

The Role of Alternative Banking Channels on Banks' Sustainability through Customer Satisfaction in Bangladesh: Evidence from COVID-19 Pandemic

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Abstract:

The COVID-19 pandemic has hit the economy world-wide in a terrible way so as the economy of Bangladesh. Banks are recognized as the mainstream of the economic development of a country. The sustainability of banks is very important for the banking industry of Bangladesh. The study focuses on the role of alternative banking channels on bank sustainability through customer satisfaction. A non-experimental survey has been conducted to collect the data from the bank customers and bank officials through a structured questionnaire. Data are analyzed using a statistical package, SPSS 25. Linear regression, correlation, and one sample statistics have been performed to estimate the role of alternative banking channels on banks' sustainability. The study finds that alternative banking channels have a significant positive influence on customers' satisfaction as well as banks' overall performance and customers are satisfied with the existing channels. There is a positive correlation among customer satisfaction, the future intends to use alternative banking channels and recommendations about these channels to other potential customers and this will enhance the banks' overall performance and sustainability. It is recommended that banks should introduce new alternative banking channels and strengthen the security of the existing channels to achieve strong sustainable performance.

Key Word: *Alternative Banking Channel, Sustainability, Customer Satisfaction, Performance, Bangladesh.*

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I. Introduction

The COVID-19 pandemic has hit the economy world-wide in a terrible way. The economy of Bangladesh also has drifted away from its normal stream. The COVID-19, Novel Corona pandemic is a contagious virus, responsible for pneumonia and severe respiratory illness syndrome caused by SARS-CoV-2 (COVID-19 pandemic in Bangladesh, 2020). This contagion pandemic cracks mostly the places where there is social density. It outbreaks effortlessly through the air, tiny droplets, or particles like aerosols, from the contaminated person's sneezes, coughs, breathes, talks, or sings. The virus may also be passing on one person to another via contaminated surfaces. The virus spreads before up to two days earlier of the symptom of the disease is exposed (COVID-19 pandemic, 2020). Social distancing is the most reliable way to avoid contamination. The spreading of the virus was first confirmed to have in March 2020 in Bangladesh. As a preventive measure, the Govt. declared a "lockdown" all over the nation from 23 March to 30 May. At this time the economy came to a standstill. During this time to avoid the contamination banks also shortened their working hours and restricted the presence of 100 percent staff at the bank at a time.

Banks are recognized as the lifeblood/mainstream of economic development of a country. It is such a fundamental part of our economy that we can't set aside from its usage/benefits. In this situation, the GDP is slowly declining. So, for the growth of the economy, the support of different sectors of business is needed from different angles. In this case, the economic contributions of banks are needless to say. Financial intermediaries (Banks) contribute a total of 3.25% and 3.35% in the country's GDP in the financial year 2019-2020 and 2018-2019 respectively (Bangladesh Bureau of Statistics, 2020). In the meantime of the economic crisis for turning back to the economic development from this pandemic situation, the banking sector can play a specific role in the economy. Banks should be more strategic from the viewpoint of economics as well as societal well-being. Taking the present situation into consideration alternative banking system can play a specific role in the economic turn back. To keep pace with globalization the revolution in the banking industry has come to the light. The banks nowadays have been being aware of providing customer-driven philosophy to gain a competitive advantage among many rivals that exist in the market. The alternative banking system has helped customers to save their time due to bank related operations and made it convenient to all at anywhere and at any

time without any geographical constraints of location. Customers' awareness and approach have improved the usage of alternative banking.

In the mid-time, the government is providing different types of stimulus packages and allowances through MFS (Mobile Financial Services) channel. So to boost up the economy, Banks are now paying their attention to financial inclusion (Uddin, 2020). Due to the blessings of advanced information technology conventional banking has turned into a digital banking system. They are changing their outlook towards the digital banking system and giving such services to the customer to satisfy them through different digital products line to enhance their market share. It possibly is the beginning of digital turning in the banking systems (Aziz, 2020). In this way, the banks which can keep pace with the revolution/change and adopt the opportunity can gain a competitive advantage through customer satisfaction and profitability without any doubt.

Research objectives

The internet is the most used things in the present world. Important tasks are being done through the internet now. Many countries are building a cashless society. Therefore, the banking sector has also faced a radical technological change. In the study, the prime intention is to explore the necessity of implementing alternative banking channels in Bangladesh. The other supportive objectives are as follows:

1. To determine the importance of implementing alternative banking channels in the existing banking arena in Bangladesh.
2. To ascertain the impact of customer satisfaction on a bank's overall performance.
3. To discover the correlation between customer satisfaction and their recommendations on using alternative banking channels to other users.

II. Literature Review

Meanwhile, in the covid-19 pandemic situation, the banks have discouraged their customers to carry out their transactions through the conventional banking system. Face to face transactions has strictly avoided through visiting the branches unless emergency to malingering contamination. Instead of visiting the branches the banks are providing support using card, POS, CDM, and Internet Banking and withdraw money from ATM by the customers. Now customers have a way into prompt, proficient, and reliable banking services. The number of internet users nowadays is increasing rapidly especially in the situation for avoiding the pandemic of covid-19. Recently, the Bangladesh Telecommunication Regulatory Commission (BTRC) has identified that the number of internet subscribers in the country has increased by six lakh in April, which is a record high. The number of internet users rose from 9.14 crores to 9.31 crore for the first three months of the year 2020 (BSS, 2020). Through the changes in the banking system globally, Information Technology (IT) is the most prominent cause behind this radical change (Argamo, 2015).

E-banking services are so convenient that it helps customers to get their required services within a very few times and, it also reduces the cost of banks. Therefore, banks are now willing to expand their E-banking products and services as it has a meaningful influence on banks' financial performance as well as overall performance. For the customer, E-banking is more convenient as it saves time, money and reduces geographical barriers also (Baten & Kamil, 2020). Besides, ATM banks offer Tele Banking, SWIFT, Easy Pay Machine, POS terminal, Debit card, Credit card, Smart card (Shamsuddoha, 2010). Commercial banks are enabling to be everywhere in coverage, resilience, interconnectivity, and greater user-friendliness than conventional banking using E-banking, (Njogu, 2014). According to Oyewole et al. (2013) E-banking has a remarkable positive effect on banks' performance and they suggested that investment choice regarding electronic banking is the rationale to banks' performance. Banks should enlarge their electronic banking services in a well-organized and well-planned way as it enhances the banks' overall performance because of increased efficiency and productivity (Maiyo, 2013). According to Orji et al. (2018) investment in electronic banking services keep banks performing well and being profitable through customer satisfaction. Another study found that E-banking improves banks performance in respect of return on assets, return on equity, and operating management (Yang et al., 2018)

Now a day, the mobile banking industry has become very widespread in Bangladesh. Mobile financial service (MFS) or Mobile Banking is the service provided by banks and other financial institutions which allows wireless service to the customers to perform financial transactions distantly using mobile like device. Some of the users find adequate security dealing with the transactions where some of them have faced fraud activities concern to the service. Banking companies should solve the problems regarding the service charge, prevention of fraud by solving PIN issues, customer care service, security, and expansion of facilities by collaborating with international companies like Pay-pal or Visa card (Maliha et al., 2020). The increase in the usage of mobile banking networks depends mainly on the commitment of customer relationships to banks and how much value they can add to their customers (Shaikh et al., 2015). Even banking companies need to take initiatives on promoting awareness campaigns regarding minimizing the risk perceptions of the clients to develop their self-reliance on the digitalized system by communicating its advantages and benefits over other conventional

channels to ensure more safe and secure service as well, (Ozlem and Tatar, 2016). To increase the market share of mobile banking, companies should focus on the problems regarding the services provided to the customers and fix them immediately. A study revealed that mobile banking has a significant influence on banks' financial performance by winning the customers' trust (Bonface and Ambrose, 2015). Maina (2012) recommended that banks can earn more profit by increasing the number of customers through the adoption of the new technology-based strategy. On the contrary, Mutua (2013) said that a weak positive relationship exists between mobile banking and the banks' financial performance in Kenya.

With respect to globalization in recent years, the expansion of information know-how and the upcoming evolution of internet banking have necessarily changed the way banks carry out their banking operations and the way customers perform their daily banking activities, (Grabner & Faullant, 2008). According to Calisir & Gumussoy (2008), Technology adds a new extent to the conventional banking system. Thus Internet banking is now the most popular self-service technology in the world. Kumbhar (2011) stated that with the aim of enhancing customers' satisfaction bankers should focus their efforts on improving the brand perception of the perceived quality of alternative banking services. Ali (2010) concluded that E-business and online banking can take Bangladesh's economy in a strong position through the satisfaction of customers. Consequently using alternative banking channels enhances customer loyalty and commitment in the long run and thereby enhances the banks' financial performance. This is the utmost requirement for banks as well as bank customers during this epidemic situation.

There is an ongoing perception about the insecurity of the internet. Researchers have proposed a wide range of devices that internet retailers can use them depending on the trust, purpose, and behavior of online consumers. In order to attract more internet banking users and increase the acceptability of online banking services, it is not enough to make the internet banking system convenient and easy to communicate. It is important to consider the issue of security to improve the rate of adoption of internet banking. (Grabner & Faullant, 2008) It is believed that the internet channel can help banks to maintain profitable growth by automating work done by employees, reduce cost, and retain customers simultaneously. Internet channels can help banks maintain profitable growth, reduce costs, and retain customers by automating employee-led work. A paper transaction at an area office cost about one dollar at the same time whereas a bank only costs five cents in a transaction via the internet. General services of Internet Banking include inquiry accounts balance, hand over money between nominated accounts, making payments and screening bank statements, etc. I-banking allows banks to lessen expenditures and thereby generating financial performance, (Chung & Paynte, 2002). A study concluded that internet banking has earned customer acceptance (Sullivan, 2000). It is also stated that though some non-interest expenses have been increased because of introducing internet banking, these expenses have not translated into lower profits. Another study found that internet banking increases the profitability and operating efficiency of the banks (Malhotra and Singh, 2009 & Stoica, Mehdian, and Sargu, 2015).

III. Theoretical Framework

By the passage of time, a revolution has made the change to the banking sector from conventional banking to online or digital banking. To eliminate the flaws of conventional banking and to make service comfortable to the customer. Banks are now emerging with modernized banking services. Banks have made changes through their products and operational method as a digitalized banking system.

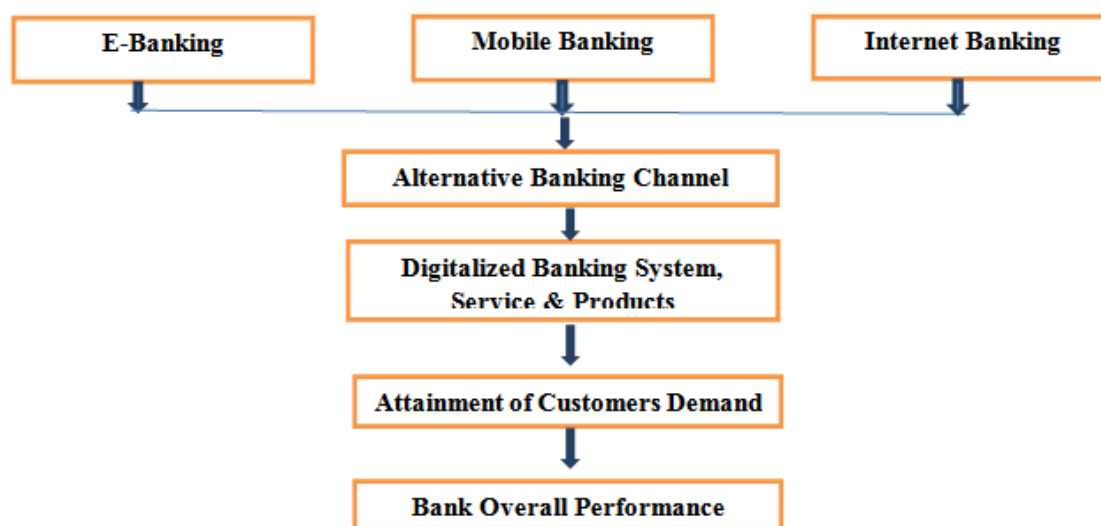


Figure 1: Conceptual framework

Alternative banking includes Electronic Banking (E-Banking), Internet Banking (i-Banking), and Mobile Banking (also known as M-Banking, m-banking, SMS Banking). Banks are offering the digitalized services and operations to the customers to improve efficiency and satisfy the customers electrically. That has led to the traditional methods of digitalized banking services. Digitalized banking offers customers the to apply for credit, to withdraw money at any time, to make payments of utility and others bills, to check the bank statement, to transfer money, to purchase, airtime recharge, and so on through different delivery channels. Digital banking varies based on time, quick service, presence, safety, convenience, controlling of finance, operational cost, customer service, and contact with the bankers, etc. That's how the digital banking system provides customer-centric products and services to build long-term relationships with them and maintain high customer satisfaction that led the banks to expand their net income and profitability. Nowadays the demands of customers are also changing. They prefer alternative banking services to conventional banking. Banks are responding to the flow of demand also. Providing the digitalized services banks are catching the eye of customers and attaining customer demands. This by turn gradually increases the banks' financial performance.

Internet Banking: Internet banking is known as online banking, i-Banking, virtual bank, or web banking. It is the process of the banking system which allows a customer to carry out financial dealings through the website of the bank employing the Internet using a device (Smartphone or laptop or Tablet). Customers can carry out basic banking transactions to transfer funds instantly without visiting the bank, paying utility bills and other bills, airtime recharge, monitor bank statements at any time, ordering checkbooks, Loan applications, and transactions, and so on.

E-Banking: Electronic banking is the kind of virtual banking that offers products and services through electronic signals and telecommunication networks without the help of paper documents. Electronic banking is the secured, trouble-free, swift, and efficient service that allows customers to reach the bank account and perform online banking operations round-the-clock availability. It is as beneficial for the banks as for the customers. It lessens transaction costs, reduces the scope of human errors, Lessens paperwork, reduces fixed costs, and makes more loyal customers for the banks.

Mobile Banking: Mobile banking is the service of financial transactions provided by the banks where a mobile device is used i.e. a smartphone/cell phone or tablet. It is safer than internet banking. Lately, M-banking is the most popular form of digitalized Banking channel in Bangladesh, which started its journey on 31st March in 2011.

IV. Methodology of the Study

This research study used a non-experimental survey method. A survey has been conducted on different customers of different state, public, and private commercial banks of Bangladesh who are using alternative banking channels to carry on their day to days banking activities. Another survey has been conducted on the bankers of several banking institutions in Bangladesh as well. Questionnaires from different respondents have collected randomly using Google form via the internet due to the pandemic situation is going on.

IV.I Population and Sampling

The customers of the state-owned, specialized, and private banks from all over the country were the population of the study. The customers who are enjoying the alternative banking channels services are the target population of the study. The study uses a convenient and random sampling method. The customers who are using the internet and digital devices like a mobile phone or personal computer took participation in this survey. A structured questionnaire was designed to collect the responses from the sampled population.

IV.II Data collection Method

A structured questionnaire was designed and sent to the sampled population via different social media platforms like Facebook messenger, E-mail, and WhatsApp as the COVID-19 pandemic is going on. A total of 900 customers responded from the different parts of the country among them 854 responses were counted. Another 46 responses are cut from the study because of some errors like incompleteness. Another survey was taken on bank officials of 13 private and commercial banks or Bangladesh including Bangladesh bank officials' to know their perception about alternative banking channels where 100 responses counted in this study.

IV.III Research Instrument

The questions of the questionnaire included demographic information of the respondents and other relevant dimensions of the customers. The responses from twenty-three questions under five categories are collected. Each question includes five parts from very high to very low scaling from 1.00 to 5.00. The responses of bank officials also categorized into five from strongly agree to strongly disagree scaling from 1.00 to 5.00. The collected data are analyzed using a statistical package called statistical package for social sciences, version

25 after encoding. Linear regression analysis, correlation, and one sample statistics analysis were performed to check the hypothesis and reach a decision.

IV.IV Hypothesis

The hypothesis of the study are as follows:

H₀: Customers are satisfied with the existing alternative banking channels

H₁: Customers are not satisfied with the existing alternative banking channels

V. Analysis & Results of the Study

Table 1: Reliability Analysis

| Reliability Analysis | | | |
|----------------------|------------------|------------|------------|
| Construct | Cronbach's Alpha | Result | N of Items |
| Ability | 0.796 | Acceptable | 5 |
| Benefit | 0.902 | Good | 5 |
| Trust | 0.85 | Good | 5 |
| Security | 0.745 | Acceptable | 4 |
| Necessity | 0.779 | Acceptable | 4 |

Cronbach's Alpha is considered as the measure of the internal unity of related items in a group. In Table 1, the result of Cronbach's Alpha is presented. It presents that Cronbach's Alpha for the succeeding parts is satisfactory and reliable. As it is stated that, reliability which is smaller than 0.60 can be considered as poor, those which are in the span of 0.70 can be acknowledged as up to standard, and those which are greater than 0.80 can be acknowledged as good. So, from the following Table, it can be said that Cronbach's Alpha for benefit and trust, is good and the ability, security, and necessity is acceptable.

Table 2: Demographic Analysis of Bank Customers

| Demographic Analysis | | | |
|----------------------|-------------------|----------------|----------------|
| Gender | Male | 547 | 64.05% |
| | Female | 305 | 35.71% |
| | Prefer not to say | 2 | 0.23% |
| | Total | 854 | 100.00% |
| Age | Less than 18 | 8 | 0.94% |
| | 19-30 | 764 | 89.46% |
| | 31-40 | 48 | 5.62% |
| | 41-50 | 23 | 2.69% |
| | above 50 | 11 | 1.29% |
| | Total | 854 | 100.00% |
| Profession | self | 359 | 42.04% |
| | Student | 77 | 9.02% |
| | unemployed | 200 | 23.42% |
| | public | 112 | 13.11% |
| | private | 106 | 12.41% |
| Total | 854 | 100.00% | |
| Education | SSC | 43 | 5.04% |
| | HSC | 101 | 11.83% |
| | Honors | 341 | 39.93% |
| | Masters | 353 | 41.33% |
| | Ph.D | 16 | 1.87% |
| | Total | 854 | 100.00% |
| Income | Below 10,000 | 166 | 19.44% |
| | 11,000 - 20,000 | 115 | 13.47% |
| | 21,000 – 30,000 | 191 | 22.37% |
| | 31,000 – 40,000 | 172 | 20.14% |
| | Above 40,000 | 210 | 24.59% |
| | Total | 854 | 100.00% |

Demographic analysis of the customers is presented based on their gender, age, Occupation, qualifications, occupation, and annual income. The survey finds that 547 males and 305 females took part in the survey and 2 did not like to talk about their gender. The banks should concentrate on including more female

customers in the banking arena. The maximum numbers of respondents were found in between the age group of 19 to 30 years (89.46%) of old. That means the young generation is the largest number of users of the banks in Bangladesh. It is a positive sign for the banking industry. It is found that most of the respondents (200) are unemployed. 25.52% is observed as a salaried person (private & public service) followed by 42.04% self-employed, 9.02% of students. Since many of the customers are salaried and self-employed so, banks have the opportunity to establish their e-based products to the salaried and self-employed person. It is observed from the survey that the number of users from different educational levels as SSC, HSC, and Honors and Masters are respectively 43, 101, 341, and 353 out of 854 respondents. As the customers are educated so it is a great opportunity for the banks to attract educated people into the digitalized banking system. Most of the customers have an income range above 40 thousand monthly.

Table 3: Index scores of different dimensions of alternative banking channels' in Bangladesh

| Dimension | Measurement Indicators | Index value | Average Value |
|---------------------------------|---|-------------|---------------|
| Tangibility (Ability) | Ability to use Mobile Phone | 2.46 | 3.194 |
| | Ability to use ATM machine | 3.52 | |
| | Ability to use Internet | 2.49 | |
| | Ability to use POS | 3.89 | |
| | Ability to use Debit card | 3.61 | |
| Responsiveness (Benefit) | Cost saving: Lower rates, transaction fees. | 3.30 | 3.118 |
| | Time saving: no need to go to bank or ATM | 2.92 | |
| | 24 hours Access: Can make transaction any time | 2.86 | |
| | Physical security: no need to go out with cash | 2.96 | |
| | Easiness: Ease of use | 3.55 | |
| Assurance (Trust) | Overall Trust | 3.02 | 3.118 |
| | Trust in banks | 2.82 | |
| | Trust in the technology of mobile banking | 2.99 | |
| | Trust in third party agent (e.g., pay outlet, cash-out point) | 3.49 | |
| | Trust in application software | 3.27 | |
| Reliability (Security) | Security from fraud | 3.03 | 2.615 |
| | Cyber security risk | 2.23 | |
| | Security related to personal information | 1.47 | |
| | Security related to PIN & passwords | 3.73 | |
| | | | |
| Empathy (Necessity) | Bank should enlarge their digital banking services | 3.30 | 2.967 |
| | Bank should introduce new digital banking products | 2.91 | |
| | Bank should update their mobile application software | 3.03 | |
| | Bank should update and modify their website(s) | 2.61 | |

The index scores of a different dimension of alternative banking channels' in Bangladesh are presented in table 3. The dimensions are created based on the SERVQUAL model. The responses are collected with a five-point Likert scale through a structured questionnaire on a scale of 1.00 to 5.00. Where 1.00 shows very high and 5.00 shows very low. The survey findings reveal that all the dimensions are on the positive side but security and necessity scores better than the other three dimensions named ability, benefit, and trust that means customers fell the necessity of introducing more alternative banking channels and the security of these channels are a big concern for them.

On the ability side, customers are more able to use a mobile phone than any other digital device by which digital banking services are provided. On the other hand, bank customers have little ability to use point of sale machine. Customers prefer these alternative banking channels because of their 24 hours accessibility but they don't think that these channels are easy to use. Therefore, the bank should make their services more feasible. The study finds that bank customers have little trust in third party agents like cash outlet points while they have a strong trust base in banks. When it is the time of security concern, customers don't have a security issue on their personal information but they feel insecure about their PIN & passwords of internet banking, mobile banking, and E-banking. Bank customers feel that the bank should update and modify their website(s) and should introduce new digital banking products.

Table 4: Regression Analysis

| Regression Analysis | | | | | |
|---|-------------------|----------|-------------------|----------------------------|------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Sig. |
| 1 | .840 ^a | .706 | .704 | .46698 | .000 |
| a. Predictors: (Constant), Necessity, Ability, Trust, Security, Benefit | | | | | |
| b. Dependent Variable: Satisfaction | | | | | |

Table 4 reveals the regression analysis of model 1 where it is clear that 70.4% of the dependent variable that is satisfaction can be explained by independent variables which include Necessity of alternative banking channels, Ability to use digital devices, Benefits of alternative banking channels, trust & security towards alternative banking channels. The P-value of model 1 is .000 which is less than 5% which means independent variables (Necessity, Ability, Benefit, Trust, and Security) have a significant impact on the customer satisfaction towards the alternative banking channels with 95% confidence level.

Table 5: Correlation

| Correlations | | | | |
|------------------------------------|---------------------|--------------|----------|----------------|
| | | Satisfaction | Interest | Recommendation |
| Satisfaction | Pearson Correlation | 1 | .499** | .073* |
| | Sig. (2-tailed) | | 0.000 | 0.034 |
| Interest | Pearson Correlation | .499** | 1 | .086* |
| | Sig. (2-tailed) | 0.000 | | 0.012 |
| Recommendation | Pearson Correlation | .073* | .086* | 1 |
| | Sig. (2-tailed) | 0.034 | 0.012 | |
| **. Significant at the 0.01 level. | | | | |
| *. Significant at the 0.05 level. | | | | |

The study finds that a significant positive correlation exists among customer satisfaction towards alternative banking channels, their interest in it, and their recommendation about alternative banking channels to other potential customers. Customer satisfaction is positively correlated with interest and recommendation at 99% and 95% confidence level respectively. From this correlation table, it can be said that when the customers are satisfied with alternative banking channels such as mobile banking, internet banking & E-banking, they feel more interested to use these channels more and more and they also recommend their potential customer to use these channels which will increase the bank's customer size as well as overall performance.

Table 6: Perception of bank official's on alternative banking channels

| Items | Mean | Sig. (2-tailed) |
|---|------|-----------------|
| Customers demand for Digital Banking (E-Banking, Internet Banking & Mobile Banking) services and products are increasing gradually during COVID-19 pandemic | 1.41 | 0.000 |
| Customers prefer to use digital banking services rather than conventional banking | 2.29 | 0.000 |
| Banks are introducing new digital banking products and services gradually | 1.85 | 0.000 |
| Digital Banking services and products have a significant impact on customer satisfaction | 2.33 | 0.000 |
| Increasing Digital Banking services and products have a significant impact on Banks financial performance as well as overall performance. | 2.00 | 0.000 |

Table 6 shows the perception of bank officials regarding alternative banking channels. The study collects the perception of bank officials' with a structured questionnaire that is 100 in number with the help of the internet because of the ongoing COVID-19 pandemic. The responses from bank officials comprise 26% of female respondents and 74% of the male responses. Each question has 5 alternative responses from strongly agree to strongly disagree which are rated 1 to 5. The mean value that is less than 3 is considered as agreed and greater than 3 is considered as disagreed with

the given statements. Bank officials are strongly agreed (mean value is 1.41) with the statement that customers demand Digital Banking (E-Banking, Internet Banking & Mobile Banking) services and products are increasing gradually during the COVID-19 pandemic. They also think that customers strongly prefer to use digital banking services rather than conventional banking as the mean value is 2.29. According to bank officials, banks are introducing new digital banking products and services gradually. They agreed with the statement that Digital Banking services and products have a significant impact on customer satisfaction (mean = 2.33) which have a significant impact on Banks' financial performance as well as overall performance.

VI. Discussion

The world is fighting with a global pandemic named COVID 19 that has brought a change in every part as well as things of the world. The financial sector of the whole world is also facing several problems because of this pandemic. As it is said to be that social distance should strictly be maintained, it cannot be possible to go for traditional banking culture, services, or products. Alternative banking channels such as E-banking, Internet banking, and Mobile banking can play a great role in this arena. The mobile phone subscribers are increasing day by day in Bangladesh. According to the Bangladesh Telecommunication Regulatory Commission (BTRC),

the number of active mobile subscribers was 166.028 million in August 2020 which was 117.758 million in August 2016.

Table 7: Number of Active Internet Users

| Year | Number of Active internet users (in million) |
|------------|--|
| June, 2020 | 103.476 |
| June, 2019 | 96.199 |
| June, 2018 | 87.790 |
| June, 2017 | 73.347 |
| June, 2016 | 63.290 |

Source: Bangladesh Telecommunication Regulatory Commission (BTRC)

There is a massive increase in the number of active internet users also. The table shows that the number of active internet users was 103.476 million in June 2020 which was only 63.290 million in June 2016 which that shows within 5 years 40.186 million new subscribers are added to the list. It can be said that people who are using the internet will always prefer to use online platforms rather than a traditional platform for any transactions like shopping, booking a hotel or restaurant, and also completing the banking activities via the internet or virtual platform.

Table 8: Volume of transactions through alternative banking channels

| Time | Internet Banking | | Mobile Banking | | E-banking |
|--------|------------------|--|----------------|--|--|
| | Customers | Volume of Transactions (amount in Crore) | Account | Volume of Transactions (amount in Crore) | Volume of transaction by cards (amount in Crore) |
| Dec-18 | 1971984 | 3798.2 | 67516007 | 32093 | 13783.9 |
| Mar-19 | 2073479 | 5504 | 67538287 | 34678.4 | 14589.6 |
| Jun-19 | 2169101 | 4956.6 | 72054058 | 31708.4 | 14057.7 |
| Sep-19 | 2287158 | 5364.9 | 76006301 | 35433 | 14542.8 |
| Dec-19 | 2472151 | 6063 | 79653748 | 40647.6 | 16866.4 |
| Mar-20 | 2648681 | 6588 | 82575750 | 39785.3 | 16569 |
| Jun-20 | 2742241 | 7421.1 | 88797075 | 44830.6 | 13657.4 |
| Jul-20 | | | | | 19690.9 |

Source: Bangladesh Bank

The study focuses on Internet banking, Mobile banking, and E-banking as a part of alternative banking channels. From 2018 to 2020, there is a remarkable increase in both the number of customers and the volume of transactions in these three dimensions of alternative banking channels. The number of internet banking customers was 2742241 and 1971984 in June 2020 and December 2018 respectively. The volume of internet banking transactions has increased 3622.9 crore during this period. The mobile banking account and the transactions through mobile banking have also been increased over the period where the number of accounts was 88797075 and the transaction volume was 44830.6 in June 2020. The transactions through cards which is a part of E-banking have also performed well though there is a slight decline in June 2020 which were 13657.4 crore it also increased just after that month and the volume was 19690.9 crore in July 2020.

The study collects different relevant data of alternative banking channels with a structured questionnaire via the internet where 900 responses are recorded. Among these 900 responses, 854 responses are count. Respondents use alternative banking channels for airtime recharge, fund transfer, balance inquiry, bank statements, bill payment, international remittance, savings, cash withdrawal, purchasing, commodity dealing, pension fund management, and also paying the bill in public transportation. Most of the customers are enjoying these services monthly and occasionally. The result shows that the necessity, ability, benefit, trust, and security of alternative banking channels have a significant impact on customer satisfaction. The study also finds that there is a significant correlation between customers' satisfaction and their recommendation towards alternative banking channels. As it is clear that the number of internet banking customers, mobile banking customers, and E-banking customers are increasing day by day along with the transaction through these dimensions, the existing bank should introduce more alternative banking channels, services, and products to satisfy their customers because satisfied customers are blessing for the banking industry. The satisfied customers will be more interested to use these channels as well as also recommend other potential customers to engage in these channels.

VII. Findings and Recommendations of the Study

VII.I Findings of the Study

From the above result of the analysis and discussion section, there are some major findings. The key findings of the study are as follows.

1. Customers feel that introducing and implementing new alternative banking technology is very necessary for the present world as social density is strictly prohibited because of the ongoing pandemic situation.
2. Banks are now offering different kinds of alternative banking channels for their customers so that the customers can complete their banking activities without being physically present in the bank. Customers also don't want to go to the bank physically because of the health issue and they think that it is very important to enlarge the existing alternative banking channels.
3. The study finds that ability to use a digital device, benefit, trust, security, and necessity of implementing alternative banking channels has a significant impact on customers' satisfaction.
4. It is also found by the study that banks' customers are now much more satisfied with the digital banking services and products.
5. A significant positive correlation exists among the customers' satisfaction, their future intentions to use these channels, and their recommendation about these channels to others. Whenever customers are satisfied they are more interested to use these channels along with this they will recommend using these alternative banking channels to other customers.
6. Customers think that the security related to these alternative banking channels should be strengthened more and strong informational privacy should be kept.

VII.II Recommendations of the Study

Based on the discussion and findings of the study, the possible required recommendations are as follows.

1. The bank should focus on the development of the Android & iOS application and making them as much as a user-friendly interface.
2. The bank should ensure a more secure banking system and making the process easier as it to its users from a different level
3. Near Field Communication (NFC) technology may be useful widely in the banking sector with a sound security system. Then, the user can get more flexibility to use technology in their banking activities.
4. The bank must secure their system more strongly and should have an ATM booth system for all Mobile Banking systems.
5. The banking sector needs the promotion of their services. They need to create awareness among the customers regarding the benefit of digital banking. ICT team of a bank should regularly update their software and check system to avoid any kinds of system failure. The bank should make digital banking hassle-free and easy for the customers.
6. Every bank should try to develop their mobile banking and online banking to build up a paper-based cashless society and should decrease paperwork and face-to-face counter should be closed as soon as possible.
7. It is strongly required for all banking link-up system upgrading. Also strongly required to upgrade the banking cyber Security system.
8. Blockchain can be the best technology in the banking sectors where this sector can ensure high-security protocol on their transition channel and customers' data. Shortly, blockchain will be the most used technology in the banking sector.
9. The bank should the charges regarding the transaction cost and other operating activity.
10. A strong public awareness should be raised about the use of digital banking for more financial inclusion.

VIII. Conclusion

COVID-19 pandemic hits every economy of the world. Face to face communication and all types of social density is strictly prohibited to fight against this deadly virus. The banking industry of Bangladesh also faces some serious problems because of this pandemic. From all the pace of life, people are opting for several transactions through various alternative banking channels to save themselves from the deadly virus through maintaining social distancing. Digital banking is way more convenient and time-saving than conventional banking which can be lessening the cost of the bank as well. Both the bankers and the customers are getting the benefits from the digitalization of the banking services. Banks can minimize their overall costs without the usage of excessive paper, manpower, opening up additional branches, etc. This saves the time, travel, and conveyance money of the customers as well. It has been found that customers are satisfied with the existing alternative banking channels and they are very interested to use these channels for future banking activities. However, customers have a concern regarding the security issue of these channels. Therefore, they want some alternative banking channels with high security where all types of information should be kept in a safer mood. If

the banks can introduce a high secured alternative banking channel, the bank can able to get more and more customers in their banking arena which will flourish the banks' overall performance.

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