

A Study on Reuse Intention of Digital Bank in South Korea - Focused on customers using an Internet Primary Bank: 'Kakao Bank'

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Abstract

The Fintech, which has recently drawn attention, has brought about a remarkable revolution in the financial sector. The so-called digital bank, Internet Primary Bank, is a total result of technology finance, which combines Artificial Intelligence(A.I.), Big data, and Blockchain technology etc. Internet Primary Bank combined with these advanced technologies have made a big difference in Korea's financial market. It was also surprising to see the number of consumers in Korea. But, really important part will be to maintain a consistent customer base. In consideration of these aspects, this study investigated factors affecting the intention to continuously use it for consumers using Kakao Bank, which shows a higher status of subscription retention than K-Bank. For this study, the main variables of the expanded technology acceptance model were modified and applied to establish a research model for variables affecting the intention to reuse that. For this research sample was conducted on adult consumers in their 20s and 50s using Kakao Bank. It has the significance of academic verification. And also provides directions for the practical use of marketing data by checking the impact variables on the intention of reuse of Korea's Internet Primary Bank, which are in their relatively early stages.

Keywords: *Digital bank, Internet primary bank, Financial services, Reuse intention, Technology acceptance model*

1. Introduction

In the modern society called the era of the Fourth Industrial Revolution, the development of financial services is undergoing very rapid changes. In the near future, existing banks based on physical distribution models will undergo changes due to the growing number of digital banks. Even some scholars believe that branch-based banking services will come to an end [1]. Kim & Kim [2] said that the core space of financial services has been expanded online due to Internet Primary Bank. With the global financial market trend being reorganized around IT technology and data, the so-called digital bank era has opened in Korea as Internet Primary Bank have started in earnest [1].

In Korea, 'K Bank' started in April 2017, and 'Kakao Bank' opened in July of the same year. Two Internet banks launched higher rate deposits and savings products than existing banks, and offered lower loan interest and fees [3]. Not only is it possible to open an account on a non-face-to-face basis through the start of a specialized Internet Primary Bank, but it has also become a world where it is possible to open an account and even provide a loan service in a few minutes. The Kakao Bank, which launched the Internet Primary Bank in

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July 2017, promoted phrase the following. “After downloading the app with mobile, if you go through a real-name verification, you can start trading in just 7 minutes without visiting the bank. It is also possible to send money in real time from a seated position or easily borrow it. In addition, the dedicated personnel listen to the complaints of consumers for 24 hours [4].”

Like this, Internet Primary Bank had quite an unconventional customer experience. K-Bank, Korea's first Internet bank, opened 20,000 accounts on its first day of business [5]. As a latecomer, Kakao Bank actively used 'Kakao Talk', a Korean national messenger, for financial marketing, surprisingly opening 30,500 new accounts and KRW 50 billion on the first day of business. In addition, it exceeded 3.07 million subscribers in the first month of operation, earning a record of 1.40 trillion won in credit and 1.95 trillion won in reception [6][7]. However, the total assets of the two institutions in 2018, one year after the launch of the Internet Primary Bank in Korea, accounted for only 1.7 percent of the total banking assets [8]. The Kakao Bank also reported a net loss of 12 billion won in the first half of 2018 and reported the lowest capital ratio among the banking sector as of March 2019 [9].

In other words, in the early stages of the introduction of Internet banking services, rapid customer growth can be seen in both institutions, but a considerable number of consumers who actually opened Internet banking accounts were dormant customers. The success of the new digital banking era will not simply be about securing the number of early customers. More importantly for financial services institutions, the part will be to keep the number of customers constantly, ie to increase the intention to reuse existing customers. According to the results of the Korea Media Panel Survey in 2018 conducted by the Korea Information Society Development Institute [10], the characteristics of Internet bank users analyzed by 8987 people were the highest at 32.9% in their 20s, and even 11.1% in their 50s the use rate of double digits was shown, but it was very low in their 60s or older [10].

Therefore, this study investigated the factors affecting the intention of reuse of Internet Primary Bank for consumers using Kakao Bank, which shows a higher customer retention status than K-bank [7]. For this study, the variables of the extended technology acceptance model were applied through the consideration of previous studies, and a research model was set up for factors affecting the intention to reuse of Internet Primary Bank. So, this study intends to conduct empirical investigations focusing on Kakao Bank with regard to the intention to use Internet Primary Bank in Korea, which is relatively in the early stages of introduction.

2. Theoretical backgrounds

2.1. Technology acceptance model

The theory of information technology acceptance can be verified using the Technology Acceptance Model derived from Theory of Reasoned Action. This technology acceptance model is supported by various empirical studies because of its concise and strong explanatory power to the acceptance of information technology [11].

Davis [11]'s technology acceptance model was developed based on the typical theory of rational behavior [12] and the theory of planned behavior [13], which is a representative theory for explaining human behavior. Davis [11] proposed a model for computers that were innovative technologies in the mid-1980s to explain people's intent to accept, suggesting perceived usefulness and perceived convenience as determinants that could affect human attitudes and behavior. Subsequently, the model was expanded and modified

and utilized in studies in various fields to identify factors affecting people's acceptance intentions or intentions for new technologies [14][15]. Furthermore, the studies that have been predicted by modifying and applying the technology acceptance model with respect to reuse intentions for new technologies have proven that variables perceived usability and perceived convenience have a stronger effect on reuse intentions [16]. Davis [11], Venkatesh & Davis [17] defined an intention to reuse the service through the study of the extended technology acceptance model, and the degree of perception of how well they performed necessary tasks through the use of the new system. Jeong & Park [18] applied the extended technology acceptance model to conduct research on potential acceptance of Internet Primary Bank consumers. In addition, Jeong [19] revealed that perceived convenience has an effect on reuse intention through a study on the effect of fintech financial service characteristics on acceptance intention. It is said to be positively affected. In addition, Shin [20] confirmed that the perceived enjoyment of Internet Primary Bank had a positive effect on sustainable use intention. Song [21] said that consumers' beliefs and perceived pleasures in mobile internet service have a significant correlation with the intention to use new technologies continuously. Therefore, this study was conducted to investigate the effects of each variable on the intention of reuse of Internet Primary Bank by adding variables such as perceived usefulness, perceived reliability, perceived pleasure and social influence to various preceding variables.

2.2. Internet primary bank

Internet Primary Bank is that do not have any branch offices or have only a handful of branches and run most of the banking business through the Internet, electronic media such as ATMs and CDs [22]. According to the Korea Financial Supervisory Service [23], the Internet Primary Bank is used as a sales channel only. It was also expressed as 'Internet Only Bank' or 'Pure Play Internet Bank'. In recent years, 'Internet Primary Bank' or 'Internet Only Bank' is mainly expressed in the sense that the Internet is the main channel [10]. Therefore, in this study is used as a concept that is different from the internet banking that existing banks used to secure customer channels.

In 2017, K-Bank and Kakao Bank started operations as the first Internet Primary Bank in Korea. These banks have attracted many consumers through the advantages of easy account opening and low fees, which were difficult to experience through banks in the past.

In K-Bank, which was the first Internet Primary Bank, was also surprising to see the number of consumers. More notably, Kakao Bank, a latecomer, showed a very surprising level of high enrollment in a short period of time [8]. According to Hwang [9], one in five people of the nation made an account two years after the launch of the Internet Primary Bank. Anyway, at the present of 2019, digital banks are already becoming a reality in Korea.

However, what is important to financial services institutions will not be simply securing customers. A really important part will be to maintain a consistent customer base [21].

Internet Primary Bank are provided as services composed of customer centered, non-face-to-face services by combining big data, artificial intelligence, and Blockchain with existing banks' systems to clearly understand their individual tendencies and personal behavior patterns.

3. Research model

The purpose of this study is to prove the correlation between the main antecedent variables of the intention of reuse of Internet Primary Bank. For this purpose, a research model such as [Figure 1] was set up through the consideration of previous studies.

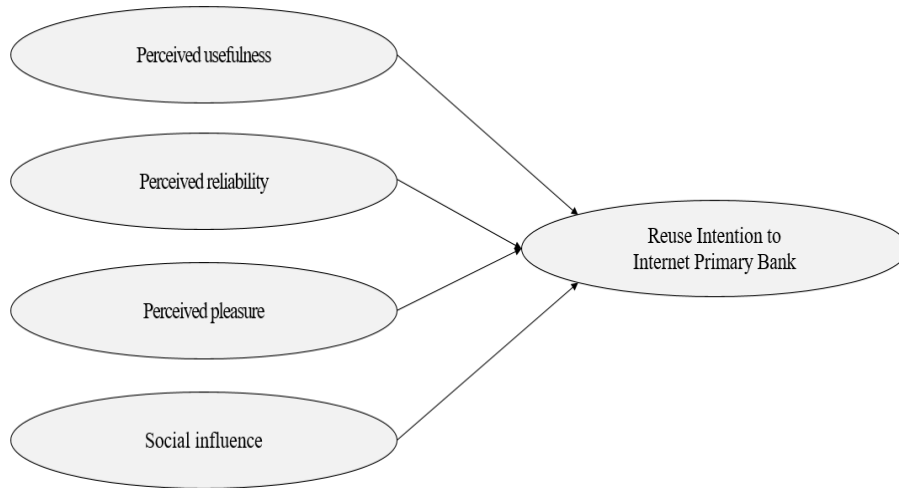
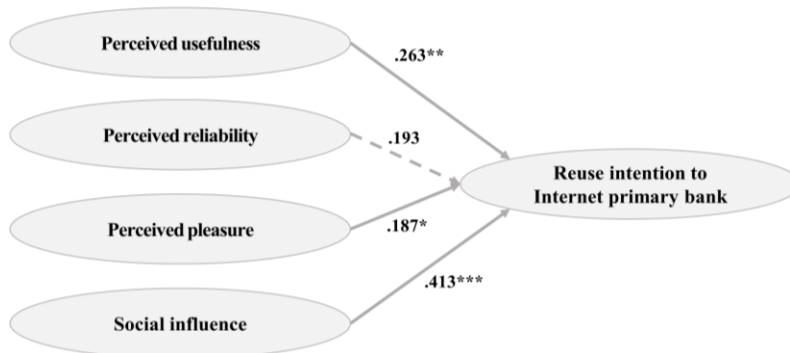


Figure 1. Research model for this study

And in order to proceed with this research, a meeting of experts consisting of professors and researchers from the Consumer Studies was conducted three times to enhance the validity and reliability of this research. This study was conducted from August 2 to 10, 2019, and the samples of 234 adults in their 20s and 50s using Kakao Bank were conducted. The reason why the sample was selected from 20s to 50s is because consumers of the age are more proficient in using mobile and internet [10], so it is judged that it will be more suitable for the purpose of this study. The Cronbach's alpha was calculated to verify the reliability of each measurement tool. The variables measured in this study were higher than .8, which confirmed that they had relatively satisfactory level of reliability. This study was analyzed by SEM and SPSS Statistics.

4. Result and conclusion



Notes: *** p < .001; ** p < .01

Figure 2. SEM result

The results of the study showed that the reuse intention was highly significant in the order of social influence, perceived usefulness, and perceived pleasure among the preceding variables. But, perceived reliability was not significant. Compared to previous prior studies, the variables that should be examined more carefully among the results of this study were social impact variables. It was necessary to pay attention to the meaning of social influence variables that showed high significance in reuse intention. To this end, considering the characteristics of the users of Kakao Bank, which was the subject of this study, it was confirmed that the use of Kakao Bank through 'Kakao Talk Messenger', the mobile phone messenger used most by Koreans.

In particular, Kakao Bank provides relatively easy and fast services such as instant remittance through Kakao Talk without knowing the account number of the other party. For this reason, the positive effect of social impact variables along with perceived usefulness. According to Yoon & Joung [24], Koreans tend to value their image in a society that they consider to be important. We could guess that satisfaction has a positive effect on reuse intention.

Through the results of this study, if marketing activities that can highlight these positive factors are continuously conducted and more special events are provided for existing customers, higher reuse intentions in terms of perceived usefulness and perceived pleasure by consumers was inferred that it could lead.

This study has a limitation in that there was on age of samples in their 20s to 50s. On the social side of modern society, where convenience through emphasis on Digital Bank Based on Information and Communication Technology (ICT) is being emphasized, there is a growing concern about marginalized groups [25], such as older people who cannot adapt to the digital age. Therefore, in the next study, if the study that considers the digital marginalized class by expanding the age range is progressed, it will be developed into a more meaningful study. In addition, we hope that empirical research can be conducted through the introduction of more diverse and new variables. In spite of some of these limitations, this study was conducted in Korea in that it conducted research on Internet primary bank in a relatively early stage. Through the results of the research, we hope that a more effective Internet primary bank marketing plan can be established, and it can be used as a basis for establishing a more stable.

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