USER PREFERENCE ANALYSIS AND UI/UX DESIGN EVOLUTION OF BCA APPLICATION

(Case Study of Informatics Engineering Students at UIN Jakarta)

Muhammad Daffa Malik Akram, Dara Ayu Iswandari, Muhammad Aidil Riansyah Manaf, Tanjung Arswendo Yudha

Faculty of Science and Technology, State Islamic University Syarif Hidayatullah Jakarta

Email : daffa.malik22@mhs.uinjkt.ac.id, dara.ayu22@mhs.uinjkt.ac.id, aidil.riansyah22@mhs.uinjkt.ac.id, tanjung.arswendo22@mhs.uinjkt.ac.id

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Abstract

In today's digital era, technology has become the backbone of the banking industry, transforming the way banks operate and interact with their customers. Bank Central Asia (BCA) developed two digital banking applications, BCA Mobile with a classic design and myBCA with a modern design. This research aims to analyze user preferences for these two apps and evaluate their UI/UX design evolution. This case study focuses on Informatics Engineering students at UIN Jakarta, who have in-depth knowledge of digital banking technologies and applications. Data was collected through surveys and in-depth interviews, and then analyzed to identify factors that influence users' perceptions and satisfaction with both apps. The findings of this study are expected to provide valuable insights for the further development of digital banking applications.

Keywords: User Preferences, UI/UX Design, Digital Banking Application, BCA Mobile, myBCA

1. INTRODUCTION

In this digital age, technology has become the backbone of the banking industry, transforming the way banks operate and interact with their customers. Digital banking applications are not only expected to provide secure and fast services, but also offer an intuitive and satisfying user experience (UX). Good user interface (UI) design is key in creating apps that are not only functional but also a pleasure to use.

Bank Central Asia (BCA), one of the largest banks in Indonesia, has developed two digital banking applications featuring different UI/UX design approaches: BCA Mobile, which represents the classic design that BCA customers have come to rely on for various banking transactions, and myBCA, which comes with a fresher and more intuitive modern design to enhance user experience.

As technology develops and user behavior changes, the UI/UX design of digital banking applications must continue to evolve. BCA Mobile, with its classic design, has long been the first

choice of BCA customers for their daily banking needs. While myBCA comes with a modern design that offers a fresher look and a more intuitive user experience, designed to meet users' increasingly high expectations of digital banking applications.

This study aims to analyze user preferences for these two BCA applications and evaluate the differences in their UI/UX design evolution. With a focus on Informatics Engineering students at UIN Jakarta as a case study, we will identify factors that influence user perception and satisfaction with these two apps.

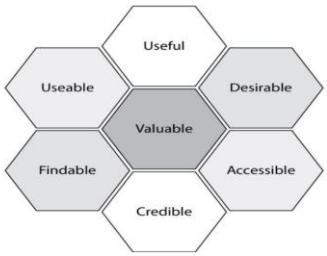
2. THEORETICAL FOUNDATION

2.1 User Experience (UX)

According to Borrys Hasian, user experience (UX) has many aspects. A UX designer must design useful products and visualize user flows in an engaging and tested way. They work closely with other teams to find ways to combine technological advancements, business goals, and user needs. The result is a product that is significant, useful, and enjoyable. UX designers determine how easy or difficult a user's interaction with the web is. Creating wireframes and building models are the basic abilities that UX designers must have[1] .

2.2 Honeycomb UX

Honeycomb User Experience, also known as UX Honeycomb, is a tool that describes various aspects of user experience design (Wesolko, 2016). there are 7 aspects that go beyond usability. Figure 1 depicts these seven aspects like a honeycomb.



Each aspect shown in Figure 1 has a different definition. Helpful means having the courage or creativity to question whether our[2] systems and products are useful and using knowledge to find innovative solutions that are more useful. In product design, usability and ease of use are very important. Ideally, efficiency should be followed by image value, identity, brand, and other

[1] Muhyidin, M.A., Sulhan, M.A. and Sevtiana, A., 2020. Ui/Ux Design of My Cic Student Academic Information Services Application Using Figma Application. *Digit Journal: Digital of Information Technology*, *10*(2), pp.208-219.
[2] Rahman, F., & Prasetya, S. (2021). *Evaluation of User Experience in Mobile Applications with the Honeycomb User Experience Approach*. Journal of Information and Communication Technology, 5(2), 120-130.

emotional design elements. Designed to be accessible, web or product design should be easy to use. To ensure that everyone has the same user experience, the website or product should be accessible as more than ten percent of the population has special needs.

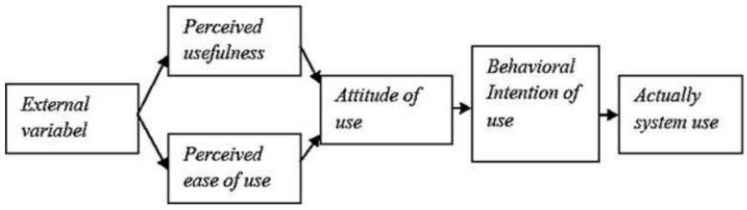
Trustworthy design components are designed to give customers trust and confidence about the services offered. Valuable products and websites should provide value to customers. Dioconde (2017) states that studying and analyzing the user experience can provide a useful picture of how the target users will receive the product. This can be achieved by using the UX Honeycomb diagram which illustrates various aspects of user experience that go beyond usability (Dioconde, 2017)[3] .

2.3 User Interface (UI)

User Interface, also known as UI, is the field that studies the graphical layout of a web or application. The scope of the user interface includes the buttons that the user clicks, text, images, text entry fields, and all items that the user interacts with. This includes animations, transitions, layouts, and other small interactions. All visual elements, including the way users interact with web pages and the content displayed on web pages, are designed by the user interface. A UI designer handles visual elements such as color schemes, determining the shape of buttons, and determining the type of font used for text. The user interface designer must be able to create an appealing look that makes users more loyal.

2.4 User Behavior

To investigate the factors that influence technology acceptance, the Technology Acceptance Model (TAM) was created (Davis, 1989). According to this theory, a person's reaction and perception of something will affect their attitude and behavior towards technology acceptance (Davis, 1989).



According to Davis (1989), in the theory of the Technology Adoption Model (TAM) is the customer's perception of the ease of use of technology and its benefits. Both factors are very

[3] Dioconde, M. (2017). The UX honeycomb checklist: 6 steps to ensure your product has value. Available at . <https://www.linkedin.com/pulse/uxhoneycomb-checklist-6-steps-ensureyour-product-has-dioconde/>.

important for users to consider when they decide to accept or use a technology because it has a relationship with their perception of technology (Davis, 1989).

1. **Perceived Ease of Use**

   Davis defines "perceived ease of use" as a person's level of confidence that a technology system can be accessed and used easily. According to Jogiyanto (2007: 114), "perceived ease of use" is a person's level of confidence that using technology will not require a lot of time or effort to do. A system will attract someone to learn its features until they want to continue using it if it is easy to use (Hamid et al., 2016).

   Customers will be more likely to make online purchases if the business simplifies the ordering process in its system (Venkatesh & Davis, 2000). To measure the ease of use variable, the indicators used in this study adopt Davis' (1989) research in Aziziyah (2021), which includes things such as easy to understand, easy to use, and flexible. [4]

2. **Perceived Usefulness**

   Adamson and Shine (2003) say perceived benefits are when someone believes that using technology can improve their performance. Davis (1989) says perceived benefits are when someone believes that using technology can improve their performance at work. Customers who are happy with the service will be more interested in using it. When users feel that a service can improve their lives, they will be more likely to use it (Lin, 2011). Customers who have experienced how a system can improve their performance and productivity are more likely to make online purchases (Suberi & Ab, 2014). In this study, the indicators used to measure perceived benefit variables include increased productivity, effectiveness, and performance (Davis, 1989).

2. 5 User Preferences

2.5.1 Customer Satisfaction Model

2.5.1.1 SERVQUAL Model

The SERVQUAL model, developed by Parasuraman, Zeithaml, and Berry in 1988, is a tool used to measure service quality and customer satisfaction. This model is based on the assumption that customer satisfaction can be measured by evaluating the gap between customers' expectations before receiving the service and their perceptions of actual service performance. SERVQUAL identifies five main dimensions of service quality that customers consider important:

a. **Tangibles:** This includes physical aspects such as the appearance of facilities, equipment, personnel, and communication materials. This aspect focuses on the visual impression given by the service.

[4] Putri, R.R.S. and Iriani, S.S., 2021. The effect of perceived ease of use and perceived usefulness on the decision to use the Tokopedia application through trust as an intervening variable. *Journal of Management Science (JIM)*, *9*(2), pp.708-722.

b. **Reliability:** This measures the ability to deliver the promised service accurately and reliably. Customers expect consistent and reliable service at all times.
c. **Responsiveness:** This assesses the willingness and ability to help customers and provide services quickly. Customers value speed and accuracy in receiving assistance.
d. **Assurance**: This involves the knowledge and courtesy of employees and their ability to foster trust and confidence. This aspect includes the competence and skills of employees in providing services.
e. **Empathy**: This encompasses the individual attention given to customers. Customers appreciate services that show understanding and attention to their personal needs.

2.5.1.2 Kano Model

The Kano Model, introduced by Noriaki Kano in 1984, is a tool that helps in understanding and categorizing customer needs for products or services. The model distinguishes between different types of customer needs and their impact on satisfaction. The features in the Kano Model are categorized into five main groups:

a. **Basic Needs:** Features that customers expect and must have. The absence of these features will cause significant dissatisfaction, but their presence often does not significantly increase satisfaction.
b. **Performance Needs:** Features that further improve the performance of the product or service. There is a linear relationship between the fulfillment of these needs and customer satisfaction; the better the performance, the higher the satisfaction.
c. **Excitement Needs:** Features that are not expected by the customer but provide a pleasant surprise. The presence of this feature can significantly increase satisfaction even if its absence does not cause dissatisfaction.
d. **Indifferent Needs**: Features whose presence or absence has no effect on customer satisfaction. Customers are neutral towards these features.
e. **Reverse Needs**: Features whose presence may actually decrease customer satisfaction. Some customers may prefer that this feature does not exist.

The Kano Model helps companies in feature prioritization and product development. By understanding the types of customer needs, companies can focus on features that have the most impact on customer satisfaction and avoid features that are unnecessary or even detrimental.

2.6 Design Evolution

2.6.1 Customer Satisfaction Model

2.6.1.1 Iterative Design

Iterative Design is a cyclical and iterative design process, where a product or service is developed through a series of stages of continuous improvement. The process involves

repeated testing, evaluation, and modification based on user feedback. The goal is to continuously improve the design until it achieves optimal results. Here are the main steps in Iterative Design:

a. **Feedback Collection**: Obtain feedback from users through various methods such as interviews, surveys, user testing, and usage analysis.
b. **Evaluation and Analysis**: Analyze feedback to identify areas for improvement or change.
c. **Design and Development**: Make changes and improvements based on findings from evaluation and analysis.
d. **Testing and Validation**: Testing the new version of the design to make sure the fixes have worked and are not causing new problems.
e. **Iteration**: Repeating this process until the design achieves the desired quality and user satisfaction.

The main advantage of Iterative Design is the ability to identify and fix problems at an early stage of development, which can save time and costs and improve the quality of the final product.

2.6.1.2 Lean UX

Lean UX is a design approach that focuses on validating ideas through cross-team collaboration and rapid user feedback. Lean UX is an adaptation of Lean Startup principles into design practices, aiming to reduce waste and increase efficiency in the product development process. Key principles of Lean UX include:

a. **Cross-functional Team Collaboration:** Involving different disciplines within the team (designers, developers, product, marketing, etc.) to work together early on in the development process. This ensures that different perspectives are considered and decisions are made faster.
b. **MVP (Minimum Viable Product):** Developing a product with minimal features that can be validated in the market as soon as possible. MVP allows the team to test key assumptions at low cost and risk.
c. **Rapid Feedback:** Using a rapid feedback cycle from users to inform the next iteration of the design. This helps the team to identify and solve problems earlier in the process.
d. **Hypothesis-Driven Design**: Formulate testable hypotheses about user needs and behavior, and then use experiments to validate or reject those hypotheses.
e. **Results-Focused**: Prioritizes desired results over deliverables. Focus on how the product or service affects users and achieves business goals.

Lean UX is perfect for dynamic and fast-changing environments, where user needs and market conditions can change quickly. By focusing on collaboration, rapid validation, and continuous iteration, Lean UX helps teams to create more relevant and effective products.

3. RESEARCH METHODS

This research uses a quantitative approach with a case study focused on Informatics Engineering students at the State Islamic University (UIN) Jakarta. This approach was chosen because it allows researchers to gain an in-depth understanding of user preferences and their views on the UI/UX design of BCA's two digital banking applications, BCA Mobile and myBCA.

The population of this study is Informatics Engineering students at UIN Jakarta, who are considered to have sufficient knowledge of digital banking technology and applications. They are potential users who are critical of the technical and design aspects of these applications. The sample was purposively selected, with the inclusion criteria being students who have used both BCA applications (BCA Mobile and myBCA).

Data was collected through two main methods: surveys. The survey was conducted to obtain an overview of users' preferences for key features in the two BCA applications as well as their perceptions of the UI/UX design of each application. The survey questionnaire was designed with both closed and open-ended questions to collect quantitative data. Closed questions included a linear scale to assess user satisfaction with certain aspects of the app, while open-ended questions gave respondents the opportunity to provide further comments and suggestions.

In-depth interviews were conducted with a number of participants selected from the survey respondents to gain more detailed insights. The interviews aimed to further explore the user experience, personal preferences, and their views on the UI/UX design evolution of the two apps. The interview questions focused on user experience, ease of use, visual impression, and suggestions for improvement.

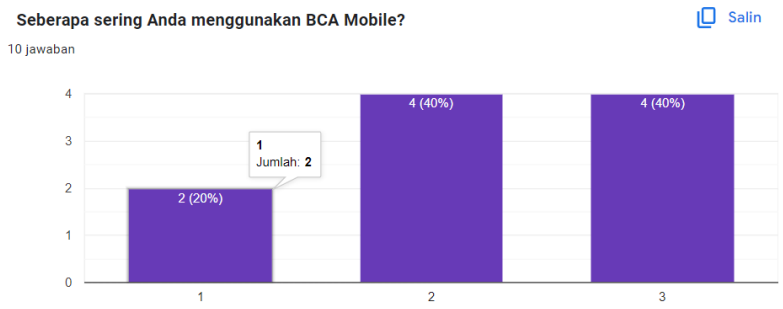
Data collected from the in-depth survey was analyzed using qualitative analysis methods to identify patterns in respondents' responses. The analysis process involved data transcription and codification, followed by thematic analysis to explore relevant patterns and findings. Data triangulation was conducted by comparing results from the survey and in-depth interviews to increase the validity and reliability of the findings. The results of the analysis were then interpreted to answer the research questions and achieve the research objectives.

With this comprehensive methodology, this research is expected to provide deep and accurate insights into user preferences and their views on the UI/UX design of BCA Mobile and myBCA.

4. DISCUSSION AND RESULTS

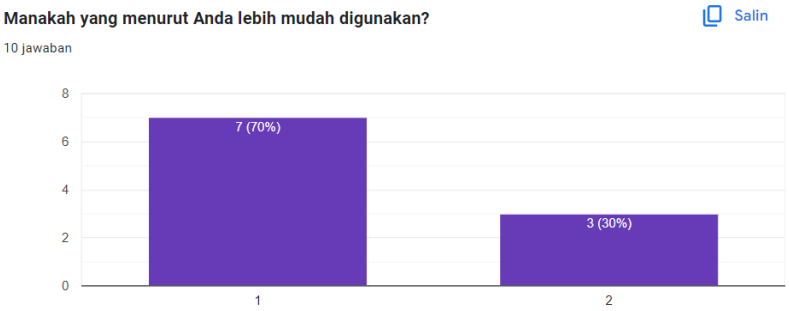
Based on the results of a survey that has been conducted on UIN Jakarta Informatics Engineering students, both from batch 21, batch 22, and batch 23, several data are obtained, namely:

4.1 Batch 21 Data



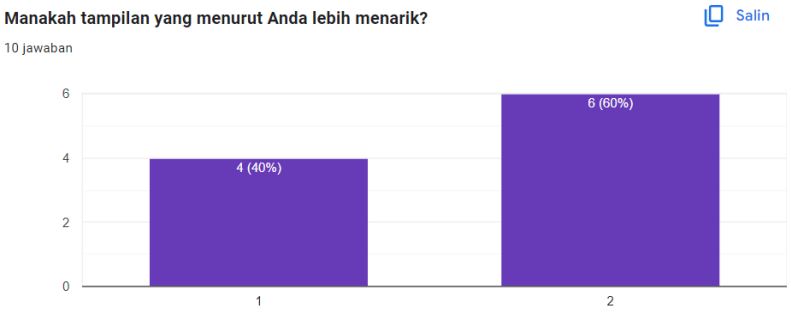
The figure displays survey results on the frequency of BCA Mobile usage among respondents. Of the 10 responses received, 20% of respondents (2 people) reported that they never use BCA Mobile. Meanwhile, 40% of respondents (4 people each) reported that they rarely or always use the app.

Ratings were divided into three categories: "1" for never, "2" for rarely, and "3" for always. The data shows that most respondents use BCA Mobile, either rarely or regularly. Only a small proportion never use the app.



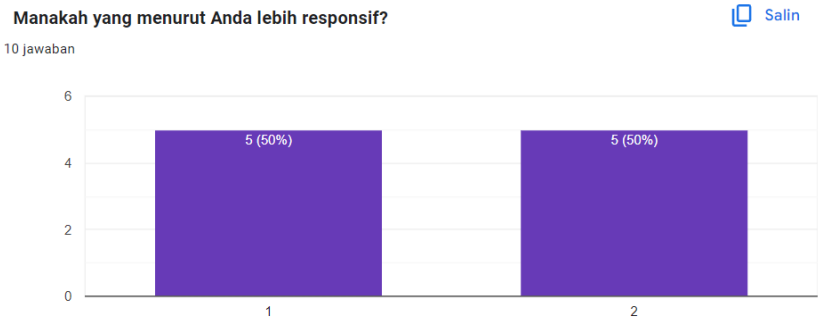
Based on the survey results that have been conducted on the 21st batch of UIN Jakarta Informatics Engineering students, the bar chart shows two categories of banking applications used by respondents. The first category is BCA Mobile, which is represented by 7 respondents or 70% of the total respondents. The second category is MYBCA, which is represented by 3 respondents or 30% of the total respondents.

The assessment shows that the majority of users find it easier to use BCA Mobile compared to MYBCA. A total of 70% of respondents chose BCA Mobile, while the other 30% found it easier to use MYBCA. This data indicates that BCA Mobile is more popular because it is easier to use, among the 21st batch of UIN Jakarta Informatics Engineering students.



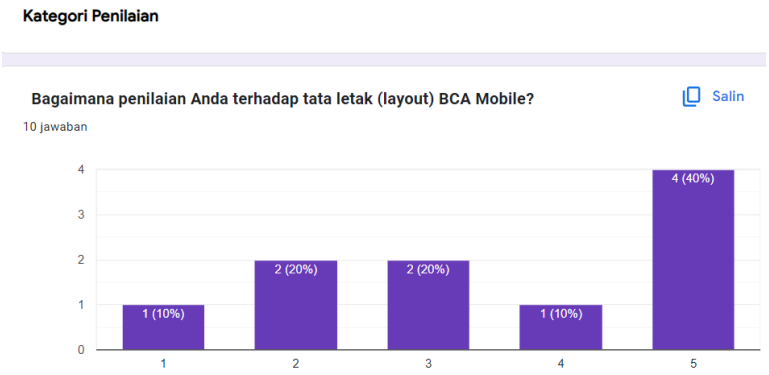
Based on the survey results that have been conducted on the 21st batch of UIN Jakarta Informatics Engineering students, the bar chart shows two categories of banking applications used by respondents. The first category is BCA Mobile, which is represented by 4 respondents or 40% of the total respondents. The second category is MYBCA, which is represented by 6 respondents or 60% of the total respondents.

The assessment shows that the majority of users find it interesting to use MYBCA compared to BCA MOBILE. As many as 60% of respondents chose MYBCA, while the other 40% found it easier to use BCA MOBILE. This data indicates that BCA Mobile is more popular among the 21st batch of UIN Jakarta Informatics Engineering students.



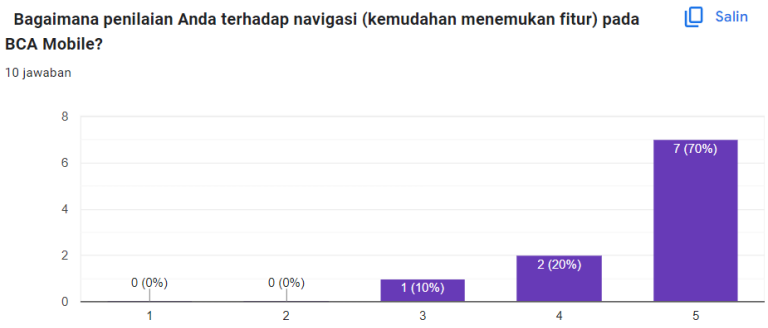
Based on the survey results that have been conducted on the 21st batch of UIN Jakarta Informatics Engineering students, the bar chart shows two categories of banking applications used by respondents. The first category is BCA Mobile, which is represented by 5 respondents or 50% of the total respondents. The second category is MYBCA, which is also represented by 5 respondents or 50% of the total respondents.

The assessment shows that there is equality in usage preference between BCA Mobile and MYBCA. As many as 50% of respondents find it easier to use BCA Mobile, while the other 50% find it easier to use MYBCA. This data indicates that both applications have the same level of ease of use among the 21st batch of UIN Jakarta Informatics Engineering students.



Based on the results of a survey conducted among 21st year students of UIN Jakarta Informatics Engineering, the bar chart shows the respondents' assessment of the BCA Mobile layout. The "Very Poor" category is represented by 1 respondent (10% of the total respondents), "Poor" by 2 respondents (20%), "Fair" by 2 respondents (20%), "Good" by 1 respondent (10%), and "Very Good" by 4 respondents (40%).

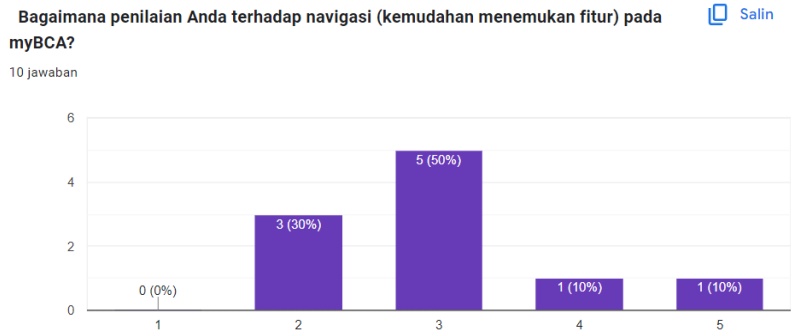
This assessment indicates that the majority of respondents gave a positive assessment of the BCA Mobile layout. As many as 40% of respondents felt very good and 10% felt good about the layout of the application. Conversely, only 10% felt very unhappy and 20% did not like the BCA Mobile layout. A total of 20% of respondents felt quite happy with the layout. This data shows that in general, the BCA Mobile layout is well received by the 21st batch of UIN Jakarta Informatics Engineering students.



Based on the results of a survey conducted on the 21st batch of UIN Jakarta Informatics Engineering students, the bar chart shows the respondents' assessment of the ease of use of BCA Mobile. The "Very Difficult" category is represented by 1 respondent (10% of the total respondents), "Difficult" is represented by 2 respondents (20%), "Fair" is represented by 2 respondents (20%), "Easy" is represented by 1 respondent (10%), and "Very Easy" is represented by 4 respondents (40%).

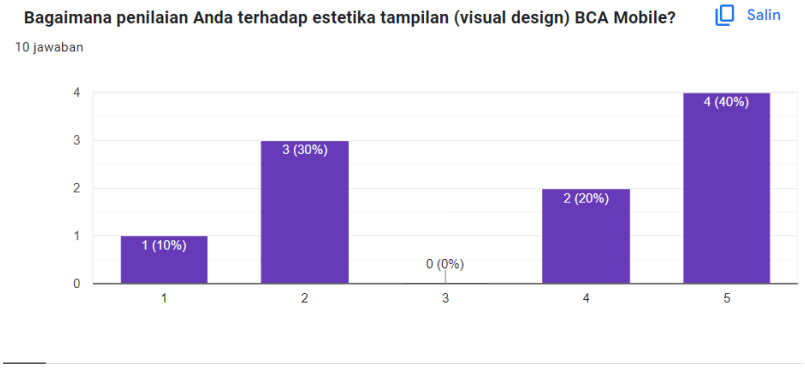
This assessment indicates that the majority of respondents gave a positive assessment of the ease of use of BCA Mobile. As many as 40% of respondents found it very easy to use the application and 10% found it easy. In contrast, only 10% found it very difficult and 20% found it difficult to use BCA Mobile. A total of 20% of respondents found it quite

easy to use the application. This data shows that in general, the ease of use of BCA Mobile is well received by the 21st batch of UIN Jakarta Informatics Engineering students.



Based on the survey results that have been conducted on the 21st batch of UIN Jakarta Informatics Engineering students, the bar chart shows the respondents' assessment of the ease of use of MYBCA. The category "Very Difficult" is marked with 1 and represented by 0 respondents (0% of the total respondents), "Difficult" is marked with 2 and represented by 3 respondents (30%), "Fair" is marked with 3 and represented by 5 respondents (50%), "Easy" is marked with 4 and represented by 1 respondent (10%), and "Very Easy" is marked with 5 and represented by 1 respondent (10%).

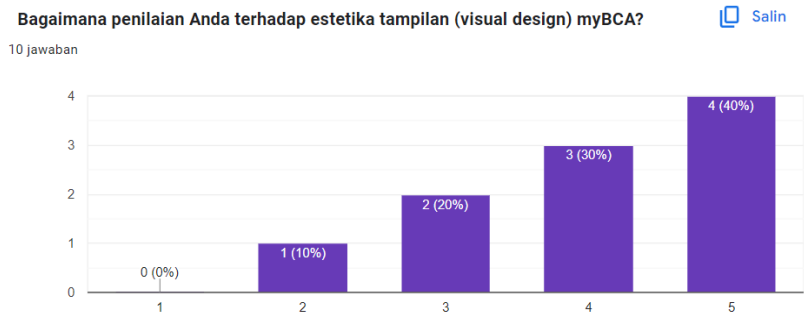
This assessment indicates that the majority of respondents gave a positive assessment of the ease of use of BCA Mobile. As many as 50% of respondents found it quite easy to use the application and 10% found it easy. In contrast, only 10% found it difficult and 0% found it very difficult to use MYBCA. A total of 50% of respondents found it quite easy to use the application. This data shows that in general, the ease of use of MYBCA is well received by the 21st batch of UIN Jakarta Informatics Engineering students.



Based on the results of a survey conducted among 21st year students of UIN Jakarta Informatics Engineering, the bar chart shows the respondents' assessment of BCA MOBILE Visual Design. The "Very Poor" category is marked with number 1 and represented by 1 respondent (10% of the total respondents), "Poor" is marked with number 2 and represented by 3 respondents (30%), "Fair" is marked with number 3 and represented

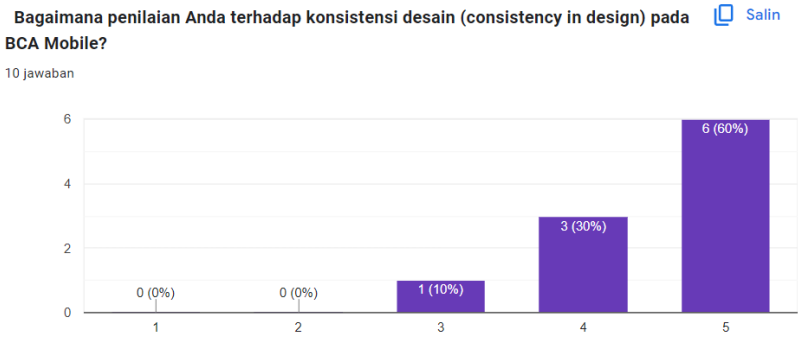
by 0 respondents (0%), "Good" is marked with number 4 and represented by 2 respondents (20%), and "Very Good" is marked with number 5 and represented by 4 respondents (40%).

This assessment indicates that the majority of respondents gave a positive assessment of BCA Mobile's Visual Design. A total of 0% of respondents felt that it was sufficient to use the application and 40% felt good. In contrast, only 30% felt poor and 10% felt very poor in using BCA MOBILE. A total of 50% of respondents felt that it was sufficient to use the application. This data shows that in general, the visual use of BCA MOBILE is well received by the 21st batch of UIN Jakarta Informatics Engineering students.



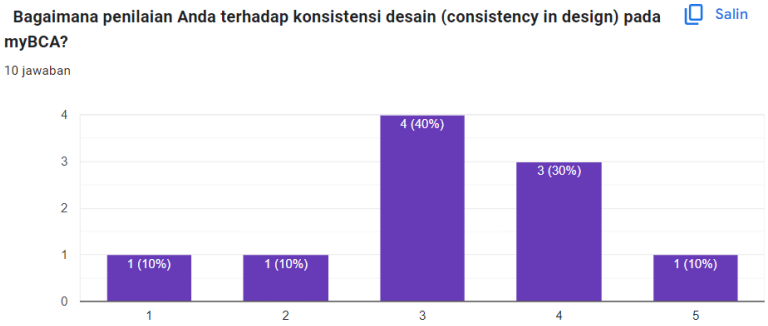
Based on the survey results that have been conducted on the 21st batch of UIN Jakarta Informatics Engineering students, the bar chart shows the respondents' assessment of MYBCA Visual Design. The "Very Poor" category is marked with number 1 and represented by 0 respondents (0% of total respondents), "Poor" is marked with number 2 and represented by 1 respondent (10%), "Fair" is marked with number 3 and represented by 2 respondents (20%), "Good" is marked with number 4 and represented by 3 respondents (30%), and "Very Good" is marked with number 5 and represented by 4 respondents (40%).

This assessment indicates that the majority of respondents gave a positive assessment of BCA Mobile's Visual Design. As many as 20% of respondents feel that they use the application moderately and 30% feel good. In contrast, only 10% felt poor and 0% felt very poor in using BCA MOBILE. A total of 40% of respondents felt very good about using the application. This data shows that in general, the visual use of BCA MOBILE is well received by the 21st batch of UIN Jakarta Informatics Engineering students.



Based on the survey results that have been conducted on the 21st batch of UIN Jakarta Informatics Engineering students, the bar chart shows the respondents' assessment of the consistency of BCA MOBILE design. The category "Very Poor" is marked with number 1 and represented by 0 respondents (0% of total respondents), "Poor" is marked with number 2 and represented by respondents (0%), "Fair" is marked with number 3 and represented by 1 respondent (10%), "Good" is marked with number 4 and represented by 3 respondents (30%), and "Very Good" is marked with number 5 and represented by 6 respondents (60%).

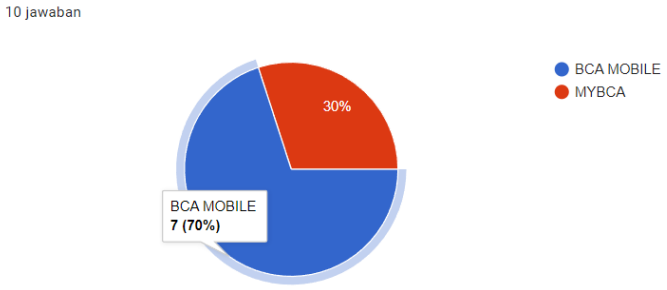
This assessment indicates that the majority of respondents gave a positive assessment of BCA Mobile's consistency. A total of 10% of respondents felt that it was sufficient to use the application and 30% felt good. As many as 60% of respondents feel very good about using the application. This data shows that in general, the consistency of BCA MOBILE design is well received by the 21st batch of UIN Jakarta Informatics Engineering students.



Based on the survey results that have been conducted on the 21st batch of UIN Jakarta Informatics Engineering students, the bar chart shows the respondents' assessment of MYBCA design consistency. The category "Very Poor" is marked with number 1 and represented by 1 respondent (10% of total respondents), "Poor" is marked with number 2 and represented by 1 respondent (10%), "Fair" is marked with number 3 and represented by 4 respondents (40%), "Good" is marked with number 4 and represented by 3 respondents (30%), and "Very Good" is marked with number 5 and represented by 1 respondent (10%).

This assessment indicates that the majority of respondents gave a positive assessment of MYBCA Consistency. A total of 10% of respondents felt that it was sufficient to use the

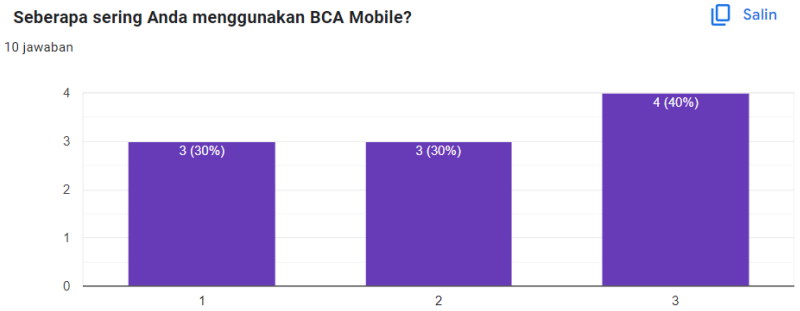
application and 30% felt good. As many as 60% of respondents felt very good about using the application. This data shows that in general, the consistency of MYBCA design is not well received by the 21st batch of UIN Jakarta Informatics Engineering students.

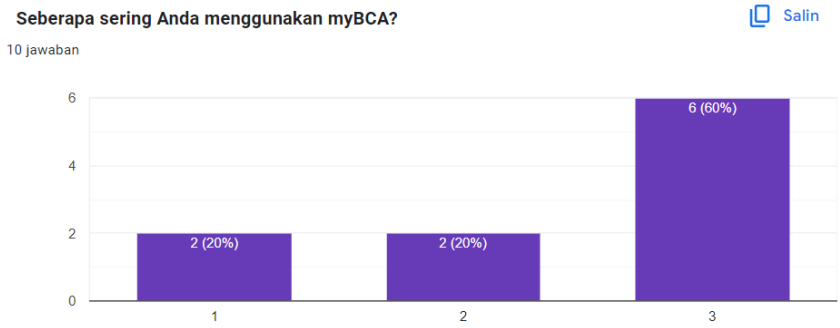


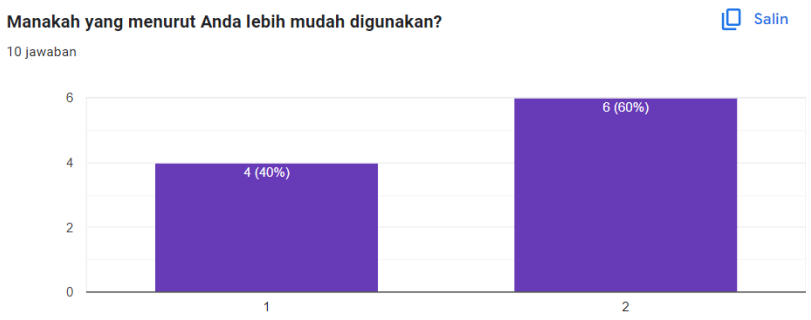
From the results of this analysis we can conclude. The majority of batch 21 users prefer BCA Mobile with a fairly high percentage of 70%. This may indicate that in this period, BCA Mobile is better known and more widely used than MyBCA.

4.2 Batch 22 Data

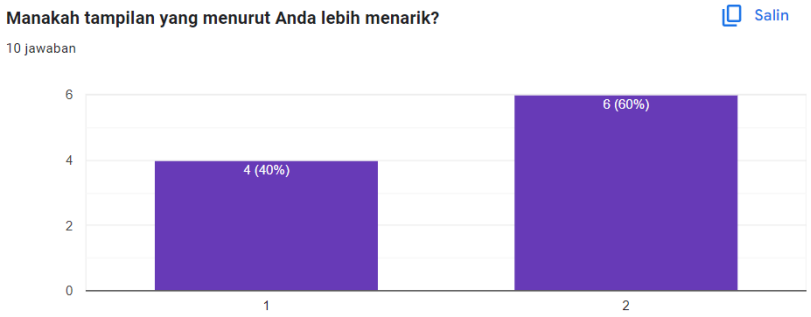
Based on the results of a survey that has been conducted on the 22nd batch of Informatics Engineering students of UIN Jakarta, several data are obtained, namely:



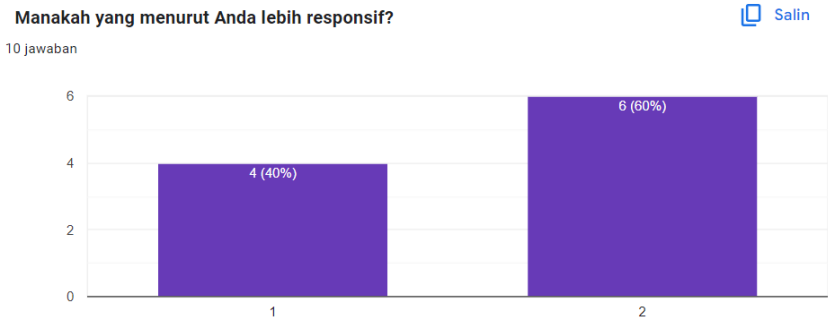




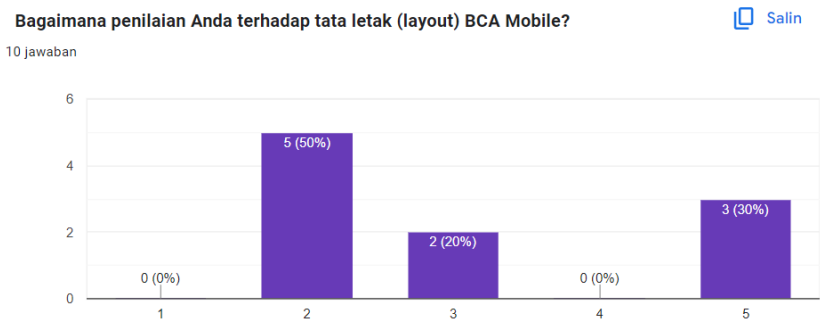
The diagram above is divided into 2 categories, 1 representing BCA Mobile and 2 representing myBCA. As many as 60% of respondents agree that myBCA is easier to use. And the remaining 40% think that BCA Mobile is easier to use.



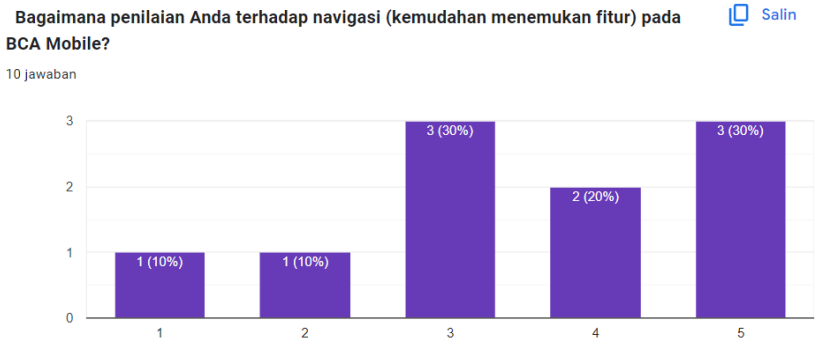
The diagram above is divided into 2 categories, 1 representing BCA Mobile and 2 representing myBCA. As many as 60% of respondents agree that myBCA is more attractive. And the remaining 40% think that BCA Mobile is more attractive.



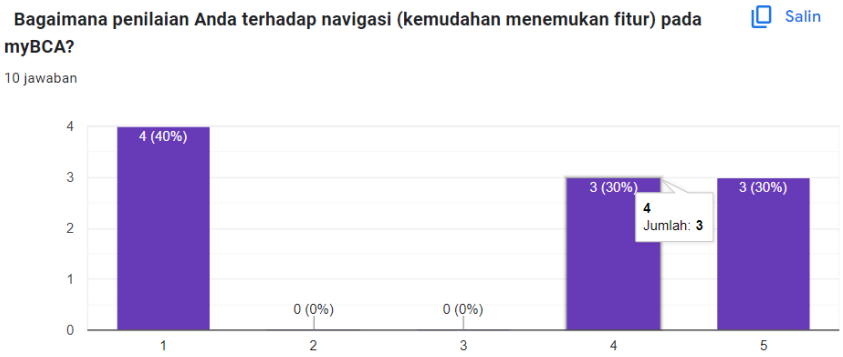
The diagram above is divided into 2 categories, 1 representing BCA Mobile and 2 representing myBCA. A total of 60% of respondents agree that myBCA is more responsive. And the remaining 40% think that BCA Mobile is more responsive.



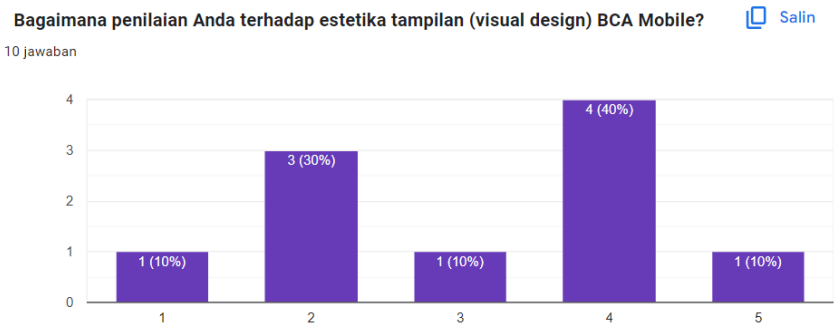
Based on the layout survey, the categories are divided into 5, 1 for very less, 2 for less, 3 for enough, 4 for good, 5 for very good. A total of 50% of respondents felt that the BCA Mobile layout was lacking, 20% of respondents felt it was sufficient, 30% felt it was very good.



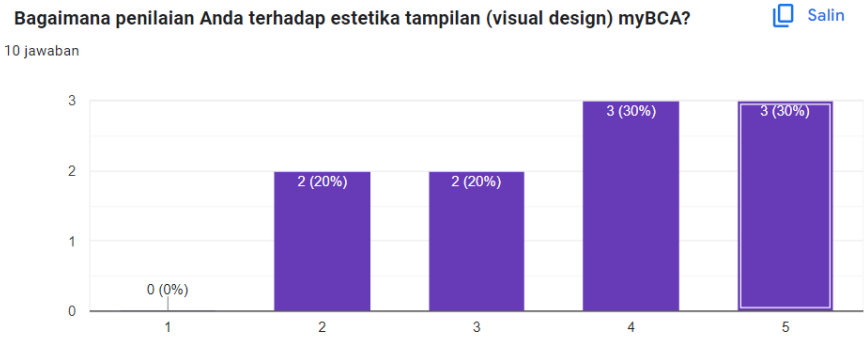
Based on the navigation survey, the categories are divided into 5, 1 for very difficult, 2 for difficult, 3 for sufficient, 4 for easy, 5 for very easy. 10% of respondents found it very difficult, 10% found it difficult, 30% found it sufficient, 20% found it easy, and the remaining 30% found BCA Mobile navigation very easy.



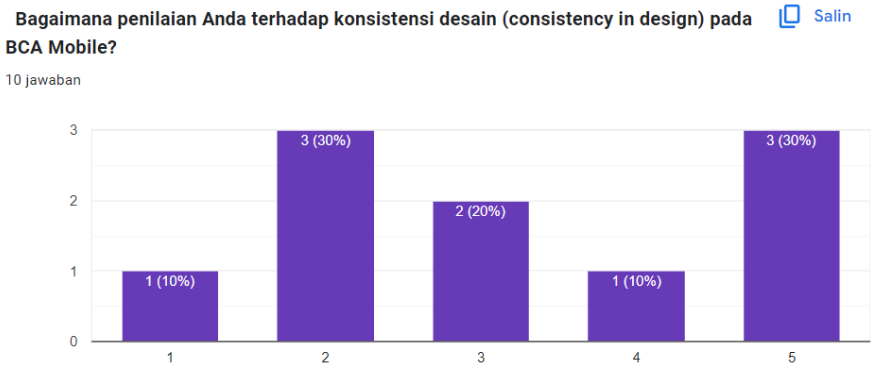
Based on the navigation survey, the categories are divided into 5, 1 for very difficult, 2 for difficult, 3 for moderate, 4 for easy, 5 for very easy. A total of 40% of respondents found it very difficult, 30% of respondents found it easy, and 30% of respondents found it very easy.



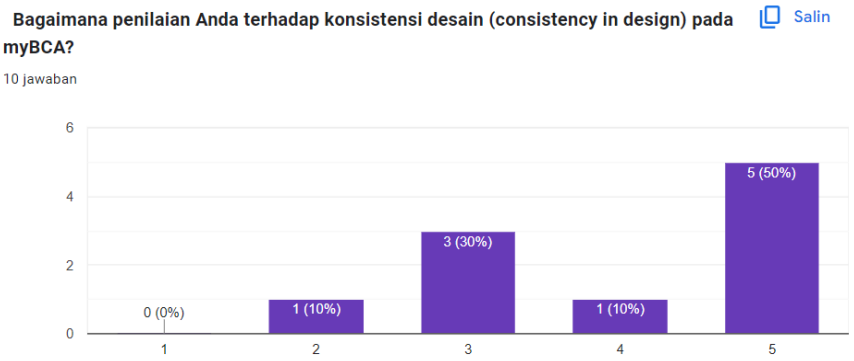
Based on the aesthetic survey, the categories are divided into 5, 1 for very less, 2 for less, 3 for enough, 4 for good, 5 for very good. A total of 10% felt very less, 30% of respondents felt less, 10% of respondents felt sufficient, 40% of respondents felt good, and 10% of respondents felt very good.



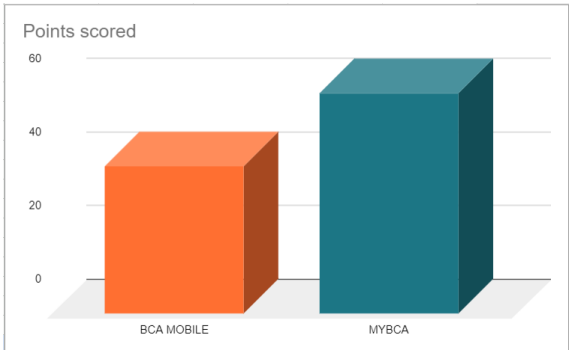
Based on the aesthetic survey, the categories are divided into 5, 1 for very less, 2 for less, 3 for enough, 4 for good, 5 for very good. A total of 20% of respondents felt less, 20% of respondents felt sufficient, 30% of respondents felt good, and 30% of respondents felt very good.



Based on the design consistency survey, the categories are divided into 5, 1 for very less, 2 for less, 3 for enough, 4 for good, 5 for very good. A total of 10% felt very less, 30% of respondents felt less, 10% of respondents felt enough, 40% of respondents felt good, and 10% of respondents felt very good.



Based on the design consistency survey, the categories are divided into 5, 1 for very less, 2 for less, 3 for enough, 4 for good, 5 for very good. A total of 10% of respondents felt less, 30% of respondents felt sufficient, 10% of respondents felt good, and 50% of respondents felt very good.

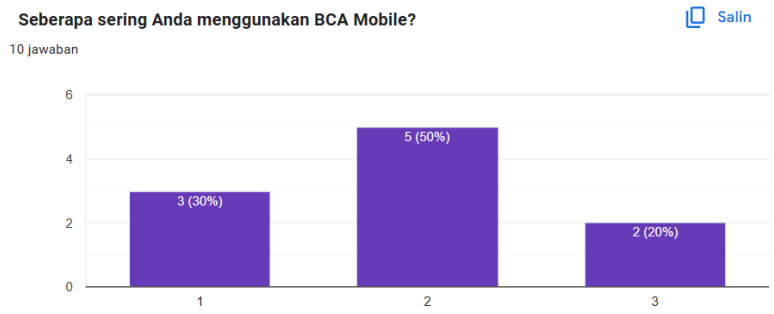


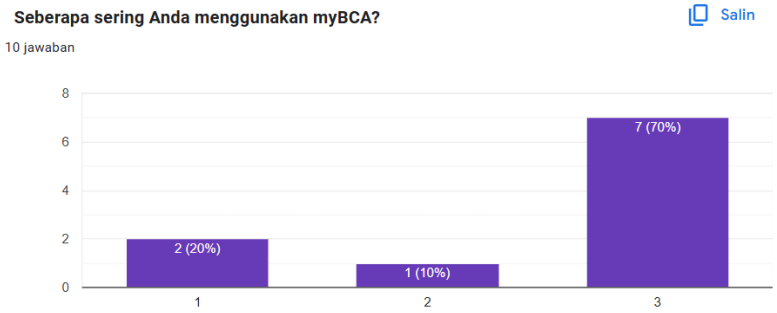
From the survey results above, it can be seen that myBCA is superior to BCA Mobile. myBCA gets 60% while BCA Mobile only gets 40%. Therefore, it can be concluded that myBCA is more attractive to generation 22 than BCA Mobile.

4.3 Batch 23 Data

Based on the results of a survey that has been conducted on the 23rd batch of Informatics Engineering students of UIN Jakarta, several data are obtained, namely:

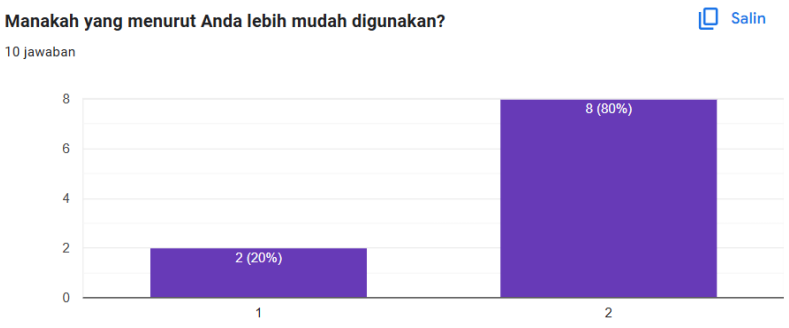
Based on the ***frequency of application use***, the majority of students of class 23 of Informatics Engineering UIN Jakarta prefer to use the myBCA application compared to BCAMobile. This can be seen from the diagram generated through the survey form, namely:





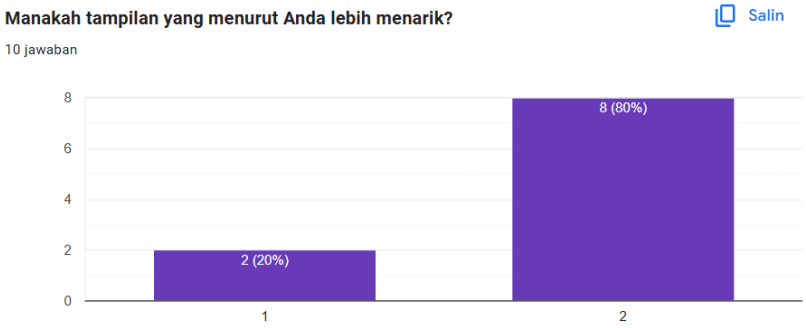
From the diagram, it can be observed that the ratings are divided into three categories: "1" for never, "2" for rarely, and "3" for always. On the use of BCAMobile by Batch 23 students, out of 10 responses, 30% of respondents (3 people) reported that they never use BCA Mobile. Meanwhile, 50% of respondents (5 people) reported that they rarely use the application, and 20% of respondents (2 people) reported that they always use the application. Meanwhile, on the use of myBCA, out of 10 responses, 20% of respondents (2 people) reported that they never use myBCA. Meanwhile, 10% of respondents (1 person) reported that they rarely use the application, and 70% of respondents (7 people) reported always using the myBCA application.

The use of BCAMobile excels in category "2" for rarely and a percentage of 50% in five respondents. Whereas in the choice of using myBCA, it excels in category "3" for always and a percentage of 70% in seven respondents. The higher percentage of use of myBCA indicates that this application is more frequently used by 23rd year students in their daily banking activities.



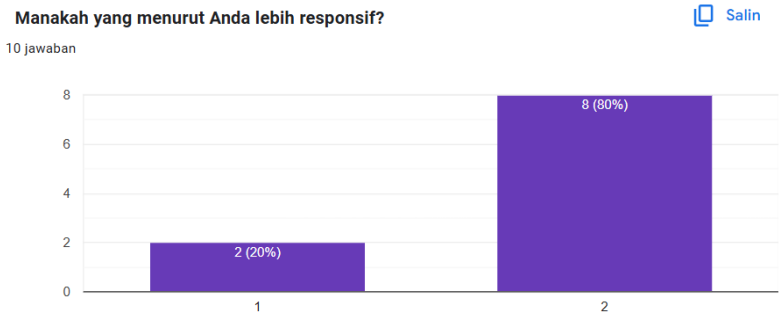
Based on ***ease of use***, from the diagram above it can be observed that the assessment is divided into two categories, "1" indicates BCAMobile and "2" for myBCA. The results of a survey conducted on 23rd year students of UIN Jakarta Informatics Engineering, the bar chart shows category "1" which is represented by 2 respondents or 20% of the total respondents. Category "2" represented by 8 respondents or 80% of the total respondents.

The assessment showed that the majority of users found it easier to use myBCA compared to BCAMobile. A total of 80% of respondents chose myBCA, while the other 20% found it easier to use BCAMobile. This data indicates that myBCA is more popular because it is easier to use, among the 23rd batch of UIN Jakarta Informatics Engineering students.



Based on the survey results that have been conducted on the 23rd batch of UIN Jakarta Informatics Engineering students, the bar chart shows two categories of banking applications used by respondents. The first category is BCA Mobile, which is represented by 2 respondents or 20% of the total respondents. The second category is MYBCA, which is represented by 8 respondents or 80% of the total respondents.

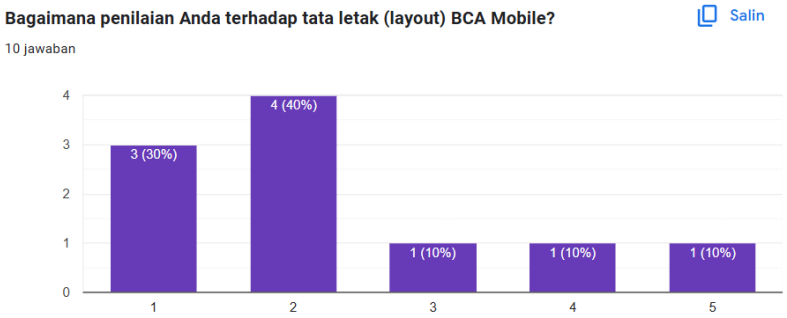
The assessment shows that the majority of users find it interesting to use MYBCA compared to BCA MOBILE. As many as 80% of respondents chose MYBCA, while the other 20% found it easier to use BCA MOBILE. This data indicates that MYBCA is more popular among the 23rd batch of UIN Jakarta Informatics Engineering students.



Based on the results of the survey related to application responsiveness that has been conducted on the 23rd batch of UIN Jakarta Informatics Engineering students, the bar chart shows two categories of banking applications used by respondents. The first category is BCA Mobile, which is represented by 2 respondents or 20% of the total respondents. The

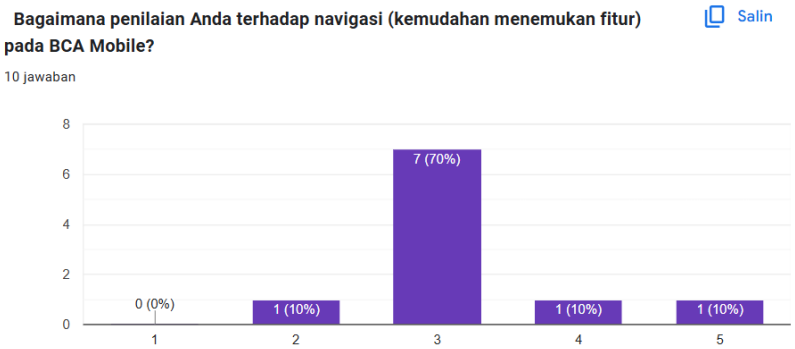
second category is MYBCA, which is also represented by 8 respondents or 80% of the total respondents.

The assessment shows that MYBCA is felt to be more responsive according to the views and experiences of most students. A total of 80% of respondents felt MYBCA was more responsive compared to BCAMobile. This data indicates that the two applications have different levels of responsiveness.



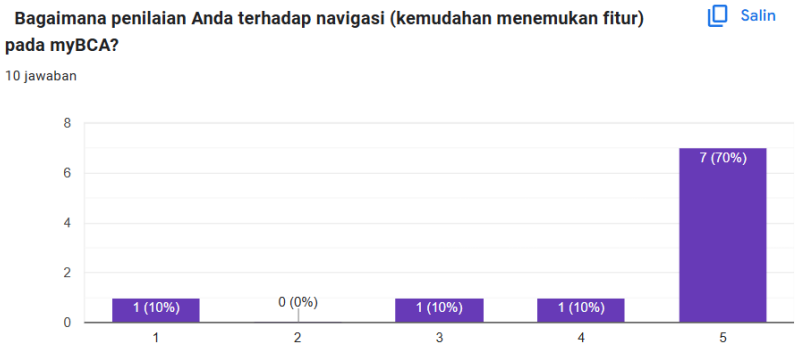
Based on the results of the survey conducted on the 23rd batch of UIN Jakarta Informatics Engineering students, the bar chart shows the respondents' assessment of the BCA Mobile layout. The "Very Poor" category is marked with number 1 and represented by 3 respondents (30% of the total respondents), "Poor" is marked with number 2 and represented by 4 respondents (40%), "Fair" is marked with number 3 and represented by 1 respondent (10%), "Good" is marked with number 4 and represented by 1 respondent (10%), and "Very Good" is marked with number 5 and represented by 1 respondent (10%).

This assessment indicates that the majority of respondents gave a less positive assessment of the BCA Mobile layout. A total of 10% of respondents felt very good and 10% felt good about the layout of the application. Conversely, 30% felt very unhappy and 40% did not like the BCA Mobile layout. A total of 10% of respondents felt quite happy with the layout. This data shows that in general, the BCA Mobile layout is not well received by students of class 23 of Informatics Engineering UIN Jakarta.



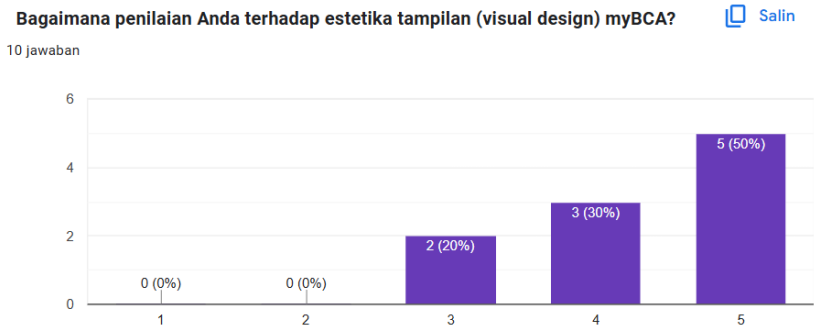
Based on the navigation survey, the categories are divided into 5, 1 for very difficult, 2 for difficult, 3 for sufficient, 4 for easy, 5 for very easy. 0% of respondents found it very

difficult, 10% found it difficult, 70% found it sufficient, 10% found it easy, and the remaining 10% found BCA Mobile navigation very easy.



Based on the survey results that have been conducted on the 23rd batch of UIN Jakarta Informatics Engineering students, the bar chart shows the respondents' assessment of the ease of use of MYBCA. The category "Very Difficult" is marked with number 1 and represented by 10 respondents (10% of the total respondents), "Difficult" is marked with number 2 and represented by 0 respondents (0%), "Fair" is marked with number 3 and represented by 1 respondent (10%), "Easy" is marked with number 4 and represented by 1 respondent (10%), and "Very Easy" is marked with number 5 and represented by 7 respondents (70%).

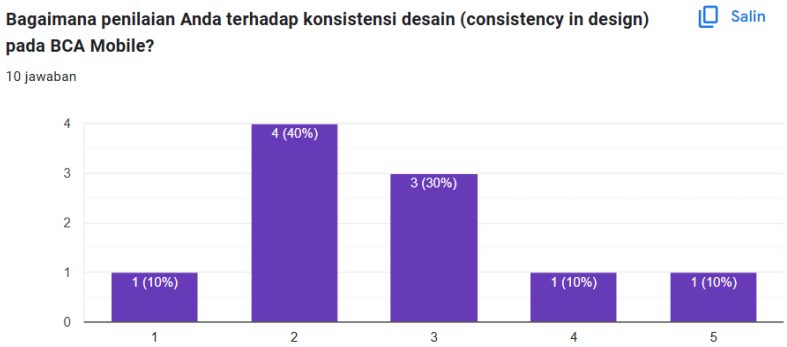
This assessment indicates that the majority of respondents gave a positive assessment of the ease of use of MYBCA. A total of 10% of respondents found it quite difficult to use the application and 100% found it easy. In contrast, 0% found it difficult and 10% found it very difficult to use MYBCA. A total of 70% of respondents found it very easy to use the application. This data shows that in general, the ease of use of MYBCA is well received by the 23rd batch of Informatics Engineering students of UIN Jakarta.



Based on the survey results that have been conducted on the 23rd batch of UIN Jakarta Informatics Engineering students, the bar chart shows the respondents' assessment of MYBCA Visual Design. The "Very Poor" category is marked with number 1 and represented by 0 respondents (0% of total respondents), "Poor" is marked with number 2 and represented by 0 respondents (0%), "Fair" is marked with number 3 and represented

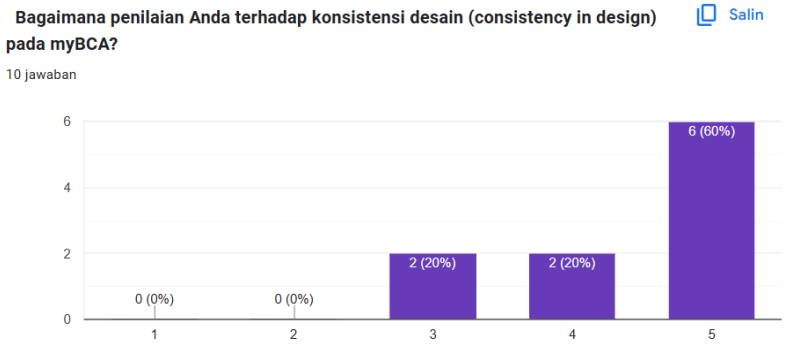
by 2 respondents (20%), "Good" is marked with number 4 and represented by 3 respondents (30%), and "Very Good" is marked with number 5 and represented by 5 respondents (50%).

This assessment indicates that the majority of respondents gave a positive assessment of MYBCA Visual Design. As many as 50% of respondents feel very good about using the application. This data shows that in general, the visual use of MYBCA is well received by the 23rd batch of UIN Jakarta Informatics Engineering students.



Based on the results of a survey conducted among 23rd year Informatics Engineering students of UIN Jakarta, the bar chart shows the respondents' assessment of the consistency of BCA MOBILE design. The "Very Poor" category is marked with number 1 and represented by 1 respondent (10% of total respondents), "Poor" is marked with number 2 and represented by respondents (40%), "Fair" is marked with number 3 and represented by 3 respondents (30%), "Good" is marked with number 4 and represented by 1 respondent (10%), and "Very Good" is marked with number 5 and represented by 1 respondent (10%).

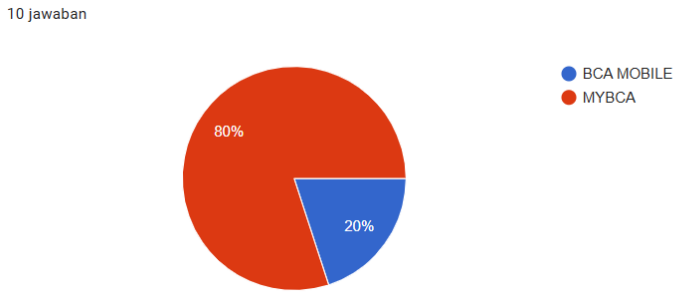
This assessment indicates that the majority of respondents gave a less positive assessment of the consistency of BCA Mobile. This data shows that in general, the consistency of the BCA MOBILE design is not well received by the 23rd batch of UIN Jakarta Informatics Engineering students.



Based on the survey results that have been conducted on the 23rd batch of UIN Jakarta Informatics Engineering students, the bar chart shows the respondents' assessment of design consistency in MYBCA. The category "Very Poor" is marked with number 1 and

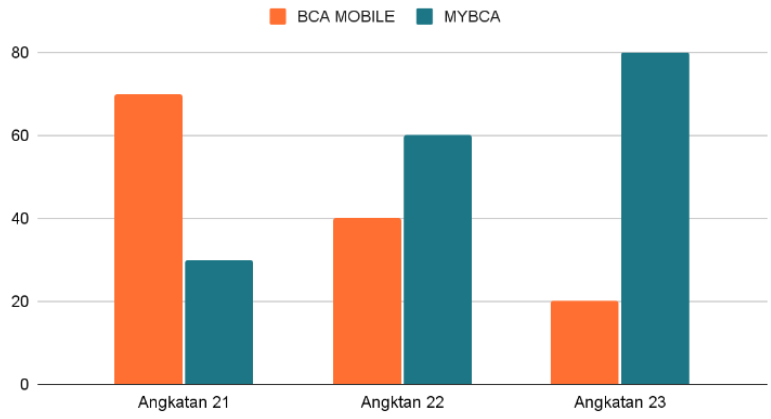
represented by 0 respondents (0% of total respondents), "Poor" is marked with number 2 and represented by respondents (0%), "Fair" is marked with number 3 and represented by 2 respondents (20%), "Good" is marked with number 4 and represented by 2 respondents (20%), and "Very Good" is marked with number 5 and represented by 6 respondents (60%).

This assessment indicates that the majority of respondents gave a positive assessment of MYBCA's design consistency. This data shows that in general, MYBCA's design consistency is well received by the 23rd batch of UIN Jakarta Informatics Engineering students.



From the results of this analysis we can conclude. The majority of batch 23 users prefer MYBCA with a fairly high percentage of 80%. This shows that in this period, MYBCA is better known and more widely used than BCAMobile.

4.4 Overall Force Average

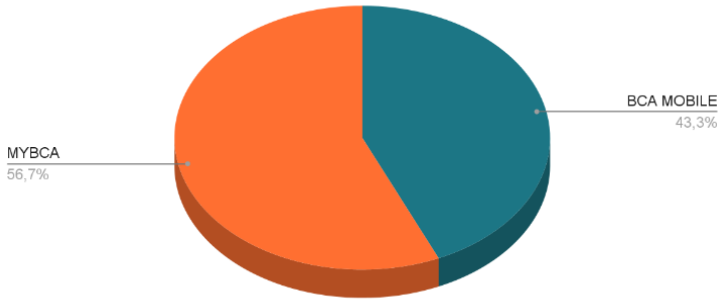


This bar chart compares the use of BCA Mobile and MYBCA applications across three cohorts: Batch 21, Batch 22, and Batch 23. In Batch 21, it can be seen that the use of BCA Mobile dominates with around 70, while the use of MYBCA only reaches around 30. For Batch 22, there is a shift where the use of MYBCA increases to around 60, higher than the use of BCA Mobile which is around 45. Batch 23 shows a significant change with a very

high use of MYBCA, reaching around 80, while the use of BCA Mobile decreases drastically to around 20.

Overall, this data shows an increasing trend of MYBCA application usage among the newer cohorts. Generation 21 still uses BCA Mobile more, but in Generation 22 and Generation 23, MYBCA usage is increasingly dominant. This indicates a changing preference as new users age, which may be due to features that better suit their needs or a better user experience offered by MYBCA compared to BCA Mobile.

4.5 Overall Analysis



Decrease in BCA Mobile Usage: It can be seen that there is a decrease in the use of BCA Mobile from cohort 21 to cohort 23. This could be an indication that the app may be less attractive or meet the needs of new users less than MyBCA.

Increase in MyBCA Usage: In contrast, MyBCA showed a significant upward trend, especially from cohort 22 to cohort 23. This could indicate that MyBCA successfully made the improvements and upgrades needed to attract more users.

5. CONCLUSIONS

From the results of our survey we can conclude several things:

1. **User Preferences**: Most UIN Jakarta Informatics Engineering students prefer using BCA Mobile because of its ease of use compared to the more modern myBCA. However, myBCA is also appreciated for its fresh and intuitive look.
2. **UI/UX Design Differences**: BCA Mobile with its classic design has long been the first choice of BCA customers, while myBCA with its modern design seeks to meet users' higher expectations of digital banking applications.
3. **User Satisfaction**: User satisfaction with the two apps was influenced by various factors including ease of use, visual appearance, and features offered. The students who responded to the study showed diverse preferences, but in general, they wanted apps that were intuitive, easy to use, and had an attractive design.

4. **Design Evolution**: Both BCA apps are constantly evolving to adapt to changes in technology and user needs. Good UI/UX design not only increases user satisfaction but also helps in maintaining customer loyalty to digital banking services.

This research emphasizes the importance of understanding user preferences and needs in developing and improving the design of digital banking applications to ensure that they can provide an optimal and satisfying user experience.

6. REFERENCE

JOURNAL ARTICLE

Normah, N. and Sihaloho, F., 2023. Design of User Interface (UI) and User Experience (UX) Application for the distribution of medical devices at the company PT. Rekamileniumindo Selaras West Jakarta. *Indonesian Journal on Software Engineering (IJSE)*, *9*(1), pp.33-38.

Putri, R.R.S. and Iriani, S.S., 2021. The effect of perceived ease of use and perceived usefulness on the decision to use the Tokopedia application through trust as an intervening variable. *Journal of Management Science (JIM)*, *9*(2), pp.708-722.

Venkatesh, V., & Davis, F. D. (2000). Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies. Management Science, 46(2), 186-204. https://doi.org/10.1287/mnsc.46.2.186.11926

Dioconde, M. (2017). The UX honeycomb checklist: 6 steps to ensure your product has value. Available at . <https://www.linkedin.com/pulse/uxhoneycomb-checklist-6-steps-ensureyour-product-has-dioconde/>.

Muhyidin, M.A., Sulhan, M.A. and Sevtiana, A., 2020. Ui/Ux Design of My Cic Student Academic Information Services Application Using Figma Application. *Digit Journal: Digital of Information Technology*, *10*(2), pp.208-219.

Rahman, F., & Prasetya, S. (2021). *Evaluation of User Experience in Mobile Applications with the Honeycomb User Experience Approach*. Journal of Information and Communication Technology, 5(2), 120-130.

Chen, C.-F., & Chang, Y.-Y. (2019). Applying Kano Model and QFD to Explore Niche Market of Dietary Supplements in Taiwan. *Total Quality Management & Business Excellence*, 30(9-10), 1082-1099.

Lovelock, C., & Patterson, P. (2019). The Role of SERVQUAL in Measuring Customer Satisfaction in the Context of E-Banking. *International Journal of Bank Marketing*, 37(3), 588-604.

Green, D., & Lin, M. (2020). Applying Iterative Design to Improve User Engagement in E-Learning Platforms. *Educational Technology & Society*, 23(2), 99-110.

aurya, A., & Olsen, D. (2019). Building a Culture of Continuous Experimentation: A Case Study of Lean UX in Practice. *Journal of Product Innovation Management*, 36(3), 330-345.