

# Customers' Reported Satisfaction with Bank Services is mediated by Perceived Ease of Use, which Influences Intention to Use (Case Study: Credit Institution)

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## ABSTRACT

The purpose of this research was to determine how perceived ease of use at Credit Institution affected intention to use, with reported enjoyment of use acting as a mediating factor. Data was gathered using a five-point Likert scale in a questionnaire created by the researcher. Three techniques—content validity, construct validity, and convergent validity—were applied to evaluate the questionnaire's validity. Reliability was also assessed using Cronbach's alpha coefficient and composite reliability. Combination dependability is measured as values more than 0.7 and less than 0.95. As a result, it is also verified that the questions are reliable overall. The 400 consumers who received the questionnaire at random comprise the statistical population of this study, which also includes all Credit Institution clients. For data analysis, PLS software and the structural equation modeling technique have been employed. The relationship was corroborated by the results, which indicated that the perceived ease of use had a 0.39 effect on the perceived enjoyment of usage. The association is validated, as seen by the 0.48 influence of perceived ease of use on perceived intention to use. Additionally, it has been verified that reported satisfaction of usage influences perceived use intention.

**Keywords:** Perceived ease of use, Intention to use, Perceived enjoyment of use, Credit Institution.

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## INTRODUCTION

Unquestionably, one of the most significant topics in every society is banking services, and as banks are the end product of any nation's official credit and financial system, they play a significant part in both economic and employment success. Throughout its nearly eight years in business, Credit Institution has consistently been at the forefront of economic growth and entrepreneurial endeavors across a range of industries. What a forward-thinking idea that this financial institution would be at the forefront of introducing innovative techniques to enhance the caliber of banking services in light of technological advancements. The degree to which a person thinks a certain technology is easy to use is known as perceived ease of use. The second factor influencing the acceptance of technology is its ease of use. It is assumed that although individuals may think technology is incredibly helpful, they may also feel that it is not worth the effort because of how difficult it is to use. Perceived ease of use is the name of this variable. Following this research, Davis, Bagozzi, and Warshaw carried out a study titled "Acceptance of Computer Technology: A Comparison of Two Hybrid Models" in 1989. They applied Fishbein and Eisen's (1975) Theory of Reasoned Behavior (TRA) model in this investigation. The rational behavior model of technology acceptance was created by Fred Davis and associates. The technology acceptance model (TAM), which helps to understand what leads to a system's acceptance, is based on this notion. Two fundamental actors and factors that influence people's behavior when using technology have been identified in the technology adoption model. The degree to which a person feels that learning a specific system doesn't involve much work is known as perceived ease of use, or PEOU. It indicates how simple a system is for a user to use. The degree to which a person thinks that utilizing a specific system would improve their performance is known as perceived usefulness, or PU. The ability to draw in new clients and keep existing ones is one of the numerous components that determine success in the banking sector. It appears that the variables of the game-based technology acceptance model have an impact on consumers' opinions about banking

services and the factors influencing them. Electronic services have emerged as a result of the growing growth of information and communication technology and the rise of electronic enterprises during the past 20 years. This is incorporated into the model of technology acceptance as well as the experience of providing credit and financial services online. A greater understanding of the role that electronic services play in the acceptance of electronic financial and credit services can result from the acceptance of technology and the relationship between customer attitude and ease of purchase as one of the factors influenced by the experience of performing online financial and credit services. By mediating consumers' reported satisfaction with bank services, the current study aims to examine the relationship between perceived ease of use and intention to use (case study: Credit Institution). If the research yields positive findings, the credit institution's online financial supplement system will be the practical outcome. This system will surely apply to all banks and credit and financial institutions. It is necessary to conduct this research because of the general policies of the nation's financial and economic system, its comprehensive plan, its need to be in line with global financial and economic trends, and, of course, the indigenization of the science of game creation based on Iranian culture. Of course, there is similar and complementary research in the nation.

### Theoretical foundations of research

#### Perceived ease of use

The degree to which an individual believes that using a specific technology is simple and easy. Ease of use is the second aspect that influences technology adoption. Assuming that individuals believe that technology is very valuable, they may also believe that the difficulty of using the technology is so great that it is not worth the effort. This variable is known as perceived ease of usage. Following this study, in 1989, Davis, Bagozzi, and Warshaw did a study titled "Acceptance of computer technology: A comparison of two hybrid models". In this study, they employed Fishbein and Eisen's (1975) theory of rational behavior model. The rational behavior model of technology acceptance was created by Fred Davis and his associates. This idea serves as the foundation for the technology acceptance model, which makes it easier to comprehend the factors that contribute to a system's adoption. Two fundamental actors and factors that influence people's behavior when using technology have been identified in the technology adoption model: The degree to which a person feels that learning a specific system doesn't involve much work is known as perceived ease of use or PEOU. It indicates how simple a system is for a user to use. The degree to which an individual thinks that utilizing a specific system would improve their performance is known as perceived usefulness, or PU. Figure (1) depicts the technology acceptance model.

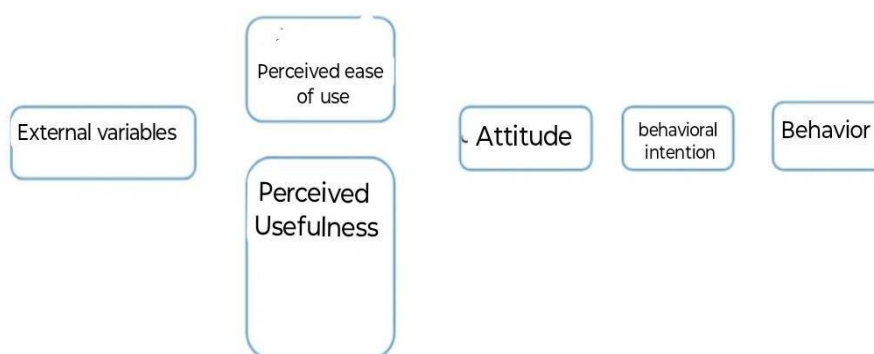
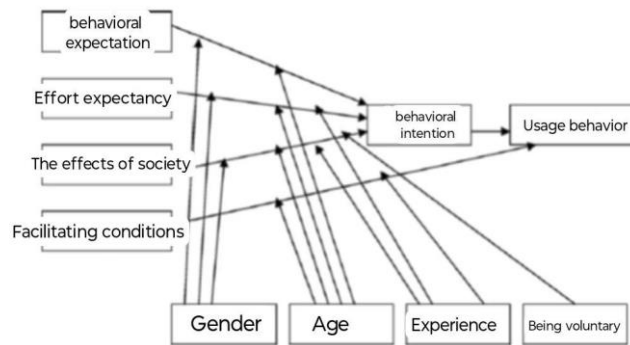


Figure 1: Technology Acceptance Model (David 2005)

The TAM model quickly attracted a lot of interest and was applied in many other domains. This model was modified by numerous researchers, and a variety of models created in this area were showcased. Venkatesh was one among them. In the paper "Theoretical Development of Information Technology Model" published in 2012, Verbach introduced a new model known as TAM2.

### UTAUT model

Unit Theory of Technology Acceptance and Use (UTAUT) is a new model that Venkatesh and his colleagues developed by constructing the technology acceptance model. In addition to the TAM model and the idea of rational action, Venkatesh's model draws inspiration from six more theories. This model collects all the factors that influence behavior and presents a more sophisticated model to measure how people behave when they accept new technology (Zhen et al., 2016). In Figure (2), the unit theory of technology adoption and use is displayed.



**Figure 2:** Unit theory of technology acceptance and use (Zhen et al., 2016)

#### Performance expectation (behavior)

The degree to which an individual thinks that utilizing a system will enable him to accomplish his professional objectives. Perceived usefulness, extrinsic motivation, work fit, relative advantages, and outcome expectation are the five constructs from many models that go into determining performance expectation.

#### Effort expectancy

A system's ease of use is referred to as expected effort. Three constructs—perceived simplicity, complexity, and ease of use—from several models are used to define performance expectations.

#### Effects of society

The extent to which a person believes that significant others expect him to use a particular system or act in a particular way is known as social influence. In the technological acceptance model, social pressure—also known as subjective norms—is a direct behavioral stimulus.

#### Facilitating conditions

The degree to which a person thinks that the organizational and technical framework is in place to support the intended system. The three primary structures in the earlier models—perceived behavioral control, facilitating situations, and appropriateness—also make up this idea. (Ribi et al., 2009).

### Research background

Rodriguez et al. (2016) researched gamification in online banking and how user-friendliness affects user satisfaction. Customers of electronic banking participated in this survey between 2012 and 2015. They employed a Likert scale questionnaire to get data from a sample of 183 and 219 individuals. The results have finally demonstrated that simplicity of use combined with game creation leads to the pleasure of use, which will increase the tendency of customers to utilize electronic banking services. Their conceptual model is based on the technological acceptance model. The influence of gamification on customers' purchase intention in online retail establishments was the title of a study carried out by Inslee et al. (2014). Customers who frequently purchase from online retailers participated in 19 structured interviews as part of this qualitative study. The findings of this qualitative study demonstrated that gaming components have a significant impact on consumers' propensity to shop online and enhance their online shopping experience. Simultaneously, it was discovered that, in the absence of adequate management, customers

themselves invent a sort of game within the store, so intensifying the competition among online retailers. In a case study of students at Islamic Azad University in the province of Golestan, Bavorsad (2015) examined the relationship between the perceived easiness and perceived usefulness of using an electronic learning system, according to the role of students' attitudes. Please utilize indicators like frequency and percentage, as well as tables and graphs, to examine data and information at the descriptive statistics level. At the inferential statistics level, use software to analyze structural equations. The following are the research's findings: The perceived usefulness of an e-learning system and attitude toward utilizing it, as well as the intention to utilize it, is positively and significantly correlated with perceived ease and usefulness. The attitude toward utilizing an electronic learning system is not positively and significantly correlated with how easy the system is judged to be. In a case study of Tejarat Bank branch customers in Khuzestan province, Karimi Alavijeh et al. (2014) examined the impact of perceived convenience and usefulness, customer awareness, and trust in the bank on the inclination to use (intention to use) the bank's system. This study looks into how customers' perceptions of the Bank's mobile system's usability and convenience, as well as their awareness and trust in it, affect their propensity to utilize it. Its approach and nature are causal and its objective is practical. The necessary data was gathered using a questionnaire. 300 surveys were sent out using the cluster sampling technique, and 274 of them were eventually filled out and examined. The findings indicate that both usefulness and awareness have a favorable impact on people's propensity to utilize the mobile banking system. The inclination to use the mobile banking system is positively impacted by convenience. In a case study, Yavari et al. (2013) examined the following factors influencing the adoption of online banking by various banking system consumer groups: The management of 4 branches of Bank Mellat. The study's findings demonstrated a relationship between the following variables: perceived risk and attitude toward using online banking services, perceived usefulness and attitude, perceived usefulness and intention to use, perceived ease of use and perceived usefulness, and culture and perceived usefulness. The association between attitude and intention to use, subjective norm and intention to use, and convenience of use and attitude is important. The results of the study also showed that there is no significant relationship between perceived behavior control and the intention to use Internet banking. Furthermore, the findings demonstrated that attitudes toward the use of Mellat Bank's Internet services have the greatest impact on intentions to use those services. Karimi et al. (2015) investigated how games and social perception impact the uptake of mobile banking using the technological acceptance model. This article's goal is to determine how gaming, social perception, and three other well-known factors—utility, attitude, and convenience of use—affect people's intentions to use mobile banking. This led to the proposal and investigation of a model that generalized the technological acceptance model with variables related to social perception and gamification. A questionnaire was used to gather information from a sample of 386 bank clients. Emos software's structural equation modeling was used to analyze the data. The results demonstrated that gamification, social perception, and the intention to use mobile banking services are directly and strongly correlated. This suggests that gamification can enhance the excitement, interest, and enjoyment of banking activities, and ultimately the intention to use mobile banking services. Using the bank's mobile application results in customers. A study named "Game Creation, New Technology in the Business World" was carried out by Saberi Mobarakeh in 2015. This article aims to explore the various facets of a new technology known as gaming, which, according to 2018 forecasts, is expected to achieve a market value of 5.5 billion dollars. Game creation stresses the application of game design features outside of games. The history, structure, and invention of games are first explored in this study. Next, the psychological underpinnings and the significance of utilizing this sector are discussed, and lastly, the applications of this new technology are explained. Providing a strategy based on game creation to develop the culture of organizational entrepreneurship was the title of a study carried out by Tehrani et al. (2014). According to these academics, gamification—the application of elements of game design in non-gaming contexts—is a valuable and abundant area for scientific study. These academics have been motivated to offer a model for the relationship between these two areas of study because of the necessity to offer strategies for fostering organizational culture (in general) and organizational entrepreneurial culture (in particular). They have attempted to enhance organizational entrepreneurial culture through a gamification-centered approach. Proposing a way to extract a game-based strategy and use it to support organizational entrepreneurial culture is the primary goal of the discussions in this article.

## **RESEARCH METHOD**

Although the current study is descriptive-analytical and applied in terms of its purpose, it is also regarded as a type of correlational research because it examines the manner and extent of the effects of variables and their correlation

with one another. The statistical population of this study is all of Credit Institution's customers, and it was conducted using the random sampling method. In this study, Cochran's formula was used to calculate the unlimited sample size. Therefore, the sample size is considered equal to 385. To increase the validity of the research, 410 questionnaires were distributed, of which 6 questionnaires were not returned. Also, 4 questionnaires could not be used in statistical analysis due to data entry errors. The research questionnaire is based on the localized questionnaire from Rodrigues's (2019) research, which has been adjusted with the expert opinions of the relevant professors and experts. The validity of the questionnaire was examined using the content validity approach. In this manner, several advisors and specialists were presented with the questionnaire and asked for their thoughts on the questions and the assessment of the hypotheses. They unanimously endorsed the questionnaire. Data analysis has been done using PLS software and the structural equation modeling technique.

**Research theories**

1. Perceived pleasure and perceived ease of use are positively and significantly correlated.
2. The perception of ease of use has a favorable and noteworthy impact on the intention to utilize Credit Institution.
3. The positive and significant impact of perceived enjoyment of use on the perceived intention to utilize Credit Institution is seen.

**FINDINGS**

There were 222 male and 178 female replies, or 44.5% of the total. In terms of age, 32 responders, or less than 10% of the sample, are younger than 25. The ages of 85 responders range from 25 to 30. With the highest frequency, 165 individuals are between the ages of 30 and 40. Ninety of them are in their 40s or 50s. The number of individuals over 50 is just 28. Of the sample population, 22% (85 individuals) have a diploma or less in terms of schooling. Of those surveyed, 54 additionally hold an associate's degree. 182 individuals possess a bachelor's degree. A total of 79 individuals possess a master's degree or above. 115 of the respondents, or 29% of the sample size, have only one experience offering financial and credit services at Credit Institution. The largest frequency of respondents—127—have two experiences offering credit and financial services at Credit Institution. Additionally, 89 individuals, or 22% of the sample size, have three prior financial and credit service transactions at Credit Institution. Seventeen percent of the sample, or 69 individuals, had more than three years of experience offering credit and financial services at Credit Institution. Table (1) presents a descriptive study of the research variables based on central parameters and dispersion parameters for the primary research components.

Table 1: Descriptive analysis of research variables

Standard deviation	Range of changes	Maximum	Minimum	Average	No.	Research variables
0.524	3.400	5.00	1.60	4.039	400	Perceived ease of use
0.581	4.000	5.00	1.00	3.955	400	Perceived enjoyment of use
0.554	3.750	5.00	1.25	3.943	400	Perceived purpose of use

The information shown in Table (1) makes it evident that 400 accurate data points on the research variables have been gathered. Among the criteria, perceived ease of use had the highest average score, with ratings ranging from 3.5 to 4. Additionally, as indicated by the mean and mode, the majority of respondents selected options 3 and 4, or "moderate" and "high" on the Likert scale. With a change range index ranging from 1 to 5, there is a significant degree of dispersion. Consequently, the majority of the research variables have a range of values of 4. Perceived usefulness has the biggest dispersion in terms of the standard deviation index. The measurement model that displays the relationship between the variables and the questions is known as the external model. The external model in the method of estimating the coefficients (factor loading) and their significance (t-values) is depicted in Figures (3) and (4), respectively.

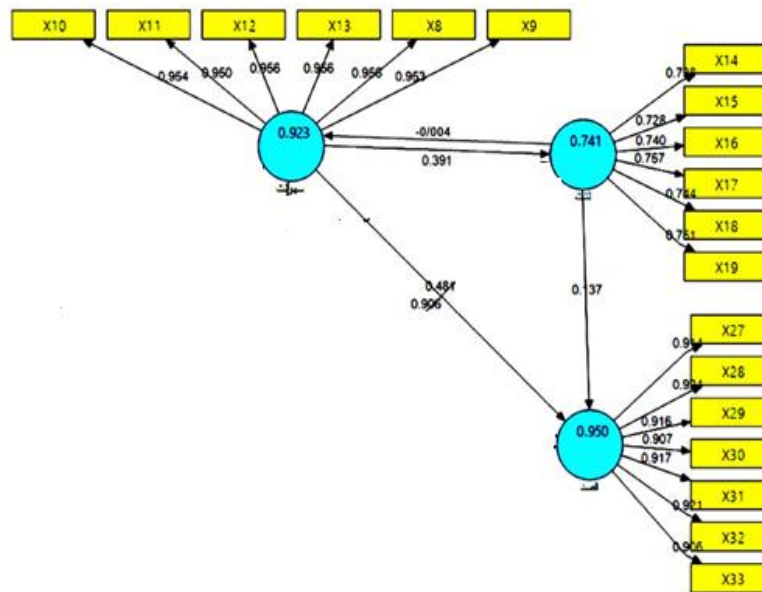


Figure 3: Path coefficients in the outer model (measurement)

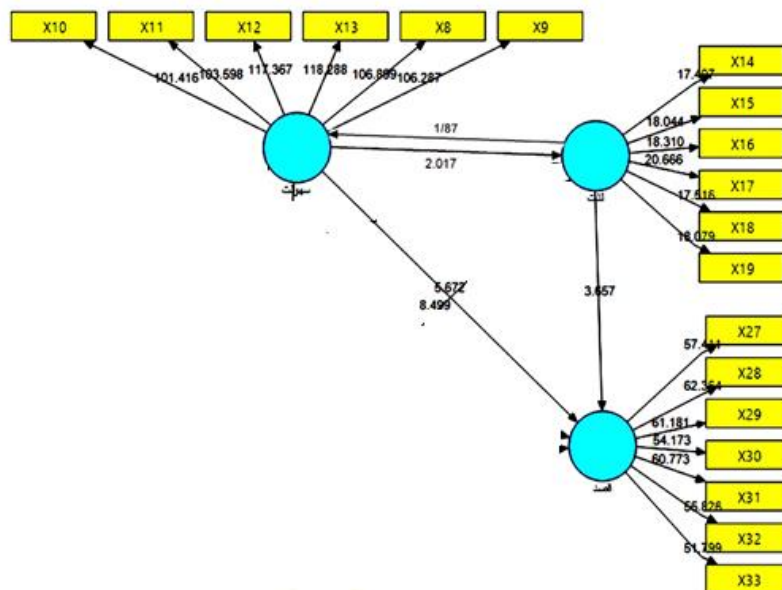


Figure 4: Significance of external model path coefficients (measurement)

A traditional measure for assessing the internal correlation of questions outside the model and gauging dependability is Cronbach's alpha. Cronbach's alpha coefficients for every variable in the current study are greater than 0.7, and reliability is considered adequate when values are greater than 0.7. As a result, there is an inherent link between the questions about these factors. Composite reliability, or CR values, is a measure of the internal correlation of a variable's questions within the model. Values greater than 0.7 and less than 0.95 are considered to be the measured values of combined reliability. As a result, the questions' overall reliability is also validated. These data are displayed in Table (2).

Values of community demonstrate shared dependability. Johnson (2008) asserts that the test's generalizability is its most trustworthy component. The power of each question, by itself and without reference to other questions, to generalize and replicate the findings in other studies is indicated by this score. Its permissible values are more than 0.5. Additionally, all of the numbers in the above table are higher than 0.5, proving shared reliability.

**Table 2: Reliability indices of the model**

AV	Communality	CR	Cronbach's alpha	Variables
0.910424	0.910424	0.983866	0.980321	Perceived ease of use
0.552036	0.552036	0.88085	0.837694	Perceived pleasure
0.83736	0.83736	0.973001	0.967619	The intended use is realized

**Table 3 - Extracted variance**

AVE	Variables
0.910424	Perceived ease of use
0.552036	Perceived enjoyment of use
0.83736	Perceived Intention to Use

The convergence validity is established in accordance with the first test since all of the AVE values or average extracted variance, are more than 0.5, as shown in Table (3).

**Table 4: Fornell Larker**

Perceived Intention to Use	Perceived enjoyment of use	Perceived ease of use	Variables
		0.95416	ease
	0.74299	0.730109	enjoyment
0.91507	61908/0	0.752296	purpose

The Fornell Lanker test is also validated since the numbers on the main diameter are more than the matching numbers in their rows and columns, as shown in Table (4). The overall conclusion is that the validity of the structure is also validated by the convergence and divergence tests.

**Table 5 - R-Score test**

CV Red	R <sup>2</sup>	Variables
0.818627	0.922576	ease
0.395085	0.729963	enjoyment
0.78638	0.95035	purpose

The advantages of convenience, enjoyment, pleasure, and intention combined at a very strong level can explain social understanding, as indicated by Table (5), which shows that the value of R2 for all variables is very strong compared to significant. The table also shows that any number of models in the field with the CV Red symbol is very strong. The GOF quality can be computed from the relationship that follows:

$$GOF = \sqrt{\text{communality} * R^2}$$

Where R2 is the average value of the coefficients used to determine the endogenous structures of the model, and communality is the average of the communal values of each structure. These values are shown inside the circles in the program output. Since the average communality is 759, the average R2 is 0.849. GOF has a value of 0.803. It can be concluded that the current research model and its variables are highly strong by comparing the 0.803 GOF value with the aforementioned values.

Table 6- Path coefficients of the overall model

the result	meaningfulness (t-value)	Path coefficient $\beta$	Internal model
acceptance of the hypothesis	2.017	0.391	The effect of perceived ease of use on perceived enjoyment of use
acceptance of the hypothesis	5.672	0.481	The effect of perceived ease of use on perceived intention to use
acceptance of the hypothesis	3.657	0.138	The effect of perceived enjoyment of use on perceived intention to use

According to the results of Table (6), the coefficient of the path between the perceived ease of use and the perceived pleasure of use is equal to 0.391 and its significance is equal to 2.017, which is outside the range (+1.96 and -1.96). Therefore, it can be said with 95% certainty that the perceived ease has a positive and significant effect on the perceived enjoyment of use.

The coefficient of the path between the perceived ease of use and the perceived intention to use is equal to 0.481, which because its value is positive, so the degree of direct and positive impact, and its significance is equal to 5.672, which is outside the range (+1.96 and -1.96) so it can be said with 95% confidence that the perceived ease has a positive and significant effect on the perceived intention to use.

In other words, the greater the perceived ease, will increase the perceived usage intention. The coefficient of the path between the perceived pleasure of use and the perceived intention of use is equal to 0.137, because its value is positive, so the degree of direct and positive impact and its significance is equal to 3.657, which is outside the range (+1.96 and -1.96) so it can be said with 95% confidence that the perceived pleasure has a positive and significant effect on the perceived intention to use.

In other words, the greater the perceived pleasure, the greater the perceived intention to use.

**CONCLUSION**

Investigating the relationship between perceived ease of use and intention to use through the mediation of reported enjoyment of use is the aim of this study. At a 95% confidence level, the hypothesis is validated by the reported 0.39 influence of perceived ease of use on felt enjoyment of usage. Will be Sriram et al. (2017), Rodriguez et al. (2016), Kadisum (2015), Zhuang et al. (2018), and Herzing et al. The findings of this study are in line with those of the following studies. There is consistency in this study.

The result indicates that the hypothesis is verified at the 95% confidence level, with the effect of perceived ease of use on perceived intention to use is 0.48. The research findings are consistent with those of the following studies: Giffen et al. (2003), Rodriguez et al. (2016), Harris et al. (2014), Hemari et al. (2011), and Fred et al.

The hypothesis is validated at the 95% confidence level, as evidenced by the 0.13 effect of reported pleasure of use on perceived intention to use. The findings of the following studies support the findings of this study: Mostler et al. (2014), Liang et al. (2005), Eva et al. (2015), Dennis (2005), and Michel et al.

Additionally, by completing little missions, their training gradually gets more comprehensive, and in larger missions, they apply what they have learned thus far and have fun! In addition to this education, individuals can provide rapid and simple access to Credit Institution.

It is recommended that learning how to interact with different parts of Credit Institution's services and the service delivery mechanism be as straightforward as possible to improve the perceived ease of use of the institution.



Additionally, the credit institution's numerous services ought to be manageable, transparent, and easy to comprehend. Additionally, service delivery methods must be adaptable, meaning that customers should have the option to get services both in-person and online.

Since this study shows how important it is for consumers to accept credit institutions, it is advised that Credit Institution managers use appropriate advertising to inform and educate their clients about the advantages of the company's credit and financial services to change their perceptions.

Customers' adoption of this new channel will speed up bank transactions, make them simpler, and improve Credit Institution's performance.

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