Information Technology Design For BTN Syariah Mobile Banking Services

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Abstract

This study aims to dig up information about how to do a SWOT analysis of the BTN Syariah mobile banking application; what the strategies implemented by Bank BTN Syariah in developing BTN Syariah mobile banking application services; how to design a mobile banking application belonging to BTN Syariah. The research method used by researchers is a qualitative type through a case study approach. Then the research subject is the manager of BTN Syariah Pekalongan branch. Retrieval techniques through interviews, observation, and documentation. Data analysis used descriptive analysis by testing the validity of the data using the triangulation method. From the research results, it was found that BTN Syariah responded to the current development of information technology by launching the m-banking application. The m-banking application offered by BTN Syariah has the strength of providing optimal service. The opportunity for this application is to increase m-banking customer service data. The weakness of this application is the lack of features offered, so this can also be a threat, namely, customers may feel bored and choose to use another mobile banking application. Even so, the strategy they implemented to develop this mobile banking service was also felt to have had a very positive effect on increasing the number of users. However, innovation in application service features must be carried out, bearing in mind that currently, many banks have issued mobile banking applications with many feature facilities.
Keywords: design and build, mobile banking, sharia BTN

Abstrak

Penelitian ini bertujuan untuk menggali informasi mengenai analisis SWOT aplikasi mobile banking BTN Syariah; bagaimana stratregi yang diterapkan oleh Bank BTN Syariah dalam pengembangan layanan aplikasi mobile banking BTN Syariah; bagaimana desain aplikasi mobile banking milik BTN Syariah. Metode penelitian yang digunakan oleh peneliti adalah jenis kualitatif melalui pendekatan studi kasus. Kemudian subjek penelitiannya adalah manager BTN Syariah cabang Pekalongan. Teknik pengambilan melalui wawancara, observasi dan dokumentasi. Analisis data menggunakan analisis deskriptif dengan melalui uji validitas data metode triangulasi. Dari hasil penelitian diperoleh hasil bahwa BTN Syariah merespon arus perkembangan teknologi informasi dengan meluncurkan aplikasi m-banking. Aplikasi m-banking yang ditawarkan oleh BTN Syariah memiliki kekuatan yakni memberikan pelayanan yang optimal. Peluang dari aplikasi ini adalah data layanan nasabah m-banking bertambah. Kelemahan dari aplikasi ini adalah kurangnya fitur yang ditawarkan, sehingga hal ini juga dapat menjadi ancaman yakni nasabah bisa saja merasa bosan dan memilih menggunakan aplikasi mobile banking yang lain. Meskipun demikian, strategi yang mereka lakukan demi mengembangkan layanan mobile banking ini juga dirasa sangat memberikan efek positif terhadap peningkatan jumlah pengguna. Akan tetapi, inovasi terhadap fitur layanan aplikasi harus tetap dilakukan, mengingat saat ini banyak sekali bank yang sudah mengeluarkan aplikasi mobile banking dengan fasilitas fitur yang banyak.
Kata Kunci: rancang bangun, mobile banking, BTN Syariah

INTRODUCTION

It is undeniable that information technology makes a significant contribution to human life. Starting from the simplest means of information technology in the form of radio and television sets to the internet and mobile phones with wireless applications (WAP), information can flow very quickly and burst into the consciousness of many people.

The availability of information that can be accessed instantly without time limits via landline phones, mobile phones, television, computers, the internet, and various other electronic media has shifted the way humans work, study, manage companies, run government, shop, or carry out industrial activities. This fact is often referred to as the era of globalization or information. Especially now that the world has entered the 4.0 era, it illustrates how easily various types of information can be accessed, searched for, collected, and sent without knowing the geographical boundaries of a country. The rapid progress of information technology makes the globe feel smaller and space seems to be no longer distant(Trisnandar et al., 2020).

Financial institutions in Indonesia, including banks, have been faster and more intensive than other sectors or types of industries in applying computer technology in providing services to customers. The development of information technology has made entrepreneurs change their business strategy by placing technology as the main element in the process of product and service innovation. The emergence of internet technology is starting to become a trend and has even become a standard. It would be strange if a bank did not follow this trend because it has become part of the prime service of a financial institution. As well as Internet banking services that appear as one of the services of the bank. In addition, there are also ATM services and phone banking or SMS banking(Irawan, 2018).

Transactions made through e-banking experience significant growth every year at several banks. OJK (Financial Services Authority) noted that the number of users of this service increased by 27% from 13.6 million customers in 2015 to 50.4 million customers in 2018. This growth has the potential to increase in line with bank services towards digital banking. This is because e-banking services have attractive features and are convenient to use and provide convenience for customers to make any transactions according to their needs. In addition, the increasingly widespread online business and the increasing number and types of smartphones have contributed to the growth of transactions through e-banking(Asma, Nurul, 2017).

One of the e-banking services is mobile banking. Mobile banking is a service that allows bank customers to make transactions via cell phones or smartphones. The m-banking

service can be used with the menu available on the SIM Card, USSD, or through an application that can be installed by the customer. M-banking provides many benefits for customers, banks, and authorities. For customers, m-banking provides ease of transaction in terms of time, place, and cost. For banks, m-banking can increase commission-based income and reduce operational costs when compared to transaction services through relatively large branch offices to pay employees, building rent, security, electricity, and so on. For the authorities, the development of m-banking encourages the realization of a less-cash society(Febrianta & Indrawati, 2016),

Bank BTN Syariah is one of the sharia financial institutions that innovates to provide mobile banking service facilities. Mobile banking owned by BTN Syariah is an application that functions to provide convenience for banking service transactions via smartphones in a safe, fast, and easy way and can be done anytime and anywhere so that customers do not need to come directly to the bank. This application also provides many menu options that can provide satisfaction to customers such as home screens, account information, transfers, virtual accounts, and customer service. Therefore, from the results of these brief observations, the researcher found a gap and was interested in studying more deeply the design or design of the mobile banking service launched by Bank BTN Syariah.

LITERATURE REVIEW

SWOT Analysis

SWOT is an acronym for the words Strengths, Weaknesses, Opportunities, and Threats. According to Freddy Rangkuti, SWOT analysis is a systematic identification of several factors to formulate corporate strategy(Asiyah, 2017). This SWOT analysis compares the company's internal factors, namely strengths, and weaknesses, with the company's external factors, namely opportunities, and threats. The internal and external conditions that have been analyzed will produce a frame of reference in establishing strategic planning(Ririh et al., 2020).

The SWOT-oriented modern business concept will generate driving, inhibiting, and potential factors. The basic assumption that underlies the company is that internal activities must be aligned with external realities so that the company's goals can be achieved. The purpose of using this SWOT analysis is as a step to compile and formulate concepts and programs for developing mobile banking services in the banking world(Noor, 2014).

The elements that form the basis of a SWOT analysis are as follows: *strength*, namely an organization's internal situation in the form of competencies or capabilities or resources

owned by the organization, which can be used as an alternative to deal with threats; Weakness, namely a situation or condition of weakness of the organization or program at this time. Weaknesses owned by the company can be seen by comparison with competitors like what other companies have but your company doesn't have; Opportunity, which is a situation or condition of opportunities outside the organization and provides opportunities to develop for the organization in the future. Elements are made at the beginning of building a business, this is because the business is formed based on opportunities to generate profits(UTAMI, 2019). The element of opportunity is included in any category that allows the business to survive and be accepted in society both in the short term and the long term; Threath, namely a situation or condition of threat to the organization that comes from outside and can threaten the existence of the organization in the future. Threats are external conditions that can disrupt the smooth running of an organization or company. Such threats can include things from the environment that are unfavorable to an organization. If this is not handled immediately, it will have an impact on achieving the vision and mission of an organization or company. Threats are external conditions that can disrupt the smooth running of an organization or company. Such threats can include things from the environment that are unfavorable to an organization. If this is not handled immediately, it will have an impact on achieving the vision and mission of an organization or company. Threats are external conditions that can disrupt the smooth running of an organization or company. Such threats can include things from the environment that are unfavorable to an organization. If this is not handled immediately, it will have an impact on achieving the vision and mission of an organization or company(Fatimah, 2016).

Information Technology Development Strategy

IT Strategy (Information Technology Strategy or Technology Strategy or ICT Strategy or IS Strategy) is an approach to creating optimal and sustainable information technology capabilities for an organization. The IT strategy is implemented using an IT Strategic Plan that documents specific steps, results, and a timeline. An organization without an IT strategy is the same as an ignorant organization adrift in the seas of 21st-century markets, rudderless and directionless(Pudjadi & Tommy, 2020).

With the rapid spread of IT (Information Technology) and increasing interconnection and connectivity in the contemporary world, having an IT strategy is no longer a luxury for organizations and indeed has become a very important requirement for survival. This means that for organizations to harness the power of IT, capitalize on the synergies between their business processes, and leverage the efficiencies of economies of scale, they need a strong, coherent, and proactive IT strategy(Yusnanto & Lestiono, 2020). Furthermore, with IT

becoming ubiquitous, a business strategy is no longer sufficient and alignment of business strategy with IT strategy becomes paramount. A typical IT strategy such as enterprise strategy must first carry out an internal and external analysis, which will guide the alignment between strengths and opportunities and weaknesses and threats(Sandfreni & Adikara, 2019).

The main reasons why organizations go in for an IT strategy are to reduce operational bottlenecks, actualize economies of scale, and derive value from technology. A good IT strategy can ensure successful results for all of these goals. Thus, it will be able to meet external challenges such as increasing competition in this market successfully. A well-thought-out IT strategy can also be a source of ongoing advantage(Tyas, 2021).

The objective of IT Strategy is to create shareholder, stakeholder, or business value. This goal will not be achieved unless we maximize value, that is, use the fewest resources, and risk to generate the most returns. This goal also requires that this value is "sustainable" – short-term or "transient" value is not the goal of a strategy. On the contrary, it symbolizes the failure of the strategy(Maulani, 2021).

Often, the term competitive advantage is used instead of value. Competitive advantage does create value but does not cover all the ways a business values – new market entry, process efficiency, and so on. The key is an alignment of business and IT capabilities rather than designing IT to meet business needs. The former assumes that the two capabilities drive each other and the latter assumes that the business drives IT and not the other way around(Ashshidiqy & Ali, 2019).

An IT strategy is usually a long-term plan of action to achieve a goal, set in the context of a rapidly changing technological environment. For any IT strategy to be effective, it must have measurable links to business strategy – and this is where many IT strategies fall short. The most effective IT strategies are those that are not only linked to business strategy but also incorporate tactics and logistics (Kurniawati, 2017). IT strategy is analogous to business strategy or enterprise strategy – from objectives to processes, the two share a common logical framework with differences that manifest themselves in the specifics of implementation. Business IT Alignment, some align business strategy with IT strategy or vice versa (Mardiana & Hartati, 2018).

As discussed, business technology alignment is more than that because it is the alignment of business capabilities with IT Capabilities. IT strategy is often included as part of a business strategy. Before IT strategy was developed as a discipline, the business strategy process was expanded to include technological implications and the business strategy document became the de-facto home of the IT strategic plan as well. Today, however, CIOs

prefer to create their IT strategy team, follow their IT strategy process, and communicate strategic plans to their organizations through separate IT strategic plan documents (Supriyantoko, 2019).

Given the complexities of modern IT businesses, technologies, and organizations, this arrangement does provide optimal value for both business and IT. However, IT strategy cannot be developed separately so the IT strategy development team must consist of both business and IT people. The initiative must have a business and IT sponsors. Recommendations must be accepted by both sides of the aisle. The business strategy and IT strategic processes must be closely coordinated. In general, there is a single logical process, organization, and communication document for business and IT strategy. Boundaries are a way of dividing work not responsibility. Depictions are only made to facilitate submission and nothing else (Muslim, 2021).

Information Technology Design

Increasingly here, almost everyone is familiar with the use of technology. Whether it's a technology that's easy to carry anywhere, to various kinds of sophisticated household appliances. So many people feel that they cannot live without technology. That way, technology can be called a lifestyle whose position is so important. Therefore, in recent years there have been many technological products that are not only sophisticated but also beautiful in design (Werdiningrum & Anubhakti, 2019).

This is of course because the design is one of the important factors that must exist in technology products. Sophisticated technology products with minimalist designs will certainly be an added value for these products. Minimalist high-tech products can be found in wearable products (Saraswati, 2018). Wearable products are technology products that are worn on the body, for example, such as smartwatches. Just like creating fashionable accessories, it is very important to pay attention to the design so that it can be presented better by the users. Especially in wearable products, design aspects need to be considered in it (Adiwinoto, 2021).

Technology will continue to evolve. Currently, there are already many products that are very sophisticated technology. Such as tools to monitor organs in the body, to devices that can provide data on speed and steps per minute while running. Therefore, technology development, especially wearables, should not underestimate design elements. Because good technology is not only seen in its sophistication, but also in the design aspect in it (Abdi et al., 2018).

According to etymology, the word design comes from the Latin, namely design which means to make, form, mark, or designate. The word "design" also includes a new word made

in Indonesian from the English "design". The meaning of the word design in the Oxford Dictionary is "a plan or drawing made to show the appearance and function of a building, clothing, or another object before it is made" (Saryanti, 2019). In addition, Oxford also provides another definition for design, namely "decorative pattern". If searching through the Big Indonesian Dictionary (KBBI), the meaning of design is a form framework; design, motive; pattern (Darmawan & Wijaya, 2022).

According to Bruce Nussbaum, Professor of Innovation and Design at Parsons The New School of Design New York, the definition of design is an auxiliary vehicle for implementing innovation in various industrial and business activities. While the definition of design is explained in more detail by a lecturer at the Faculty of Art and Design ITB, Dudy Wiyancoko, namely design is everything related to concept creation, data analysis, project planning, drawing, rendering, cost calculation, prototyping, frame testing, and test riding. So, in general, the notion of design is a plan or design that is carried out before the manufacture of an object, system, component, or structure (Rahman, 2018).

There are several design functions, namely as a tool in the process of creating new objects. Then as a container to show the appearance of certain objects to the public with a picture or actual situation. In addition, design functions as a means for designers to convey their ideas or creations to the public. Finally, the function of design is to improve human knowledge so that they can better understand the shape of plane drawings, space, configuration, composition, arrangement, and so on (Informatika & Informasi, 2021).

The main purpose of design is to help humans design an object so that it can be useful for human life. In addition, there are several other design goals such as to create objects, systems, structures, or components that are useful to humans. Then, to create something that can increase efficiency, productivity, and quality of human life. Also, the design combined with elements of art and technology aims to create comfort, beauty, and safety (Wulandari, 2017).

Previous Research

To avoid similarities in research and minimize plagiarism, the researcher explains two previous studies which have little in common with the title and this research. The first is research conducted by Angga Lukmana in 2014 on "Design of an al-Murabahah Financing Information System for al-Ijarah Islamic Financial Institutions". In this study, the results obtained were that the al-ijarah Islamic financial institution created an innovative web-based transaction application that was expected to improve the performance of all staff and customer

service, so that business productivity would increase, especially in recording and submitting transaction information (Lukmana, 2014).

The second research is research that was conducted by Eko Purwanto in 2019 concerning "Development of Student Payment Systems with BTN Syariah Mobile Payments". In this study, the results obtained were that the development of a student payment system with BTN Syariah mobile payments was done by adding a cloud server as an integration or liaison between the local server and BTN Syariah. Implementation of the mobile payment system has been going well (Purwanto & Sopingi, 2019).

The difference between this research and the two previous studies is that researchers will examine how Bank BTN Syariah globally designs a mobile banking application with various features that can pamper customers and make other people interested in joining the application.

METHODS

This type of research is included in field research. This is because the data sources to be sought by researchers are carried out by direct interviews with managers of Bank BTN Syariah Pekalongan Branch Offices. The research location is located at Jalan Hayam Wuruk No. 15 Pekalongan. As for the method, the researcher chose to use a qualitative method, namely a method based on participatory objective observations of existing social phenomena. Then the approach used by researchers in this research is a case study approach. The case study approach is an approach carried out by a researcher intensively, in detail, and in-depth in the form of programs, activities, and events to obtain in-depth information (Fadli, 2021).

This study uses primary data types. The data will be obtained by researchers directly from the manager of Bank BTN Syariah Pekalongan Branch Office. Researchers will use data collection techniques through interviews and observation. Interviews will be conducted with the management. Researchers will also use an interview guide as guide in collecting data. As for observation, researchers will do it with participatory observation as supporting data from interviews. It is intended that the supporting data resulting from these observations are easily found and digested by researchers.

Then to test the validity and credibility of the data that has been obtained, the researcher uses two types of data validity, namely internal validity and external validity. Internal validity is carried out in two ways, namely triangulation and member checking. As for conducting data validity by triangulation, two techniques are used, namely method and source triangulation. Method triangulation is a method of data validity by juxtaposing documentation data regarding BTN Syariah m-banking facilities with data from interviews

with management. Then the second validity is external validity which is carried out with a transferability pattern, namely comparing the results of the researchers' findings with the results of previous studies which are still relevant.

After the data is completed in the process of testing the validity and credibility, the next researchers carried out the process of data analysis through three stages. The first is the data reduction stage, in which the researcher will sort out the data that has been obtained from the field and then only take data related to the formulation of the problem. The second technique is the display or presentation of reduced data. The last technique is a conclusion or concluding the selected data. Then, all the data that has gone through the process of data analysis will then be analyzed by researchers with related theories and researchers use a type of qualitative verification analysis in analyzing the results of the research that has been done.

RESULTS AND DISCUSSION

SWOT Analysis of BTN Syariah Mobile Banking Services

In making product innovation, of course, there is a SWOT analysis that must be carried out. This SWOT analysis is intended as evaluation material for the bank so that it can continue to provide the best service for its customers. The following is a SWOT analysis of the BTN Syariah mobile banking facility:

1. Strength

   Almost all mobile banking services owned by the bank have the same characteristics (Asiyah, 2017). It's just that some differences can be seen in the application features offered. In the mobile banking application owned by BTN Syariah, it is felt that it is enough to provide services that help customers. Then how to activate this application is also very easy. The customer will usually be assisted by the bank to activate it until the mobile banking application is ready to use. This of course makes customers feel helped by the presence of the application. It becomes easier for customers to make every transaction, whenever and wherever they are.

2. Opportunity

   Opportunities from the emergence of mobile banking services make customers interested in using this application (Asiyah, 2017). This is because, in this digital era, of course, everyone wants something practical, including making transactions in an easy and fast way. The presence of the application is trying to meet the demands of the times and customer needs.

3. Weaknesses

Despite the advantages they have, of course, there are some disadvantages to this application. Incomplete features sometimes make users bored and have backup mobile banking applications from other banks.

4. Threath

As explained in the weakness of the application, of course this weakness can be a threat to banks. When users feel bored with the limited application features, they will look for a more complete mobile banking application. So, the solution that must be done by the bank is to try to always update the application so that it continues to compete with other mobile banking applications.

BTN Syariah Mobile Banking Service Development Strategy

PT Bank Tabungan Negara (Persero) Tbk revealed that the company's digital banking or e-channel services have been increasingly preferred by customers since the Covid-19 pandemic hit. This can be seen from the total number of transactions at BTN Syariah, around 96% of which are carried out through e-channels. Transaction changes were quite significant in 2020, where the total financial transactions (e-channels and tellers) were 200,885,753 transactions and the total transactions for the e-channel itself were 192,183,992 transactions.

According to the Main Director of BTN Haru Koesmahargyo, from these transactions, it can be seen that there has been a significant shift in that fewer and fewer transactions are being made at bank offices, namely, approximately only 4%, meaning that almost 96% have been carried out electronically. This is a change that deserves a solution on how banks can adapt.

According to Haru, the increase in the number of transactions through e-channels proves that mobile banking, internet banking, and Cash Management System (CMS) services make it very easy for customers to make transactions. For this reason, the company will continue to strive to further strengthen digital banking services amid the Covid-19 pandemic.BTN Syariah also presents solutions and convenience for customers to make transactions as a form of adaptation during the Covid-19 pandemic and continues to strive to adapt in the new normal period as an effort to provide the best service for customers.

Haru said digital banking has long been considered the "Future of banking", so a strategy is needed to be able to compete with many entrants in the customer-oriented banking market to deliver a better customer experience. In each digitalization initiative, it is expected that banks can respond to developments in digital services while still paying attention to the aspects of reliability, availability, and serviceability.

Haru explained, there are six focuses and strategies carried out by Bank BTN Syariah to strengthen its digital services:

1. Acquisition of BTN Syariah digital service users, both new customers, and existing customers as well as increasing transactions by increasing the marketing activities of BTN Syariah digital banking products.

2. Developing service features based on personal needs so that the need for the latest services can be enjoyed by customers. This digital banking is the first innovation that understands what customers want, in BTN Syariah itself understands that their needs are for example buying a house or searching for a house, then they can buy with cash, they can also buy with mortgages, and new journeys from the community, for example wanting to renovate a house or buy a new house, or sell the old house and then buy a new house. BTN Syariah seeks to provide things that help the journey

3. Continue to develop features, namely accelerating the addition of payment features and services as well as purchasing services on all digital service channels.

4. New service innovations, BTN Syariah will build a new service system that can directly increase users and transactions on digital service channels.

5. BTN Syariah will strengthen the BTN Housing Ecosystem services, both services for housing developers and residents of the housing (Pre-KPR, Realization of KPR, Post-KPR) so that they are always connected with BTN Syariah. Sixth, process acceleration, which accelerates the addition of features, payment services, and purchasing services on all digital service channels by implementing an efficient and effective partnership and application development process.

BTN Syariah Mobile Banking Service Application Design

BTN Syariah's mobile banking application is an application launched by BTN Syariah to provide services that can make customers more satisfied. The application is an innovation from BTN Syariah which contains various features that are easy for users to understand. Customers can get this application by downloading it through the PlayStore or AppStore application.

The way to register customers is very easy, which can be done through an ATM first. The following is how to register for BTN Syariah mobile banking:

Other transactions - E Channel - SMS Banking - Mobile Banking Registration - Enter No. HP - Enter the 6-digit number of the Mobile Banking PIN - Rewrite the Mobile Banking PIN - Select the Account Type - Confirmation of Registration (make sure the Mobile Number and Account Number are correct) - Proof of registration in the form of a receipt. After that, the

customer can activate the application on their cellphone.

Figure 1

Image of the BTN Syariah Mobile Banking Application
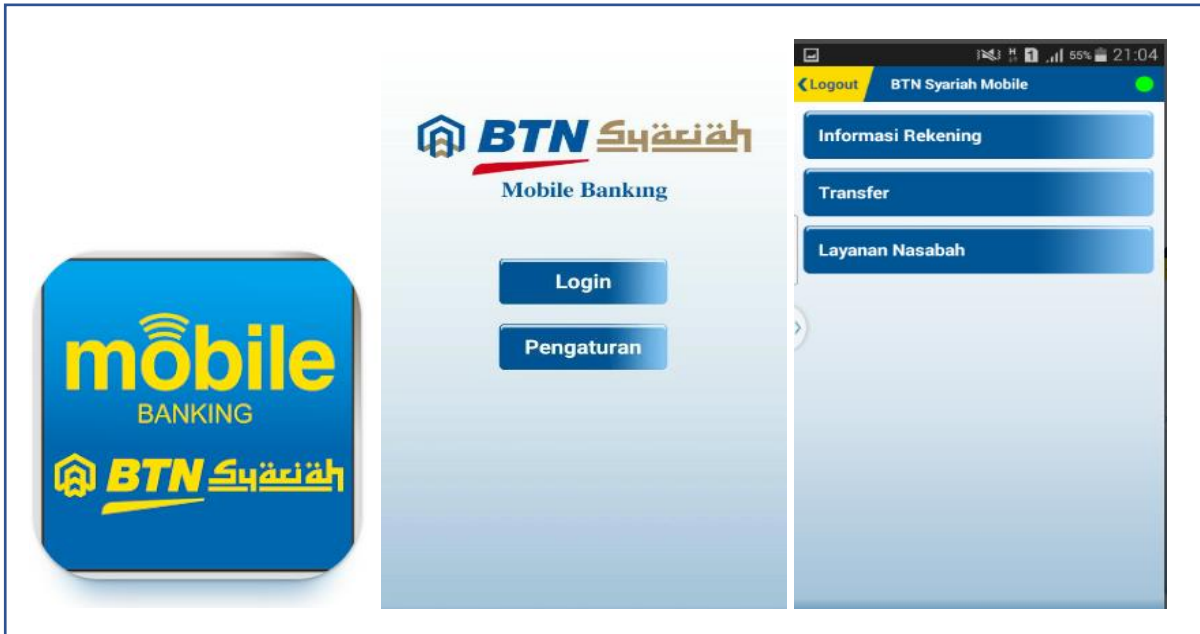
The following menu options are provided in the BTN Syariah mobile banking application:

Table 1

BTN Syariah Mobile Banking Service Application Features

No	Menu Name	Function
1	Home Screen	a) To access, select Login and enter your 8-digit Alphanumeric Mobile Banking PIN b) To change the PIN, select Settings - Change Password - Enter Old Password - New Password - Confirm New Password
2	Account Information	a) Know the account balance b) Select an account to find out the last 5 transactions
3	Transfer	a) Transfers to BTN accounts (Sharia and Conventional) and other banks b) List of transfer destinations, to find

			out, modify and delete stored transfer destination accounts
4	Virtual Accounts	a)	Payments to institutions that have collaborated
5	Customer Service	a)	Inbox, to find out the messages received from transactions that have been done
		b)	Change PIN, to make changes to PIN

CONCLUSION

Along with the times, the development of information technology is growing very rapidly. Therefore, all levels of society are required to follow the flow. In addition, all business sectors, including financial institutions, must also participate in digital literacy. Innovations and information technology development strategies must be continuously carried out to meet the demands of customer needs. In the end, a mobile banking application was launched to improve its service to customers.

One of the banks in Indonesia, namely BTN Syariah, also responded to this condition by launching a mobile banking application. The mobile banking application offered by BTN Syariah has the strength of providing optimal service. Then the opportunity from this application is that mobile banking customer service data increases. While the weakness of this application is the lack of features offered, so this can also be a threat, namely, customers may feel bored and choose to use other mobile banking applications.

Nonetheless, the strategy they adopted to develop this mobile banking service was also felt to have had a very positive effect on increasing the number of users. However, innovation in application service features must be carried out, bearing in mind that currently, many banks have issued mobile banking applications with many feature facilities.

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