

## E-B ANKING IN SRI LANKA: ANALYSIS OF CRITICAL SUCCESS FACTORS

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**Abstract**— *The banking sector is one of the main economies contributing segment that dominates the financial system of Sri Lanka through the highest share of the total financial assets. As a rapidly growing industry, both private and public-sector banks are playing a critical role to secure their financial assets. The banks engage in competition, seeking strategies to embrace more customers by providing diverse services and facilities in the term of accomplishing the transaction in an efficient way. The e-banking concept is one of the successful concepts in economically well-established countries. Developing countries like Sri Lanka still in discussions, about the success rate of the adoption of E-Banking technology. The research intended to analyze the critical success factors that affect the growth of E-Banking services. The methodology used to conduct this research is a qualitative and quantitative-based survey. The online survey circulated through Email and the survey were completed by 250 samples of people covering both rural and urban areas. Among responses, more than 82% of the participants agreed on issues with user interfaces. The total 70% of the participants highlighted the fear of the security considerations on their banking credentials. It is very important to highlight the language barrier of the users and it was the highest percentage, more than 90%. According to the critical success factors analysis, Enhance the user-friendliness of application, Minimize the language barrier providing the language selection and Educate the security levels will increase the usability of the e-banking in the Banking Industry.*

licensed private sector banks. Some of them have attained

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### I. INTRODUCTION

Banks play a vital role in Sri Lankan financial market as they are biggest purveyors of credit. Banking is necessary for any nation in the world. Because a developed banking system holds the key to the economic health of a country.

Banking structure is affected by the changing of the environment of the economy. Successful reform of public sector banks is a good example of a dynamic mix of public and private ownership in banks. A considerable feature of banking reforms in Sri Lanka is the growth of newly

globally best standards in terms of technology, services, and sophistication.

*A. Objectives*

- Study the public-sector vs private sector banks from the e-banking perspective.
- Asses the satisfaction level with the existing e-banking system of current customers.
- Find the most important factor that is inducing people towards e-banking.

*B. Research question*

How to build a more useful e-banking system, mitigate the complexity of existing e-banking system and attract more customers to enjoy the e-banking service in Sri Lanka.

## II. LITERATURE BEHIND ANALYSIS

This research, based on survey and comparative study of private sector and public sector online banking service and its usage in both urban areas and rural areas. Under this literature behind analysis chapter readers can gain some knowledge about other related knowledge under following topics.

- E-Transformation.
- Quality of bank services. (E-Services)
- Acceptance of online banking service among various type of customers.

*A. E-Transformation*

Organizations perform some distinct and novel business and organizational strategies for enhancing their operations such as business processes reengineering, business process redesigning, E-Transformation, etc. According to current world trend each organization pays more attention towards the E-Transformation strategies.

E-Transformation refers that “a planned and evolutionary move towards leveraging web technologies to enhance business” <sup>[1]</sup>. Every organization’s processes have been changing due to IT-driven forces and business-driven forces. IT-driven forces refer that association of the information and telecommunication technology with the

existing processes because of the advancement of the current world technology. Customers always expect reliability, efficiency, higher quality, quick results, ease of use, etc. According to the findings, both public sector banks and private sector banks contain enablers and inhibitors to gain success of this E-Transformation. Such as top management of most public-sector banks and private sector bank show magnitude higher involvement, enthusiasm and initiative towards E-Transformation than private sector banks.<sup>[1]</sup>

factors like security, assurance, etc. according to the

*B. Quality of bank services (E-Services)*

Service is defined as customers belief or attitudes concerning the degree of service excellence offered by banks <sup>[2]</sup>. There are several types of models exist to evaluate and assess the quality of services. Among them the “SERVQUAL” model gets the priority place. According to this model, there are five main dimensions that customers use to judge service quality. Those are 1. Reliability, 2. Responsiveness, 3. Assurance, 4. Empathy, 5. Tangible <sup>[2]</sup>.

According to the <sup>[2]</sup>, service quality defines as the difference between predicted or expected service and perceived service (customer perception). There are three levels. 1. Expected service < perceived service (surprise level), 2. Expected service = perceived service (Satisfactory level), 3. Expected service > perceived services (unacceptable quality).

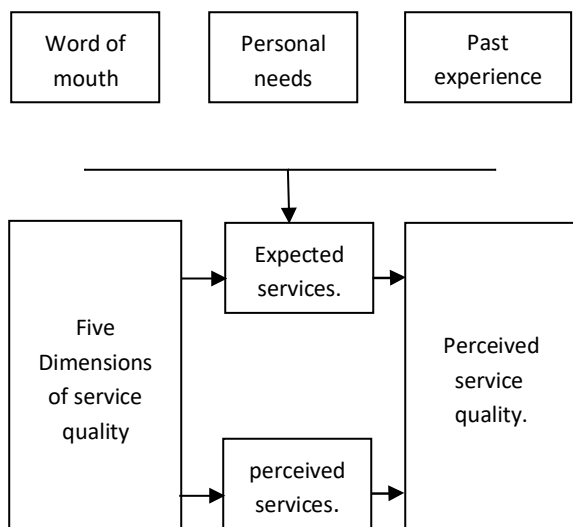


Figure 1. Perceived service quality  
Source: <sup>[2]</sup>

*1) E-service quality in banking sectors*

Because of the information and communication technology involvement in banking sector provide more advancement in day to day transactions (online banking). So, quality of these E-services primarily based on some

“SERVQUAL” model there are eleven dimensions that involved to evaluate the quality of the E-Services. 1. Reliability, 2. Responsiveness, 3. Access, 4. Flexibility, 5. Ease of navigation, 6. Efficiency, 7. Security/ privacy, 8. Assurance/ trust, 9. Price knowledge, 10. Site aesthetics, 11. Customization/ personalization <sup>[2]</sup>. So, some hypothesis and facts of this research will be analyzed based on some of above dimensions.

Good web page design, good interface design, language used, and other design aspects directly affect the popularity of online banking service.

Usefulness, ease of use of the system awareness about online banking and risks related to it are the main perusing factors to accept online banking systems. These aspects are effect positively on use of online banking system services <sup>[3][4]</sup>.

### *C. Acceptance of online banking service among various type of customers*

Customer awareness of online banking could be differed due to many reasons in Sri Lanka <sup>[5]</sup>. According to <sup>[5]</sup>, Sri Lankan customers mainly consider the owner of those particular banks. That research shows that the usage of online banking services among different age groups, different types of employment, different types of account holders and different reasons for using this online banking services.

According to <sup>[6]</sup>, there are several types of aspects which are influence on customers for use of online banking. Such that convenient of online banking, level of education and reliability. 80% of customers have positive opinion on internet banking. According to <sup>[6]</sup>, there is slow growth of using internet banking on time Sri Lanka. There is good level of satisfaction about online services of the bank. Also, they agreed with online banking provides more accessible and frequency than traditional banking <sup>[6]</sup>.

According to <sup>[7]</sup>, there are several factors which affect positively and negatively on online banking in Sri Lanka. 1. Internet banking is convenient in every aspect concerned with traditional banking, 2. Internet banking is the way forward in the future of banking, 3. Internet banking can be easily learned and carried out by anybody, 4. Internet banking is not secure enough compared traditional banking, 5. Internet banking cannot provide all the facilities provided by traditional banking, 6. Internet banking makes people lethargic.

In this research <sup>[7]</sup>, the researcher has done his research

based on some hypothesis. Such as awareness of internet banking, knowledge of internet use, internet access, risk perception of security of inline banking. Demographic factors.

### III. METHODOLOGY

The objectives of this research area to investigate the level of achievement in E-banking by the public sector and private sector banks. In this research, the main objectives were to investigate the level of usage in E-Banking services of the public sector and private sector banks among bank customers. Since this research is comparative type of study between public sector and private sector banks including large amount of people, we were choosing non-probability sampling methods and based on quantitative and qualitative data.

#### A. Sample Collection

The population of this research was whole bank customers/users and there was a large amount. Since this matter, this research was chosen non-random sampling method to carry out the sample selection. Because it was very cheaper and quicker method to obtain data. To enhance the accuracy of data, population was classified into two main parts. 1. Bank customers/ user from urban areas. 2. Bank customers/users from rural areas.

So, 250 people were selected as the sample from both rural areas and urban areas. We were selected Sooriyawewa location as the rural area and Colombo as the urban area.

#### B. Data Collection

This research used a questionnaire to gather the data for the survey. This survey was conducted online by using emails and for the rural areas we have personally met the respondents/ bank customers and conducted the survey. In addition to these questionnaires we have also conducted some interviewees to enhance the quality of results of this research.

Through this questionnaire, we were attempted to evaluate some selected specific facts. Such as quality/ issues of interfaces, language barriers, security aspects and their comments about online banking. So, this questionnaire was included dichotomous questions, checklist questions with a few open-ended questions.

### IV. RESULTS AND DISCUSSIONS

Dynamic changes took place in the Sri Lankan financial system during last few years. Different policies shaping up in Sri Lankan economy and earmarked ambitious plan for economic growth. To enhance the customer satisfaction the policies of banking services aims at encouraging the competition in banking sector as well as introduction of financial services such as Internet banking.

#### A. Questions asked to selected samples

The circulated questionnaire was based on close-ended questions. For further evaluation and assistance to research, we gave optional open-ended questions.

##### 1) Section 1: Socio-Demographic Data:

- Gender

Table 1. Gender popularity as a percentage

Particulars	No. of Respondents	Percentage
Female	87	34.8%
Male	163	65.2%
Total	250	100%

Analysis and Interpretation: As shown in *Table 1* out of 250 samples who participated in the research, majority of 65.2% was Male and 34.8% was Female.

- Age

Table 2. Age popularity as a percentage

Particulars	Percentage
18-24 years	20.8%
25-34 years	38.4%
35-44 years	28.4%
45-54 years	8.8%
Above 55 years	3.6%

Analysis and Interpretation: *Table 2* shows the categorized samples according to their age. Majority of e-banking users are from 25-34 years of range and minor of e-banking users are from above 55 age range.

- Experience in e-banking

Table 3. Experience in years using e-banking

Particulars	Percentage
1-5 years	38.4%
6-12 years	52.4%
13-20 years	7.6%
Over 20 years	1.6%

Analysis and Interpretation: As shown in *Table 3* the majority of sample subjects have experienced e-banking for 6-12 years and minor subjects have experienced over 20 years.

- Hesitation to not to use e-banking (Multiple Answer)

Table 4. The percentage for each reason calculated out of 250

Particulars	Respondents out of 250 for each	Percentage for each
Hard to understand the technology	91	36.4%
Hard to understand the language	237	94.8%

Prefer a manual system	19	7.6%
Can't trust the safety of e-Banking services	203	81.2%
Not easy to use the existing GUI	212	84.8%
Other	16	6.4%

Analysis and Interpretation: Majority of e-banking users hesitate to use the service because of the language barrier, rough GUI and untrusty of security. (Table 4)

2) Section 2: Extant System:

- Trust in existing security measures regarding e-banking

Table 5. Customer satisfaction regarding security measures

Particulars	Percentage
Strongly satisfy	6%
Satisfy	36.8%
Neutral	41.6%
Dissatisfy	14%
Strongly Dissatisfy	1.6%

Analysis and Interpretation: When the security measures are considered, 41.6% satisfy normally and 36.8% of users are happy about the measures. (Table 5)

- Platform popularity for e-banking

Table 6. Platform usage as a percentage

Particulars	Percentage
Web	39.2%
Mobile app	53.2%
Mobile web	7.6%

Analysis and Interpretation: As shown in Table 6 most of e-banking users prefer to use the service through a mobile application and next they prefer web and mobile web.

- Difficulties in existing e-banking system (Multiple Answer)

Table 7. Identified weak points in current e-banking system

Particulars	Respondents out of 250 for each	Percentage for each
Rough guiding	175	70%
Using GUI is not easy	201	80.4%
Unable to reset login details by myself	222	88.8%
Transaction limits	61	24.4%
No currency conversion	93	37.2%

Not accessible from all platform	30	12%
Hard language understanding	198	79.2%

Analysis and Interpretation: According to data in Table 7, it shows the major difficulties identified by users within the existing system. Most of users would like to reset login details themselves without making phone calls to call center. As we see they expect easy handling of GUI and language translation support.

3) Section 3: Expectations in a new e-Banking system:

- Features to be improved/added (Multiple Answer)

Table 8. Customers' expectations from a new system

Particulars	Respondents out of 250 for each	Percentage for each
Extended transaction amount	54	21.6%
Easy GUI guiding	187	74.8%
Reset login details by my self	103	41.2%
Add language translation	135	54%
Platform independence	24	9.6%
Add currency conversion	77	30.8%
Instant SMS/ Email alerts	211	84.4%
Other	12	4.8%

Analysis and Interpretation: Table 8 shows the expectations of e-banking users from a new system. Mostly they try to avoid difficulties identified in Figure 8.

V. CONCLUSION

As a developing country using e-banking concept is very essential and as well as important to compete with today's world. But unfortunately, the number of Sri Lankans who use this concept in their day-to-day activities are very low. Not only in rural areas but also in urban areas people do not tend to use this method in transaction as we found according to the survey, rural people have problems with the technology and language even though it is different from urban areas They also not interested in this concept. It seems mainly the dislike within them to use the new concept instead of conventional method. Other than that GUI problems, less knowledge about technology, lethargic to try out new method problems about security is there. E-banking is some kind of service which the customer can use with having access to a computer (or similar device)

and carry out their transactions by a remote location such as the workplace or their house.

The main disadvantage of not using E-banking services is the undue delay which people face standing in the bank queues. The main advantage of using E-banking facility is saving the customers precious time.

However, almost all the commercial banks of Sri Lanka have given their customers the E-banking facility. The most renowned form of E-banking is the self-banking applications which could be operated by the smartphone. From these applications customers could access their accounts and could basically manage almost all their transactions.

Anyone can do the transactions at any time any place via fingertips. While paying attention to all these factors mentioned above this research has been conducted to find out the critical factors of lack of using e-banking facility.

Rural Sri Lankan community is reluctant to use these kinds of services. As a further work researches can be conducted to find specific reasons according to the community. Also, researches can be conducted deeply to find specific problems in the urban community. It will enable to provide more reliable and efficient services. In this research we have considered the common factors. As a precise solution for that researches can be conducted deeply regarding security issues. Furthermore, researches can be conducted to find what can be done about the issues about security and how to gain trust from customers. Moreover, it would be better to conduct researches about the preference of GUI.

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