



E-Banking Application System: Interface Usability Evaluation of Koperasi Tentera Online System on a Mobile Device

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Abstract The purpose of this research is to examine the relationship between user-user satisfaction on the use of mobile application system belongs to one of the large cooperatives in Malaysia, namely Koperasi Tentera Berhad. A total of 169 respondents consisting of officers and members of other ranks were involved in this questionnaire where all of them are members of the cooperative. There are 2 research objectives that have been identified, namely (1) To identify Reliability, Flexibility, Content and Design, Ease Of Use, Perceived Trust, and Perceived Efficiency on Interface usability of the Koperasi Tentera online system, (2) ii. examine whether Reliability, Flexibility, Content and Design, Ease of Use, Perceived Trust, and Perceived Efficiency on Interface usability of the Koperasi Tentera online system have a significant relationship with user satisfaction. This study has a group target; their consumers use electronic banking applications on mobile phones as bank transaction online services. The study will focus on user usability interface evaluations on a mobile device in terms of scope research. Hence, it will focus on usability as antecedents of user satisfaction towards the interface of Koperasi Tentera Online System application on their mobile devices. Selected usability attributes in this study such as: (1) Reliability (2) Flexibility (3) Content and Design (4) Ease Of Use (5) Perceived Trust (6) Perceived Efficiency. Based on previous studies, the reasons for this study are positively related to user satisfaction. Based on the findings of the study, recommendations for organization, Implication for Practice & Organization and directions for future research are provided.

Keywords Mobile Banking Application, User Interface for mobile banking, user satisfaction toward mobile application, Mobile Banking Application Development

Introduction

The mobile device has become a comment need in our life. Many people today has relied on mobile device to do many thing in their life. In the last few years, mobile devices have grown in popularity to become one of the most common consumer devices. (Jiang He et al. 2007) Therefore, in the last decade, the research of mobile phones' usability has been a newly evolving area with few established methodologies and realistic practices that ensure capturing usability in evaluation.

Thus, there is growing demand to explore appropriate evaluation methodologies that evaluate mobile phones' usability quickly and comprehensively. This study aims to develop a task-based usability checklist based on heuristic evaluations in views of mobile phone user interface (UI) practitioners (Yong Gu Ji et al. 2010). Hence, when discussing the routine of life in our society using new technologies, people need to change their paradigm shift. Indeed, with new revolution has inspired existing of new inventions and products. The same situation involved consumer of an electronic banking application who uses a mobile device to access it. Then it contributes a positive impact on the banking institution.



The mobile application uses widely on consumer's mobile devices as leading apps for banking transactions. Mobile is software programmed that is programmed to operate on mobile devices such as smartphones or tablets. It is a result of recent advances in technology. Because of the convergence of advertising, information technology, the Internet, and advanced technologies, mobile apps have arisen. (Phongtraychack, A., & Dolgaya, D.2018).

Source from Statista.com, update on 30 July 2020, smartphone penetration rate as share of the Population in Malaysia from 2015 to 2025, then in the year 2020 is about ninety-three percent (93.96%).



Figure 1: Smartphone Market in Malaysia - Statistics And Facts (*Hanadian & Nurhayati-Wolff, Oct 14, 2020*)

Most all banks in Malaysia have provided electronic banking for their customer with various functions on mobile phones. Fortunately, essential functions such as check their account details, saving balance, view transaction history, transfer money, show a debit and credit, and other features depend on banks are provided. All of the approaches were designed for awarded benefits for their customers or customers who are entitled to have it on their mobile phones for their easier way without step into the bank.

Koperasi Angkatan Tentera Malaysia Berhad, known as Koperasi Tentera, was registered in 1960. From day one until Dec 2019, there are one hundred fifty-four thousand and six hundred twenty (154,620) members, mostly from military personnel and an officer from the Ministry of Defense registered as Koperasi Tentera members. (Retrieved from <https://www.katmb.com.my/en/home/>) In the early stage of existing, Koperasi Tentera only uses a manual method to facilitate their customer. When time is evolving and technologies become more sophisticated, Koperasi Tentera has adapted this technology and has introduced a Web-based Online System to serve its members. In March 2019, the Koperasi Tentera introduced the next level of banking technology: mobile banking that has benefitted all its members.

Problem Statement

The use of mobile banking applications has become an essential requirement nowadays. This mobile banking application has played a crucial role in being very convenient and helps customers carry out banking transactions easily and quickly. Mobile banking can be identified as an Internet bank. The biggest driver for the development of this service is a smartphone to help make our lives easier.

The development of the mobile banking application interface plays a critical role in determining customer satisfaction. The application's usability is highly dependent on the features of the application interface that helps users access and execute their banking transactions. According to (Hamisu Ibrahim Abubakar, Nor Laily Hashim, Azham Hussain, 2017), mobile device applications' usability is tested through its interfaces. Therefore, any mobile application's suitability depends on the degree of satisfaction users have when using the application. Interface usability is the primary role in a mobile application to support the system on mobile devices. However, when mobile devices are designed, they are invented and produced with multi interfaces that need to ensure consumers of this electronic banking application system can feel satisfied and comfortable before using an application. Usually, these issues included effectiveness, efficiency, and satisfaction. Limited connectivity also contributed to a barrier to the usability of the mobile device interface. The use of mobile devices has



dramatically changed customer behavior as they can complete so many tasks on this one device. As such, customers have become accustomed to speedy transactions. (Lama Zalloum et al., 2019).

Utilizing the Technology Acceptance Model (TAM), this paper looks at how these elements influence individuals' interface usability of Koperasi Tentera Online mobile application. In the Independent Variable (IV), Reliability, Flexibility, Content and Design, Ease Of Use, Perceived Trust and Perceived Efficiency are utilizing to test the Dependent Variable (DV) in Koperasi Tentera Online System Mobile Application Satisfaction.

Context and Scope of Research

This study's objectives will be a specific area on Koperasi Angkatan Tentera Malaysia Berhad (Known as Koperasi Tentera) that focuses on their members using koperasi tentera online application on a mobile device. This company has been chosen because only a Co-op serves the Ministry of Defense Malaysia (MINDEF). More over, this study will target members of Koperasi Tentera who are using koperasi tentera online application on their mobile devices application as their online transaction.

The context of this study will be held among members of Koperasi Tentera or consumers that using Electronic banking using mobile devices. This co-op or company is chosen because there is only one co-op since 1960 and has now transformed into a financial institution. This co-op banking of Koperasi Tentera has about one hundred fortyfive and one hundred ninety-five (145,195) members among army officers, personnel, and staff of the Ministry Of Defense. The company's collective asset is about Malaysian Ringgit, one billion seven hundred and three billion (RM1.703 billion). (Retrieved from <https://www.katmb.com.my/en/home/>).

This study has a group target; their consumers use electronic banking applications on mobile phones as bank transaction online services. The study will focus on user usability interface evaluations on a mobile device in terms of scope research. Hence, it will focus on usability as antecedents of user satisfaction towards the interface of Koperasi Tentera Online System application on their mobile devices.

Related Previous Research

Since the beginning of the decade, researchers have focused mainly on online or Internet banking. In contrast, there has only been little attention on mobile banking (Crossman, 2011). Riquelme and Rios (2010) found that the decision to implement mobile banking services can be affected the most by utility, social norms, and social risk. They also suggested that ease of use and social norms significantly impact female respondents than male respondents. In contrast, relative advantage has a more significant impact on male respondents' perception of usefulness.

The arrival of the cell phone marked the beginning of a change in the way people connect and communicate. It has redefined engagement and has reshaped the way services are distributed. Undeniably, the cell phone has brought a paradigm shift, impacting people's lives and the business climate. It has pervaded the lives of billions of people around the world, becoming an essential tool for many (Elalfy, 2005). The cell phone is also becoming increasingly sophisticated, slimmer, and multifunctional as an ever-evolving platform. It enables multiple operations to be done, such as messaging, connecting to the Internet, and accessing services.

The unique features that the mobile phone has allowed it to adapt to the many services it uses. Many organizations are recognizing that there is a great deal of potential in the mobile environment. The high mobile phone usage rate is the driving force behind the switch towards mobile strategies. The financial services sector has responded quickly to this mobile era by providing a wide variety of mobile services (Laukkanen, 2007).

To provide prevalent access to banking services, many banks worldwide have launched mobile banking services. They can have any banking services at their fingertips via a mobile device (Crossman, 2011). The service is an evolution of internet banking and is not as widespread, but it could expand in the future.

User interface usability using mobile phones is interfaces that show on mobile devices such as button, start, on, off, or others function. Log in access. Usability Factors can affect the usability of a system, impact the overall design of the product, and, in particular, affect user interactions with the application. According to (Harrison et al.2018), three usability factors must consider:

- (a) **User:** During the development process, the user is an important aspect to remember, as users have physical limitations, which will affect how a user uses a software application. The user interface,



whether or not the user is used to using the program, is another significant point. A consumer with ample application experience may choose to use a more direct interface and a more direct interface.

- (b) **Task:** Task refers to the purpose that the user wants to achieve in using an application. An excess of functionalities can increase the application complexity, causing the application usability to be impaired because it will be more difficult for the user to complete his goal.
- (c) **Use Context:** Context of use refers to the environment in which the user will use an application. It also refers to the user interaction with other people and other objects (such as an external device needed for the utilization of a mobile application). Some utilization contexts may influence the use of a mobile application, which shows an average decrease in walking speed when the user uses a mobile application while performing sports. Considering the impact that other tasks executed in parallel have on mobile application usage, this is an essential factor to be considered.

A device's user interface is its look and feels on-screen menus. For example, Android and iOS are two different user interfaces and operating systems running on different smartphones. Each has an entirely different appearance and feel.

User Interface Design's focus is to anticipate what users will need and to ensure that the interface is user-friendly. User Interface involves user experience, including visual design, interaction design, and information architecture (Lavery, 2005).

When used on mobile devices, there are many benefits to the user interface, such as performance, where it can fully help all consumers who use electronic banking using mobile devices and behavior. Performance is one of the main elements where users can quickly execute tasks by the most straightforward method. Users find it friendly to use and suitable for their industry and subject, then there is engagement.

Error Tolerance is a powerful tool that supports various user behaviours and only reveals an error in actual, erroneous situations. By figuring out the number, form, and severity of common mistakes users make and how quickly users can recover from those mistakes, to accomplish this. Error Tolerance is a powerful tool that supports various user behaviours and only reveals an error in actual, erroneous situations. By figuring out the number, form, and severity of common mistakes users make and how quickly users can recover from those mistakes, to accomplish this. Simple to learn, new users can quickly reach targets on future visits and even more efficiently. Besides, other items should be considered as benefits of interface usability on mobile devices.

The ability to conduct financial transactions via a mobile device, more broadly, or simply the ability to conduct bank transactions via a mobile device (Foster, 2010). This definition is an appropriate working definition as it includes basic services such as bank account statements and transfer of funds and electronic payment options, and information-based financial services (e.g. alerts on account limit or account balance, access to stockbroking). It compares this with the definition found in (Kiesnoski, 2001) where mobile banking is referred to as "the ability to bank virtually anytime, anywhere."

Mobile banking is the application of Mobile (Cell) phone technology in WAP, GPRS, 3G, and 4G for mobile banking transactions. The term mobile financial services refer to all financial activities conducted using mobile devices, including those carried out with the aid of cellular phones and personal digital assistants (Crosman, 2011). Mobile banking allows bank customers to check their balances, monitor their transactions, obtain other information, transfer funds, locate branches, and recharge their mobile phones. All these products utilize SMS, WAP, GPRS, 3G, 4G, or other mobile Internet.

As of 2017, Mobile banking is defined by the World Bank as a financial transaction undertaken using a mobile device against one's banking account. Mobile payment, mobile money transfer, and smartphone wallets are used to facilitate transactions between people and companies.

Research Objective

Specifically, the research objectives are as follows:

- (a) To identify Reliability, Flexibility, Content and Design, Ease Of Use, Perceived Trust, and Perceived Efficiency on Interface usability of the Koperasi Tentera online system.



- (b) To examine whether Reliability, Flexibility, Content and Design, Ease of Use, Perceived Trust, and Perceived Efficiency on Interface usability of the Koperasi Tentera online system have a significant relationship with user satisfaction.

Theoretical Framework

The Technology Acceptance Model (TAM) was proposed (Fred Davis, 1989) when extending sound behaviours' hypothetical sense. In the two key considerations of saw worth and saw usability, the model exists. The apparent benefit reflects the degree to which the customer agrees that the item or system's use increases his work's quality or level. The apparent convenience reflects whether the customer feels that the item or framework is difficult to use or easy to function.

This model recognizes that behavioural expectations will influence customers' ability to use, and the use frame of mind and usability together determine customers' behavioural objective. It is possible to separate the impacting variables of mindsets into apparent ease and see helpfulness. Amongst that, evident comfort can affect frames of mind by apparent value in a roundabout way. Similarly, other outside components may impact evident usability and convenience.

Given the writing audit and the hypothetical premise of this exploration, the customer's expectation to change to the mobile banking application stage is fundamentally influenced by the associated gain and associated cost. This paper thus introduces the evident hypothesis and model of identification of invention and erases a portion of the variables indicated by the exploration object's attributes. Consequently, we present the apparent ease, demonstrated handiness, the danger of information misfortune, the chance of information spillage, time potential, use of specific stage expansiveness, and fulfilment of unique stage as our free factors. The examination model that influences the clients' switch expectation of mobile banking application stage is appeared as beneath.

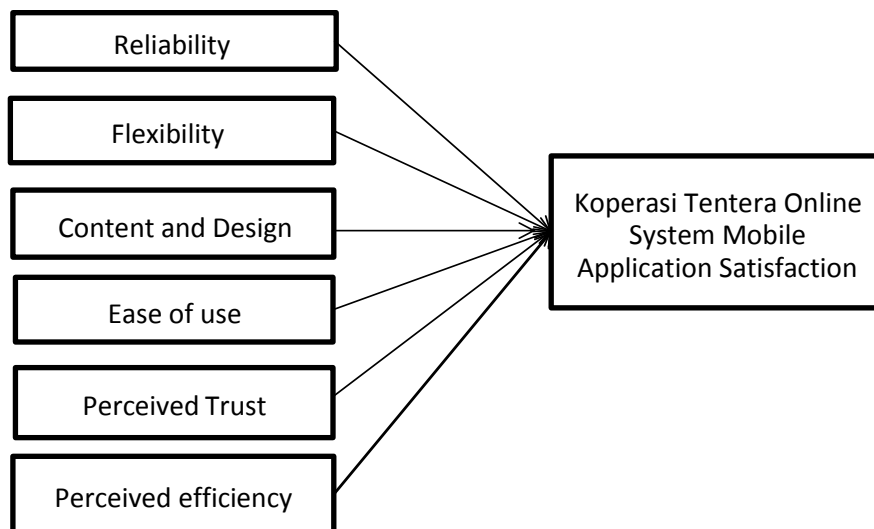


Figure 2: Theoretical Framework of the Study

This study adapter from framework that wrote and referred from several referencessuch as (Sadaf Firdous, 2017), (Saleh, Ashraf & Binti, Roesnita. 2016) (Richa Priya, Aradhana Vikas Gandhi, Ateeque Shaikhl, 2018), (Hoehle & Venkatesh, 2015) (Heba Khalil Asfour & Shafiq I. Haddad, 2014) and (Alturki, Ryan & Gay, Valerie, 2017). 2.2.4 Reliability Is it an important determinant of quality measurement that is often used in the manufacturing and service industries? For the banking customer system in the service process, each service is likely to cause failure and lead to customer complaints. Reliability shall be taken into account in time in the setting of conditions or conditions for the environment's use, and the product or service may meet the required functional standard. In short, reliability, the product, or whether it survives in the ordinary life or cycle process, will be affected by the reliability of satisfaction with the quality of the good or service (Fang et al., 2013).



Research Approach

A questionnaire review is an examination technique that gets information from study tests through a similar questionnaire. A questionnaire is an exploration device comprising a progression of inquiries to assemble information from respondents. As per the attributes of speculative factors and models proposed, this investigation plans an assortment of inquiries that influence the basic's eagerness to utilize cloud storage and discharges the questionnaire on the web and disconnected. In the wake of separating, as indicated by the number of substantial questionnaires, the rest of the information can give an information establishment to the investigation and results in discourse. Utilizing a quantitative methodology with review examines strategy and questionnaire as the exploration instrument for gathering information. The review inquiries about the procedure will be received because of its reasonableness in responding to the exploration questions and accomplishing the research objective.

Population, Sampling, and Data Collection

This study will consist of Koperasi Tentera members at any level using and have experience in electronic banking applications using a mobile device. They were chosen because Koperasi Tentera is a biggest Co-Op in Malaysia with many employees, members and deals with technology.

The sampling of this study will be about 169 members of Koperasi Tentera and obligatory to answers completely the questionnaire has given. To achieve the sampling size target, the total number of questionnaires distributed will also answer the questionnaire using online survey distribution.

The scale of measurement used in this study is ordinal, and its application of statistical analysis is considered appropriate. The software that will be used is SPSS version 25 as software to key in data and analysis.

Data Analysis

The main purpose for this study is to determine the factors (reliability, flexibility, content and design, ease of use, perceived trust and perceived efficiency) influencing user satisfaction of Koperasi Tentera Online Mobile System. The specific objectives for this study are (1) to determine the level of reliability, flexibility, content and design, ease of use, perceived trust and perceived efficiency and user satisfaction and (2) to determine relationship between reliability, flexibility, content and design, ease of use, perceived trust and perceived efficiency toward user satisfaction on Koperasi Tentera Online Mobile System. Besides that, in this chapter also will be cover on reliability test, normality test, descriptive analysis and correlation analysis. All the data in was analyses using SPSS version 25.

Table 1: Normality Test

Variable	Skewness	Kurtosis	Decision Kurtosis
User Satisfaction	-.358	.267	
Reliability	-.523	.519	.267
Flexibility	-.546	.337	.519
Content and Design	-.425	.558	.337
Ease of Use	-.321	-.176	.558
Perceived Trust	.017	-.565	-.176
Perceived Efficiency	-.100	-.596	-.565



Based on Table 1 shows that normality test for seven variable which are user satisfaction, reliability, flexibility, content and design, ease of use, perceived trust and perceived efficiency. The result shows that value range for skewness is -.546 to .017 and value range for kurtosis is -.596 to .558. Overall result shows that range of skewness and kurtosis are constructed within ± 2 . all the data in this study was assumed as normally distributed.

Results show that 158 (93.5%) respondent who are involved in this study is male. Only 11 (6.5%) respondents are female. For the respondent age, 35 (20.7%) respondents are aged between 20 – 30 years old. Followed by 83 (49.1%) respondents aged between 31 – 40 years old. While, 47 (27.8%) respondents aged between 41 – 50 years old. Only 4 (2.4%) respondents are aged 51 and above.

Most of the respondent in this study are Malay which is 16 (94.7%) respondents. While 4 (2.4%) respondents are Indian and 4 (2.4%) for others race. Only one (0.6%) respondent are Chinese. For the highest education level, 66 (39.1%) respondents in this study, their education level at SPM/STPM level. While, 32 (18.9%) respondents their education level at diploma level. Followed by 39 (23.1%) respondents at degree level and 23 (13.6%) respondents are at master level. Only 3 (1.8%) respondents their education level at certificate level. While only one (0.6%) respondent at PHD level. Only 5 (3%) respondents at others level.

For services, result shows that 155 (91.7%) respondents are Army. Only 8 (4.7%) respondents are Airforce and only 6 (3.6%) respondents are Navy. For the position, 83 (49.1%) respondents stated that they as an Officer. 86 (50.9%) respondents are at other rank.

Result for computer literacy shows that 86 (50.9%) respondents in this study are intermediate skill. Meanwhile 61 (36.1%) respondents are basic skill and only 22 (13.5%) respondents are expert and advance skill. Based on result, 138 (81.7%) respondents are using android system. While only 31 (18.3%) respondents are using Apple iOS system.

In this study, result shows that 168 (99.4%) respondents are members of Koperasi Tentera. Only One (0.6%) respondent are non-member of Koperasi Tentera. Same goes to user for Koperasi Tentera Mobile Application. Result shows that 168 (99.4%) is user to Koperasi Tentera Mobile Application. Only one (0.6%) are not user for that application.

Objective 1

Level of user satisfaction, reliability, flexibility, content and design, ease of use, perceived trust and perceived efficiency's perception

Table 2 shows the level of user satisfaction's perception on Koperasi Tentera Online System. Based on the result, level of user satisfaction's perception is at high level. 87 (51.5%) respondents stated that their level of user satisfaction's perception is at high level. Meanwhile, 73 (43.2%) respondents stated that their level of user satisfaction's perception is at moderate level. Only 9 (5.3%) respondents stated that their level of user satisfaction's perception is low level. Mean and standard deviation value are $M=2.4615$. $SD=.59761$.

Table 2: Level of User Satisfaction's perception

Level	Frequency(n)	Percentage (%)	Mean	Standard Deviation
Low	9	5.3		
Moderate	73	43.2	2.4615	.59761
High	87	51.5		

Table 3 shows the level of reliability on Koperasi Tentera Online System. Based on the result, level of reliability is at high level. 107 (63.3%) respondents stated that their level of reliability is at high level. Meanwhile, 54 (32%) respondents stated that their level of reliability is at moderate level. Only 8 (4.7%) respondents stated that their level of reliability is low level. Mean and standard deviation value are $M=2.5858$. $SD=.58251$.

Table 3: Level of Reliability

Level	Frequency(n)	Percentage (%)	Mean	Standard Deviation
Low	8	4.7		
Moderate	54	32.0	2.5858	0.58251
High	107	63.3		

Table 4 shows the level of flexibility's perception on Koperasi Tentera Online System. Based on the result, level of flexibility's perception is at moderate level. 93 (55%) respondents stated that their level of flexibility's



perception is at moderate level. Meanwhile, 65 (38.5%) respondents stated that their level of flexibility's perception is at high level. Only 11 (6.5%) respondents stated that their level of flexibility's perception is low level. Mean and standard deviation value are $M=2.3195$. $SD=0.59133$.

Table 4: Level of flexibility's perception

Level	Frequency(n)	Percentage (%)	Mean	Standard Deviation
Low	11	6.5		
Moderate	93	55.0	2.3195	0.59133
High	65	38.5		

Table 5 shows the level of content and design's perception on Koperasi Tentera Online System. Based on the result, level of content and design's perception is at high level. 123 (72.8%) respondents stated that their level of content and design's perception is at high level. Meanwhile, 41 (24.3%) respondents stated that their level of content and design's perception is at moderate level. Only 5 (3.0%) respondents stated that their level of content and design's perception is low level. Mean and standard deviation value are $M=2.6982$. $SD=0.52104$.

Table 5: Level of Content & Design's perception

Level	Frequency(n)	Percentage (%)	Mean	Standard Deviation
Low	5	3.0		
Moderate	41	24.3	2.6982	0.52104
High	123	72.8		

Table 6 shows the level of ease of use's perception on Koperasi Tentera Online System. Based on the result, level of ease of use's perception is at high level. 129 (76.3%) respondents stated that their level of ease of use's perception is at high level. Meanwhile, 38 (22.5%) respondents stated that their level of ease of use's perception is at moderate level. Only 2 (1.2%) respondents stated that their level of ease of use's perception is low level. Mean and standard deviation value are $M=2.7515$. $SD=0.46009$.

Table 6: Level of Ease of Use's perception

Level	Frequency(n)	Percentage (%)	Mean	Standard Deviation
Low	2	1.2		
Moderate	38	22.5	2.7515	0.46009
High	129	76.3		

Table 7 shows the level of perceived trust's perception on Koperasi Tentera Online System. Based on the result, level of perceived trust's perception is at high level. 116 (68.6%) respondents stated that their level of perceived trust's perception is at high level. Meanwhile, 51 (30.2%) respondents stated that their level of perceived trust's perception is at moderate level. Only 2 (1.2%) respondents stated that their level of perceived trust's perception is low level. Mean and standard deviation value are $M=2.6746$. $SD=.49462$.

Table 7: Level of Perceived Trust's perception

Level	Frequency(n)	Percentage (%)	Mean	Standard Deviation
Low	2	1.2		
Moderate	51	30.2	2.6746	0.49462
High	116	68.6		

Table 8 shows the level of perceived efficiency's perception on Koperasi Tentera Online System. Based on the result, level of perceived efficiency's perception is at high level. 114 (67.5%) respondents stated that their level of perceived efficiency's perception is at high level. Meanwhile, 53 (31.4%) respondents stated that their level of perceived efficiency's perception is at moderate level. Only 2 (1.2%) respondents stated that their level of perceived efficiency's perception is low level. Mean and standard deviation value are $M=2.6627$. $SD=0.49866$.

Table 8: Level of Perceived Efficiency's perception

Level	Frequency(n)	Percentage (%)	Mean	Standard Deviation
Low	2	1.2		
Moderate	53	31.4	2.6627	0.49866
High	114	67.5		

Objective 2

Relationship between reliability, flexibility, content and design, ease of use, perceived trust and perceived efficiency's perception toward user satisfaction.



Objective 2 is to identify relationship between independent variable (reliability, flexibility, content and design, ease of use, perceived trust and perceived efficiency's perception) toward user satisfaction on Koperasi Tentera Online System. To measure this factor, researcher had been used five-point scale Likert like 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly Agree.

This objective is to determine the relationship between reliability, flexibility, content and design, ease of use, perceived trust and perceived efficiency's perception toward user satisfaction. Therefore, the analysis used is Pearson Product Moment Correlation to see the relationship between this variable. P value is showing the significant of relationship. Meanwhile, r -value show the strength of relationship between two variables.

Table 9 shows that there a significant relationship between reliability and user satisfaction on Koperasi Tentera Online System ($r=0.675$, $p=0.000$). Based on Guilford's Rule of Thumb, the relationship between reliability and user satisfaction ($r=0.675$) shows strong relationship. Positive relationship shows that when level of reliability online system increase, the level of user satisfaction will be directed increase.

Result shows that there is a significant relationship between flexibility and user satisfaction on Koperasi Tentera Online System ($r=0.687$, $p=0.000$). Based on Guilford's Rule of Thumb, the relationship between flexibility and user satisfaction ($r=0.687$) shows strong relationship. Positive relationship shows that when level of flexibility for online system increase, the level of user satisfaction will be increase too.

For content and design factor, result shows that there is a significant relationship between content and design and user satisfaction on Koperasi Tentera Online System ($r=0.663$, $p=0.000$). Based on Guilford's Rule of Thumb, the relationship between content and design and user satisfaction ($r=0.663$) shows strong relationship. Positive relationship shows that when content and design for online system are always updated, interesting and easy to use, the level of user satisfaction will be increase.

Result shows that there is a significant relationship between ease of use and user satisfaction on Koperasi Tentera Online System ($r=0.683$, $p=0.000$). Based on Guilford's Rule of Thumb, the relationship between ease of use and user satisfaction ($r=0.683$) shows strong relationship. Positive relationship shows that when level of ease of use for online system increase, the level of user satisfaction will be increase too.

Table below shows that there is a significant relationship between perceived trust and user satisfaction on Koperasi Tentera Online System ($r=.655$, $p=.000$). Based on Guilford's Rule of Thumb, the relationship between perceived trust and user satisfaction ($r=.655$) shows strong relationship. Positive relationship shows that when level of perceived trust on online system increase, the level of user satisfaction will be increase too.

Last, for perceived efficiency shows that there is a significant relationship between perceived efficiency and user satisfaction on Koperasi Tentera Online System ($r=0.805$, $p=0.000$). Based on Guilford's Rule of Thumb, the relationship between perceived efficiency and user satisfaction ($r=0.805$) shows strong relationship. Positive relationship shows that when level of perceived efficiency on online system increase, the level of user satisfaction will be increase too.

All factors ((reliability, flexibility, content and design, ease of use, perceived trust and perceived efficiency's perception) has significant relationship between user satisfaction on Koperasi Tentetra Online System. The strength of the relationship between variable are strong and very strong.

Table 9: Relationship between reliability, flexibility, content and design, ease of use, perceived trust and perceived efficiency's perception toward user satisfaction.

Variable	User Satisfaction	
	r	p
Reliability	0.675**	0.000
Flexibility	0.687**	0.000
Content & Design	0.663**	0.000
Ease of Use	0.683**	0.000
Perceived Trust	0.655**	0.000
Perceived Efficiency	0.805**	0.000



Summary

The main purpose for this study is to identify relationship between factors (reliability, flexibility, content and design, ease of use, perceived trust and perceived efficiency's perception) and user satisfaction on Koperasi Tentera Online System. Mobile banking can be identified as an Internet bank. The biggest driver for the development of this service is a smartphone to help make our lives easier. However, when mobile devices are designed, they are invented and produced with multi-interfaces that need to ensure consumers of this electronic banking application system can feel satisfied and comfortable before using an application. Therefore, this study looks at how these elements influence individuals' interface usability of Koperasi Tentera Online mobile application. In the Independent Variable (IV), Reliability, Flexibility, Content and Design, Ease Of Use, Perceived Trust and Perceived Efficiency are utilizing to test the Dependent Variable (DV) in Koperasi Tentera Online System Mobile Application Satisfaction.

The result shows that level of perception on reliability, content and design, ease of use, perceived trust and perceived efficiency at high level. While, only flexibility at moderate level. For the correlation, there is a significant relationship between level of perception on reliability, flexibility, content and design, ease of use, perceived trust and perceived efficiency's perception toward user satisfaction on Koperasi Tentera Online mobile System.

Based on the data analysis, its shown that there is significant relationship between reliability and user satisfaction on Koperasi Tentera Online mobile System. Reliability is the important things in order to make sure the application can be used. According to Fang et.al (2013), reliability, the product, or whether it survives in the ordinary life or cycle process, will be affected by the reliability of satisfaction with the quality of the good or service. According to the past research, this result is similar with past result where reliability of online system will be influencing the user satisfaction.

Mobile technology is an important thing nowadays because it is easy to use n very flexible to uses especially used during working, making it possible to work at home or during travelling. For this study, result shows that there is a significant relationship between flexibility and user satisfaction. This result are similar with the past result indicated that the flexibility of online system will be increase user satisfaction (Benjati et al, 2012). This is because when the only system is flexible, user can use it anytime and anyway. According to Sallem and Rashid (2011) indicated that user will be satisfied when the can directly using the application while working off-site. It easy to them to access all the important resources.

Next, based on the result, shows that there is a significant relationship between content and design toward user satisfaction. Content and design for application is very important to influencing user satisfaction (Lee and Koubek, 2010). This result is similar with the past review that content and design application give a huge impact to user satisfaction (Dianat, at, el, 2019).

In order to make an application are more compactable to use, when that application ia easy to use using mobile. According to Omwansan et al (2012) stated that perceived ease of use is a level of a person who believe that using mobile banking system would be free effort. This result also similar with the previous study which is they found that perceived ease of use positively impacted the intention to adopt mobile banking (Rahmath et al, 2011). Other than that, Andol Reza et al (2011) also stated that mobile banking are easy to uses and it will increase the customer satisfaction while doing a bank transaction instead of waiting at the bank counters.

Them for the perceived trust, research result show that there is a significant relationship between perceived trust and user satisfaction. According to Kim et ala (2010) stated that trust is a crucial factor in the success of internet banking. When, customer give a 100% trust on that application like internet banking, they will used consistency. that why trust in mobile banking has become a moral code. Previous study also shows that when internet banking offers the quality and secure services, and the customer give a trust to mobile banking, leel of satisfaction will be increase directly. Lastly is perceived efficacy. Result show that there is a significant relationship between perceived efficiency and user satisfaction.

This study can be used as a basic guide to improve the existing online system especially the online system of Koperasi Tentera. In addition, this study also shows several factors that have a relationship with consumer satisfaction. Apart from that, this study can also be used to determine the weaknesses and advantages of an application to facilitate the detection and repair of errors that cause the application to fail to use.



Management and developer for this application can benefit from this research finding by reinforcing user's satisfaction and decision. They can maintain their quality of highly rated features of the online banking system quality measures, communicating these features to potential user, making their online banking system and services more engaging and commercially viable.

Next, from this research finding, we can see that experiences user relied on their perceptions of performance expectancy and online banking system quality to make decision about system usage. In this study, the benefits accumulated in perceptions of user satisfaction such as reliability of system, flexibility of system, content & design, ease of uses, trust and efficiency of Koperasi Tentera Online Banking system. The Implications is for practitioners is to build on these features and merits in attracting non users and reinforcing the decision of actual user by maintaining and improving all those factor and characteristics of efficiency.

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