Internet Banking Adaptation in Different Age Ranges

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Abstract: *The Internet application has dramatically expanded since the past decade, and such expansion has equally led to the increased risk in the Internet usage, especially in the domain of internet banking. The confidence level among different segments of e-banking users or customers is examined in this study, and the difference in outcomes are explained. Questionnaires were distributed to 315 respondents to obtain data. The obtained results show that different segments of users or customers show different levels of trust towards internet banking usage at Cairo Bank in Egypt. Additionally, different segments of users show different levels of perceived lack of information. Furthermore, the most notable segmentation can be split into three groups as follows: users or customers aged between 18-30, those aged above 60, and the rest. This study is of value to the security and marketing of internet banking services.*

Keywords : Internet Banking, e-Commerce, e-Marketing, Customer Trust, Internet Risk

I. INTRODUCTION

Internet banking entails a service furnished by bank to its customers. Using the service, the costumer could execute diverse types banking services online. Initially, banks employed their platforms for information purposes only, but after the online security has sufficiently established, banks began to employ them more as a transaction avenue for services for their customers.

In general, banks that provide their services through the internet are keen in speeding up the process of adoption owing to the lower cost of services provided online as opposed to those provided over the counter [1]. The last recent years have in fact seen the fast expansion of online banking and the internet banking usage trend is increasingly popular nowadays. However, compared to the regular use of internet, the growth of internet banking is still not as wide. This may be attributed to the issue of trust; trust among bank customers is still lacking, especially following the increase in the cases of internet frauds [2]. Also, the repeated reports on internet

frauds may also be attributed to the initial slow growth. Hence, this study expects that trust differs based on users' marketing segment. Accordingly, to establish a sounder comprehension of the factors that justify why some customers are not employing internet banking as they should, becomes the purpose of this study.

II. RESEARCH MODEL

Based on the discussions above, this study proposes four sub-hypotheses as shown below:

1. H1. Trust in the utilization of internet banking differs among segments
2. H2. Different segments have different perceived lack of information
3. H3. Relative advantage in reducing the apprehensions of users leads to increased utilization in internet banking
4. H4. Perceived security and perceived information are correlated.

III. LITERATURE REVIEW

There are five distinctive theoretical basis or frameworks proposed in this study as follows: The Rogers's factors, relative advantage, risk, the lack of information, and lack of trust.

Accordingly, the decision of customers to either adopt or reject an innovation is impacted by three factors namely Relative advantage, Compatibility and Risk. Relative advantage emerges when a new innovation is viewed to be superior to the prior counterpart [3]. Additionally, perceived relative advantage of an innovation has positive linkage to its adoption rate. Also, with internet banking, customers could gain access to their bank at all times and places, and this equally a significant advantage [4]. Apart from that, the internet banking allows customers to control their finances more, as they can keep track of transactions more easily.

An innovation that demonstrates compatibility with the previous experience and the present values of individual is more likely to be adopted [5]. Based on this notion, the more the internet is being utilized by an individual, the more the internet is perceived as compatible with the lifestyle of the individual, and the more likely the internet banking will be adopted. In the process of adoption, risk is another dimension. In fact, the lack of security and privacy has been commonly linked to internet usage [6]. It is therefore unsurprising that the internet banking is regarded as a risky activity, which is a problem.

Hence, banks consistently make the efforts to find solutions. Furthermore, considering that new technology and new functions will bring with them forms of risk, the issue of risk is not likely solvable using one ultimate solution. Rather, the solution to the problem encompasses a continuous process [7].

For some customers, they feel that they don't have sufficient training in the utilization of internet banking, and this causes them to feel uncertain. Also, for customers, the information obtained prior to and during usage is regarded as vital because without it, they could not execute the service on their own [8]. As such, it is crucial that bank furnishes the customers with the required important information on its internet pages. However, there is no sure-fire way for banks in this matter; they have to do it based on trial and error.

Trust encompasses a personality trait of individuals who interact with the organization's peripheral environment. Trust can be viewed as a trait leading to a generalized expectation concerning others' trustworthiness [9]. Similarly, trust can similarly be regarded as the risk taking in a relationship, but trust can only happen when there is a specific discernible relationship with another party [10].

For both banks and their associates, the theoretical contributions of this study will benefit them in their development of new services [11]. Equally, this study contributes to the marketing domain because this study reveals the presence of user differences, chiefly in the usage of internet banking. It should be noted that the topic of this study has not been adequately explored before [12].

IV. METHODOLOGY

Customers of Cairo Bank, in Egypt were this study's population with the size of approximately 2M people, while the sample comprised 313 respondents. The data were obtained through the use of questionnaire distributed to these respondents. For the questionnaire employed in this study, the majority of the items utilized a 5-point Likert scale where the scale of "1" represents the low end and the scale of "5" signifies the high end. Items in the questionnaire were pre-tested and reviewed as well.

V. ANALYSIS

From the 313 respondents who completed the questionnaire, 315 admitted that they were utilizing internet banking, which means that 313 respondents were non-users of internet banking. Responses from the non-users were excluded from the analysis because they may affect validity. However, since there was a missing data in one of the returned questionnaires, the particular questionnaire was eliminated, and therefore, the finalized number of usable questionnaires was 313.

Table 1 highlights the respondents' demographic profile. From the table, more than half of the respondents were male 71% and 29% were female, while the majority were in the age group of 18-30 years old.

Table- I: Demographic profile (n = 263)

Variable	Ranges	Frequency	%
Age	From 18 to 30	201	64.3
	From 31 to 40	39	12.4
	From 41 to 50	38	12.1
	From 50 to 60	26	8.3
	From 60 above	9	2.9
Gender	Male	222	71
	Female	91	29

From the χ^2-test carried out, it can be concluded that the trust level for each segment differs, lending support to hypothesis H1 (Trust in the utilization of internet banking differs among segments). From the results, younger segments appear to demonstrate greater reliance on internet banking, as opposed to on the older counterparts.

The outcomes of χ^2-test show that the degree of information dearth varies among segments, which implies support to hypothesis H4 (Perceived security and perceived information are correlated). As can be concluded form the results, segments with elderlies believe that their lack of information was higher. Also, their primary concern was safety/risks and usage. Notably, there were considerable jumps from the 18-30 age group to the rest, except for the last age group (above 60).

The division of answers based on age group is displayed in the following Table 2:

Table- II: Perceived inadequacy of information on the internet banking

Age	Yes	No
From 18 to 30	26	200
From 31 to 40	8	40
From 41 to 50	17	38
From 50 to 60	0	25
From 60 above	11	10

Notably, there were considerable jumps from the 18-30 age group to the rest, except for the last age group (above 60), which is in agreement with the findings of past studies. This equally implies the presence of a solid case with segmentation in three parts.

When a given innovation is considered as superior to the ones prior to it, there is relative advantage. As can be viewed in Table 3, the most common responses are convenience and availability with ration 52 and 45. Presumably, these responses can be deemed a relative advantage of the internet banking as opposed to the services provided over the counter. Still, these two responses need to be tested in order to differentiate and understand each extent.

Table- III: Reasons for internet banking usage

Cost Questions	Time Saving	Convenience	Availability
1	2	52	45

Innovation that matches the prior experience of individual is more likely to be adopted. In fact, in this study, it appears that 99% of the internet users were also internet banking users.

VI. RESULT AND DISCUSSION

From the outcomes, it was found that: 1) Trust in the utilization of internet banking differs among segments (H1 is accepted), 2) Perceived lack of information differs based on segments (H2 is accepted), 3) Relative advantage increases internet banking usage (H3 is accepted), and 4) Perceived security and perceived information are strongly correlated (H4 is accepted). Notably, the results show that the most distinct segmentations are those within the age group of 18-30, those aged over 60 and the rest, implying that these groups require information of different types and amounts.

Also, individuals in this group have different view concerning internet banking risk. As such, it would be wise for banks to approach these groups using different approaches, in order to achieve optimal results. The findings of this study also point to the need to focus on the expected adaptation levels and needed for each segment.

It appears that younger segments show more readiness to take risk. However, another factor should be considered namely the innovation factor of risk as it will change within a generation. For older segments today, internet banking is something new to them and for this reason, they are more careful. Nonetheless, in future, it is possible that older segments would have more readiness to take risk in this area due to their familiarity with the technology.

Hence, differences in taking risk readiness in innovative technology can be expected. For this reason, it is sensible for banks to understand the reaction of their customers towards new technology while also try to find out how quickly each segment may demonstrate readiness to adopt it, especially the older ones, should there be a proclivity towards that. A long-time scrutiny over this matter may provide banks with an adaptation curve for this new banking technology. Then, the curve could be correlated with the more reputable curve of the lifecycle of technology adaptation which is equally known as the adaptation curve. This way, the type and form of correlation that is present between different adapters (innovators, early adaptors, early majority, late majority and lagers) and segments of age over time, can be ascertained. A dynamic model could then be fashioned from the outcomes, and further, comparison could be made between the model and the innovations in other industries. Meanwhile, in the provision of theoretical support of these cycles, biology and evolutionary theory could be referred.

VII. CONCLUSION

This study accordingly has several suggestions for next studies. First of all, future studies could consider employing broader segmentation. In this regard, rather than focusing on just gender and age, other aspects of segmentation could also be considered such as education level, income and geographical location. Secondly, the setting of this study is Egypt, which has its own culture. As such, future works could consider replicating this study in other countries embracing culture that is distinct from that embraced in Egypt because the outcomes may differ distinctively. Additionally, future studies could specifically explore the specific types of needed information as well as the types of risks that users would consider more prominent.

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