

Moderating Effects Of Consumer Innovativeness On Perceived Risk And Online Banking Usage In Chennai

By

K.R. Abarna

Research Scholar, Vels Institute of Science, Technology and Advanced Studies (VISTAS),
Pallavaram, Chennai, Tamil Nadu, India-600117

Email: abarnaravi1991@gmail.com

Dr. V Vijayalakshmi

Former Associate Professor, Research Supervisor & Guide, Department of Commerce,
Vels Institute of Science, Technology and Advanced Studies (VISTAS), Pallavaram, Chennai,
Tamil Nadu, India-600117

Email: vijayalakshmi.vels@gmail.com

Dr. V Andal

Assistant professor & Research Co-Guide, Corresponding Author, Department of Commerce,
Vels Institute of Science, Technology and Advanced Studies (VISTAS), Pallavaram,
Chennai, Tamil Nadu, India-600117

Email: andalgokul79@gmail.com

Abstract

Customers can make financial transactions using online banking (also known as Internet banking), their actual or virtual bank or a credit union's secure website. Only the bank's customer can use internet banking to manage his account. The bank will give its customers a User ID and Password to use the online banking feature. Electronic banking combines several technologies to deliver financial products to the user, including online banking, automated teller machines, and mobile phone banking. The survey aimed to determine the factors influencing the customers using the electronic banking services. Because providing excellent customer service is a crucial aspect of banking. The main goal of the research is to estimate how happy customers felt using E-Banking products and perceived risk.

Keywords: Online banking, Customers, technological knowledge

1.1 Introduction

The automated mode of delivering both new and established banking services and products to the consumer directly over electronic communication channels is known as electronic banking. Electronic banking combines technologies through public or private networks that let individual consumers access their accounts, conduct quick transactions, and get up-to-date information on the newest financial goods and services. It supports several platforms, including online banking, telephone and television banking, automated teller machines, mobile banking, and desktop and mobile banking services. Modern electronics and information technologies like the web, cell devices, netbooks, and desktops allow consumers to choose and use their desired features.

They can also see how modern technology is used to deliver electronic banking products through permissions and facilities. Banks must invest in capital projects and cutting-edge technology to lower operating costs and increase client loyalty, but they must also maximise asset value while lowering operating expenses. The present study is inclined to find the intrinsic relationship that exists among the factors of consumer innovativeness and the usage of online banking. The study also intended to estimate the nature of effects of perceived risk in controlling the usage of online banking. The moderating effects and their important role in determining the usage of online banking is also encountered in this research.

1.2 Literature Reviews.

Huseynov, F., & Yildirim, S. Ö. (2016) argued the role of Internet users' interest, evaluation, trust, and customer intention in the financial services and online shopping. The predominant reasons are the product characteristics, financial transactions during online shopping, and marketing policies of the seller. The customers expect more privacy and safety during their venture in online shopping attached to internet potentiality.

Clemes, M. D., Gan, C., & Zhang, J. (2014) identified and ranks seven important decision factors: perceived risk, consumer resources, service quality, subjective norms, product variety, convenience, and website factors.

Abbade, E. B. (2014) adaptive optimism and pioneers impacts positively on the propensity to the electronic commerce. Most of the consumers are not fully equipped for the marketing interaction with sellers. The customers perceived the existence of flaws in the transactions along with lack of insecurity. .

Melewar, T. C., Alwi, S., Liu, M. T., Brock, J. L., Shi, G. C., Chu, R., & Tseng, T. H. (2013) three perceived benefits namely price benefit, convenience benefit, and recreational approach. The customers seek for safety assurance, potential website, confidence and scenarios of optimistic attitude. Customer trust always emerged out of safe online purchase..

Wu, W. Y., Quyen, P. T. P., & Rivas, A. A. A. (2017) ascertained e-services dimensions with respect to the factors aesthetic appeal, customization, usability, and financial security respectively. The customer trust can get its momentum through the optimistic attitude delivered from the components of website quality, safety and internal approach of the marketers.

Chen, Y. H., Hsu, I. C., & Lin, C. C. (2010) argued the innovative notions behind the continuous applications of online shopping, It is also found that the quality of websites to ascertain the product attributes based on customer preference is very much needed. The customers are categorized with respect to their depth of expertise.

Aggarwal, A. (2020) The customer attributes of online purchase namely trust, technology and money safety consists of eight different factors namely web suite quality, involvement in shopping, quick dealings, security, digital transfers, transparency, price advantage and safe and quick delivery, revealing the online shopping behaviour..

Katta, R. M. R., & Patro, C. S. (2017) identified the prevailing heavy competition among the e-commerce vendors and they have their own promotional strategies to intensify the online sales. They adopt the strategies for customer attraction, customer satisfaction and

customer retention respectively. They have attractive websites to induce the consumer purchase intentions

Hasan, B. (2016). Identified the three website design characteristics had significant negative effects on perceived irritation in online shopping context.

Patro, C. S. (2018). Compared the attitudes of online consumers and conventional consumers and found that the online consumers are smart enough in their purchase control, price consciousness than conventional consumers. It is also found that the online consumers have accessibility for more interaction with their vendors. They have the potentiality to derive more adequate information about the availability of any commodity.

Qalati, S. A., Vela, E. G., Li, W., Dakhan, S. A., Hong Thuy, T. T., & Merani, S. H. (2021) determined the contribution of the predominant factor perceived risk in the form of moderators over trust in online shopping, They take a dynamic purchase intention based on the depth of risk involved in the purchase. The important factors trust and purchase intentions also depend upon the service quality of sellers, website quality and reputation of the organization.

1.3 Research Gaps.

The reviews revealed that there is a relationship between perceived risk and online banking usage and also the factors awareness, technological knowledge and timely benefits are not directly correlated to the usage of online banking but these factors are able to create the moderating effect over the usage of online banking. The research question also arises whether the consumer innovativeness of online banking comprises the components awareness, technological knowledge and timely benefits to the customers. In order to fill the research gaps the researcher intended to test the following five hypotheses

1.4 Hypotheses.

1. Perceived risk and online banking usage of customers are inter related.
2. Consumer innovativeness comprises the factors awareness, technological knowledge and timely benefits
3. Awareness of online banking fluctuate (increase or decrease) the online banking usage of customers.
4. Technological knowledge of online banking fluctuate (increase or decrease) the online banking usage of customers
5. Timely benefits of online banking increase the online banking usage of customers

1.5 Objectives Of The Study:-

- 1. The perceived risk and usage of online banking are enumerated for their relationships.
- 2...To estimate the role of awareness, technological knowledge and timely benefits of online banking on its usage.

1.6 Research Methodology

The research leans the primary data derived from the users of online banking. These responses are emerged through a scientifically framed questionnaire. It consists of demographic details of customers of online banking and 5 statements each for the five factors perceived risk, online banking usage, awareness, technological knowledge and timely benefits. These statements are rationally answered by the customers of online banking in a required measure.

Pilot study is carried out to check the reliability of statements and found the cron bach alpha co efficient 0.855 which is the above required bench mark value 0.75. Convenience sampling technique is exploited to collect the 500 responses from the customers of online banking. The collected responses are systematically tabulated and the multivariate statistical tools linear regression analysis, moderator regression analysis, confirmatory factor analysis are applied over them to test all the four hypotheses of the research.

1.7 Analysis And Discussions.

In case of hypothesis testing 1, linear multiple regression analysis over the independent variable perceived risk and the dependent factor usage of online banking.

Table 1 Coefficients for perceived risk

VAR	UNAP		SAP BET	t	Sig.
	B	SER			
1	OVA	3.246	.119	27.331	.000
	Perceived risk	.218	.032	6.860	.000

a. Dependent Variable: Online banking

The regression analysis revealed the beta value=.294, t-value=6.860 and p-value=.000 which are statistically significant to approve the perceived risk and its domination over usage of online banking. In fact, perceived risk bearing capabilities of customers is able to decide their depth of usage of online banking. This supports the hypothesis H1

In order to test the H2, confirmatory factor analysis (CFA) is found appropriate to validate that the three components awareness, technological knowledge and timely benefits have their explanatory power to surmount consumer innovativeness. The results of following diagram and table are used to test the model.

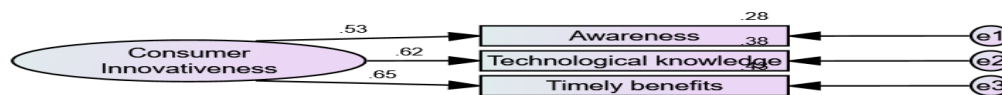


Table 2 *Model Fit Indices And Bench Markks For Consumer Innovativeness*

S.NO	Fit indices	Values	Bench mark values
1	Chi-square	5.388	-
2	P-value	0.410	>.05
3	Goodness of fit index(GFI)	0.964	>.9
4	Comparative fit index(CFI)	0.962	>.9
5	Normed fit index(NFI)	0.961	>.9
6	Root Mean Square Error of Approximation(RMSEA)	0.07	<=0.08

From the above table and diagram, it is identified that all the six fit indices found more suitable for required bench mark values . These six fit indices confirm that the consumer innovativeness can be considered as the combination of the components awareness, technological knowledge and timely benefits. This supports the hypothesis H2.

In this section hypothesis testing 3,4,5 are done using moderation regression analysis. The scenario in this moderation regression analysis is considering, perceived risk as independent variable and usage of online banking as dependent variable and the components of consumer innovativeness namely awareness, timely benefit and technical knowledge as moderation variables. Moderation variables are not directly related to the dependent variable, where the multiplication of scores of these three variables with independent variables separately would create moderate effects (i.e) it may increase (or) decrease the effect of independent variable perceived risk. The qualification of moderately variable is that they should not have direct correlation with the dependent variable. In order to prove this the following correction matrix is obtained.

Table 3-*Correlations among the moderator factor*

		Online banking	Awareness	Technological knowledge	Timely benefits
Online banking	Pearson Correlation	1	.011	.041	.062
	Sig. (2-tailed)		.452	.541	.394

** . Correlation is significant at the 0.01 level (2-tailed).

The three variables awareness, timely benefit and technical knowledge have their correlation values .011, .041 and .062 which are highly insignificant to qualify as a moderating variable. Each of these three scores of variables are separately multiplied with the scores of the independent variables to create the new moderating variables highly conducive to exploit the moderation regression analysis.

Table *Coefficients for moderating variables.*

	VAR	UNAP		SAP BET	t	Sig.
		B	SER			
1	Perceived risk	1.550	.155	-.187	-9.976	.000
	Awareness	.128	.026	.192	4.918	.000
	Technological knowledge	.424	.038	.442	11.039	.000
	Timely benefits	.110	.036	.124	3.076	.000

a. Dependent Variable: Online banking

In this type regression analysis, it is found that the perceived risk (B-value=-.187, t-value=-9.976, P-value=.000) are negative. It implies that the more perceived risk would diminish the usage frequency of online banking. In this same nature, the moderating variables awareness (Beta=.192, t=4.918, p=.000) technology (Beta=.442, t=11.039, p), timely benefits (Beta=.124, t=3.076, p=.000) have their positive beta and t-values with very good significance. This shows that the combination of awareness with perceived risk increases the usage of online banking as evident from positive beta and t-values. Similarly (Copy the variables) combined with perceived risk boost the frequency of usage of online banking. This supports the hypothesis H3, H4 and H5.

1.8 Findings and conclusions

The research revealed that online banking usage absolutely depends upon the factor perceived risk understood by the consumers. The fluctuation in the risk fluctuation regarding the usage of online shopping is due to the awareness level of the customers, their technological knowledge about the perceived risk and their realization of timely benefits of online banking. Customers perceived that online banking is convenient for them and they are able to curtail the waste of time in visiting the branches of Banks.

Customer innovativeness depends upon the variety and depth of awareness regarding technology, convenience, safety and security. Besides this awareness of the customers technological knowledge is the evidences for innovation and their involvement to use online banking and to reap the timely benefits without wasting their precious time.

1.9 Managerial implications.

The study revealed that the perceived risk hamper the usage of online banking by the customers. Therefore it is suggested that the banks and financial institutions should create more awareness among the customers regarding secured and safe online banking transactions. The banks and the financial institutions should have a separate customer relationship management strategy to create innovative ideas among the customers particularly; the innovative strategies must focus towards creating technological knowledge among the customers of online banking.

The frequency of usage in online banking can be increased by importing confidence on technology and motivate them to realize the convenience in using online banking. They must be taught to read the advantages of online banking by saving their precious timings.

1.10 Limitation and scope for future study

The research mainly focuses on two entities perceived risk realised by customers and their frequency of usage of online shopping. The study is limited to only these two factors. Similarly, the customer's innovativeness consists of several factors, but the study highlights only these three factors awareness, technological knowledge and timely benefits. The study

can also be extended by the future researchers regarding their moderate effects of advertisements and celebrity endorsements over the usage of online banking.

A main focus on customer's relationship management in increasing the usage of online banking would yield interesting innovative results.. The smooth customer relationship management increased the confidence of customers and it becomes a powerful motivator to increase the usage of online banking. This study can be extended to other digital banking transactions like mobile banking, internet banking, credit card management and core banking solutions.

References

- Abbade, E. B. (2014). Technological readiness and propensity of young people to online purchases. *Revista de Negócios*, 19(1), 27-43.
- Aggarwal, A. (2020). Preferences of Indian consumers towards attributes of online shopping websites: a conjoint analysis. *International Journal of Public Sector Performance Management*, 6(5), 605-621
- Chen, Y. H., Hsu, I. C., & Lin, C. C. (2010). Website attributes that increase consumer purchase intention: A conjoint analysis. *Journal of business research*, 63(9-10), 1007-1014.
- Clemes, M. D., Gan, C., & Zhang, J. (2014). An empirical analysis of online shopping adoption in Beijing, China. *Journal of Retailing and Consumer Services*, 21(3), 364-375
- Hasan, B. (2016). Perceived irritation in online shopping: The impact of website design characteristics. *Computers in Human Behavior*, 54, 224-230.
- Huseynov, F., & Yildirim, S. Ö. (2016). Internet users' attitudes toward business-to-consumer online shopping: A survey. *Information Development*, 32(3), 452-465.
- IAMAI report on online banking 2006
- Katta, R. M. R., & Patro, C. S. (2017). Influence of web attributes on consumer purchase intentions. *International Journal of Sociotechnology and Knowledge Development (IJSKD)*, 9(2), 1-16.
- Khan, M.S., Mahapatra, S.S. and Sreekumar (2009) 'Service quality evaluation in internet banking: an empirical study in India', *Int. J. Indian Culture and Business Management*, Vol. 2, No. 1, pp.30-46.
- Melewar, T. C., Alwi, S., Liu, M. T., Brock, J. L., Shi, G. C., Chu, R., & Tseng, T. H. (2013). Perceived benefits, perceived risk, and trust. *Asia Pacific Journal of Marketing and Logistics*
- Patro, C. S. (2018). Predicting Consumers' Acceptance of Online Shopping on the Internet: An Empirical Study. *International Journal of Cyber Behavior, Psychology and Learning (IJCBL)*, 8(1), 33-60.
- Qalati, S. A., Vela, E. G., Li, W., Dakhan, S. A., Hong Thuy, T. T., & Merani, S. H. (2021). Effects of perceived service quality, website quality, and reputation on purchase intention: The mediating and moderating roles of trust and perceived risk in online shopping. *Cogent Business & Management*, 8(1), 1869363
- Sunith, C. K. (2019). Customer Satisfaction in E-Banking Services. *International Journal of Business and Management Invention*, 8(1), 19-24.
- Wu, W. Y., Quyen, P. T. P., & Rivas, A. A. A. (2017). How e-servicescapes affect customer online shopping intention: the moderating effects of gender and online purchasing experience. *Information Systems and e-Business Management*, 15(3), 689-715.