

# E-Banking Adoption in Bangladesh; Present Status and Customer Satisfaction

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## Abstract

A structured questionnaire utilized to collect the core primary data as well as secondary data has also been collected from different journals, literature, and annual reports of the selected banks. The results have been organized and analyzed mostly through descriptive statistics. Research Findings: This paper found that a significant number of respondents agreed; E-Banking has improved service efficiency and cost-efficiency. Besides, this paper identified a few critical aspects of present banking status, addressed for further value addition.

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*Index terms*— electronic banking in bangladesh, e-banking adoption, e-banking status,

## 1 Introduction

The emergence and essence of technology have changed banking services like opening an account, authorizing customer, and transaction processing and recording (Irechukwu, 2000).

With that transformation, the banking sector became digitized with E-Banking, also known as internet banking, online banking, virtual banking, and electronic fund transfer (EFT). Distinct E-Banking products and utilities come forth, namely Automated Teller Machine (ATM), Tele-Banking, Digital Card and Wallet, Electronic Bill Payment, e-cheque, etc. (Daniel, 1999; ??ols 1998; ??athye, 1999).

E-Banking is regarded as the cheapest delivery channel mostly, PC, Telephone, Internet, and other electronic media, thereby saving time and cost both for the bank and customer (Markku, 2012 and Al-Smadi and Al-Wabel, 2011). Moreover, E-banking is beneficial to the environment as electronic transmissions un necessitate paper, vehicle traffic, and physical branches. In terms of adoption level, it is evident that because the early embracement of e-banking by the developed countries made it benefited and experienced it (Zhao et al., 2008). It is transparent that the acceptance and exertion of e-banking in most developed countries have matured considerably.

Developing countries like Bangladesh are also quickly adopting and have reached far in Electronic banking service efficiency as experts found it a costefficient system that enables better bank services. Bangladesh experienced a transitional period in the banking sector with digitization, eliminating the drawbacks faced by customers earlier, such as limited accessibility, time consuming customer service, higher cost, etc., (Ali and Akter, 2010).

Despite the progress, e-banking is less or to somehow unknown concept to a noticeable number of customers, choose to go with the traditional way, and not all the branches of banks are fully functional to this system. Researchers tried to understand what made people uncomfortable to put a deal with it. Be sides less awareness, inadequate training on using electronic media and the internet, Poor marketing effort, etc. could be the barrier to the advancement of E-Banking here. This paper aims at surveying customer satisfaction and attitude over e-banking performance in Bangladesh as well as explore the history and current scenario of it in Bangladesh.

The key research question of this paper is to understand the extent of customer satisfaction concerning the adoption of E-banking in Bangladesh. To facilitate the main objective, few supporting objectives have been considered. They are to provide an overview of the existing e-banking infrastructure of Bangladesh, the exhibition of the current scenario, the expansion of e-banking in Bangladesh, and outline recommendations for the concerned.

45 Section two deals with the current status of e-banking practices in Bangladesh, section three is about literature  
46 review and research methods used, section four discusses the analysis and findings and section five summarizes  
47 conclusion remarks, and relevant recommendations.

### 2 a) The Status of E-Banking in Bangladesh

49 The banking industry of Bangladesh, structured with 57 scheduled banks as of December Also, the dynamic  
50 website of BB offers open data sources. To mobilize payment and settlement systems, the Payment Systems  
51 Department (PSD) of Bangladesh Bank functions with an automated processing system, national payment  
52 switch, Real-time gross settlement, mobile financing, e-commerce, mcommerce, payment systems strategy. In  
53 most re-cent, BB has launched the Interbank Internet Banking Fund Transfer or IBFT service.

### 3 Literature Review

55 The e-banking system has evolved in different ways; branched on the ground of the instruments used. By using a  
56 telephone connection, electronic banking, categorized as Phone Banking, Automated Telephone System, Mobile  
57 Banking (SMS banking, GSM Toolkit. whereas Home Banking, Internet banking, Online Banking, Mail Banking  
58 falls under electronic banking with Personal Computer. (Chovanová, 2006). E-Banking services are carried  
59 through versatile electronic means collectively called Electronic delivery channels, which are: Electronic Fund  
60 Transfer, Any Branch Banking, Point of Sale (POS), KIOSK, SWIFT, and Magnetic Ink Character Recognition  
61 (MICR), open online, Money Link, Phone Link, ATM, Credit Cards, Debit Cards (Bashir et al., 2015).

62 The banking sector of Bangladesh has adopted several policies and instructions integrated by Bangladesh  
63 Bank, the central bank of Bangladesh, in all possible areas under sustainable banking (Bangladesh Bank, 2016).  
64 Green banking is one of three broad categories of sustainable banking, and this category has achieved a high  
65 status in the era of ebanking services. 100% of banks in Bangladesh have now online branches, and 72.9% of  
66 these are fully online (Bangladesh Bank, 2016). Undoubtedly, e-banking has brought a revolutionary flavor to  
67 banking customer services. But the success of such a paramount program is not possible until the demand section  
68 finds it fit. The customers' satisfaction in e-banking services receives consistent attention from the researchers  
69 as technology and service patterns change daily.

70 A large volume of researches focused to understand the variety of dimensions of e-banking services ?? But,  
71 researchers do not even respond to customers' satisfaction seems about e-banking services throughout developing  
72 countries. Researchers found that electronic banking service channels have gained a positive impression in India  
73 and Kenya (Nyangosi et al.,2009) as well as the failure of achieving customers' responses (Rashmita and Saho,  
74 2013). To some extent, insisting on products and services become more important rather than a better customer  
75 experience cause of the marketing strategy (Rashmita and Saho, 2013). But, service quality and informational  
76 trust are the keys to deliver satisfactory customer services (Islam and Yang, 2009). Bangladesh is a growing  
77 economy, with 58 scheduled banks (Bangladesh Bank, 2017). In such a competitive situation, this research aims  
78 at revealing the customer's experience of e-banking products and services.

### 4 III.

### 5 Research Method a) Research Technique

81 Both quantitative and qualitative methods are applied to the utilization of primary and secondary data. The  
82 Survey research strategy, the most suitable technique for gathering descriptive information, is used in this study.  
83 This research technique covered targeting the population and getting the responses in the questionnaire. The  
84 target population here covers specifically users and prospective users of E-Banking services. The researchers  
85 picked respondents mostly from the Dutch Bangla Bank Limited, Prime Bank Limited, and Bank Asia Limited  
86 in the Chattogram. The majority of the respondents are customers, although the questionnaire also took an  
87 informal interview with bankers and other experts. Both convenience and purposive sampling techniques were  
88 applied for data collection, in this research.

### 6 b) Data Collection Procedure

90 With the combination of closed and openended questions, the researchers prepared a structured questionnaire  
91 to collect data. As the most versatile method to yield clean data, "Multiple choice questions" applied, and  
92 respondents were allowed with optional answer. The questionnaire also contained an additional "other" option  
93 with a comment field so that respondents can write down responses that were not available in the given options.  
94 Though, different write in responses made the researcher do some extra work about separating each which,  
95 helped to get unbiased responses because the respondents were not bound to a fixed number of answering  
96 options. There is also the inclusion of some open-ended questions to let respondents provide their suggestions  
97 and recommendations.

### 7 c) Data Processing and Analysis

99 After assembling and organizing data by the structured questionnaire, the researcher coded, cleaned, and filtered  
100 those through Microsoft Excel and Google Analytics. Besides, statistical analysis applied by the software to

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101 show alliance among variables, and frequency distribution is used as a statistical analytical method for displaying  
102 descriptive statistics. The consistent data has been then manifested in a standard model using tables, frequencies,  
103 and percentages to analyze and interpret the data. Besides, the mean/average score is considered in determining  
104 the ranking of some multiple answer options. Finally, the results are illustrated by charts and tables for a better  
105 understanding of the analysis.

106 IV.

## 107 8 Result and Discussion

108 The researchers at first tried to find out customers' bank selection. 88% of respondents unveiled the bank name  
109 where they maintain the accounts. Most of the respondents have an account in more than one bank. Therefore,  
110 the table is arranged so that we can derive how many times the responses are opted on an individual bank name  
111 and their ranking in terms of average score. However, people have mentioned about 16 different banks. Most  
112 of the respondents have the account in both IBBL and DBBL; thus, in the table, we Secondly, the researchers  
113 aimed at exploring customer's perceptions of different types of service delivery channels. 98% of respondents  
114 expressed their preferences. It is visible that most of them responded (43.84%) opted for "Electronic Banking" as  
115 their preferred Banking system, which is not up to the expectation. The response on only "Traditional banking"  
116 is relatively lower. However, both the banking system option (41.10%) is pretty close compared to the option  
117 "Electronic Banking." Thirdly, 68% of the total respondents defined Ebanking in 5 different ways. According to  
118 most respondents (29.41%), E-banking is banking with Electronic Media and the inter net. They added that  
119 banking services, pro vided through mobile, PC and internet are called E-banking. Whereas (27.45%) of the  
120 respondents defined it as "Internet-Based Banking." They think that all types of banking procedure facilitated  
121 by the internet are said to be E-Banking. (27.45%) of the respondents understood it as "Online Based Banking.  
122 In their view, E-banking refers to the banking system which depends on online activities, and (7.84%) of the  
123 respondents referred to e-banking as "Real-Time Banking" which is easy and convenient, time saving and can  
124 be operated remotely. Fourthly, the researchers tried to understand what form of e-banking services is mostly  
125 demanded in the market. Almost 36% of total respondents prefer the Combination of (Inter-net Banking +  
126 Online Banking + Mobile Banking) has a response rate of 28.07%. Be-sides, 24.56% of the respondents chose  
127 only "Online Banking" as the form of E-Banking they use.

128 Moreover, the combination of (Internet Banking +Online Banking) and only Mobile Banking have limited  
129 demand. Then, there should be rationality for e-banking services. Almost 58% of total respondents find E-  
130 Banking facility as efficient and admit the option "ALL" (Convenience, Easy Access, Time Saving, No need to  
131 stand in line, Cost saving) for the reasons/advantage of using E-Banking Facility. At the same time, other  
132 combinations of choices got the nearer percentage of responses from the respondents. Still, a remarkable  
133 section of our population is Not interested in E-Banking services. Majority of the non-interested respondents  
134 (55.74%) addressed that they have no clear idea about the security system in ebanking. At the same time, some  
135 respondents (19.67%) found as "Lack of Technological knowledge" for their reason for not choosing this service.  
136 The combination of "Security Issue and Lack of Technological Knowledge" has 9.84% response, and 6.56% have  
137 chosen the option "ALL" as the reason for not choosing E-Banking service. Finally, the researchers checked  
138 the customer's recommendation on e-banking services and patterns. Despite the growth, experts claim that e-  
139 banking is still in its infancy in Bangladesh. In this case, maximum respondents (31.25%) recommended that the  
140 security should be enriched by ensuring that the computer system is used only by the trusted people, creating a  
141 security framework, etc. At the same time, 14.06% of the respondents emphasized the training of both employees  
142 and customers. They suggested trained IT experts should be employed, and basic training to be given to the  
143 customer by the friendly employees. Ensuring education with technological knowledge is inevitable for the growth  
144 of E-banking, 12.50% of the respondents suggested about this. They added that without education level people  
145 would be unable to use the internet and operate electronic devices. The same percentage (12.50%) of respondents  
146 claimed that E-Banking would be accepted to a larger extend only when it becomes flexible, easy, and convenient  
147 to use for all kinds of clients. Moreover, some other recommendations pro vided by the respondents are creating  
148 intense awareness about e-banking, especially in a rural area, building a robust infrastructure and regulatory  
149 framework, reducing the prices of internet and additional e-banking charges finally, enacting government law  
150 such as information security law. V.

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## 153 11 Conclusion

154 Digitalization of the banking industry is one of the elements of the "Digital Bangladesh" Vision. The rapid growth  
155 of smartphone penetration, and the rise in internet users, will further influence the adoption of E-Banking in  
156 our country. In this study, it is evident that the majority of the bank in our country are adopting information  
157 technology to render services. The survey focuses that majority of the respondents are concerned about E-  
158 Banking. People accept it beneficial in terms of quality, time, access, etc. However, the tendency of the practice  
159 is mostly inoperative and sluggish still. Indeed, banks are integrating different E-banking services and features

160 through marketing, advertisement, and raising awareness. Several "Security breaching" events in the banking  
 161 sector of Bangladesh made people puzzled. Therefore, both the government and the Banks should come forward  
 162 to save this prospective banking system from the cold static situation by ensuring literacy level, developing  
 163 infrastructure, enacting a security law framework, creating skilled and trained workforce, and considering the  
 164 recommendations mentioned in this study. Promoting financial literacy, availability of cheaper network facilities,  
 165 sufficient ICT infrastructure, and workforce development, strict compliance maintenance, etc., could accelerate  
 166 E-Banking adaptation more efficiently and satisfactorily. Regulations also need to be active to check money  
 167 laundering chances through Ebanking platforms.

168 **12 Global Journal of Management and Business Research**

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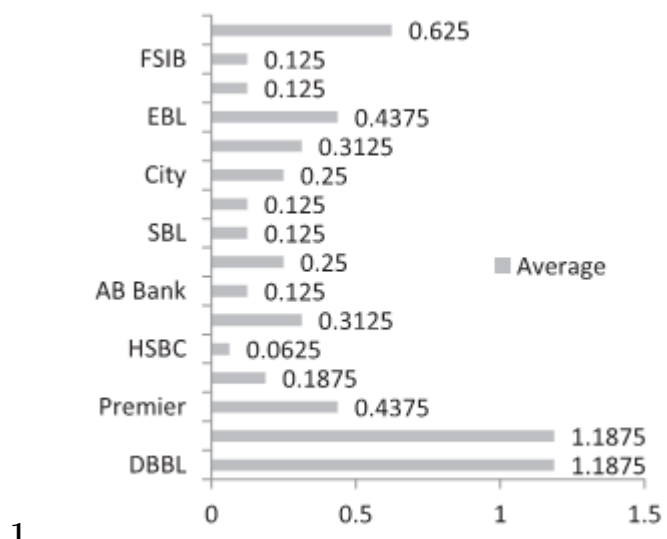


Figure 1: Figure 1 :

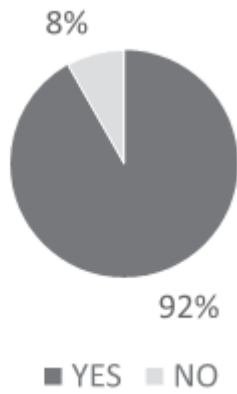
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Figure 2: Figure 2 :

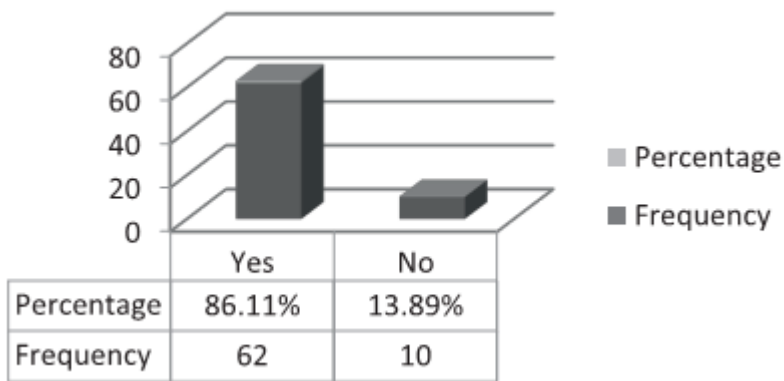
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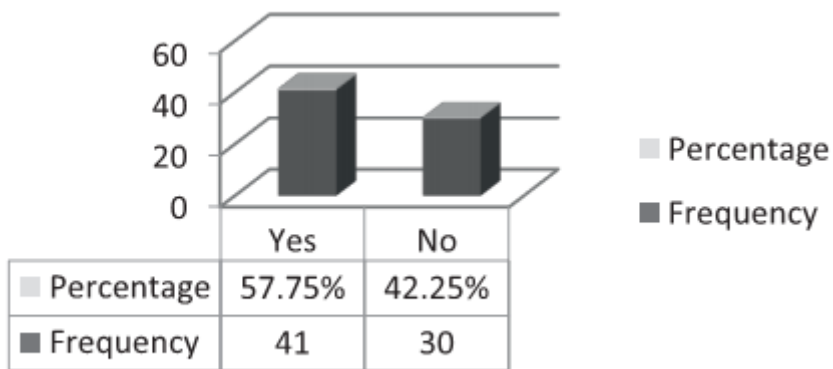
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Figure 3: Figure 3 :



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Figure 4: Figure 4 :Figure 6 :



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Figure 5: Figure 5 :

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Most

Figure 6: Table 1 :

2

E-Banking Adoption in Bangladesh; Present Status and Customer Satisfaction: An Evaluation

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Global Jour- nal of Man- agement and Business Re- search	Types of Bank SOCBs(06) SDBs(02)	No. of ATM (own) 204 0	No. of ATM' (Shared) 14,753 0	No. of Branches 1,410	Total 3,732	No. of Branches with online cov- erage 3,004 70	% of Online Branches 80.49% 4.96%
	PCBs(40)	9763	84873	4826		4825	99.98%
	FCBs(09)	168	4,207	66		66	100.00%
	G. Total	10,135	103,833	10,034		7,965	79.38%

Source: Quarterly Review Report (2017), Bangladesh

Figure 7: Table 2 :

3

Product/Service	No. of bank	% of Bank
Internet Banking	40	78.43%
Online Banking	38	74.51%
Mobile Banking	41	80.39%
Automated Teller Machine	48	94.12%
Debit Card	46	90.20%
Credit Card	47	92.16%

[Note: Source: Calculations done by the Researchers based on Secondary DataII.]

Figure 8: Table 3 :

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Figure 9: Table - 3

4

Banking System	Frequency	Percent
Electronic Bank	32	43.84%
Traditional bank	11	15.07%
Both	30	41.10%
Total	73	100.00%

Figure 10: Table 4 :

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5

View of E-banking	
Electronic Banking	15.69%
Banking with Electronic Me-dia and internet	29.41%
Internet-Based Banking	27.45%
Online Based Banking	19.61%
Real-Time Banking	7.84%
Total	100%

Figure 11: Table 5 :

6

Form of E-Banking	Per-centage
ATM + Debit Card +Credit Card	35.09%
Internet Banking + Online Banking + Mobile Banking	28.07%
Online Banking	24.56%
Internet Banking + Online Banking	10.53%
Mobile Banking	1.75%
Total	100.00%

Figure 12: Table 6 :

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Figure 13: Table 7 :

8

Disadvantage	
No Idea about Security	55.74%
Lack of Technological Knowledge	19.67%
Speed Issue	1.64%
Security Issue and Lack of Technological Knowledge	9.84%
Other	6.56%
All	6.56%
Total	100.00%

Figure 14: Table 8 :

9

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Figure 15: Table 9 :

13

Occupation/ Profession	Percent
Government Service	12.16%
Private Service	28.38%
Business (Me-dium)	17.57%
Self-Employed	33.78%
Housewife	8.11%
Total	100%

Figure 16: Table 13 :



## 1 Appendix

## 2 Demographic information of Respondent

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- [Do you think E-Banking provides better Customer service than traditional banking? Yes / No Please explain your choice in short: 10. Do you feel safe using the e-banking service? Yes / No Please explain your choice in short: 11. Which service/services do you enjoy most pro, (vided by E-Banking)
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- 237 [What kinds of bank account do you use? Current / Saving / Fixed / Other] *What kinds of bank account do you*  
 238 *use? Current / Saving / Fixed / Other*,
- 239 [What security measure/measures are taken by your bank? Encryption / Firewall/ Session management / Login Pin Verification  
 240 'What security measure/measures are taken by your bank? Encryption / Firewall/ Session management /  
 241 Login & Pin Verification /all / Other????????????????????? 13 . Do you think the adoption of E-Banking  
 242 in Bangla-desh will Develop the Banking system? Yes/ No Please explain your choice in short: 14.  
 243 What is your recommendation/suggestion to develop an E-Banking system in Bangladesh? E-Banking  
 244 Adoption in Bangladesh'. *Online Payment & Transfer/ Account Information check/ Online Shopping/ Ticket*  
 245 *Booking/Investment Service Other ?????????????????????????????? ? 12, (Present Status and Customer*  
 246 *Satisfaction: An Evaluation)*
- 247 [Which Bank or Banks do you use to maintain an account? DBBL /BRAC/Prime/Premier / Govt] *Which*  
 248 *Bank or Banks do you use to maintain an account? DBBL /BRAC/Prime/Premier / Govt*,