

ACQUISITION OF CUSTOMERS BY INDIAN BANKS IN THE ERA OF DIGITIZATION: AN EMPIRICAL STUDY IN DELHI

NITISH BAGDI

*Ph.D. Research Scholar,
Department of Commerce, Delhi School of Economics
University of Delhi
E-mail: nitish.acma.srcc@live.in*

Abstract—*Digital Transformation is far-flung further than just stirring from conventional banking to a digitally active one. It is an elementary revolutionize in how economic institutions and banks become skilled at about, intermingle with and convince customers. Over the years, banks have become more digital and less human in helping their customers. They might be well-organized but relationships are not about competence. As customers persist to change their conduit usage patterns, banks and credit firms need to focus on conveying a picture perfect customer experience across an assortment of touch points. This study is a pilot one which aims to inspect various factors on which customer buying behavior is reliant such as experience, perception, benefits, security and ease of use in context with the utilize of e- banking services. The study is based on primary data and a survey was conducted using semi structured questionnaire with a sample size of 134 respondents from Delhi. Automatic Linear Modeling Regression Analysis was applied. Furthermore, the results obtained stated that benefits, experience and ease of use proved to be statistically significant as all the three variables contribute statistically significant amount of predictions to the practice of e-banking services.*

Keywords: *Digital banking, digitization etc.*

Introduction

Banks are imperative in each nation state and have a momentous end product in sustaining economic progress all the way through well-organized financial services. They offer a motorized structure to group saving and alter them into asset. For over a decade, banks have been pretentious by changes allied with globalization and economic liberalization. Banks have been drastically exaggerated by the appraisal of technical know-how; contest between banks has strained them to unearth new market to enlarge and the figure of monetary establishments that tender electronic banking products amplified. Consequently, banks have started to put forward electronic banking services to perk up the efficacy of giving out channels all the way through dipping the transaction cost and increasing the tempo of services.

At present India as a realm is tending towards creating a cashless future. Sustained by the victorious acceptance of demonetization, the Government of India (GoI) is now approaching digital transactions. The conventional banking industry is thus in front of the collision of digital technology. To stay up to date and applicable, numerous commercial banks have by now started assertively innovating digital products and services for customers. Lastly it is customer penchant which will compel business models. Customers with new-fangled expectations and the need to erect trusted relationships are forcing incumbents search for value schemes where transaction, efficiency, experience and transparency are key in fundamentals. As autonomous solutions materialize amongst competitors, the aptitude to make a distinction will be an enormous challenge. And adding together to societal changes, the driving energy at the rear will be modernism in financial services can principally be accredited to technological advances external to the financial services segment that will fetch novel openings to comprehend and handle the risk.

The present study aims to discover the factors which establish customer buying behavior while doing banking in the era of digitization.

Review of Literature

| S. No. | Researcher and Year | Objectives | Research Methodology | Findings |
|--------|---------------------------|---|------------------------------|--|
| 1. | Peter (2015) | To look into customer's point of view towards internet banking services and to recognize some of the factors preventing customers from using internet Banking in Nigeria. | Multiple Regression | It was concluded that awareness Factor has no consequence on customer satisfaction of internet banking. |
| 2. | Rodrigues (2017) | To have a say to the investigation to which factors influence Portuguese customers' e-banking adoption. | Multiple Regression | It was enumerated that the shortfall of trust and to be deficient in of personal contact are the two on the whole essential factors preventing clients from using electronic enabled banking services. |
| 3. | Al-Smadi (2012) | To recognize and be conscious of factors that influence banking customers' exercise of digital banking services. | Multiple Regression | It was highlighted that indecision avoidance has a positive and momentous impact on perceived ease of use and perceived usefulness. Perceived risk has the forceful bluster on customers' outlook, which in turn manipulates customers' intention to use digital banking services. |
| 4. | Teka and Sharma (2017) | To consider the influence of demographic factors on users' implementation of e-banking systems in Ethiopia from the current users' standpoint | Analysis of variance (ANOVA) | It was found out that commercial banks in Ethiopia should generate more awareness to their e-banking users' (especially to females) in order to develop better e-banking usage practice. |
| 5. | Lusaya and Kalumba (2018) | To inspect the challenges of adopting the use of e-banking by customers. | Chi-Square test. | It was depicted that building the information necessary by customers available will augment the numeral of customers using digital banking. |
| 6. | Hassan and Awan (2017) | To scan the factors which catch the fancy of the customers to espouse digital banking in Pakistan. | Partial Least Squares | It was depicted that more collision to make bigger the anticipation of customers to implement digitally enabled banking services while this study depicts that customers can be extra trustworthy if they feel expediency in adopting the services. |

Objectives

1. To inspect the influence of experience on the frequency of usage of E- banking services by customers.
2. To inspect the influence of perception on the frequency of usage of E- banking services by customers.
3. To inspect the influence of benefits on the frequency of usage of E- banking services by customers.
4. To inspect the influence of security on the frequency of usage of E- banking services by customers.
5. To inspect the influence of ease of use on the frequency of usage of E- banking services by customers.

Hypotheses

- HA1:** Experience influences the usage of E-banking services.
- HA2:** Perception influences the usage of E-banking services.
- HA3:** Benefits influences the usage of E-banking services.
- HA4:** Security influences the usage of E-banking services.
- HA5:** Ease of use influences the usage of E-banking services.

Data and Methodology

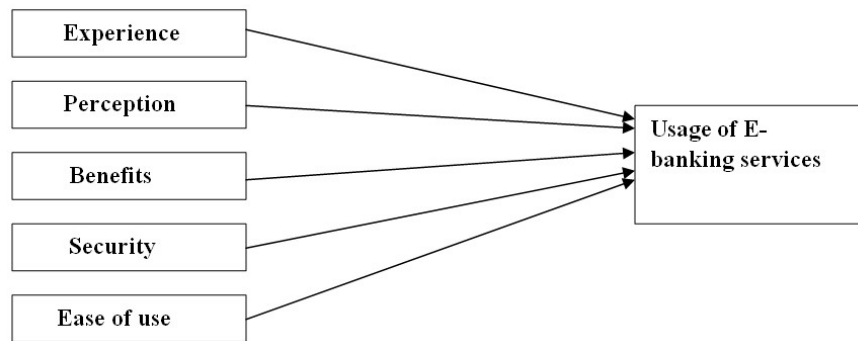


Figure 1: Theoretical Framework

Research Design

Data Collection and Data Instrument

The study mainly focuses on the Primary data for which a Semi-structured online survey consisting of 5 factors consisting i.e. **Experience, Perception, Benefits, Security, and Ease of use** and usage of **E-banking** services is formulated using Google docs.

Method of Collection of Sample

Questionnaire pretesting is a comparatively uncomplicated, economical method for spotting problems with a questionnaire. It entails a minute study to settle on how a questionnaire can be enhanced to curtail reply errors, like respondent misunderstanding a question (Converse and Presser 1986). In order to accumulate data and to pretest the items of the questionnaire a Sample size of 134 respondents is being taken from Delhi on the basis of convenience sampling method and an Electronic Questionnaire is being circulated to them.

Tools and Techniques

In order to test the Hypothesis and to achieve the objectives, hence a reliability and validity test is being carried out for the same. Cronbach Alpha is being used which determines the internal consistency of items in a survey instrument to estimate its reliability. Further, the data is analyzed using Automatic Linear Modeling Regression Analysis.

Analysis

Table 1

| Reliability Statistics | |
|------------------------|------------|
| Cronbach's Alpha | N of Items |
| .819 | 6 |

Table 2

| Item-Total Statistics | | | | |
|-----------------------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
| Experience | 18.42 | 14.275 | .515 | .807 |
| Perception | 18.64 | 13.450 | .548 | .803 |
| Benefits | 18.57 | 14.547 | .633 | .782 |
| Security | 18.62 | 13.576 | .580 | .793 |
| Ease of use | 18.25 | 14.807 | .667 | .779 |
| Usage E-banking | 18.57 | 14.547 | .633 | .782 |

It can be seen from Table 1 that Cronbach's alpha is **0.819**, which indicates a good level of internal consistency for the questionnaire. Table 2 presents the value that Cronbach's alpha would be if that particular item was removed from the scale. We can see that elimination of any item would result in a bit lower Cronbach's alpha. Therefore, it will be desirable not to remove any of the above items.

After the successful reliability test we applied the **Automatic Linear Modeling (Regression Analysis)**.

Table 3
Model Summary

| | |
|-----------------------------------|-----------------|
| Target | Usage_E-banking |
| Automatic Data Preparation | On |
| Model Selection Method | Best Subsets |
| Information Criterion | -800.332 |

The information criterion is used to compare to models. Models with smaller information criterion values fit better.

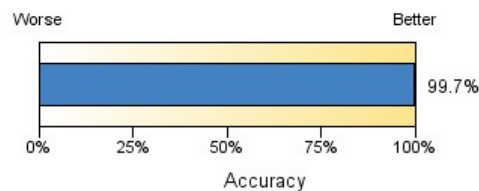


Table 3 shows the value of Adjusted R Square = .997. This can also be cross checked as the number appears to the left of bar graph which is highlighted in blue colour but is unlabeled.

Table 4
Automatic Data Preparation

Target: Usage_E-banking

| Field | Role | Actions Taken |
|---------------------------------|-----------|---------------|
| (Benefits_transformed) | Predictor | Trim outliers |
| (Easeofuse_transformed) | Predictor | Trim outliers |
| (Experience_transformed) | Predictor | Trim outliers |
| (Perception_transformed) | Predictor | Trim outliers |
| (Security_transformed) | Predictor | Trim outliers |

If the original field name is X, then the transformed field is displayed as (X_transformed). The original field is excluded from the analysis and the transformed field is included instead.

Table 4 represent the actions of the **Automatic Data Preparation** function. In this study, **Trim Outliers** was the only transformation required for the predictors. In other words, scores greater than the absolute value of z score of 3.0 were replaced with 3.0 because it was indicated in the analysis setup that three standard deviations distance from the mean will be designated as the cut-off value.

Table 5
Model Building Summary
Target: Usage_E-banking

| Information Criterion | Model | | | | | | | | | |
|-----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Information Criterion | -800.332 | -799.888 | -799.371 | -798.628 | -796.871 | -796.277 | -796.179 | -793.703 | -792.239 | -792.085 |
| Experience_transformed | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| Benefits_transformed | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Effect Security_transformed | ✓ | | | ✓ | ✓ | ✓ | | | ✓ | ✓ |
| Easeofuse_transformed | ✓ | ✓ | ✓ | ✓ | | | | | ✓ | ✓ |
| Perception_transformed | | | ✓ | ✓ | | ✓ | ✓ | | ✓ | |

The model building method is Best Subsets using the Information Criterion. A checkmark means the effect is in the model.

Table 5 represent the **Model Building Summary** and deliver the required overview of results. All the predictor variables are displayed in the first column at the left side of the table. They are named as being transformed as evaluations of fit are made on the standardized model to place all variables on the same (z score) metric. Each column under the model is one of the top 10 best fitting models ordered by its value on the **Information Criterion**. **Lower (more negative)** values indicate a better fit. Top-rated model (Model 1) has an Information Criterion value of -800.332. The variables included in that model as predictors are checked (Experience, Benefits, Security and Ease of use). Thus, the Adjusted R Square value depicted by the Accuracy bar graph applies to this model 1.

Diagram: 1

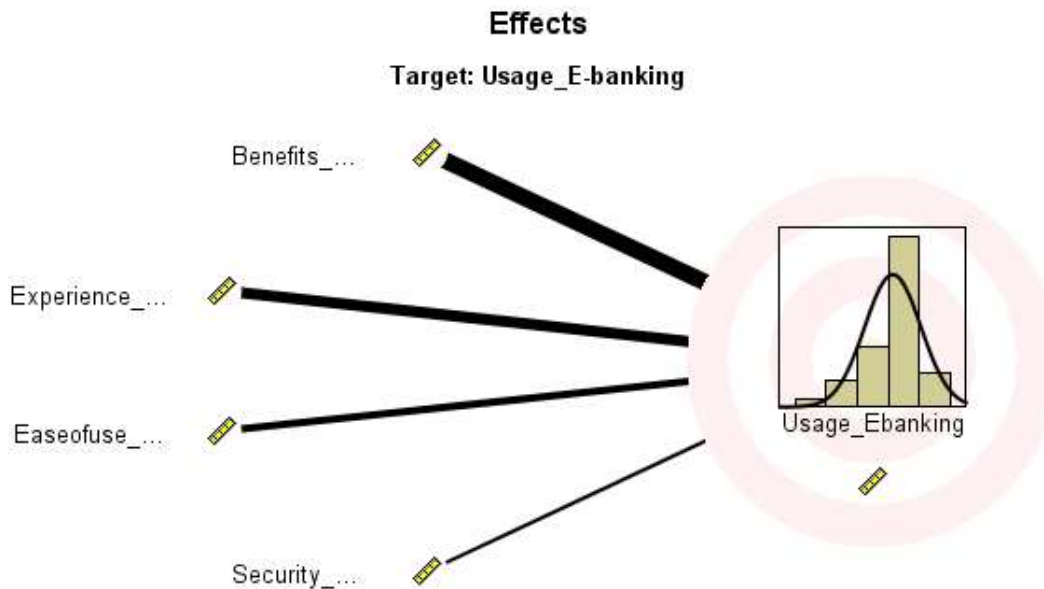


Diagram: 1 represent that out of five predictors only four (benefits, Experience, Ease of use and Security) effects the Usage of E- banking services by customers. Thus, the predictor named Perception is being discarded. Information of similar nature is being depicted by Table 6 below i.e. the Corrected Model (Model 1) is statistically significant too with a p value < .05.

Table 6
Effects
Target: Usage_E-banking

| Source | Sum of Squares | df | Mean Square | F | Sig. |
|-------------------|----------------|-----|-------------|------------|------|
| Corrected Model ▶ | 108.490 | 4 | 27.123 | 11,082.116 | .000 |
| Residual | 0.316 | 129 | 0.002 | | |
| Corrected Total | 108.806 | 133 | | | |

Diagram: 2

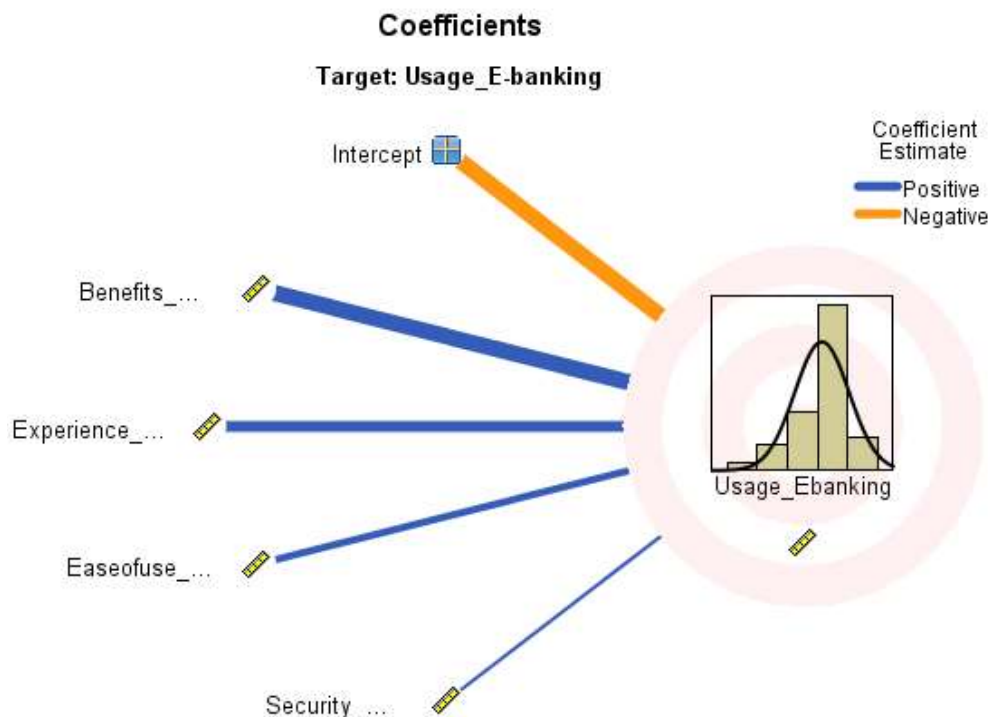
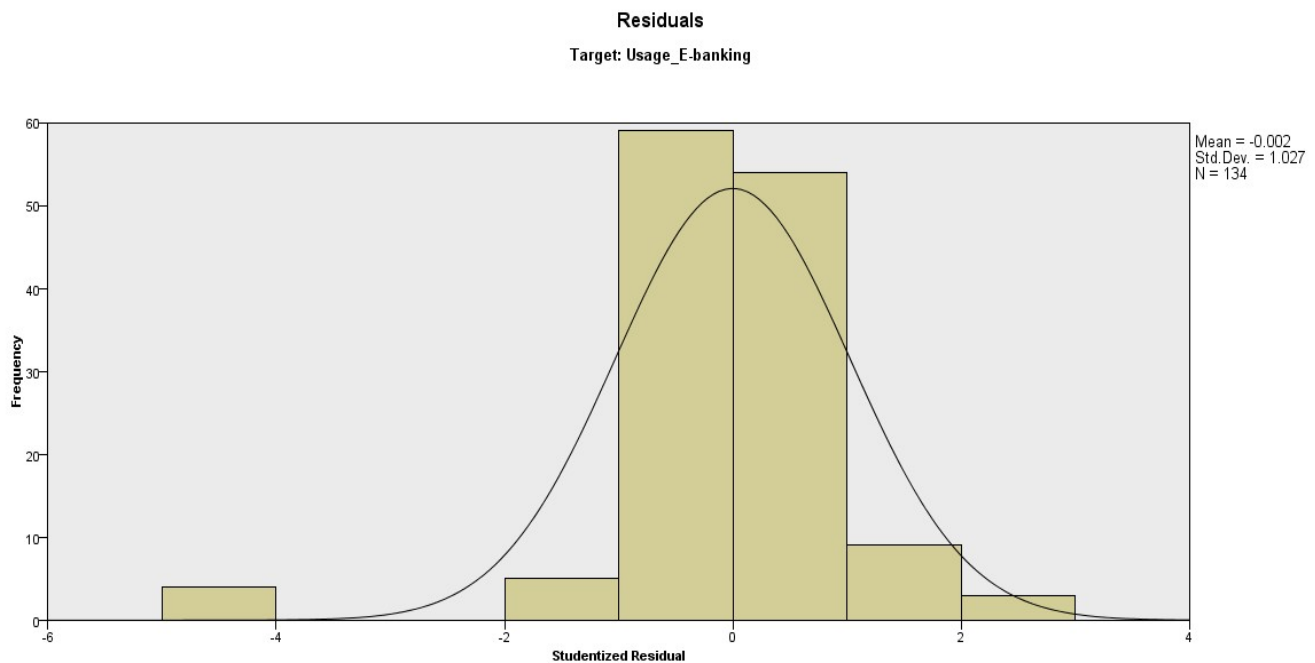


Diagram: 2 represent that out of four predictors in the Correction Model (Model 1) only three (Benefits, Experience and Ease of Use) contribute statistically significant amount of predictions to the Model 1. Furthermore, same can also be confirmed from Table 7 below i.e. the unstandardized partial regression coefficients are presented for each predictor together with a test of statistical significance for each respectively. It can be seen that (Benefits, Experience and Ease of Use) have a p value less than .05. The third column of Table 7 depicts the results of relative importance analysis and it can be seen that out of three predictors only Benefit has a high value of .999.

Table 7
Coefficients
Target: Usage_E-banking

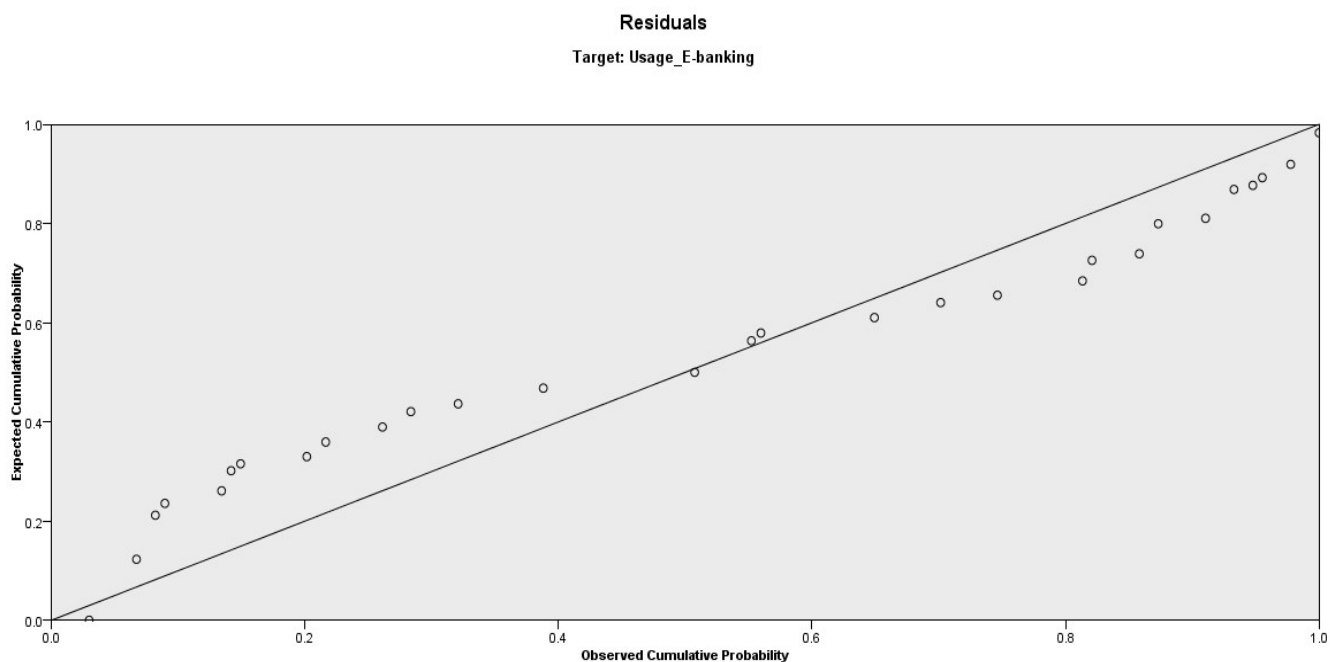
| Model Term | Coefficient | Sig. | Importance |
|------------------------|-------------|------|------------|
| Intercept | -0.222 | .000 | |
| Benefits_transformed | 1.017 | .000 | 0.999 |
| Experience_transformed | 0.014 | .002 | 0.000 |
| Easeofuse_transformed | 0.017 | .020 | 0.000 |
| Security_transformed | 0.007 | .114 | 0.000 |

Diagram: 3



The histogram of Studentized residuals compares the distribution of the residuals to a normal distribution. The smooth line represents the normal distribution. The closer the frequencies of the residuals are to this line, the closer the distribution of the residuals is to the normal distribution.

Diagram 3: Represent the Residual output of Automatic Linear Modeling in diagram mode.

Diagram: 4

The P-P plot of Studentized residuals compares the distribution of the residuals to a normal distribution. The diagonal line represents the normal distribution. The closer the observed cumulative probabilities of the residuals are to this line, the closer the distribution of the residuals is to the normal distribution.

Diagram: 4 represent the output of Automatic Linear Modeling in P-P plot mode.

Conclusion

The study is a pilot one and started from scratch from development of a questionnaire and its circulation to respondents with an aim of pretesting it to check its reliability and validity. In the light of results achieved after reliability analysis and Automatic Linear Modeling (Regression Analysis), it can be seen that the items of the questionnaire showed up a good score on reliability part and furthermore, out of five variables .i.e. benefits, experience and ease of use proved to be statistically significant as all the three variables contribute statistically significant amount of predictions to the usage of e-banking services. Hence, Accepting the (HA:1, HA:3 and HA:5) alternate Hypothesis and rejecting the (HA:1 and HA:4) hypothesis. Hence, the study aims to move further by exploring more variables and increasing the sample size for conducting the preliminary and main analysis using techniques like exploratory factor analysis, Confirmatory factor Analysis and Structural Equation Modeling to attain its objectives and to provide an effective framework in context of factors affecting the adoption and use of digitally enhanced banking services by customers.

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