The Driving Factors of Digital Banking Intention and the Role of Customer Experience in Indonesia Banking Industry

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Abstract: As one of the most important industries of a country’s economy, banking is now faced the challenge of competition and demand from the customers to provide excellent service. In addition, the advancement of technology has opened up opportunities to increase service quality of banking offerings. One of the newest approaches is digital banking. Unfortunately, the literature is still limited in this area especially on the customer adoption of this service. The objective of this study is to find driving factors that contributes to the intention to use and reuse digital banking especially in generation Z and Millennials. It is hypothesized that there are six factors that might drive the intention, includes performance expectancy, effort expectancy, social influence, perceived service quality and hedonic motivation. It has also argued that intention is mediated by customer experience. Quantitative research was conducted to 105 respondents in Indonesia where digital banking is flourishing. The results provide valuable insights to the factors of digital banking usage intention in the future.

Keywords: component; customer experience; marketing; digital banking; service quality; unified theory of acceptance

Introduction

The banking industry is considered to be the lifeblood of the economy and one of the most important services that can be provided by a country. Considering the intense competition in the banking sector, banks ultimately have to try harder in providing their services better and faster to consumers. The goal is to be able to continue to gather many other consumers in their services. In addition, in this competitive banking environment, it is often felt that it is difficult to achieve product differentiation due to the products and services offered by similar banks (Rouf, Kamal & Iqbal, 2018). Moghavvemi and Lee (2018) argued that this situation results in the use of service quality as the most effective way to differentiate between one bank from another. Ayo (2018) also believes that offering superior and good service quality is an important aspect of the banking industry which in turn will produce customer satisfaction and loyalty.

In addition to service quality, the rapid development of technology significantly contributes to the banking service sector. On the customer side, technological advancements have spurred substantial growth and demand for internet and mobile banking. This swift technological evolution is projected to lead to a substantial increase in internet users. Out of Indonesia’s 264 million people, approximately 171.17 million individuals, or roughly 64.8 percent, are now connected to the internet. The recorded growth of internet usage, at 10.12%, was derived from a survey with 5,900 samples collected in the March to April 2019 period by APJII 2019. This transformative development impacts various fields, including banking and financial services. The financial industry, facing rapid technological changes and evolving consumer demands, must adapt. Embracing digital banking necessitates banks and their financial management models to undergo transformation. Therefore, banks must critically comprehend the influence of digital banking on customer experience and prevailing financial phenomena, ensuring optimal utilization of opportunities.

In addition, the importance of the younger generation, comprising Gen Z and Millennials, to the Indonesian banking industry cannot be overstated. Generation Z, often referred to as Gen Z, encompasses individuals born from the mid-1990s to the early 2010s, succeeding the Millennials. Millennials, born between the early 1980s and mid-1990s, constitute a demographic cohort following Generation X. Both groups share exposure and familiarity with digital
technology, the internet, and social media, shaping their perspectives and behaviors as consumers and contributors to modern society. With the largest proportions of 27.94% and 25.87%, respectively (Badan Pusat Statistik, 2020), within the population, they represent the next wave of banking customers. Recognizing that these cohorts are digital-savvy and tech-oriented, catering to their preferences and needs becomes imperative for the banking sector. Engaging with Gen Z and Millennials not only secures a substantial customer base but also positions banks strategically in adapting to evolving technological trends and preferences. As these demographics become increasingly influential in shaping the financial landscape, focusing on their banking experience and preferences will undoubtedly contribute significantly to the industry's growth and sustainability.

Currently it is understood that one of the efforts made to improve services is through digitalization, thus the level of adaptation of this digitalization is quite welcomed. However, the industrial world is still in the stage of studying consumer intentions in adopting new digital services. There is still a lot of research in the context of e-banking and is not specific to digital banking. There are still many contexts of research conducted in developed countries and it is believed that developing countries have different consumer behavior towards banking services. One of the previous studies is the research by Yaseen and Qirem (2018) found that there are basic variables such as performance expectancy, effort expectancy, social influence, perception of service quality and hedonic motivation that affect behavioral intention to use e-banking. Another study by Mbama and Ezepue (2018) found that customer experience is an important mediating factor between customer perceptions of a bank to customer satisfaction and loyalty. The perceptions include service and functional quality, customer engagement, perceived value and perceived usability and risk. As the industry experience rapid development in its e-banking services, it is deemed necessary to evaluate the banking experience both online and offline (Garg, Rahman & Qureshi, 2014).

Given the critical role of the financial sector, coupled with the ongoing trend of digitization and insights from prior research, this study's primary goal is to identify the key drivers influencing the behavioral intention to embrace digital banking. Previous research such as Sinha and Singh (2022) have studied perceived experience to mobile banking intentions, from the merchant perspective and had suggested a follow up study considering customer perspective and different age group. Other studies investigated several factors directly related to behavioral intention (Nguyen et al, 2020) therefore still leaves unanswered questions on the role of customer experience within the relationships.

To achieve the objective, several factors have been proposed, including performance expectancy, effort expectancy, social influence, perceived service quality, and hedonic motivation. Furthermore, the article introduces a crucial mediating factor—customer experience—as a significant variable influencing the intention to use and repeatedly utilize digital banking services. This addition enhances the comprehensive understanding of the dynamics shaping the adoption of digital banking.

**Literature Review & Hypothesis**

The study will employ the Unified Theory of Acceptance, Customer Experience and Behavioral Theories as the base of composing the model of this research. UTAUT or The Unified Theory of Acceptance and Use of Technology (UTAUT) is an integrated model developed by Venkatesh et al (2003) based on social cognitive theory with a combination of eight leading research models regarding the acceptance of information technology. UTAUT is known as the basic model used for the study of technology including both in organizations and non-organizations. UTAUT is considered to be able to explain more than half of its user variants (Venkatesh et al., 2003). Malik (2020) also included that the UTAUT Model was developed because of the limitations in the TAM model which were considered to be less comprehensive in considering several aspects that influence the
behavior of acceptance of use towards receiving the technology. The UTAUT model then developed with the addition of several variables to develop into UTAUT 2. The previous UTAUT model was considered to be more focused on technological work, so that it did not touch the consumer side, on several additions to the UTAUT 2 model, it made UTAUT 2 more focused on the consumer side as well. The old UTAUT model has four driving variables, namely Performance Expectancy, Effort Expectancy, Social Influence and Facilitating Conditions. meanwhile, in the UTAUT 2 model, three new construction keys were added, namely Hedonic Motivation, Price Value and Habit (Venkatesh, et al. 2003).

Perceive Services Quality

Perceive service quality has an important impact on behavior, intentions, and in the electronic and technological context. Naik et al. (2010) found that service quality has a dominant dimension that makes a direct influence on behavioral intentions and customer satisfaction. Parasuraman et al. (2005) developed a new measurement scale to measure the quality of electronic services.

H1: Perception of the quality of digital banking services will affect customer experience positively

Performance Expectancy

Performance expectancy is the opinion that certain technology will provide benefits for users in carrying out certain activities (Venkatesh et al., 2012). According to Malik (2020), Performance expectancy is a variable that can be explained as the ability to get significant benefits after someone uses an existing system. Performance Expectancy itself consists of representations of five dimensions, the first discussed is perceived usefulness which refers to the extent someone believes that using a particular system will help its performance (Davis, 1989 and Davis et al., 1989). The second Extrinsic motivation explained as the perception that the user wants to do the activity because it is considered as a tool that can achieve valuable results that are different from the activity itself (Venkatesh et al., 2003). The third is the Work correlation defined by Venkatesh, et al. (2003) namely how the capabilities generated from a system that is used can improve job performance. The fourth is Relative advantage according to Venkatesh, et al. (2003) is as far as using an innovation that is perceived to be better than using its predecessor or the previous one. While the latter is Outcome expectation according to Venkatesh et al. (2003) is related to behavioral consequences. This form is separated based on work expectations and personal expectations. The study hypothesized that:

H2: Performance Expectancy will have will affect customer experience positively

Effort Expectancy

Venkatesh (2003) explained effort expectancy as the level of ease associated with using a system. Effort Expectancy refers to whether a person found it easy to use an existing system. Vankatesh and Davis (2000) suggested that ease of use of technology will give a feeling in the user that the system has significant benefits and will cause a sense of comfort if used in completing a task or work. Effort expectancy itself is built from different variables, consist of perceive ease of use (Davis, 1989; Davis et al., 1989) from the TAM model, complexity (Thompson et al., 1991) from the model of PC Utilization, and ease to use of Information Diffusion theory. Davis (1989) suggests that an application can be easily accepted by its users when an application is easy when used. From this explanation, it can be hypothesized that:

H3: Effort Expectancy will affect customer experience positively

Social Influence

Social influence can be defined as the extent to which an individual views that others who are considered quite important and are trusted for themselves will influence it in using certain technologies or a new system (Venkatesh et al., 2003). Using a new technology is considered as a statement that can rise the status of an individual in a social environment. Individual behavior is also influenced by the way in which they believe that others will see them as a result of using such technology. In the context of adoption of e-banking services, social influence means the extent to which bank consumers perceive that
those they consider important trust that a person should accept and use the offered services (Venkatesh et al., 2012). Thus, it is suggested that in the context of consumer acceptance, social influence will affect behavioral intention positively.

H4: Social influence will affect customer experience positively

Hedonic Motivation

Hedonic motivation can be defined as the pleasure and enjoyment felt in using technology that is specifically used and considered to have an important role in a person in adopting and using technology. Hedonic motivation is found as a determining factor that influences behavioral intentions to accept a technology, the adoption of a technology, and usage of a certain technology (Venkatesh et al., 2012). Moreover, the context of digital banking encompasses many special features that can be used for hedonic motivation evaluation, thus providing an opportunity to analyze user motivation to use the service from a different perspective (Yaseen and Al Omoush, 2013). It can be concluded in the hypothesis five.

H5: Hedonic motivation will affect customer experience positively

Customer Experience

According to Shaw (2005) Customer Experience is explained as an interaction between organizations and consumers in which there are several elements of the company's physical performance, stimulation of the person's own senses and emotions created by all of these compared with customer expectations at all points of the element. To be considered a good experience, there must be good consistency in every activity carried out such as in all available distribution channels, interactions that are created, emotional relationships that are built as well as relationships with direct brands (Seybold et al., 2001). Customer Experience in banking services is a study that creates a measurement scale consisting of customer, employee interaction, speed, services cape (service environment), functional online elements, presence of other customers, additional value, service processes and online aesthetics, marketing mix and hedonic online elements.

H6: Customer experience will affect behavioral intentions in using/re-use banking services positively.

Method

This study employs a quantitative research method to validate hypotheses, focusing on customers using digital banking services. The unit of analysis is the customers themselves. Data was collected and analyzed using the Structural Equation Modelling - Partial Least Squares (SEM-PLS) method. The sampling using convenience sampling with criteria of respondent’s minimum 17 years old and within the age of generation Z and millennials. The underlying reason for the respondent selection is the proportion of Indonesia population is now dominated by the two generational cohorts. The total numbers respondents were following rules of thumb for PLS-SEM that generates a target of 60 but the research decided to collect a minimum of 100 samples. The collection of samples is using google forms.

The results reporting will cover respondent demographics, both outer and inner models, and a discussion of findings. To enhance understanding, the results will be compared with previous studies, limitations will be acknowledged, and suggestions for future research will be provided. This rigorous approach ensures a thorough examination of hypotheses, offering valuable insights into the dynamics of digital banking service adoption for informed discussions in financial services research.

Result and Discussion

The study managed to collect 105 respondents qualified for the study. The demographic profile of the respondents (Table 1) consists of mostly female (58.10 percent), within the age group of 16 to 39 years old dominated with Gen Z or below 25 years old (35.24 percent). In terms of education, most of the respondents were in high school and undergraduate level (41.90 percent). On the
socio-economic level, more than half of the respondents were categorized as upper level (56.19 percent) segmentation.

Table 1. Demographic Profile of Respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>44</td>
<td>41.90%</td>
</tr>
<tr>
<td>Female</td>
<td>61</td>
<td>58.10%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 16</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>16-19</td>
<td>3</td>
<td>2.86%</td>
</tr>
<tr>
<td>20-25</td>
<td>37</td>
<td>35.24%</td>
</tr>
<tr>
<td>26-29</td>
<td>24</td>
<td>22.86%</td>
</tr>
<tr>
<td>30-35</td>
<td>30</td>
<td>28.57%</td>
</tr>
<tr>
<td>36-39</td>
<td>11</td>
<td>10.48%</td>
</tr>
<tr>
<td>&gt; 45</td>
<td>0</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SES</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper 1</td>
<td>28</td>
<td>26.67%</td>
</tr>
<tr>
<td>Upper 2</td>
<td>31</td>
<td>29.52%</td>
</tr>
<tr>
<td>Middle 1</td>
<td>31</td>
<td>29.52%</td>
</tr>
<tr>
<td>Middle 2</td>
<td>13</td>
<td>12.38%</td>
</tr>
<tr>
<td>Lower 1</td>
<td>2</td>
<td>1.90%</td>
</tr>
<tr>
<td>Lower 2</td>
<td>0</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD/Elementary</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>SMP/Junior High</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>SMA/K/High School</td>
<td>50</td>
<td>47.62%</td>
</tr>
<tr>
<td>D3/Diploma 3 Year</td>
<td>8</td>
<td>7.62%</td>
</tr>
<tr>
<td>S1/Bachelor</td>
<td>44</td>
<td>41.90%</td>
</tr>
<tr>
<td>S2/Master</td>
<td>3</td>
<td>2.86%</td>
</tr>
</tbody>
</table>

Source: primary data, processed by authors.

The respondent set in this study is young, educated and upper social economic class is expected as representative of the bank’s customers targeted the young millennials. In addition, all the respondents admitted that they currently have bank accounts in one of digital banks listed in the survey.

Outer Model Analysis

The outer model reports the reliability and validity analysis of the indicators. There are several criteria’s used to determine validity and reliability. There criteria include measurement of Cronbach’s Alpha, Composite Reliability and Average Variance Extracted.

From total of 30 indicators (figure 1), all except one indicator of experience (CE1) have passed the criteria of path loading value (>=0.8). Based on the criteria stated in Table 2 and Figure 1, it can be concluded that the indicators were valid and reliable, therefore can be continued for inner (structural) model process.

Inner Model Analysis

The inner model analysis validates the structural model path and hypotheses. The result found that from six hypothesis, there are two hypotheses rejected and four are accepted. The variable of perceived service quality and hedonic motivation are validated to affect customer experience, which then becomes a good predictor for behavioral intention to use and re-use digital banking services. Social influence has also found to affect customer experience, even though with lower levels of confidence.

On the contrary, the study has not found evidence to support the variables of performance expectancy and effort expectancy to affect customer experience. In spite of the evidence from previous literatures has shown

Table 2. Validity & Reliability - Inner Model

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Cronbach's alpha</th>
<th>Composite reliability (rho_a)</th>
<th>Composite reliability (rho_c)</th>
<th>Average variance extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Intention</td>
<td>0.936</td>
<td>0.937</td>
<td>0.959</td>
<td>0.887</td>
</tr>
<tr>
<td>Customer Experience</td>
<td>0.937</td>
<td>0.941</td>
<td>0.951</td>
<td>0.763</td>
</tr>
<tr>
<td>Effort Expectancy</td>
<td>0.956</td>
<td>0.961</td>
<td>0.968</td>
<td>0.884</td>
</tr>
<tr>
<td>Hedonic Motivation</td>
<td>0.868</td>
<td>0.87</td>
<td>0.919</td>
<td>0.792</td>
</tr>
<tr>
<td>Perceived ServQual</td>
<td>0.894</td>
<td>0.895</td>
<td>0.927</td>
<td>0.759</td>
</tr>
<tr>
<td>Performance Expectancy</td>
<td>0.955</td>
<td>0.959</td>
<td>0.966</td>
<td>0.849</td>
</tr>
<tr>
<td>Social Influence</td>
<td>0.892</td>
<td>0.898</td>
<td>0.92</td>
<td>0.698</td>
</tr>
</tbody>
</table>

Source: primary data, processed by authors.
The Driving Factors of Digital Banking Intention and the Role of Customer Experience in Indonesia

A different result. Study by Nguyen et al. (2020) found that performance expectancy and effort expectancy both have positive significant relationships to behavioral intention.

Figure 2. Path Loading values and R-square

Although it has not directly investigated the effect towards customer experience as mediation. The current findings might explain the non-significant relationship in two arguments. First, in the young audience which mostly consist of generation Z, technology is somewhat a given standard expectation. Given that Gen Z is acknowledged as digital natives, they are accustomed to utilizing technology from a very young age (Szymkowiak et al., 2021).

Figure 3. T-values and R-square adjusted

The generation is more digital natives in nature and will not consider technology something that requires effort nor any expectations on increasing performance. Second argument is on the usage of the banking. It is possible that most of the usage is for transactional and personal usage. Therefore, the simple transactions do not require effort expectancy or any noticeable incremental performance expectations that driving to use and re-use a digital banking service.

In addition, a crucial discovery from this study underscores the significance of customer experience as a pivotal predictor of the...
behavioral intention to both use and repeatedly engage with digital banking services. The statistical loadings reveal a substantial 72.5% contribution of customer experience to the overall intention. Similar findings, albeit in hospitality industry, is the work of Amoako et al (2021) that found customer experience leading to intention to repurchase the service. In the same industry recent work validated that perceived experience of merchants is the most influential factor contributing to behavioral intention to use mobile payment services (Singha & Singh, 2022). Examining more closely the components of customer experience, it becomes evident that hedonic motivation emerges as the most influential driver, giving a considerable impact on behavioral intention.

Following closely are perceived service quality and social influence, which also play noteworthy roles in shaping the customers' inclination to adopt and persistently utilize digital banking services. The findings align with recent research in the same industry by Singha & Singh (2022) which found that word of mouth, that can be considered as social influence, was the second affluent factor that was mediated and moderated by experience to behavioral intention. This understanding highlights the multifaceted nature of factors influencing user behavior in the realm of digital banking.

The result gives several managerial implications. First, in designing a digital banking service/interface or applications, it is important to design an excellent customer experience. This experience for the particularly younger customer segment, translates into a good fun design or exciting program (hedonic motivation) but still delivering excellent customer service quality. In addition, social influence can also be a driver to promote this experience. If the three drivers are fulfilled, there is a good chance that a memorable customer experience will result in continuing usage intention of digital banking services.

Conclusion

The study begins with a question of what are the drivers of intention to use and re-use digital banking services? It argues that customer experience is an important mediating factor of the drivers before getting to intention. The study validated that customer experience, indeed, a good predictor for intention. Moreover, the result indicates that hedonic motivation, perceived service quality and social influence are the driving factors of customer experience.

Limitation of this study its generalizability, since it only represents sample from one country. As digital banking is now a worldwide phenomenon, replication study is encouraged in other countries. Secondly, the sample representative mostly young adult segment, a more mature audience might have different needs and perception toward digital banking. In terms of the model representativeness, the model has not yet had perfect predictive capability, there are still other factors that influence both customer experience and behavioral intention warrants for further investigation.

References


2020-mencatat-jumlah-penduduk-sebesar-270-20-juta-jawa.html


Szymkowiak, A., Melović, B., Dabić, M., Jeganathan, K., & Kundli, G. S. (2021). Information technology and Gen Z: The role of teachers, the internet, and


