

## EVALUATION OF CUSTOMERS' RISK PERCEPTION TOWARDS ELECTRONIC BANKING SERVICES

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### ABSTRACT

*The main aim of this study is to measure the factors which influencing the risk perception of customers while using electronic banking channel. The major findings of this study are, internet banking is having high risk assumed by the most of the respondents. Based on the risk dimensions, financial risk influencing more compared to the other types of risk. Most of the respondents are assuming that financial risk and psychological risk is more in credit card. Performance risk are more in debit card, time risk, psychological risk, security risk and social risk are huge in internet banking. Financial risk is the mediating factor for determining the perceived risk of the electronic banking customers.*

**Keywords:** Perceived risk, Psychological risk, Time risk.

### Introduction:

With the development of the Internet, more knowledge is accessible to people anywhere at any time. Facilitating communication, data transmission, and global interaction, the Internet is a playing field unlike any other. Transcending the traditional barriers of time and space, the Internet is redefining the world of banking. The Internet has created new methods for carrying out a variety of financial transactions. With these developments, a new era of banking has emerged which has come to be known as "E-Banking."

E-banking encompasses an array of financial transactions, once done through the tangible exchange of information, now are done electronically. While the benefits of such advancements have been welcomed, there also have been drawbacks. Issues such as security, fraud, and theft have deterred people from participating in the Internet and E-Banking revolutions. Furthermore, without the proper countermeasures in place to prevent malicious actions, users may find the prospect of Internet banking unappealing.

### Problem Background:

Transactional activities in today's banking industry make the tangible transfer of funds seem archaic. Cash is becoming a scarce method of payment while credit cards and debit cards are flooding the marketplace. Also, with new facets for buying and selling goods, cash is no longer the most practical choice in many instances. Delivery channels for purchasing and selling, once limited to the

telephone, through the mail, or in person, now include the Internet. Beyond the simple transactions of buying and selling goods, paying bills, transferring funds, and managing investments has been revolutionized also. All activities which were once handled through the safety of tangible exchange can now be carried out electronically. Feeling safe enough on the Internet to conduct these financial transactions represents a host of security concerns associated with the ideas mentioned above. The psychological barriers involved with age, financial status, and education in relation to an individual's comfort level with electronic commerce present a foundation to the security dilemma and may provide a correlation for current attitudes towards e-banking.

### Objectives of the Study:

The main objectives of this study are as follows:

- To measure the factors which influencing the risk perception of customers while using electronic banking channels
- To measure the relationship among the factors which influencing the risk of the customers
- To offer valuable suggestion for theoretical contributions

### Methodology:

Based on these issues researcher found that this research study belongs to the nature of empirical in nature. Empirical research study focussing on issue to followed or practiced for solving the research issues. These kind of

empirical evidence already been published elsewhere for solving the similar kind of problems. In this research study used both primary and secondary data. Primary data collected through well-structured questionnaire. Structure of the questionnaire constructed with the use of conceptual model. Secondary data collected through already published sources like, websites, text books, journals and magazines. Sample size for this research study will be decided as 400. This sample size decided based on the population standard deviation. Population standard deviation calculated through trial survey. Trial survey conducted with 50 samples. This trial survey used to the researcher to strengthen the instrument, calculating the sample size, checking the reliability and validity of the instrument being used to measure the perceived risk of customers while using electronic banking services. Researcher used systematic sampling to collect the response for this research study. Appropriate research tools used based on the research issues formed by the researcher.

### Review of literature:

Financial Risk, also referred to as economic risk, is the possibility of monetary losses during on-line purchasing (Lim, 2003). In other words, financial risk is the money losses as a result of purchasing any products or services (Laroche, Bergeron and Yang, 2004). The risk perception of the IB customers primarily grows out of the IT lapses and the resultant losses incurred in fraudulent access to customer accounts (Littler and Melanthiou, 2016).

Performance Risk is the possibility of defect or failure as a result of purchasing a product (Laroche, Bergeron and Yang, 2004). In internet banking, performance risk arises when (a) either money is not transferred on time, or (b) customers have difficulties in accessing the web page or (c) not having enough new web-based services requested by customer (Littler and Melanthiou, 2016).

Time Risk is the combination of lost time and effort spent in purchasing any product or service (Murray and Schlacter, 2010). In internet banking, when more time is required to learn how to access any particular service, risk perceptions increase. Customers also perceive risk when money transfer is not realized in time and faults occur during the transaction leading to time loss perception (Littler and Melanthiou, 2016).

Social Risk can be defined as the possibility of derogate from his/her friends' dignity and interest (Murray and Schlacter, 2010). Family members' and other people's constructive and negative thoughts about internet banking impact the customer's purchasing decision. Nonetheless, the lack of face-to-face communication with bank personnel can also get customers worried. Some researchers claim that technology based services have a built-in deterrent impact by not providing interactive effect with people (Littler and Melanthiou, 2016).

Psychological Risks: Customers often become anxious or stressful because of their purchasing attitude. For example,

when a purchasing experience does not correspond to the expected, people become nervous. This nervousness can be called psychological risk. (Lim, 2003).

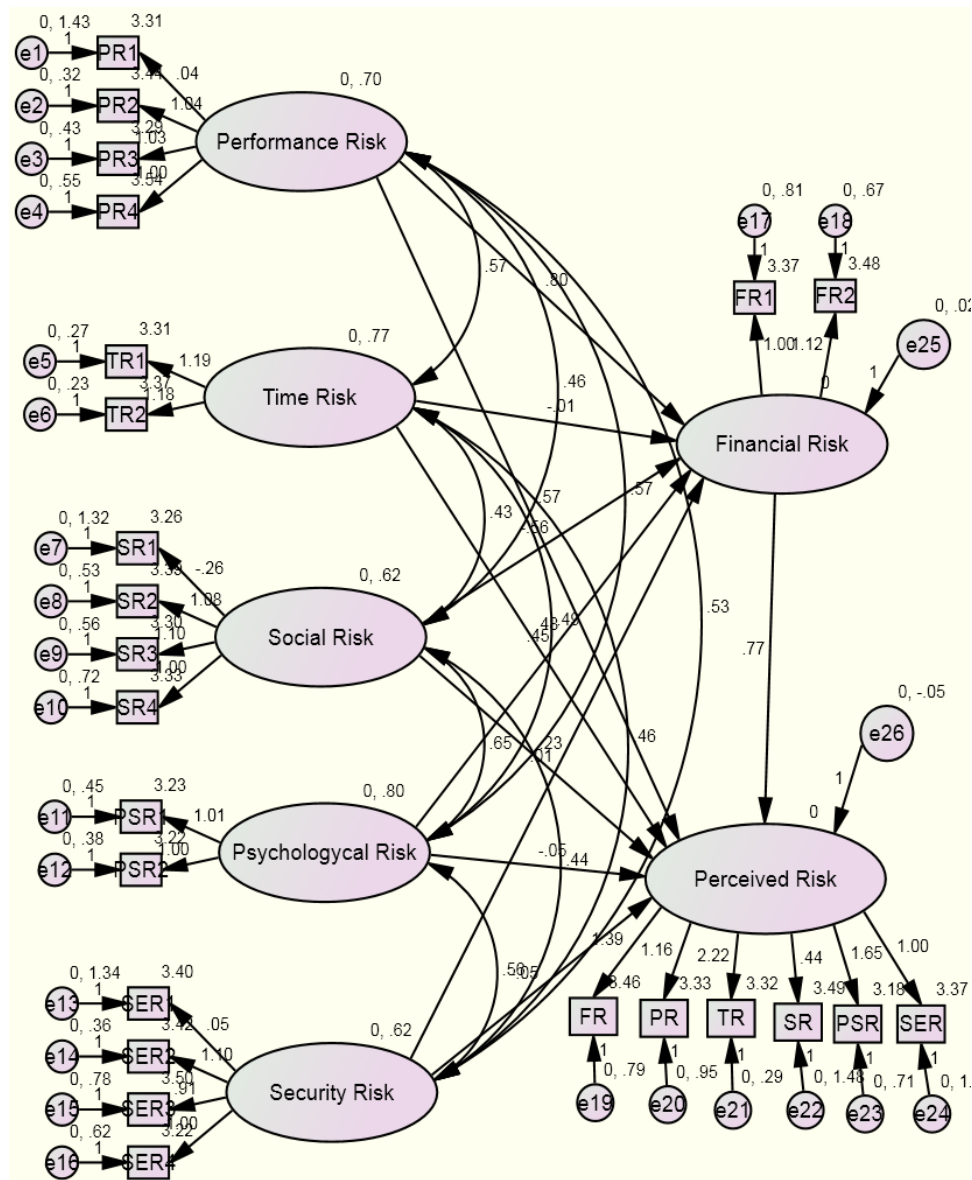
Security Risk occurs when customers worry that money transfers from their accounts or their private financial information can be seen by others without their permission; this worry creates security risk (Littler and Melanthiou, 2016). Security risk is the main obstacle in using internet banking. (Polatoğlu and Ekin, 2001). It has been suggested that improved security in protecting personal information can increase the preference for using internet banking (Yousafzai, 2003).

### Data Analysis and Discussions:

**Table 1: Estimation of factors influencing to determine Perception of electronic banking channels**

Regression Weights	Estimate	S.E.	P
Financial Risk <--- Performance Risk	.80	.069	.000
Financial Risk <--- Social Risk	-.57	.014	.072
Financial Risk <--- Psychological Risk	.45	.024	.168
Perceived Risk <--- Financial Risk	.77	.097	.039
Perceived Risk <--- Performance Risk	-.57	.006	.000
Perceived Risk <--- Time Risk	.48	.001	.000
Perceived Risk <--- Social Risk	.23	.006	.008
Perceived Risk <--- Psychological Risk	-.05	.091	.002
Perceived Risk <--- Security Risk	-.05	.111	.070
PR3 <--- Performance Risk	1.03	.074	.000
SR3 <--- Social Risk	1.10	.098	.001
PR2 <--- Performance Risk	1.04	.071	.030
SR2 <--- Social Risk	1.08	.096	.000
SR1 <--- Social Risk	-.26	.093	.075
PSR1 <--- Psychological Risk	1.01	.065	.000
SER3 <--- Security Risk	.91	.092	.040
SER2 <--- Security Risk	1.10	.089	.033
FR2 <--- Financial Risk	1.12	.003	.012
PSR <--- Perceived Risk	1.65	.013	.030
SR <--- Perceived Risk	.44	.004	.005
TR <--- Perceived Risk	2.22	.001	.044
PR <--- Perceived Risk	1.16	.018	.011
FR <--- Perceived Risk	1.39	.007	.009

**Figure 1: AMOS graphically exhibits the relationship between the dimensions influencing perceived risk of electronic banking channels**



From above graphics and table infer that AOMS graphically exhibit the relationship between the variables. From the above table infers that performance risk influenced the financial risk by 0.803. Social risk having negative influence with Financial risk by -0.57. Psychological risk having positive influence with financial risk by 0.45. financial risk having positive influence on perceived risk by 0.77. Performance risk having negative influence with perceived risk by -0.57. Time risk having positive influence on perceived risk by 0.48. social risk having positive impact on measuring perceived risk by 0.23.

#### Model Fit Summary:

**Table 2: Baseline Comparisons**

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.86	.768	.886	.791	.965
Saturated model	1.00		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Table 3: RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.020	.009	.041	.000
Independence model	.033	.022	.044	.000

Baseline fitness measures are close to 1 and RMSEA low level approximation of error in this model and it is close fit the model in relation to the degree of freedom. P close value used to test the hypothesis with the model and degree of freedom. Hence it infers that this model significantly fit for measuring the perceived risk of alternate banking channel.

### Other important findings:

- Most of the problem related to non-usage of plastic money is hidden charges and unauthorised utilisation. So, most of the banks are now using verification and security facilities for verifying the users. But even for sometimes the usage of credit cards will create problems to customers.
- Online banking, mobile banking and telephone banking are enabling the customers to transact without the intervention of branch banking. Branchless transactions are very useful for the transactions of business and non-business customers. But due to some hackers or some unauthorised web pages remain the hurdles for the internet banking.
- Internet banking is considered as high risk category perceived by respondents. Internet banking is having 2.91 mean. It is high when compared to other alternate channels. Security enablement and privacy are low Internet banking.
- Financial risk is the highest risk category, when compared to all the types of risk. Financial risk is having grand mean of 2.93.
- Credit card is considered as high risk category perceived by respondents with the mean score of 3.12. It is high when compared to other alternate channels.
- Performance risk is high in debit card. Debit card having grand mean of 2.97. Compared to all the alternate channels debit card having highest performance risk.
- Time risk is high in Internet banking. Internet banking is having grand mean of 2.96. Compared to all the alternate channels internet banking is having highest time risk.
- Social risk is high in internet banking. Internet banking is having grand mean of 2.79. Compared to all the alternate channels internet banking is having highest social risk.
- Psychological risk is high in credit card and internet banking. Credit card and internet banking is having grand mean of 2.79. Compared to all the alternate channels credit card and internet banking is having highest psychological risk.

- Security risk is high in internet banking. Internet banking is having grand mean of 3.03. Compared to all the alternate channels internet banking is having highest security risk.
- Financial risk is the mediating factor for determining the perceived risk of the electronic banking customers.

### Suggestion to the bankers:

- Customers of bank are unable to know provision available for online for making complaints and other queries related to the financial and non-financial related issues. So, they must clearly and simply provide the provisions for these services.
- Bankers must provide flexible time for transactions and complete the service quickly and efficiently to reduce the queue for the services.
- Bankers must establish more number of biometric ATMs for the transactions.
- Bankers must communicate the information regarding to the usage of credit card and term and conditions related to the credit card.
- Bankers must concentrate the performance of customer care executives for providing the proper customer response.
- Banker must facilitate the information for the financial or non-financial transaction done by the customers, banker need to update the status of transaction quickly and in multiple disclose information for eg: send SMS to registered mobile number promptly, e-mail about the status, confirmation through call centre.
- Bankers must take these issues into the consideration. So, they need to tighten the security and privacy aspects of customers. Banker must execute transaction by verifying the one time password send by the SMS to registered mobile number of the respondents and authenticating the debit card while entering into the financial transactions.

### Conclusion:

Online banking, mobile banking and telephone banking are enabling the customers to transact without the intervention of branch banking. Branchless transactions are very useful for the transactions of business and non-business customers. But due to some hackers or some unauthorised web pages remain the hurdles for the internet banking. Based on this research study researcher would like to conclude that credit card, debit card and internet banking having high risk aspects from the customer perspective. So, the regulatory must try to increase the security and privacy aspects. So as to protect the customers from uncertain situations and help them to improve the usage of electronic banking channels. All the banking companies must try to reduce the financial risk. So as to reduce the risk perceived by the customers.

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