USER INTERFACE ANALYSIS IN MOBILE BANKING APPLICATION USING DESIGN THINKING METHODS WITH USER SEGMENTS FOR ELDERLY OF PEKANABARU (STUDY CASE : BANK XYZ)

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XYZ banking company opens banking services with the concept of providing services to people who use mo- bile banking. However, current mobile banking users must first have an identity card, use mobile banking at least 18 years old and there is no maximum age limit. The average use of mobile banking is generation Y and Z, name- ly on an age scale of 18 to 35 years. Therefore, this study aims to examine how many elderly users use XYZ mo- bile banking. As a long-term user experience analysis, it has the characteristics of facilitating users in terms of use and user experience when using the application. This study provides a comparative analysis of Design Think- ing. Was conducted on 5 elderly respondents. Its use is based on four parameters, namely tasks completed, errors during task execution, time per task completed, and number of clicks during task performance. After testing, re- spondents were interviewed to find out the responses and problems experienced during this test, the results of the usability test showed that the XYZ Mobile application excels in completing the parameter task. However, many elderly people are confused about how to use it, many letters whose size does not match the elderly's point of view. The results of the questionnaire show that the XYZ Mobile application has superior scores in terms of sharpness, efficiency, dependability, and stimulation. After the data is processed and analyzed, it can be ascer- tained that the XYZ Mobile application has a very lacking User Interface aspect, especially for users aged 60 years and over. Seeing the results of previous research regarding mobile banking applications for the elderly re- ceived a positive response, this is a motivation for the author to do this to get a better response, especially from the elderly aged 40 years and over, so that the applications made later can be useful for the elderly. Therefore, in this design for the elderly it is necessary to know what needs are needed in this mobile banking application, and it is easy to use to accommodate their mobile banking needs so that the elderly can continue to use it. Therefore the results of the research conducted in this study were, obtained a comparison of the acceptance categories from "Not Accepted" to "Accepted", the scale of values to be accepted and the ranking of adjectives from "Bad" to "Good". From this value the prototype design can be categorized in a good range with grade A where the prototype design can be accepted by users. The author proposes this research to produce an interface model that is in accordance with the goals and needs of users in using MBanking XYZ services. This can be achieved by using Design Thinking which can make it easier to get Mobile available for the elderly from the age of 60 years and over.

Keywords: Design Thinking, Mobile banking, Usability Testing, User Interface, User Interface.

I. INTRODUCTION

Smartphone users in Indonesia from the results of a survey conducted by eMarketer estimates the number of smartphone users in Indonesia as many as 92 million users in 2019. The amount smartphone users make many developments various types of mobile applications available on smartphones [1].

Amount of interest people in using smartphones make good government agencies and the private sector are trying to improve their services through service-based mobile application. The results of research from Bank Syariah Indonesia Pacitan KCP is one of the Islamic banking institutions that has a mobile banking application. The application is a form of Islamic banking services to make it easier for customers to transact anywhere and anytime. Even though the mobile banking application is very useful for customers, there are still those who do not have the application, especially the elderly. This problem is a challenge to pay attention to customers in using and how to use mobile banking. Because what is happening now is a lack of interest, a lack of understanding, a lack of knowledge in using mobile banking. Basically, customers need directions and invitations to be interested in using the mobile banking application. The banking sector is no exception. The many types of mobile applications in Indonesia make banking institutions in Indonesia compete to provide the best service through mobile banking application. According to data on the ATM PRIMA network site in 2018 transaction banking awards with the best

predicate, namely largest in transactions, highest in growth, and fastest in processing applications in Indonesia which is in the 3rd highest rank, namely Bank XYZ [1]. The company also carries out product innovation as a strategies to attract consumer interest by developing fea- tures that Strategies to attract consumer interest and assess one of them by an approach to software design that makes users as a benchmark in the application development process. Must have advantages owned by banks that provide mobile banking services to be able to success in the market is a mobile banking application that is a rep- resentation of banking itself to customers. According to Nielsen, Heuristic Evaluation is a method usability engineering to find deep usability problems user interface so that it can be used as part of redesign process.

The application is a support to interact with users, a good application is a reflection as a product or service that has a high level of ease of use by the user. It is very important to ensure that the product or service has a good user interface. Mobile banking services function very effectively in helping customers in conducting transactions anytime and anywhere. It can be seen that the data of active users of mobile banking reached 9.3 million users mobile banking. From this data, mobile banking users in Indonesia variety, ranging from young people, old peo- ple to the elderly.

Limitations experienced by the elderly such as decreased function and physical, psychological and cognitive abilities, often resulting in decreased mobility of the elderly accompanied by elderly dependence. With a lot limi- tations possessed by the elderly, then information technology has crucial role in helping the elderly to live more independently, especially in the use of online transactions will make it easier for the elderly to help work on a job they have accomplished, one of which is Mobile Banking.

To run the product quality level of the product must be balanced with the ability of the product. Not all users who use a mobile application feel comfortable, the thing that affects the mobile application is the user-friendly aspect and is easy to use for the elderly who are around 60 years of age and over. To see the level of quality of a product, especially a mobile application by hearing directly the opinions of users with the user interface. The advantage of this research compared to previous research is that it is easier for the elderly to use the mobile banking application because the authors are inclined to make the appearance more attractive, of course the elderly are not difficult to see colors that are not too flashy, making it easier for users to access them, as well as users easily access top up in a form that is not complicated, more efficient and there are not many menu choices in the mobile banking application.

The limitations of the elderly in psychomotor, sensory, and cognitive aspects make interaction with technology sometimes difficult for the elderly. By Therefore, the author wants to design a XYZ mobile banking application for customers the elderly according to the needs of the elderly. Experience analyst testing users use analysis with Design thinking and Usability methods.