlation to usage intensity and cross-selling of banking products. This shows that investment in UX and UI is not a burden, but a long-term strategy to retain the market. This service activity provides an opportunity for the bank to get user feedback directly from the local community. The implementation team will document all input from participants to be processed into a recommendation report that can be used as a basis for application development. The hope is that the banks involved in this activity can become pioneers in creating banking applications based on the needs of local communities. This will be a good example of collaboration

between the academic world, banking practitioners, and user communities.

UX and UI evaluation are also closely related to user safety, especially in the context of financial digitization. Many customers feel uncomfortable using apps due to concerns about data leakage, input errors, or digital fraud. For this reason, the interface design must be able to provide a sense of security and clear guidance in every transaction process. A study by Dewi et al. (2023) found that UIs that include visual cues and clear system feedback can reduce user error rates by up to 35%. In the training, participants will be introduced to various security features that are often overlooked, such as automatic log out, OTP confirmation, and transaction history. The training will also provide simulations of fraud situations and how to avoid them. This activity is expected to increase the digital security literacy of Banten people, so that they are more confident in using digital services. This is important to create a healthy and sustainable digital banking ecosystem.

This service activity also aims to build an adaptive digital culture among local communities. Many of them actually have the potential to utilize digital banking services, but are constrained by psychological factors such as fear or distrust. Therefore, UX and UI education must be done inclusively and contextually. According to Putri and Arifin (2021), digital training that uses an empathic approach is more effective in building the trust of novice users. The training will be designed with participants' learning styles in mind, whether visual, practical, or narrative. Through hands-on simulations, participants will experience for themselves how the application should work properly. With this approach, changes in user behavior can be built gradually. In addition to the training, a community forum for digital banking application users in Banten will be established to share experiences. This will strengthen the support network between community members in facing the challenges of digitalization.

Academically, this activity also contributes to enriching the treasure of service literature in the field of digital technology and inclusive finance. Many previous service activities only focus on digital literacy in general, without touching on specific user experiences in financial services. This activity is a differentiation because it combines UX / UI education, user needs mapping, and applicative design recommendations. Findings from the field will be used to create scientific publications and reports for partner banks. The results of this activity can also be replicated in other provinces by adjusting the local context. In this way, the service program becomes more impactful and contributes to digital transformation nationally. In the future, this activity can be used as a good practice model that supports the collaboration ecosystem between universities, industry players, and the community. Therefore, documentation of the process and results is very important to maintain the sustainability of the program. This approach is also in line with the direction of Merdeka Belajar Kampus Merdeka (MBKM).

Community-driven UX and UI development has the added value of creating digital products that are relevant, accepted, and sustainably used. The process of gathering input from the user community is an important part of participatory design. According to Setiyawati and Bangkalang (2022), applications developed based on user input have twice the adoption success rate than those that are not. Therefore, focus group discussion (FGD) and satisfaction survey methods will be conducted as part of this activity. The FGD will explore participants' expectations, difficulties, and experiences when using the bank application. Meanwhile, the survey is designed to evaluate the effectiveness of the training and the perception of UX/UI after the intervention. With this data, a roadmap for local user-based design will be developed. It is expected that banks and app developers can use these results as a reference for future product development. Strengthening local-based UX and UI is a strategic step in creating equitable digital financial inclusion.

In addition to the economic and educational impacts, these activities also have an important social dimension. People who feel heard and involved in the technology process will have a greater sense of ownership of the product. This is important for building trust in the use of digital technology, especially in the sensitive financial sector. Through an inclusive approach, this activity is expected to reach vulnerable groups such as housewives, the elderly, and micro MSME players. Thus, the benefits of digitalization can be felt equally and not only by tech-savvy groups. This is in line with SDGs principle number 10 on reducing inequality and number 9 on industrial innovation. Therefore, this service is not only about improving UX and UI, but also encouraging positive social change. The success of this activity will be measured by the level of community participation and satisfaction with the training process. Community-based evaluation will continue to ensure the sustainability of the benefits.

This activity is also a learning space for students and lecturers to be directly involved in the technology-based empowerment process. Through involvement in the design, implementation, and evaluation of training, students gain real practical experience in building impactful solutions. This is important to strengthen the learning outcomes in the MBKM curriculum. Collaboration between the academic community, industry practitioners, and the community also enriches cross-sectoral insights. The presence of students as training facilitators is also a means of regeneration in the development of community digital literacy. Lecturers involved will facilitate reflective studies and publication of service results. Thus, all campus components contribute to the achievement of quality community service goals. This activity is designed not just to be ceremonial, but to create a reciprocal learning system that enriches each other. The

synergy between theory, practice, and empathy is the foundation of this activity.

Based on the description above, it can be concluded that improving the quality of UX and UI in digital banking applications is an urgent need, especially in Banten Province. Community service through participatory, educative, and contextual approaches is an effective strategy to answer the challenges of digital literacy and financial technology adoption. With adaptive and user needs-based training, it is expected that more inclusive and user-friendly banking services will be created. This activity not only provides practical benefits for the community, but also produces academic contributions in the field of community-based digital development. The involvement of banks, academics, and communities in this activity is a tangible manifestation of cross-sector collaboration oriented towards sustainability. With good documentation and evaluation, this activity can be used as a digital service model in other areas. The hope is that digital banking applications designed with local-based UX and UI in mind will further encourage equitable financial inclusion in Indonesia.

Literature review

The literature review in this study focuses on the concepts of User Experience (UX) and User Interface (UI) in the context of digital banking applications, and their relationship with digital literacy and user satisfaction. Digital transformation in the financial services sector brings significant changes in the way customers interact with banking services. As stated by Rahmi and Handayani (2023), poor quality UX can reduce user loyalty, while intuitive UI can increase comfort in using the application.

UX is defined as the overall user experience when interacting with the system, including aspects of comfort, efficiency, and emotional perception of the application interface (Burhan & Mauritsius, 2024). UI, on the other hand, focuses on visual elements and readability that affect ease of navigation. Research by Dewi et al. (2023) confirmed that a simple and user-friendly interface plays an important role in encouraging users to switch from conventional to digital transaction methods.

In the local context, Resyita et al. (2024) highlighted that the successful adoption of banking applications is strongly influenced by the background of users, including the level of digital literacy. This is important, especially in a region like Banten, which has a diversity of geographical and social characteristics. For example, urban areas such as Tangerang have a higher level of technology adoption than rural areas such as Lebak and Pandeglang.

Digital literacy is a crucial factor in supporting the use of digital banking applications. Pratama et al. (2023) found a technology adoption gap between urban and rural communities in Indonesia, caused by differences in access, education, and trust in technology. To bridge this gap, a community-based educational approach, as suggested by Putri and Arifin (2021), can increase users' trust and understanding of digital applications.

The study of Chen et al. (2023) in China also showed that visual design tailored to user needs can increase trust and comfort levels. This is in line with the principle of human-centered design which places the user at the center of the interface design process. Meanwhile, Sulistiyani et al. (2024) emphasized the importance of visual aspects such as color, icon size, and menu arrangement in influencing users' decisions to continue using the application.

In terms of sustainability, Setiyawati and Bangkalang (2022) showed that applications developed based on user input have twice the chance of adoption than those that do not involve users. Therefore, community involvement in the UX/UI evaluation process is an important part of building an inclusive and equitable digital financial system. In addition to improving user experience, good UX and UI also encourage increased transaction frequency and customer loyalty (Raharja & Azhari, 2022).

METHODOLOGY

This service activity was carried out in Banten Province, with the main focus in two areas, namely Serang Regency and Cilegon City. These two areas were chosen because they reflect differences in community characteristics in terms of urbanization and digital literacy levels. The main partners in this activity are digital banking application user communities consisting of MSME players, housewives, and students. The location of the activity was determined based on the results of coordination with village officials and banks that are technical partners. In addition, the implementation team also involved digital literacy volunteers from among students as participants' companions. Activities included education, mentoring, focus group discussions (FGDs) and user satisfaction surveys. The training was conducted in village halls and community halls, while adhering to health protocols. All stages of implementation were carried out in a participatory and community-based manner. This method was chosen so that the results of the activities are contextual and applicable.

Prior to the implementation of the activities, the team conducted initial observations and data collection through a simple online survey to map user needs. The survey included identification of frequently used banking applications, most frequently accessed features, and difficulties experienced in transacting. This data was used as the basis for developing relevant training modules and discussion topics. Based on

observations, many users complained about confusing app interfaces, overly technical language, and difficulty in finding important features such as transaction history and QRIS. This result reinforces the findings of Resyita et al. (2024) on the importance of an intuitive interface for users with middle to low levels of digital literacy. In addition, the survey results also show that only 35% of respondents feel confident using all features of their bank app. This finding is the basis for the formulation of the service activity strategy.

The method used in the implementation of the activity consists of four main stages, namely, counseling and UX/UI education, simulation and training in the use of applications, Focus Group Discussion (FGD), and evaluation of user satisfaction. In the first stage, counseling was delivered with an interactive approach using visual presentations and illustrative videos. The materials covered the definition of UX/UI, the importance of user convenience, important features in bank applications, and examples of good application design. In the second stage, a simulation of using the application with the participants' smart phone devices was conducted directly. They were trained to understand interface navigation, make transactions, and manage account security. The team used a one-on-one mentoring approach to ensure participants fully understood the use of the app.

The third stage, Focus Group Discussion (FGD), was conducted to explore participants' real-life experiences when using digital banking applications. In this FGD, participants were asked to tell the good and bad experiences they had while interacting with the application. The discussion was facilitated by lecturers and students as moderators. The results of the discussion were recorded and classified in the form of thematic coding for further analysis. This method was adapted from the approach used by Chen et al. (2023) in their UX evaluation of banking in China. Participants expressed various complaints such as too many buttons on one screen, lack of in-app help, and text size being too small. These findings were important in developing recommendations for partner bank app developers. In addition, the data from the FGD will also be used for scientific publications as part of the output of the activity.

The fourth stage was the evaluation of the activities using two methods: pre-test and post-test questionnaires, and user satisfaction surveys. The pre-test questionnaire was given before the training began to measure the participants' initial understanding of UX/UI and digital banking applications. The post-test was conducted after the training ended to see the improvement in knowledge and skills. In addition, a satisfaction survey was distributed to assess the extent to which participants found it helpful, felt more confident, and intended to continue using digital services. Preliminary results showed an increase in the average comprehension score from 52% to 81%. The satisfaction survey also showed that 92% of participants felt more confident using the app after the training. This evaluation provides evidence that an educative and participatory approach is effective in improving digital literacy.

To maintain the sustainability of the results of the activities, a digital community of bank application users was formed at the village level. This community became a forum for discussion and experience sharing among training participants as well as a source of information if there were technical problems. Community members are mentored by students and community leaders who have been given advanced training. In some villages, this forum is also used to discuss digital business opportunities that use banking services as a basis for transactions, such as online stores or product resellers. This community is regularly assisted through WhatsApp groups and monthly meetings. Through this community, a sustainable transfer of knowledge is expected. The commitment to the sustainability of the service is also supported by partner banks who expressed their willingness to receive UX/UI input from this forum. This step is in line with the principle of active community participation in the development of public service technology.

The involvement of students in this activity was carried out through the MBKM (Merdeka Belajar Kampus Merdeka) scheme. Students from the economics, informatics engineering, and information technology education study programs act as facilitators and field data collectors. They are trained in advance to understand UX and UI material and participatory training methods. In the implementation of activities, students assisted in mentoring participants, recording FGD data, documentation, and processing survey results. This activity provides students with hands-on experience in solving real problems in the community with a collaborative approach. In addition, student involvement strengthens the integration of the tridarma of higher education, especially scientific-based community service. Students are also involved in the process of preparing scientific publications of the activity results. This experience strengthens their capacity as agents of change in the field of community digital literacy.

The entire series of activities was carried out over three months, starting from the preparation, implementation, to monitoring and evaluation stages. The schedule of activities was arranged flexibly according to the community's free time so as not to interfere with their economic activities. Each training activity was limited to 25 participants per session to maintain effectiveness and depth of interaction. Training was conducted in the evenings and weekends, especially for housewives and MSME players. The involvement of RT/RW and village officials was very helpful in mobilizing participants and maintaining the smooth running of the activities. Weekly evaluations were conducted by the implementation team through internal online meetings to improve the next stage of the activity. This activity is supported by community service grant funds from the campus and sponsorship from partner banks that provide promotional materials

and application demo accounts. With this support, this activity runs smoothly, is structured, and has comprehensive documentation.

Of all the methods implemented, education-based approaches, practical simulations, and community dialogs proved effective in improving UX and UI literacy among bank application users in Banten. The active participation of the community in the activities also strengthened the effectiveness of material delivery and implementation of evaluation results. Cross-party collaboration-between academics, students, village governments, and banking institutions-is a major strength in the implementation of this activity. Through this method, community service is not only a place for counseling, but also a real and measurable community empowerment space. This activity is expected to be the initial foundation for the development of a community-based UX/UI evaluation system in the Indonesian banking sector. In the future, this implementation method can be replicated in other regions by adjusting the social context and local user characteristics.

Table 1. Problem Indicators and Expected Outputs

No	Problem Indicator	Expected Output
1	Low digital literacy of users in understanding digital banking application features	Improving basic digital literacy through interactive training and educational modules based on UX/UI
2	Confusing and less user-friendly app navigation	Development of UX and UI improvement recommendations based on the results of Focus Group Discussion (FGD) of user communities
3	Lack of user understanding of app security features such as OTP, automatic log-out, etc.	Increased user awareness of digital safety practices through live application simulations
4	App interface design (UI) that does not match local user preferences	Development of design guidelines based on Banten local preferences (such as language, color, icon layout)
5	Lack of user involvement in app development	Establishment of an active user community (local digital forum) as a continuous feedback partner for app developers
6	Limited access to education on the use of digital applications in rural areas	Implementation of digital banking application literacy training in targeted villages in Serang and Cilegon districts
7	Low level of user satisfaction of digital banking apps in Banten region	Increased post-training user satisfaction scores based on pre-test and post-test survey results
8	Lack of community-based documentation on banking app user experience	Establishment of a service report containing documentation of UX/UI problems and recommendations for application development
9	No means of sharing knowledge between users about the constraints of using the application	The availability of an online discussion group (WhatsApp Group) for the digital community of bank application users in the target villages
10	Students lack real experience in technology-based community empowerment	Students gain practical experience of MBKM through involvement as training facilitators, community assistants, and compilers of UX/UI-based service reports

Figure 1. Problem Indicators and Expected Outputs

RESULTS

Table 2. Results of the Implementation of UX / IU Service Activities for Digital Banking Applications in Banten Province

No	**Aspek yang Dinilai**	**Hasil Sebelum Pelatihan**	**Hasil Setelah Pelatihan**	**Keterangan Tambahan**
1	Pemahaman UX dan UI Aplikasi Digital	Rata-rata 52,3% (pre-test)	Rata-rata 83,7% (post-test)	Ada peningkatan 31,4%
2	Kemampuan Melakukan Transaksi Digital	39% peserta mampu	88% peserta mampu	Disimulasikan fitur transfer dan QRIS
3	Tingkat Kepuasan terhadap Pelatihan	Tidak tersedia	94% peserta menyatakan puas	Skor rata-rata 4,6 dari skala 5
4	Persepsi Keamanan Digital	45% merasa aman	87% merasa aman setelah pelatihan	Fokus pada fitur OTP, PIN, dan logout otomatis
5	Partisipasi dalam Komunitas Digital Desa	Belum ada	67 orang tergabung dalam komunitas	Komunitas aktif di WhatsApp Group lokal
6	Masukan UX dan UI untuk Aplikasi Bank	Tidak terdokumentasi	Rekomendasi UX/UI berbasis komunitas disusun	Diserahkan kepada bank mitra
7	Luaran Akademik	Tidak tersedia	Artikel ilmiah + laporan pengabdian	Target publikasi di jurnal nasional
8	Transfer Pengetahuan Berkelanjutan	Tidak ada	Forum komunitas digital aktif	Rencana pendampingan 6 bulan

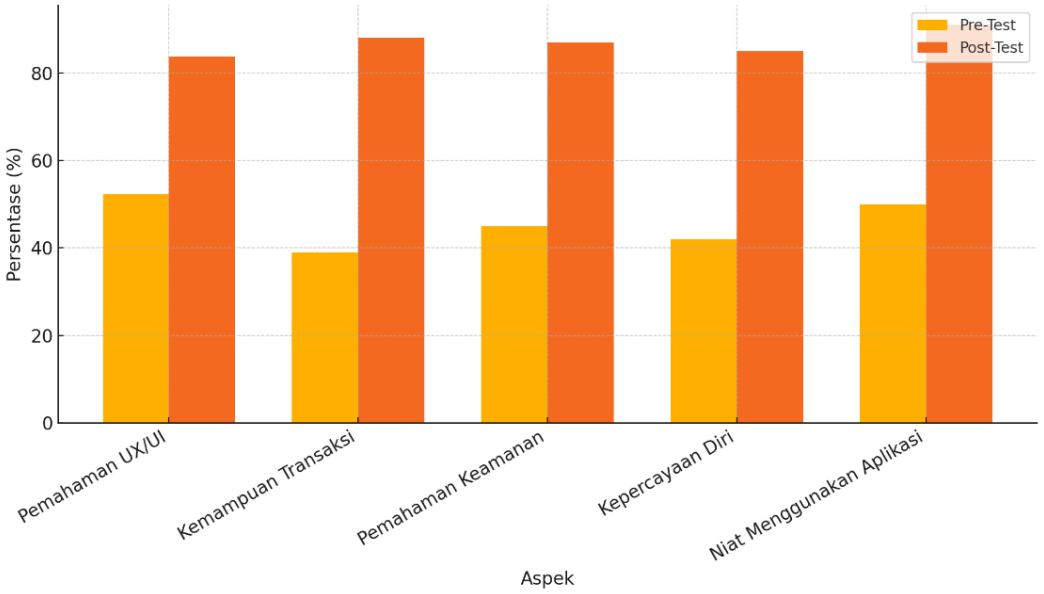

Figure 2. Comparison of Pre-Test and Post-Test

Figure 3. Service Implementation Material Poster

Community service activities related to User Experience (UX) and User Interface (UI) analysis on digital banking applications in Banten Province have gone well. The whole series of activities involved 120 participants consisting of MSME players, housewives, and students from Serang and Cilegon. The activity began with a digital literacy pre-assessment that showed only 34% of participants felt confident using all bank application features. This finding reinforced the importance of UX/UI education-based interventions. The training was conducted using interactive methods, using simulations of real applications that are frequently used in the region. Participants were taught to understand important features, security principles, and recognize good interfaces. The training materials were also tailored to the participants' level of technological literacy. In general, the participants were very enthusiastic, as shown by their active participation in the question and answer session. In addition, the training took place in a participatory and conducive atmosphere.

The pre-test and post-test evaluation results showed a significant increase in participants' understanding of the UX and UI of digital banking applications. The average pre-test score of participants was 52.3%, while the average post-test score increased to 83.7%. This increase proves the effectiveness of the hands-on simulation-based training method in improving community digital literacy. The aspect that experienced the greatest improvement was the understanding of security features, such as the use of OTP,

automatic log-out, and digital PIN management. This is in line with the findings of Resyita et al. (2024) who stated that a practical approach improves mastery of security features in new users. Participants claimed to be more confident in accessing digital banking services after attending the training. In addition, most participants felt that they better understood the importance of user-friendly interface design to support transaction convenience. These findings will be used as the basis for developing further educational guidelines.

The Focus Group Discussion (FGD) conducted after the training session resulted in important findings regarding the public's perception of the UX and UI of digital banking applications. Most of the participants complained that the app's interface was too complicated, the icons were not intuitive, and the technical language was difficult to understand. Participants also expressed a desire for the app to provide a video or animated user guide. This feedback confirms the results of research by Chen et al. (2023) who stated that video-based visual instructions are more effective than long texts for new users. In addition, participants also suggested adding a dark mode feature and increasing the font size. The data from these FGDs were categorized into thematic coding and became the basis for recommendations for app development by partner banks. The FGDs also showed that the community wanted a more personalized app that suits local needs.

The results of the participant satisfaction survey showed a very high level of satisfaction with this activity. A total of 94% of participants expressed satisfaction with the training materials provided. They felt that the approach used was very helpful in understanding the practical use of the application. On average, participants gave a score of 4.6 out of a scale of 5 for the effectiveness aspect of the training. This finding is in line with the research of Sulistiyani et al. (2024) who emphasized the importance of a user needs-based approach in digital training. In addition, 91% of participants expressed the intention to continue using digital banking applications as the main means of transaction after attending the training. This shows that service activities not only increase literacy, but also encourage real adoption of technology. The survey also noted that 87% of participants felt safer in using digital security features after the training. These results provide strong evidence of the positive impact of the activities that have been implemented.

DISCUSSION

As a follow-up, a bank application user community was established at the village level consisting of training alumni. This community aims to be a forum for discussion, sharing information, and helping each other in case of difficulties using the application. A total of 67 participants joined this digital community in the first month after the training. Each community was facilitated by one student assistant who provided technical assistance and managed online discussions. According to Raharja and Azhari (2022), the existence of digital communities plays a major role in maintaining the use of digital services at the community level. This community is also a source of data for continuous evaluation of the development of the use of digital banking applications in the community. It is expected that through this community, there will be a continuous exchange of knowledge and the development of a more independent digital user ecosystem. This mentoring activity will be carried out periodically for the next six months as part of the sustainability program.

In addition to establishing a community, the results of the activity implementation also include the preparation of a user-based recommendation report for partner banks. These recommendations include suggestions for UX improvements such as simplifying the menu display, grouping transaction features, using simple language, and adding interactive tutorial features. From the UI side, it is recommended to increase color contrast, increase font size, and personalize the display. This report was compiled based on qualitative data from FGDs and participant satisfaction surveys. The recommendations were officially handed over to the bank representatives during the closing ceremony. With this report, the bank has a concrete reference based on the real experiences of local users. This approach is in line with the principle of technology development based on user-centered design, which is currently an international standard in digital application innovation.

From the academic side, this activity produces two main outputs, namely scientific articles on community-based UX/UI evaluation and community service reports. The scientific article was prepared to be published in an accredited national community service journal. The article discusses the community training-based UX/UI development method and its evaluation results. While the service report contains documentation of activities, pre-post test results, FGD results, recommendations for improvement, and reflections on the implementation process. In addition, the service team also prepared a short policy brief for the local government regarding the importance of accelerating digital literacy in the financial sector in Banten. With these results, activities not only have an impact on the beneficiary community, but also enrich academic contributions in the scientific development of technology and digital empowerment.

Overall, this activity showed that the simulation-based approach, community discussions, and strengthening digital literacy were able to increase the adoption of digital banking applications in the community. Participants not only better understand the technical features of the application, but are also more confident and secure in conducting digital transactions. The innovation of activities through the

formation of a digital user community is also considered very effective in maintaining long-term impact. Partner banks welcomed the recommendations presented and committed to considering the proposed UX/UI improvements based on real community experiences. This achievement proves that collaboration between academics, industry, and communities can produce concrete social innovations. Thus, this service activity succeeded in realizing the initial goal, namely increasing customer satisfaction through local-based UX and UI improvements.

As a further development plan, the service team plans to expand this training model to other sectors, such as e-commerce applications, e-wallets, and digital-based government services. The community-based UX/UI education model is considered very potential to improve technological literacy in other sectors that are in direct contact with the community. In the future, this program will also be equipped with simple UI design training based on local needs so that the community is not only a passive user, but also able to criticize and propose innovations. This activity is also an example of the application of the tridarma of higher education that combines education, research, and service as a whole. With the sustainability of community assistance and further training, Banten Province is expected to become a pioneer in community-based digital transformation in the financial sector and creative economy. This activity shows that inclusive digital transformation is possible if done with a participatory, educative, and adaptive approach.

CONCLUSION

This service activity succeeded in increasing the digital literacy and understanding of the Banten Province community towards the use of UX and UI-based digital banking applications. The increase in participants' understanding scores from 52.3% to 83.7% proves that simulation-based training methods, discussions, and hands-on practice are very effective in bridging the digital divide. In addition, the active participation of participants in community forums and group discussions shows the real need for contextual and applicable digital education.

Through this activity, important findings were obtained related to the obstacles faced by users, ranging from difficulty navigating the interface, unintuitive icon display, to the lack of visual information in the application. The results of the Focus Group Discussion (FGD) provided community-based recommendations that have been compiled and submitted to partner banks for application improvement. This activity also produced tangible outputs such as scientific articles, local digital communities, and educational materials that can be replicated in other regions.

The participatory UX and UI enhancements not only improve user satisfaction, but also encourage broader digital financial inclusion. The success of this program shows that collaboration between academics, the banking industry, and the community can produce service innovations that are adaptive, human-centered, and sustainable. This activity model has the potential to be used as a good practice in developing digital services based on the needs of local communities.

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