

## Online Banking and Bank Branding Commitment: A Structural Equation Model Examines the Impact of E-Customer Operations and Perceived Usefulness

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**Abstract:** Numerous studies have looked at the quality of service provided by various types of service providers. Because of this, there has been minimal study done on the quality of electronic services. This study's goal is to determine how much internet banking adoption and bank brand loyalty affect the quality of e-customer service, which is a critical component of e-service quality. In addition to this, online banking customer value has also been examined. For a sample of ten people who use online banking, we performed a self-administered survey. Many quantitative methods, such as correlation and structural equation modelling, were used to examine the data (SEM). Online customer service and user perception value are both important factors in driving online banking usage and customer satisfaction, according to the study's results. Because online customer service has an effect on online banking use, this research is the first of its kind to assess the impact of online service quality on online banking utilization.

### 1. Introduction

Electronic banking includes a variety of services such as ATMs, mobile phone banking, real-time internet banking, and point of sale, call center banking, and the composition of plastic cards, among others (Ngah, ABD.GHANI and RAHI, 2020). This has resulted in the present study focusing only on online banking, which is the most sophisticated and practical service accessible in the field of online banking. Technology is the most crucial tool in business since without it, organizations will not be able to exist and would never be able to get an edge over their rivals. In today's world, almost every bank offers internet banking services, and its users are well acquainted with the goods and features of their financial institutions' websites. Online transactions are the wave of the future for our businesses (Miller, 2003). Banks, and even other sectors, would be the core owners, and the internet would conduct various sorts of transactions with the least amount of risk. People will soon prioritize the internet for all forms of transactions in the future. E-commerce may be defined as applications that allow the exchange of goods and services between two or more parties for the purpose of doing business. So technology is increasingly vital in every kind of organization, and it is definitely required if a company wants to obtain a competitive edge. Furthermore, online banking will alter the method in which services are delivered and the way in which managers connect with their consumers (Shamim, 2022). The results of several research studies are now being considered to determine if internet banking or fully electronic banking will become more popular in the future. The importance of consumer perceived value in achieving customer happiness cannot be overstated. It is defined as the ratio of benefits to the cost that a potential customer is ready to pay in return for a certain product. User perception value is defined as the index of user consequence to input that really is equivalent to the advantages of user output to input or where the user is satisfied with what he/she obtains in return for money he/she is going to have to pay. To become more precise, user perception quality can be

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defined as the index of user outcome to input that is equivalent to the advantages of user outcome to input (Patterson and Spreng, 1997). In general, this research seeks to further our understanding of users' actions as they relate to the adoption of online banking, particularly as they relate to the effect of online customer service and user perception value.

## 2. Literature review

Banking is a significant component of the general economy in any nation in which it operates (Levine, 1998). Online banking provides the highest amount of pleasure for both customers and businesses in the banking sector, and this is true across all industries. Its goal is to boost the revenues and profits of financial institutions. Many individuals these days prefer to do their financial transactions online since it is convenient and quick. Consequently, from an accessibility aspect, the delivery channel role performed by online banking websites is quite important to consider (Amin, 2016). Aspects like as the customer's impression of value are also significant. In order to evaluate whether online banking or totally electronic banking will be more popular in the future, the findings of many research projects are now being reviewed. It is impossible to overestimate the significance of consumer perceived value in obtaining customer satisfaction levels. It is described as the relationship between the advantages of a product and the price that a prospective consumer is willing to pay in exchange for that product (Shamim, 2018). When it comes to user perception value, it's described as the index of user consequence to input that really equals the benefits of user output to input, or when the user is content with what he or she receives in exchange for the money he or she will have to spend. Further, user perception quality may be defined as the index of user result to input that is comparable in value to the benefits of user outcome to input. In the parts that follow, we will go through many major theoretical framework building blocks in more depth, with a particular emphasis on the influence of online customer services on customer value perception.

### 2.1. Online banking usage

The trend has shifted as the number of individuals who use technology has increased through time. It is reasonable to conclude that the usage of the internet is on the increase. It is for the purpose of improving their technological offerings in order to acquire a competitive advantage that websites evolve at a quick pace (Nylén and Holmström, 2015). It is essential for company owners to use information technology to give a front-line role in a location where they may not be present, but where their customers are, and where they are ready to purchase your goods and services. Customers have the flexibility to finish their transaction from any location by using online banking location they want, regardless of whether they are paying for or purchasing an item. We may conclude that internet banking is a global network of computers based on the fact that there are multiple distinct definitions of the term available. Because the internet has changed throughout time, you no longer have to be confined to a computer or a smart phone when you utilize a website to sell your items (Shamim, 2022). Furthermore, banks that do not provide online banking run the danger of losing a significant number of their clients who seek to take advantage of the service, which is becoming increasingly important for corporate authorities and organizations to use the internet.

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network of computers. Since the internet has expanded over the years, you no longer have to be confined to a computer or a smartphone while you're selling your items via a website or on social media (Shamim, 2022). Furthermore, those banks who do not provide online banking run the danger of losing a significant number of their clients who seek to take advantage of internet banking, which is becoming increasingly important for corporate authorities and organizations to do business on the internet.

## 2.2. Brand customer satisfaction

It is the brand that gives the product its distinct identity, and the image communicates whether or not that brand identity is appreciated by the consumer. The trademark of a product assists to distinguish it from other products of a similar kind on the market. "Logo," "mark," or even "brand" are all terms used to describe a symbol that is used to encourage people to buy a product (Suriadi, Mariana and Reza, 2022). When a symbol is used to lure customers to purchase a product, it is known as a "logo," "mark," or even a "brand." In addition, one of the most important responsibilities of a brand is to distinguish one product from another in terms of quality or service. As a consequence, customer confidence is boosted, which in turn increases a company's capacity to compete. A brand is the unique identification of a product (Kumar and Kaushik, 2018). Customers, according to this notion, may see a brand from a multitude of aspects, including their overall purchase and use experiences with the company (Shamim, 2017). This results in the formation of a customer's overall perception of a brand. If a product has distinguishing characteristics, it will attract consumers and build a favorable brand image. According to the research, consistency in terms of quality and services is critical in order to maintain the brand identity. In order to create a favorable brand image, they must be great at offering services, organizing events, and being concerned about product delivery and quality.

## 2.3. Online customer service

It is important to remember that online customer service is a critical component of overall service excellence. Aspects of this feature include customer happiness, attention to complaints, and reliability of service delivery. It was intended to improve the quality of network service for customers, and it was linked to an information technology system that aimed to improve the client connection. Also possible are summaries of customers' overall evaluations and judgments of the e-service quality provided by a virtual market marketplace (Papakonstantinidis, 2017). "Online service" refers to the ability of a website to help its users in making purchases, shopping, or obtaining information about goods and services (San-Martín, Prodanova and Jiménez, 2015). Quality internet service allows businesses to communicate with their customers and obtain vital feedback from them in addition to earning a competitive advantage. Although it was formerly believed that offering low prices on a website was the only way to ensure success, recent events have shown that delivering good customer service is crucial if you want to be successful operating an online company. In addition, today's customers want personalized attention, on-time delivery, and a prompt response to their messages, among other things. As a result, website administration must do all in its ability to live up to these high expectations (Shamim, 2016). Online customer service has ensured a crucial part of high-quality service: prompt response time and availability.

## 2.4. User perception value

The opinions of value held by users are impacted by a broad variety of variables. It is necessary for a potential customer to be completely pleased in order for him or her to pay for anything and get something in return (Womack and Jones, 2015). In terms of customer perceptions of value, there are several types to consider: functional value, conditional value (which is dependent on the company's organizational structure), emotionally based value (which reflects the customer's feelings about the product), social value (which reflects the customer's perceptions of other people), and epistemic value. When it comes to purchase decisions, practical value is important, however emotional value is

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important in piquing consumers' interest in a certain brand and helping them to form an emotional reaction to that brand. This is why the focus of this study is on the whole process of perceived value, from the point of purchase through the point of use and its completion. It is possible to determine how much money and time your client expends to find a product and how much he gets in return in order to determine the customer's sense of value. Taking into consideration everything your consumer performs, from physical labor to mental effort, is another method of determining value.

### 3. Hypothesis formulation

<b>H1</b>	The use of online banking is heavily influenced by the availability of good online customer service.
<b>H2</b>	Branding for banks is heavily influenced by the quality of their online customer service.
<b>H3</b>	Customer value perception considerable effect on online banking implementation.
<b>H4</b>	The impression of customer value has a tremendous impact on bank branding.

### 4. Theoretical framework

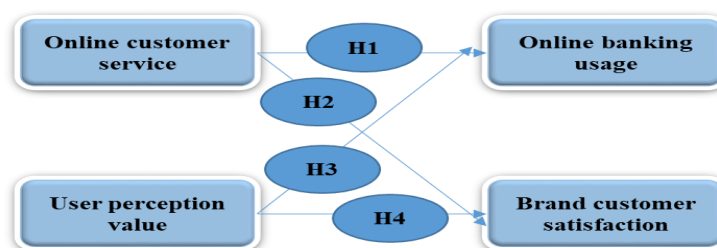


Figure 1 Theoretical model

### 5. Methodology

In the first segment, questions focused on demographics such as region, age, gender, and educational background; in the second section, four latent constructs with a total of fourteen items were evaluated; and in the third section, four latent constructs with a total of fourteen items were studied. A total of three factors were analyzed for each of the three components.

The study's target population consisted of people who were customers of commercial banks. Letters were written to the various branches of the commercial banks in question. In this particular instance, the researcher first obtained permission from the bank branch management before proceeding with the study. In this study, a sample technique known as convenience sampling was used. The survey was completed by a total of ten participants. The next section contains a thorough examination of the mathematical formula that has been offered:

$$n_0 = \frac{z^2 \times p(1 - p)}{e^2}$$

Table 1 Description of equation

Symbol	Description
$n_0$	is the sample size
$z$	is the two tailed area under the normal curve where $\alpha=0.05$ and the z value is 1.96
$e$	is the acceptable sampling error
$p$	is the population of a proportion with a desired attribute (assumed to be 0.5 which maximises the sample size to be determined)

The data processing was carried out using the Structural Equation Model. The Measuring Model and the Structural Model are two models that are often used in SEM. Prior to doing structural modelling inquiry, it is necessary to validate the measurement model of the latent concept for its scale, accuracy, and consistency by performing a confirmatory factor analysis (CFA).

The following pie charts illustrate respondent profile:

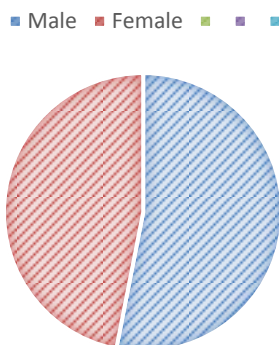


Figure 2 Demographic data

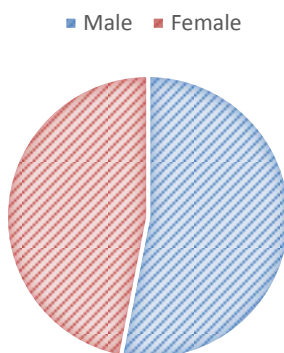


Figure 3 Gender data

## 6. Findings

Online Customer Service and user perception value were provided as exogenous factors in this research, whilst online banking use and Brand customer satisfaction were presented as reflective first order endogenous variables in the same study. The results of confirmatory factor analysis were shown in **Table 2**. (CFA). Reliability in a composite (CR) According to **Table 2**, values greater than 0.7 were found when the construct indicator represented the latent construct in the data set. As a result, the average variance extracted, which shows the total amount of variation in the indicators that were accounted for the latent construct, was more than 0.5 in **Table 2**. In addition, the construct validity of the model was evaluated based on the model's fitness of index (FIT). **Figure 4**. Show model fit index for the measurement model.

Data were submitted to a discriminatory validity test before being used. **Table 3** depicted the squared correlation coefficient between the constructs and their relationships. **Table 3** shows that the square root of AVE (bold) was found to be bigger than the relevant correlation coefficients, which are represented by the values in rows and columns. All of the data given in **Table 3** suggest that discriminating validity has been achieved in this study.

The findings in **Table 4** show the path coefficients of the various constructions, as well as the degree of significance for each construct. The results of the hypothesis tests indicated that all four hypotheses had a statistically significant association. The association between online customer service and online banking use has been established and verified by several studies (H1). The association between online Customer Service and brand customer satisfaction has been established as a result of this (H2). Users' perception of value is substantially correlated with online banking use, as shown by H3, as well as other findings (H3). Finally, the findings of H4, which showed acknowledged and validated by (H4).

*Table 2 Results of measurement model*

<b>Constructs</b>	<b>Loading</b>	<b>AVE</b>	<b>CR</b>
<b>Online Customer Service</b>	<b>Service</b>	<b>0.506</b>	<b>0.754</b>
The online transaction process was accurate.	0.68		
The hyperlinks on this portal site are valid.	0.77		
Internet banking portal performs the service correctly.	0.68		
<b>User perception value</b>	<b>Value</b>	<b>0.651</b>	<b>0.848</b>
Compared to alternative Banks (don't have internet banking), the Banks (have Internet Banking) offers attractive service costs.	0.82		
Compared to alternative Banks (don't have internet banking), the Banks (have Internet Banking) charges me fairly for similar services.	0.80		
Compared to alternative Banks (don't have internet banking), the Banks (have Internet Banking) provides more free services.	0.80		
<b>Online banking usage</b>	<b>Internet</b>	<b>0.608</b>	<b>0.823</b>
I intend to use the system in the next months.	0.79		
I intend to consult the balance of my account on the platform of Internet banking.	0.78		
I intend to perform a transfer on the platform of Internet banking.	0.77		
<b>Brand customer satisfaction</b>	<b>Brand</b>	<b>0.584</b>	<b>0.808</b>
<b>I feel that a banks branding services (Internet Banking) possesses its practical function</b>	0.71		
<b>I feel that a banks branding services (Internet Banking) possesses a positive symbolic meaning.</b>	0.79		
<b>I feel that a bank branding services (Internet Banking) can relate to the pleasant experience.</b>	0.79		

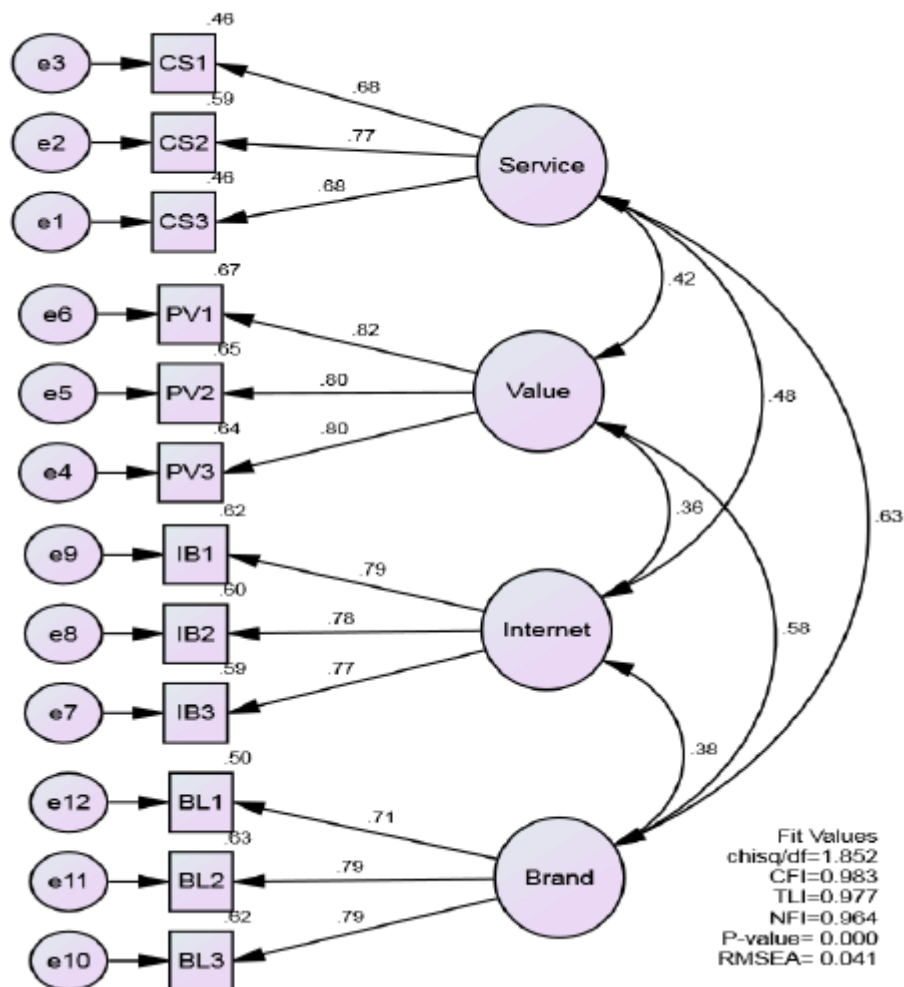


Figure 4 Measurement model

Following the completion of the validity and reliability analyses, the measurement model was developed. In addition, the structural equation model was created in order to evaluate the assumptions that were provided in this research. AMOS 21.0 was utilised to do the route analysis. **Figure 5** depicts the results of the study, which illustrates the route coefficient from independent constructs to their important dependent constructs, in accordance with the research hypothesis mentioned earlier.

Table 3 Discriminate validity

Constructs	E-Customer Service	Perceived Value	Internet Banking	Brand Loyalty
E-Customer Service	<b>0.711</b>			
Perceived Value	0.42	<b>0.806</b>		
Internet Banking	0.48	0.36	<b>0.779</b>	
Brand Loyalty	0.63	0.58	0.38	<b>0.764</b>

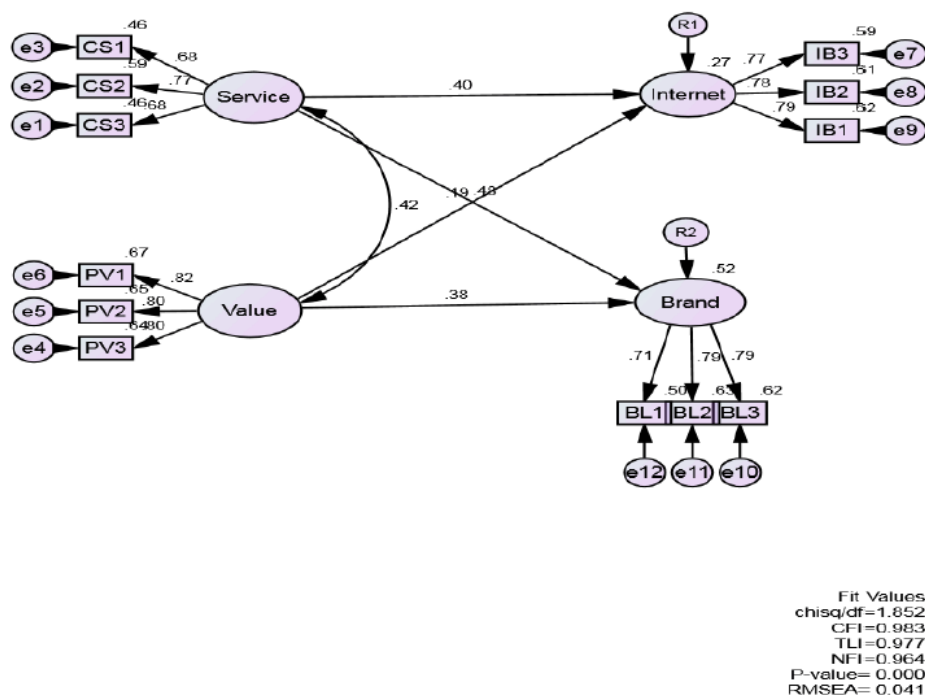


Figure 5 Structural model

## 7. Conclusion

According to the findings of the study, all commercial and public banks should prioritize delivering exceptional online customer service. Online banking is the most critical service to provide in order to keep clients satisfied. Even more significantly, if bank managers want their clients to stay loyal, they must focus their efforts on improving their online services and user perceived value. Individuals' usage of online banking grows as their online customer service becomes more responsive. The relationship between online customer service and the number of people who use it supports the user's perception of value. Specifically, according to H3, if the User perception value is high, the number of individuals who use online banking will increase significantly. Customers' pleasure with online banking is the most important factor in determining customer loyalty, but other findings such as user perception value are also important, so online customer service is eye-catching for the purposes of online banking and brand customer satisfaction.

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