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# The COVID-19 Pandemic and the Shift of Banks' Marketing Preferences: The Case of Listed Private Commercial Banks in Bangladesh

#### Abstract

The COVID-19 pandemic has hastened the changes in patterns of service delivery worldwide, including banking. Lockdown and restricted physical presence posed formidable disruptions and challenges to the overall banking industry that required them to adopt a sustainable and innovative business model promptly to continue operations and to protect financial stability. In response to this crisis, all banks effectively reset their agenda by incorporating less human-interactive, a digital mechanism where the marketing team of the banks played a pivotal role by shifting their traditional marketing practices to digital techniques. The study examines the effect of this alteration and its implications by undertaking a survey of bank personnel of all the listed Private Commercial Banks (PCBs) in Bangladesh. A non-parametric Mann-Whitney Wilcoxon test identifies strong differences in expectations of marketing formats in the pre-pandemic and present periods. The analysis reveals statistically significant demographic differences of preference between older and younger marketing personnel in all banks; as well as between Islamic and Conventional Banks. The findings are a wake-up call for banks' policymakers that have multifaceted implications in formulating alternative digital based marketing strategies to continue sustainability and to remain competitive in the long run.

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### 1. Introduction

As the COVID-19 pandemic evolves, banks and non-financial institutions around the world are left with little choice but to rethink their future marketing strategies as the traditional marketing practices are impeded due to lockdowns and limited physical presence. Bangladesh, a leading developing country, has also taken some aggressive fiscal and monetary measures to tackle the effects of the pandemic, while banks, the main driving force of the country's economy, adopted dynamic marketing techniques during the lockdown period (Barua and Barua, 2021; Lalon, 2020; Parkash, 2020; Khondker, 2020). This comparatively new transformation for the Bangladeshi banking industry is not only enabling the retention of existing clients by enhancing relationships with them but also attracting new clients by intensifying marketing efforts and meeting their needs and expectations.

It is well understood that the uncertainty of the COVID-19 will remain for the foreseeable future. To deal with the unexpected circumstances, massive changes in banks' strategies have taken place during the pandemic period. However, their effects and the clarity to accelerate the path to normalcy are yet to emerge. It is of interest to the banks' policymakers and researchers to understand the implication of the new strategies that banks adopted for their marketing and advertisement purposes during the COVID-19 lockdown and/or restricted in-office working days. In particular, the findings of this research can be considered as a wake-up call for the Board of Directors (BoDs) because they would have to make crucial decisions of taking aggressive steps to improve relevant departments of their banks in multiple dimensions. However, to remain competitive in the industry, this change is inevitable for developing countries and is rewarding in the long run (Görg et. al., 2020; Phan et.al., 2020, etc).

This paper aims to unfold the alteration in marketing and advertising fund allocations preferences based on banks' generations and their employees' characteristics by analyzing and comparing 2 scenarios – Pre lockdown period (2016-2019) with the Present and Future periods (2020-2022). It looks at different components where Bangladeshi banks predominantly allocated their marketing funds and investigates radical shift compelled by the COVID-19 pandemic. It also exhibits 'the expected' preference of marketing-related fund allocation in the post-lockdown period derived from employees' experiences, expertise, and their expectations from the respective bank's management.

For this single country-specific and industry-specific exploratory research, all the primary data are gathered from a questionnaire survey on 556 bank employees<sup>1</sup> from 2020 to 2022, which are categorized under different segments while the secondary data are collected from the bank's annual report and the Head Office's for the period of 2016-2020. Classifying the data into banking generation, bank types and employees' age groups, a non-parametric Mann-Whitney Wilcoxon test is performed to understand the significance of the pandemic on marketing preference by analyzing the mean difference between 2016-2019 (Pre-Pandemic) and 2020-2022 (during Pandemic and Later).

Consistent with the annual reports' observations, all respondents agreed that there was a difference in the component of spending variables during the sample period. Among the variables - Sponsorship, Advertisements and Financial Technology (FinTech) based marketing show the most significant changes between the two sample periods in all the generations and types. From the annual report data, it is also evident that banks' marketing strategies have been shifted since the first quarter of 2020 and the COVID-19 pandemic has acted as a catalyst to speed up the move towards digital-based marketing, a product of FinTech, which was way less acknowledged before 2020.

Further decomposing the results into employees' age groups, it is observed that the preference for marketing/advertising fund allocation is diverse among different age groups. There is a significant difference in Sponsorship, Media Ads and FinTech between the age groups of 'below 35' and the age groups of '36-50' and 'above 50'. The coefficient of the variables indicates that the 'below 35' age group prefers the FinTech-based marketing style in the future, while respondents aged '36-50' and 'over 50' prefer returning to the traditional ways of marketing. Identifying and analyzing the reasons for disagreement is beyond the scope of this paper and can be explored in future research.

The rest of this paper is structured as follows: Section 2 gives a brief description of the Bangladeshi banking industry and the 'Context' of this research. Section 3 provides the 'Literature Review' concerning the theoretical framework, the marketing strategies of banks, the trend in marketing preferences, and the future trend for bank

<sup>&</sup>lt;sup>1</sup> In 2019, there are 29 listed Private Commercial Banks (PCBs) in Bangladesh where a total of 113,530 employees work; out of them 2,299 employees work directly for banks' marketing purposes.

<sup>&</sup>lt;sup>2</sup> Data for 2020 is collected both from primary and secondary sources. As a few Annual Reports were unavailable during the data collection period, data obtained from respective banks' Head Offices and Questionnaire for the year 2020.

marketing in Bangladesh. Section 4 is the 'Methodology' that describes the sample collection process, research design, data analysis technique and hypotheses formation. The 'Results and Analysis' are presented in Section 5. Finally, Section 6 contains the 'Conclusion'.

### 2. Context and Relevance of the Research

Following a decade of independence, the government embarked on a process of de-nationalizing the banks and issued licenses for the Private Commercial Banks (PCBs). The 1st Gen PCBs were incorporated in 1982, transferred control to the private sector, and faced difficulties not only because of inheriting poor risk management processes but also due to ineffective regulatory supervision, poor credit management, and unethical activities. Because of their poor performances, the international donor agencies pressured the government to strengthen internal bank management and credit discipline. Under the amended Bank Company Act 1991, the 2nd Gen PCBs were established with a tighter risk management mechanism and had a better transparent reporting system. After 1998, the government issued new banking licenses for the 3rd Gen PCBs that adopted more technology-driven products and services and mimicked western bank methods that saw a larger portion of income generation from off-balance sheet business3 (Uddin and Suzuki, 2011; Mahbub, 2016).

A total of 29 PCBs were listed on the Stock Exchanges<sup>4</sup> in 2019. Among the listed PCBs, a total of 113,530 employees worked on a full-time basis, where 2.03% i.e., 2,299 employees, worked directly for banks' marketing purposes. These listed PCBs spent Bangladesh Taka (BDT) 219,082.86 million as operational expenses according to their 2019 annual reports; among which 4.4% amounted to BDT 9.633.58 million were disbursed as advertisement expenses.

In 2019, when most countries in the world were under various forms of lockdown due to the COVID-19 pandemic, bringing in change became mandatory. This unprecedented halt to normal life has led to a fundamental shift which has emerged opportunities in banks' marketing and advertising techniques, accelerating the trend of digital adoption that was way underway during the pre-crisis period (Amit, 2020; De' et. al., 2020). While digitization and mobile banking dominated the headlines, the modernization, cloudification, and optimization of marketing processes also had a fair share of the banks' annual IT budgets (Friedman, 2021). Though limited information is available on the costs and benefits of banks' internet-based marketing in developing countries, it is apparent that the success or failure is greatly determined by the holistic integration of technology infrastructure with business processes (Fosso et al., 2020). The main challenge and cost of the successful adoption of new marketing methods in banking heavily depend on how the management accepts and implements them in conjunction with their other existing techniques and mechanisms (Jebarajakirthy and Shankar, 2021). Another important consideration for the bank's e-marketing system seems to be whether the general rules of contracts provide sufficient quarantees for the validity and necessity of electronic content, as there is a tendency to over-smart while marketing products (Yousufani et. al., 2020). Despite the additional costs and other potential challenges, change is inevitable to ensure performance excellence and stronger customer loyalty for

 $<sup>^3</sup>$  A further set of banks were established after 2012, labeled as 4th Gen PCB. As they are relatively recently established, complete data for these banks are not fully available (Mahbub et. al., 2019).

<sup>4</sup> At present, Bangladesh has 8 Gen-1 PCBs (6 Conventional and 2 Islamic), 10 Gen-2 PCBs (8 Conventional and 2 Islamic) and 12 Gen-3 PCBs (9 Conventional and 3 Islamic).

banks during the crisis period. Unlike the developed countries, Bangladesh is far behind in transformation to digitalization in all sectors, including banking (World Bank, 2020). The pandemic forced the PCBs to switch to a more advanced digital system, which made it possible for marketing preferences to change from traditional to modern.

The PCBs in Bangladesh are a good case to study the use of digital adaptation. While there have been numerous studies on digitalization in developed and developing countries, there has not been any that has explored the preference of digital adaptation for banks' marketing in Bangladesh. It is important to know why digital marketing and advertising techniques matter now and in the future for numerous reasons. Firstly, there is no doubt that incremental use of digitalization is cost-effective from the bank's perspective in the long run (Phan et.al. 2020; Görg et. al., 2020). Secondly, for a densely populated and developing country like Bangladesh, digitalization allows more clients from remote and rural areas to enjoy banking facilities (Islam and Divadkar, 2020). Thirdly, as more and more people are using the mobile networking platform nowadays, the digital advertising revolution is a must to attract potential customers and retain existing clients (Jebarajakirthy and Shankar, 2021). Fourthly, digital marketing and advertising are less time-consuming, target-oriented, and demography-specific, which allows them to convey the bank's message and interact with people easily (Hammerschlag et al., 2020). Fifthly, banks can reach the global marketplace quickly, with minimal hassle and fewer complications through digital marketing and advertising (Friedman, 2021).

Thus, the contribution of this research is threefold. The paper explores how Bangladeshi PCBs are welcoming digitalization with respect to their marketing and advertising preferences, upholding trends in the future. Secondly, it highlights the divergence in preference (if any) among the banking generations, types, and employee age groups. Thirdly, the immense benefits of digital adoption are widely accepted, particularly in developing countries, where Bangladesh is lagging far behind in reaping them. The results of this research will be an eye-opener for the policymakers of the PCBs and will encourage them to take the necessary steps to keep their banks competitive and sustainable in the long run.

### 3. Literature Review

#### 3.1 Theoretical Framework

The banking industry overall faced unexpected challenges in communicating and marketing banking products to existing and potential clients during the pandemic period. While many physical locations were temporarily closed as a safety measure, the banks' marketers needed to alter their old anatomy by finding new and sustainable marketing models to deliver financial products and solutions to the users. Such a practical approach is found in the literature on innovation and sustainability that implies the changes or adjustments of an existing entity in relation to its surroundings or supporting activities integrated with firms' economic objectives and future ambitions (Faber et al., 2005; Adams et al., 2012; Evans et al., 2017). Nowadays, the ability to innovate ways to remain sustainable is considered essential and a necessary business capability; irrelevant to small-incremental steps or radical-disruptive jumps.

In this regard, Sustainable Business Model Innovation (SBMI) is emerging as a potential concept that integrates sustainability into business by implementing new and innovative ways to create and deliver existing products and/or services and

 $<sup>^5</sup>$  A few articles on Digital Adaptions for banks' marketing - Phan et.al. (2020), Talom and Tengeh (2020), Singh et. al. (2020), Akinyemi and Mushunje (2020) etc.

ultimately capture value from them. According to Lüdeke-Freund (2010), SBMI is a business model that creates a competitive advantage through superior customer value and contributes to the sustainable development of the company and society. Teece (2010) suggests that the design of SBMI enables the reconfiguration of business capabilities to adapt the firm to the changing business environment. SBMI is considered a vehicle for innovation and an essential means for commercializing technological novelties (Zott et al., 2011; Evans et al., 2017). Also, Bocken et al. (2014) added that SBMI creates significant positive impacts, and substantially reduces negative effects, for businesses and society through making changes in the way organizations and their networks create, deliver, and capture values.

As SBMI is an emerging concept, researchers from different disciplines have attempted to explain it from various perspectives. The approaches to implementing it in practice require integrated thinking and reconfiguration of several business considerations, such as capabilities, stakeholder relationships, knowledge management, leadership, and culture (Adams et al., 2012). Nevertheless, SBMI has been regarded as a valuable way to bring business opportunities with challenging implementation processes (Chesbrough, 2010) as the development of a new model might conflict with the existing and prevailing models while many firms are uncertain about their appropriate models and their outcomes. Further, it is acclaimed that SBMI is multi-dimensional, context-dependent and ad-hoc; neither systematic nor systemic; where advanced technologies can influence it by unlocking the potential values and transforming that into market outcomes (Evans et al., 2017).

### 3.2 The Concept of Bank's Marketing

Bank marketing is a specialized and separate area of marketing theory that emerged from the advancement and evolution of service marketing by modifying the appearance, development, separation. delimitation, and specialization of service marketing (Constantinides, 2014). There is no perfect definition for banks' marketing. however, the concept is an assembly of strategical and tactical decisions adopted in the management process where banks' objectives are to convey a message to a target group, to achieve customer satisfaction, and to generate revenue in a more efficient manner than their competitors (Amel and Martha, 2002; Gayathri, K. 2017; Grubor and Jakša, 2018). The American Marketing Association defines it as an organizational function and a set of processes for creating, communicating, and managing customer relations in a manner that is beneficial for the organization and its stakeholders (Pezullo, 1992). Because banking products are distinquished as complex, most of the customers do not easily understand the characteristics of a new financial product or service and its potential benefits, where marketers are required to identify the potential clientele base and convey the message through an efficient distribution and advertising channel.

The banking marketing mix<sup>6</sup> is a product of many alternatives and synergetic combinations of instruments to achieve the proportion between the total costs of marketing and the bank's total revenue (Kwast et. al., 1997). Besides, the concept evolved not only due to the significant increase in the demand for financial innovation but also due to the appearance of new competitors. market overcapacity, and competition intensification in the financial sectors (Amel and Martha, 2002). During the 70s and 80s, banks' marketing was basically launching expensive advertising campaigns and performing various promotional activities, while in the 90s, they shifted their efforts to establishing a lasting relationship

<sup>&</sup>lt;sup>6</sup> Please refer Sarangi (2019) for details of Bank's Marketing Mix and Service Marketing Mix.

with customers and creating superior banking products or services considering customer needs (Grubor and Jakša, 2018). Today, there exists powerful competition in the banking industry where transparency is more pronounced and customers have become more critical and fastidious (Yousufani et. al., 2020). Being better informed about the banking and financial issues, customers demand diversity. For that, banks needed to develop and implement professional and efficient bank marketing strategies to understand the demand and maintain a long-lasting relationship with their customers.

## 3.3 Bangladeshi PCBs' Marketing/Advertisement Strategies

As evident from the annual reports, Bangladeshi PCBs use 'Sponsorships' as a predominant marketing tool till 2019. The PCBs often sponsor events, programmes, trade shows, charity proceedings, etc. to meet specific business goals, reach the targeted niche market and attract local audiences. Sponsorship- style marketing persuades customers by sharing specific messages about a product or service product/service that the bank offersrenders. 'Television and Radio Ads' is the second concentrated area for banks' publicity; yet, it is very volatile in developing countries due to its dependency on political and other external factors (Friedman, 2021). Offering 'Promotional Material and Gifts' on different occasions and festivals is the third-highest spending head for listed PCBs' marketing/advertisements in the pre-crisis period as per the annual reports.

Besides these, PCBs also do 'Paper Advertisements' in newspapers, magazines, and leaflets. The tendency of advertising through direct postal mail is diminishing due to the amplified implementation of paper-free campaigns. In recent years, 'Cross-Selling' marketing programs Marketing Programme including In-Branch Marketing and Point of Sales Marketing' have been are gaining much attention as PCBs' marketing tools. Loyalty programmes, cash-back options, point collections, discounting options, etc. are making these forms of marketing and advertisement techniques attractive to an all-age all-aged digital-savvy population. Another set of popular and attractive but less expensive advertising tools includes -Balloon, Billboard, Hoarding, and Neon Light - the 'Outdoor Promotions'. Unlike all the mentioned traditional marketing and advertising tools, digital adaptation for marketing and advertising is less prominent according to the annual reports of the respective PCBs prior to 2020.

### 3.4 Future of Banks' Marketing – Evolution and/or Revolution of FinTech in Banking

The process of digital revolution among Bangladeshi PCBs for marketing is inevitable as all other means of marketing and advertisement were least feasible and not safe during the COVID-19 outbreak. To strive in the global market, combat the crisis, handle clients' preferences and keep up to date in providing banking facilities, Bangladeshi PCBs need innovation and revolution to make steps towards technology-driven services with limited human interference. financial revolution The

 $<sup>^{7}</sup>$  Annual reports of 29 listed PCBs from 2016 to 2019 were analyzed. The amount that the PCBs spent for marketing is gathered from the Notes sections of respective banks' annual reports.

<sup>&</sup>lt;sup>8</sup> Sponsorship also encourages word-of-mouth marketing without any incremental cost as people attending the event ideally have a positive interaction with the banks and continue to talk about their service/product (Friedman, 2021).

 $<sup>^{9}</sup>$  Cross-sell refers to sell of related or complementary products to an existing customer. In the financial services industry, cross-selling includes - selling different types of investment products, offering life insurance, retirement planning for clients etc. In-Branch Marketing refers to identifying the prospective customers, determining their needs and matching products/services accordingly. Point of Sale (POS) is where a customer executes the payment for goods or services. Banks do POS Marketing by communicating information and sharing benefits through the sales mediator at the point of sale.

pushed banks to the evolution of 'FinTech' by developing multi-channel distribution systems and services to meet customers' demands (Alkhowaiter, 2020; Shankar and Jebarajakirthy, 2019). Although 'FinTech' is a relatively new term in Bangladesh and has very limited use, it is widely implemented globally, particularly in the developing countries in Africa (Fosso et al., 2020; Akinyemi and Mushunje, 2020).

Combining the words 'Financial' and 'Technology', 'FinTech' is technology-enabled financial innovation that allows financial institutions to provide a wide range of consumer and business-related services (Chen et. al., 2021; Baabdullah et al., 2019). The emergence of promising new forms of service is developed and implemented the telecom/banking sectors (Talom and Tengeh, 2020; Fosso et al., 2020) which allow individuals to receive, keep, and spend money using a mobile phone without having a bank account<sup>10</sup> (Mombeuil, 2020; Lashitew et al., 2019; N'Dri and Kakinaka, 2020).

Digitalization offers an opportunity to rural Bangladeshi populations with the advent of new complementary technologies to eradicate the obstacles of financial institutions' branch remoteness, the lack of infrastructure/communication, and the cost of services (Mombeuil, 2020; Singh et. al., 2020; Hammerschlag et. al., 2020). It also promotes accessibility to digitally illiterate people by customizing and by adapting to demography-specific requirements while reducing the digital divide between Bangladesh and other continents (Mombeuil, 2020). This practically reconstituted proximity, brings financial services closer to the most remote and isolated populations, facilitating and improving their access to financial services at a lower cost (Adaba et al., 2019; Hammerschlag et al., 2020). Eventually, these products and services contribute to reducing the inequalities

created by traditional financial services and have enormous potential in terms of leveraging the development of Bangladesh.

The COVID-19 pandemic is testing the limits of societies and economies around the world where business and economic activities are mostly done through digital platforms (Kavota et al., 2020; Kanu, 2020; Kickbusch et al., 2020). With an estimated population of 185 million, Bangladesh is lagging far behind in the areas of financial inclusion and digital-based marketing while this pandemic acts as a catalyst, boosting digitalization to a new high in 2020 (Bive'e, 2020; Simon and Nika, 2021). In such an unprecedented global consumers' crisis. acceptability digital-based marketing has led to a in thinking beyond the traditional marketing matrix in the overall banking industry.

While digitalization is much demanded and is considered the new generation of banking evolution, an effective marketing team with innovative and beyond traditional ideas are required (Damak et. al., 2020). In the global scenario, it is estimated that traditional marketing spending in 2022 will be approximately USD 790 billion. However, the ad market will slow down in the coming years (Guttmann, 2019). By 2022, Uzbekistan, Ukraine, India, Panama, and Vietnam will be the fastest-growing ad markets, with major media expenditure growth surpassing 40%, while Qatar, Oman, Saudi Arabia, Kuwait, and Bahrain will show similar results but in the negative (Guttmann, 2019). Thus, to retain the existing ones and to attract potential customers, target-oriented, technology-based marketing is necessary. According to Baret et al. (2020) and Jebarajakirthy et al. (2021), Millennials and Generation-Z's increasing demand for a digital banking experience is transforming the entire banking industry, while their marketing preferences are shifting from traditional to digital.

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# 4. Methodolog

### 4.1 Sample

A complete set of all the 29 PCBs in Bangladesh, that are listed on the Dhaka Stock Exchange (DSE) and Chittagong Stock Exchange (CSE), have been selected. As banks' marketing and advertisement teams are placed in the capital city, Dhaka, and most of the marketing work and marketing funds are sanctioned by the head offices that are based in the capital; making the capital city an ideal place for capturing the required data.

This research uses both primary and secondary data. Primary data for 2020, 2021, and 2022 are collected through a questionnaire survey developed after an extensive review of annual reports and relevant literature to identify and select the bank's marketing-related head of expenses. The questionnaire is circulated to the banks' head offices where a total number of 2,299 employees (till 2019) are associated directly with the banks' marketing activities. Out of them, a random sample of 556 employees responded, which is considered a representative sample with a confidence interval (Bolarinwa, 2015). Researchers have recommended a larger sample size for a reliable result (Osborne and Costello, 2004) and as a rule, the sample size should be five times that of the variables to be measured (Hair et al., 2013). In this research, a total of 20 measurable items, i.e., heads of expenses for marketing and advertisement, were identified, and thus the sample size of 556 exceeds the required number of 100 as per researchers. The secondary data are collected manually from 2016 to 2020 by reviewing annual reports and critically examining vouchers, pay slips, money receipts, etc. spent for banks' marketing/advertisements.

All 556 respondents are then classified based on the following: the generation of the banks; type/nature of banking activities; and employees' age groups. There are 3 generations of banks - 1st, 2nd and 3rd from which 170, 190, and 196 respectively employees responded, while there are 2 types of banks – Conventional and Islamic Shariah-based, where 457 and 99 employparticipated. Employees' clustered as: below 35, 36-50, and over 50, where 272, 221 and 73 employees replied. The data was collected physically in the months of January and February 2021, when the country was out of lockdown temporarily with an extremely high level of protection measures.

### 4.2 Research Design

A structured questionnaire is designed with 20 heads of marketing-related expenses where 556 employees, based on their experience, expertise, and expectations, put a percentage score for each item ranging between 0% and 100%. The questionnaire was pretested by 10 respondents of 5 participating banks to check if all the components of spending were included while ensuring the technical quality, to check the content validity, and assess the internal consistency of results to minimize the ambiguity or error if any (Bolarinwa, 2015). The baseline results of the pilot test revealed that the survey questionnaires have high internal consistency in testing the effect of PCB's different marketing options<sup>12</sup>. For better understanding, the questionnaire was developed primarily in English and later translated into the national language (Bengali), which is commonly used among the people of the country. While distributed, the meaning of each component was explained to the respondents using a digital application, (WhatsApp).

Primary data is collected for 3 years from 2020 to 2022 where employees put in actual %-scores for 2020 and expected %-scores for 2021 and 2022 for their banks' marketing expenses. Secondary data is gathered from 2016 to 2019 from the respective banks' head offices. A dataset consisting of 7 years with 20 assorted

<sup>&</sup>lt;sup>11</sup> The following formula is used to determine the Sample Size "n" and  $n=N^*X$  / (X+N-1) where  $X=Z\alpha/22$ \*p\*(1-p) / MOE2 [ $Z\alpha/2$  = the critical value of the Normal distribution at  $\alpha/2$  (e.g. for a confidence level of 95%,  $\alpha$  is 0.05 and the critical value is 1.96); MOE = the margin of error; p = the sample proportion; N = the population size

and mutually exclusive heads of expenses is constructed to understand if there exist any differences in preference in funds allocation between the pre-pandemic period and the present. However, a few heads of expenses were found insignificant for some years for a few banks, and thus 20 variables are clustered into 7 variables to avoid information overload. The final variables are- 1. Sponsorship, 2. Media Ads, 3. Paper Ads, 4. FinTech, 5. Cross-Sell Marketing, 6. Outdoor Marketing and 7. Promotion.

### 4.3 Data Analysis and Hypotheses Formations

As the research uses both primary and secondary data, ensuring the reliability of data is crucial for data analysis. Cronbach's alpha is used to measure the reliability and consistency of the results (Bolarinwa, 2015). The scaled coefficient of the 7 variables is 0.8209 where the alpha-value for Sponsorship is 0.8032, Media Ads is 0.7801, Paper Ads is 0.8740, FinTech is 0.7859, Cross-Sell is 0.7520, Outdoors is 0.7985 and Promotion is 0.7584. The results are internally consistent because all the values exceeded Nunnally and Bernstein's (1994) and Malhotra and Birks's (2006) recommended criterion of 0.70 for scale reliability.

A popular nonparametric 13 test, the Mann-Whitney Wilcoxon test, is used to compare outcomes between two independent groups that come from the same population (Leech, Barrett and Morgan, 2005). Regardless of the sample size or the data type (categorical or numeric), it allows the formulation of two sample groups to compare non-normal distributions. A Shapiro Wilk W-test for checking the normality of the distribution (Malhotra and Birks, 2006) has been conducted and found some of the variables are not normally distributed which establishes that the Mann Whitney test is suitable for this dataset. Moreover, unlike other methods like the Z-test, F-test or the one-way ANOVA which is comparing variances of a normally distributed sample, the Mann Whitney test is more comprehensive to explain through hypothesis testing by comparing the mean values of two sample groups of the same population. When the mean values are statistically different from one another, it is intuitive to reject the null hypothesis and conclude the two groups are different (Bolarinwa, 2015).

For this research, the dataset from 2016 to 2022 is partitioned into 2 groups: pre-lockdown from 2016-2019 and the present period from 2020-2022 to understand the effect of the pandemic on marketing preference. Thus, the research question is: what is the consequence of the pandemic on PCBs' marketing preferences considering banking generation, bank type, and employees' age group? Hence, a few hypotheses are formed to identify if there is any change in preference by differentiating the statistical significance of their means from one period to another.

The null hypotheses are:

**Hoa:** No difference in preference between 2016-2019 and 2020-2022 for the listed Islamic Shariah-based and Conventional PCBs of Bangladesh.

Hob: No difference in preference among Gen 1, Gen 2 and Gen 3 PCBs from 2016 to 2022

Hoc: No difference in preference among employees aged below 35, 36-50, and over 50 of Gen 1, Gen 2 and Gen 3 Conventional and Islamic Shariah-based PCBs from 2020 to 2022

### 5. Results and Interpretations

### 5.1 Descriptive Statistics

As 20 heads of marketing/advertising expenditure were identified initially, the spending on some components was found negligible for some banks in several years. Thus, a few similar components are clustered

<sup>13</sup> Nonparametric statistics is a distribution-free or unspecified parameters measure of the probability that includes both descriptive statistics and statistical inference which is used assuming that the parametric tests are violated.

together for a better understanding and to distinguish the difference. Avoiding excessive and unnecessary details, a manageable chunk of 7 variables is constructed, which is expected to give the clearest and most appropriate outcome of the analysis. The variables are 1. Sponsorship, 2. Media Ads (merged TV Ads and Radio Ads), 3. Paper Ads (merged Newspaper, Magazine, Leaflet and Postal Mail), 4. FinTech

(merged Email Ads, SMS Ads, Social Media Ads, Search Engine Ads, Web/Online Ads and Chatbots), 5. Cross-Sell (merged In-Branch cross-selling and POS marketing), **6. Outdoors** (merged Billboard, Neon Light and others) and 7. Promotion (merged Festival Gifts and Promotional Materials).

Below is a year-by-year descriptive statistic from 2016 to 2022.

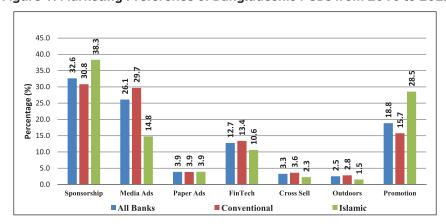
**Table 1: Descriptive Statistics of the Variables** 

Year	Obs.	Variables	Sponsorship	Media Ads	Paper Ads	FinTech	Cross Sell	Outdoors	Promotion
2016		Mean	32.64	26.11	3.87	12.73	3.29	2.52	18.83
-	203	Std. Dev.	7.34	10.49	1.29	13.15	1.94	1.53	10.19
2022		Min – Max	13.3 - 56.0	2.5 - 50.2	1.0 – 7.8	0.1 – 46.2	0 – 8.5	0 – 7.5	5.4 - 62.5
2016		Mean	35.91	30.97	3.49	2.16	3.49	2.16	21.82
-	116	Std. Dev.	6.57	10.49	1.26	2.96	1.69	1.49	10.49
2019		Min – Max	26.0 - 56.0	2.5 - 50.2	1.0 – 6.5	0.1 – 15.2	0.1 – 6.2	0 – 6.2	6.0 – 62.5
2020		Mean	28.28	19.61	4.38	26.83	3.04	3.01	14.86
-	87	Std. Dev.	5.93	6.06	1.14	6.56	2.22	1.46	8.29
2022		Min – Max	13.3 - 41.0	2.8 - 26.9	2.0 - 7.8	3.5 – 46.2	0 – 8.5	0.4 – 7.5	5.4 – 54.5

Table 1 presents the descriptive statistics of the variables from 2016 and 2022 as well as separates two periods: from 2016-2019 and from 2020-2022. It's evident that banks allocate most of their funds in to Sponsorship, Media Ads and

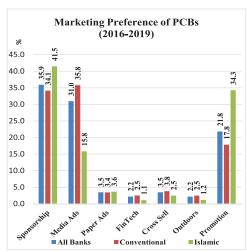
Promotion and least to Paper Ads, Cross-Sell and Outdoors while FinTech positioned itself somewhere in-between during the overall sample period. Figure 1 shows the visual allocation of marketing funds.

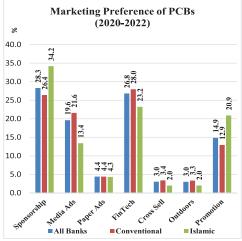
Figure 1: Marketing Preference of Bangladeshis PCBs from 2016 to 2022



It's interesting to observe that there is a strong difference in spending preference, particularly for FinTech, during the pre and present periods. Besides, Sponsorship, Media Ads and Promotions also display a high disparity between 2016-2019 and 2020-2022 which is provided in the visual diagram in Figure 2. It is clearly visual from Figure 2 that the amount of fund allocation on FinTech has excelled exponentially from 2020 while it was the most negligible mode of banks' marketing till 2019. In other words, the COVID-19 pandemic hastened the changes to the patterns of banks' marketing from traditional to digital.

Figure 2: Marketing Preference of Bangladeshis PCBs from 2016-19 and 2020-2022





### 5.2 Hypotheses Testing and Analysis of Results

To understand the impact of the pandemic on marketing preferences, the null hypotheses are have been formed, and the Mann Whitney test has been applied to examine them. The results with analysis are presented below.

# A. Marketing Preferences between Two Banking Types in Two Time Periods

The null hypothesis, Hoa, assumes that there is no difference in marketing preferences between the periods of 2016-2019 and 2020-2022 for all the listed Islamic Shariah based and Conventional PCBs. The result of the hypothesis is presented in Table 2.

Table 2: Comparison of Preference of Islamic and Conventional Banks between 2016-2019 and 2020-2022

Period	Between 2016 - 2020 - 20		From 2 To 20		From 2 To 20		From 2020 To 2022			
Banks	All Ban	ks	Islami Con		Islami Con		Islamic Vs Conv			
Observation	203		203	3	116	5	87			
Variables	Z	Prob	Z	Prob	Z	Prob	Z	Prob		
1. Sponsorship	7.65***	0.00	-6.58***	0.00	-5.43***	0.00	-4.74***	0.00		
2. Media Ads	7.84***	0.00	8.76***	0.00	7.85***	0.00	5.00***	0.00		
3. Paper Ads	-4.42*** 0.00		-036	0.72	-0.62	0.54	0.26	0.79		
4. FinTech	-12.12***	0.00	1.69*	0.09	2.19**	0.03	2.39**	0.02		
5. Cross Sell	1.71*	0.09	4.14***	0.00	3.19***	0.00	2.64***	0.01		
6. Outdoors	-4.09***	0.00	5.36***	0.00	4.19***	0.00	3.58***	0.00		
7. Promotion	notion 6.19*** 0.00		-6.44*** 0.00		-6.88***	0.00	-3.32***	0.00		
*** Significant a	t 1%, ** Significar	nt at 5%, * S	ignificant d	it 10%						

Except for one variable (Cross-Sell significance level at 10%), there are significant mean differences at 1% in the remaining six variables between 2016-2019 and 2020-2022 for all the listed PCBs. The bank types (i.e., Islamic Shariah-based and Conventional banks) showed no mean difference only for Paper Ads from 2016 to 2022. Further, the results are similar once they are grouped into two periods and show significant differences. Thus, analyzing the results, the null hypothesis is rejected and it can be said that the fund allocation for marketing purposes between the two time periods for the conventional and Islamic Shariah-based banks are significantly different.

### B. Marketing Preferences among Three **Banking Generations**

According to the second null hypothesis, HOb, there is no difference in marketing preference between Gen 1, Gen 2 and Gen 3 PCBs between 2016 - 2019 and 2020 -2022. The results are presented below in Table 3.

Table 3: Comparison of Preferences among Generations between 2016-2019 and 2020-2022

Vs		Vs.		Vs.		Vs.		Vs.		Vs.		Vs.		Vs.		Vs	
n <b>G1 -All</b> n 56		G1 - Conv 42		G1 - Islamic 14		<b>G2 – All</b> 63		<b>G2 – Conv</b> 49		G2 – Islamic 14		<b>G3 – AII</b> 84		<b>G3 – Conv</b> 63		G3 – Isl	lamic
																21	
Z	Prob	Z	Prob	Z	Prob	Z	Prob	Z	Prob	Z	Prob	Z	Prob	Z	Prob	Z	Prob
5.04***	0.00	5.31***	0.00	1.42	0.15	4.18***	0.00	4.72***	0.00	2.07**	0.04	3.95***	0.00	4.02***	0.00	3.73***	0.00
3.88***	0.00	5.49***	0.00	-0.19	0.85	4.97***	0.00	5.94***	0.00	2.65***	0.01	4. 63***	0.00	5.86***	0.00	1.28	0.20
-1.38	0.17	-2.24**	0.03	0.52	0.61	-1.72*	0.08	-1.17	0.24	-1.83*	0.07	- 4.56***	0.00	-4.07***	0.00	-2.19**	0.03
6.15***	0.00	-5.49***	0.00	-2.87***	0.00	-6.75***	0.00	-5.94***	0.00	3.10***	0.00	-7.82***	0.00	-6.76***	0.00	-3.85***	0.00
0.11	0.91	-0.14	0.89	0.00	1.00	0.41	0.69	-0.71	0.48	1.18	0.24	1.37	0.17	1.23	0.22	0.61	0.55
-0.83	0.41	-0.74	0.46	-2.79***	0.00	-1.32	0.19	-1.99*	0.06	0.72	0.47	-4.55***	0.00	-3.65***	0.00	-2.53***	0.01
3.78***	0.00	4.25***	0.00	1.55	0.12	2.52***	0.01	2.28**	0.02	2.97***	0.00	4.31***	0.00	3.33***	0.00	3.02***	0.00
	Vs 2020 - 50 2 5.04*** -1.38 - 6.15*** 0.11 -0.83	56 Z Prob 5.04*** 0.00 3.88*** 0.00 -1.38 0.17 -6.15*** 0.00 0.11 0.91 -0.83 0.41	Vs. Vs. 2020 - 2022 2020 - 20	Vs. 2020 -2022 2020 -2022  G1 -All G1 - Corv  56	Vs. Vs. 2020 -2022 2020 -2022 2020 -  G1 -All G1 - Corw G1 - Isl  56 42 14  Z Prob Z Prob Z  5.04*** 0.00 5.31*** 0.00 1.42  3.88*** 0.00 5.49*** 0.00 -0.19  -1.38 0.17 -2.24** 0.03 0.52  -1.55*** 0.00 -5.49*** 0.00 -2.87***  0.11 0.91 -0.14 0.89 0.00  -0.83 0.41 -0.74 0.46 -2.79***	Vs.         Vs.         Vs.         Vs.         2020 -2022         2020 -	Vs.         Vs.         Vs.         Vs.         Vs.         Vs.         Vs.         2020 - 2022	Vs.         Vs.         Vs.         Vs.         Vs.         Vs.         2020 -2022         2020 -2022         2020 -2022         Vs.         2020 -2022 <th< td=""><td>Vs.         Vs.         2020 - 2022         2</td><td>Vs.         Vs.         2000 -2022         2020 -</td><td>Vs.         Vs.         2020 - 2022         2</td><td>Vs.         Vs.         Vs.<td>Vs.         Vs.         2020 - 2022</td><td>Vs.         Vs.         Vs.<td>Vs.         Vs.         2020 - 2022         2020</td><td>Vs.         Vs.         Vs.<td>Vs. Vs. Vs. Vs. Vs. Vs. Vs. Vs. Vs. Vs.</td></td></td></td></th<>	Vs.         2020 - 2022         2	Vs.         2000 -2022         2020 -	Vs.         2020 - 2022         2	Vs.         Vs. <td>Vs.         Vs.         2020 - 2022</td> <td>Vs.         Vs.         Vs.<td>Vs.         Vs.         2020 - 2022         2020</td><td>Vs.         Vs.         Vs.<td>Vs. Vs. Vs. Vs. Vs. Vs. Vs. Vs. Vs. Vs.</td></td></td>	Vs.         2020 - 2022	Vs.         Vs. <td>Vs.         Vs.         2020 - 2022         2020</td> <td>Vs.         Vs.         Vs.<td>Vs. Vs. Vs. Vs. Vs. Vs. Vs. Vs. Vs. Vs.</td></td>	Vs.         2020 - 2022         2020	Vs.         Vs. <td>Vs. Vs. Vs. Vs. Vs. Vs. Vs. Vs. Vs. Vs.</td>	Vs.

Segregating the sample into generations, the allocation of funds for Sponsorship, Media Ads, FinTech and Promotions seems significantly different for all 3 generations. However, for Gen 3 banks, Paper Ads and Outdoors are also different between the periods. Further fragmenting the generations into types of banks, Gen 1, 2 and 3 Conventional banks have a mean difference in Sponsorship, Media Ads, FinTech and Promotions whereas Gen 3 Conventional banks have two additional mean differences in Paper Ads and Outdoors.

On the other hand, for Islamic Shariah-based PCBs, only FinTech's mean difference is observed commonly in all three generations, Besides FinTech, Gen 1 Islamic PCBs have a mean difference in Outdoors, Gen 2 Islamic PCBs have a mean difference in Sponsorship, Media Ads and Promotions and Gen 3 Islamic PCBs have a mean difference in Sponsorship, Paper Ads, Outdoors and Promotions. By analyzing the results, the second null hypothesis is also rejected. Further, it is observed that only FinTech shows a significant mean difference in all the cases, regardless of banking generation and bank types.

# C. Marketing Preferences among Banking Generations, Types and Employees' Age Groups

The third null hypothesis, H<sub>OC</sub>, states there is no difference in preference of marketing techniques for the later periods among the employees aged below 35, 36-50, and over 50 of Gen 1, Gen 2, and Gen 3 Conventional and Islamic Shariah-based PCBs. The results are presented in Table 4.

Table 4: Comparison of Preferences among Age Groups of Gen 1, Gen 2, and Gen 3 Islamic and Conventional Banks from 2020 to 2022

Age Group	Below	Below 35 Below 35			36	-50	Below	35	Below 35		36 – 50		Below	35	Below	35	36 – 50		
	Vs.		Vs.			Vs.	Vs.		Vs.		Vs.		Vs.		Vs.		Vs.		
	36 – 50 n All – Gen 1		Over 50		Over 50		36 – 50		Over 50		Ove	50	36 – 50		Over 50 All – Gen 3		Over 50		
Generation			All – Ge	All – Gen 1		All – Gen 1		All – Gen 2		All – Gen 2		All – Gen 2		en 3			All – Gen 3		
Observation	48		48		4	18	54		54		5	4	72		72		-	72	
	Z	Prob	Z	Prob	Z	Prob	Z	Prob	Z	Prob	Z	Prob	Z	Prob	Z	Prob	Z	Prob	
1. Sponsorship	-2.08**	0.04	-1.25	0.21	0.77	0.44	-2.25**	0.02	-2.18**	0.03	0.21	0.83	-2.89***	0.00	-2.69***	0.01	0.39	0.69	
2. Media Ads	-3.66***	0.00	-3.70***	0.00	-1.22	0.22	-4.34***	0.00	-5.01***	0.00	-1.68*	0.09	-3.64***	0.00	-4.78***	0.00	-1.57	0.12	
3. Paper Ads	-1.59	0.11	-1.16	0.25	1.19	0.23	-0.31	0.76	0.38	0.70	0.56	0.57	0.58	0.56	1.01	0.31	0.01	0.99	
4. FinTech	3.78***	0.00	4.27***	0.00	1.71*	0.09	5.22***	0.00	5.25***	0.00	1.25	0.21	5.79***	0.00	5.80***	0.00	0.81	0.42	
5. Cross Sell	0.12	0.90	0.24	0.81	0.19	0.86	1.01	0.31	1.60	0.11	0.79	0.43	0.63	0.53	0.77	0.44	0.22	0.83	
6. Outdoors	0.56	0.58	0.64	0.52	0.59	0.56	0.15	0.88	0.74	0.46	0.74	0.46	0.98	0.33	0.93	0.35	-0.19	0.85	
7. Promotion	-2.00**	0.05	-0.83	0.41	1.23	0.22	-0.87	0.39	-0.99	0.32	-0.18	0.86	-0.81	0.44	0.03	0.98	0.67	0.50	
Conventional	Gen 1		Gen		Gen 1		Gen 2		Gen 2		Gen 2		Gen 3		Gen 3		Gen 3		
Observation	36		36		42		42		42		42		54		54		54		
	Z	Prob	Z	Prob	Z	Prob	Z	Prob	Z	Prob	Z	Prob	z	Prob	Z	Prob	Z	Prob	
1. Sponsorship	-1.83*	0.07	-2.74***	0.01	-1.08	0.28	-2.35**	0.02	-2.22**	0.03	0.18	0.86	-2.19**	0.03	-2.15**	0.03	0.41	0.68	
2. Media Ads	-4.05***	0.00	-4.18***	0.00	-1.98*	0.06	-4.84***	0.00	-4.79***	0.00	1.95*	0.06	-3.47***	0.00	-4.26***	0.00	-1.78*	0.08	
3. Paper Ads	-1.51	0.13	-2.19**	0.03	-0.19	0.85	0.45	0.65	0.77	0.44	0.05	0.96	0.31	0.76	0.97	0.33	0.20	0.84	
4. FinTech	4.18***	0.00	4.53***	0.00	1.66*	0.10	4.57***	0.00	4.66***	0.00	1.12	0.26	4.89***	0.00	4.83***	0.00	0.77	0.44	
5. Cross Sell	0.32	0.75	0.31	0.76	0.16	0.88	1.31	0.19	2.01*	0.06	1.09	0.28	0.37	0.71	0.39	0.69	0.02	0.98	
6. Outdoors	0.76	0.45	0.93	0.35	0.65	0.52	0.45	0.65	0.94	0.35	0.72	0.47	1.03	0.30	1.08	0.28	-0.11	0.91	
7. Promotion	-2.68***	0.01	-3.02***	0.00	-0.47	0.64	-0.53	0.59	-0.83	0.41	-0.30	0.76	-043	0.66	0.49	0.62	0.83	0.40	
Islamic	Gen	Gen 1 G		Gen 1		Gen 1		Gen 2		Gen 2		Gen 2		Gen 3		3	Gen 3		
Observation	12		12			12	12		12		1	2	18		18			18	
	Z	Prob	Z	Prob	Z	Prob	Z	Prob	Z	Prob	Z	Prob	Z	Prob	Z	Prob	Z	Prob	
1. Sponsorship	-1.28	0.20	1.27	0.26	1.69*	0.10	-1.44	0.15	-1.44	0.15	0.53	0.59	-2.21**	0.03	-1.90*	0.06	0.58	0.56	
2. Media Ads	-0.99	0.32	0.21	0.83	0.74	0.46	-1.97**	0.04	-1.93**	0.05	-1.63	0.10*	-2.21**	0.04	-2.17**	0.03	-1.07	0.29	
3. Paper Ads	-0.73	0.46	1.22	0.22	1.95	0.06*	-1.61	0.11	-1.35	0.18	1.37	0.17	0.79	0.42	0.26	0.79	-1.03	0.31	
4. FinTech	1.04	0.29	1.45	0.15	1.27	0.20	2.89***	0.00	2.89***	0.00	0.42	0.67	3.05***	0.00	3.05***	0.00	0.40	0.69	
5. Cross Sell	-0.33	0.74	0.06	0.96	0.54	0.59	0.24	0.81	0.42	0.67	-0.11	0.91	0.61	0.54	0.98	0.33	0.47	0.64	
6. Outdoors	0.33	0.74	1.81**	0.07	1.29	0.19	-0.56	0.57	0.37	0.70	0.64	0.52	0.13	0.89	-0.15	0.88	-0.41	0.68	
7. Promotion	-0.32	0.75	2.10**	0.04	2.26**	0.02	-1.44	0.15	-0.95	0.35	-0.11	0.92	-0.78	0.44	-0.78	0.44	-0.17	0.86	
*** Significant at	1%, ** Sigr	nificant	at 5%, * 5	Signific	cant at	10%													

While analyzing the results by clustering them into three dimensions - (a) employees' age, (b) banks' generation, and (c) bank type - gives a mixed result. All three generations show a significant mean difference, mainly in three variables - Sponsorship, Media Ads and FinTech - for all age groups. Gen 2 and Gen 3 banks found Sponsorship has a difference between the age groups of below 35 and over 50. Only for Promotion, there is a mean difference in Gen 1 banks between below 35 and 36-50.

Digging further into bank types - Conventional and Islamic Shariah-based banks, the Conventional banks present much the same results as the overall results. Unlike the aggregated results, Gen 1 Conventional Banks have a significant difference for Promotion in both 36-50 group and the over 50 group from the age group of below 35. Also, distinct from the overall results, the age group of 36-50 shows a mean difference in Sponsorship and Paper Ads with the below 35 age group for the Gen 1 Conventional banks. Other than that, the Gen 2 and Gen 3 Conventional banks have completely identical results with the overall by having significant mean differences in Sponsorship, Media Ads and FinTech while having no differences in Paper ads, Cross-Sell, Outdoors and Promotions.

For the Islamic banks, the significant results have some similarities with the overall results. Media Ads and Fintech of Gen 2 and Gen 3 Islamic Banks have a significant mean difference between below 35 and 36-50 and over 50. Sponsorship was found to have a significant mean differnce only for Gen 3

3 banks between below 35 and 36-50. However, Gen 1 Islamic Banks are completely different from other generations as they have a mean difference in Promotion, which is significant between age groups below 35 and 36-50 and 36-50 and over 50. Considering the above results, the null hypothesis is rejected at a 5% significance level. Additionally, it is observed that except for Gen 1 Islamic banks, in all other cases Sponsorship. Media Ads and FinTech, there are statistically significant mean differences between the age groups of below 35 and 36-50, and over 50.

### 6. Conclusion

Over the past years, banks in Bangladesh have experienced the effects of the global financial crisis, regulatory reforms, new competitors from the emergence of Gen 4 banks, and now a global pandemic (Asmild et. al., 2021). The COVID-19 pandemic poses not only financial and organizational distress and challenges to the banks and other institutions around the world, but also creates a unique environment to make a compulsive shift in their traditional marketing techniques. Banks in contemporary financial market increasingly focus on finding ways and methods of achieving sustainable competitive advantages, where the application of the demand-based marketing concept in the Bangladeshi banking industry has become increasingly prominent since 2020.

This paper examined the marketing-related spending of all the listed PCBs in Bangladesh from 2016 to 2022 by dividing the years into two groups. Annual report data are used for the pre-lockdown period from 2016-2019 while a survey on PCBs marketing employees is performed to obtain information on expected preferences of fund allocation for the later years. For a more detailed understanding of the spending pattern of the marketing funds, the banks are further classified by their types and generations. Running a Mann Whitney Wilcoxon test, the findings show a clear difference in preference on marketing spending that points to a change in PCBs' traditional marketing technique.

Irrespective of the banking generations. the shift from traditional to digital-based marketing was apparent both in Conventional and Islamic Shariah-based banks during the pandemic time in 2020. At that time, they adopted the digital mode of marketing, compromising funds from all other marketing heads. Besides, the emergence of digital-based marketing was also very much evident by analyzing PCB's second and third quarter reports for 2020. Overall, it showed that the PCBs have substantially reduced the portion of spending on their traditional core marketing areas in 2020. The digital revolution in bank marketing was inevitable as other means of marketing/advertisement were not possible and safe throughout the lockdown period. It is the priority of the banks now to determine the extent of digitalization that they need to put in place to distinguish their customer orientation and ensure a competitive advantage over others in the future.

The trend not only shows a significant difference in major marketing components at present but also highlights some significant differences in expectations of future marketing strategy when respondents are classified demographically by age. In 2020, employees in all age groups supported digitalization. However, for marketing-budget allocation preferences for 2021 and 2022, the younger generation, i.e., age group of 'below 35', supported contemporary marketing styles, i.e., Fintech-based marketing, and they prefer the trend to be continued in the future. On the other hand, the '36-50' and 'over 50' employees choose to return to the traditional marketing technique with a hefty allocation of funds on Sponsorship, Media Ads and Promotion.

The reasons for the difference in preference are debatable and can be considered as a potential research area. Also, how the extensive application of FinTech and digital-based marketing is affecting banks' profitability, efficiency, and customer retention in Bangladesh can be researched in the future. Nevertheless, this finding is a wake-up call for the banks' policymakers who need to address the issue immediately to ensure for ensuring their bank's sustainability and competitiveness in the long run. Further, one of the limitations of this research is the likely bias of selecting the variables and clustering the sample in into different age groups. A future study using more variables on a larger sample and cross-country analysis is recommended.

Finally, after a year of incremental change in the banking operations and banks' marketing procedures, Bangladeshi PCBs must plan for a fundamental modification and rethink of providing deep-rooted and varied technology-based services and operations services/operations in order to thrive in a rapidly digitized and data-driven world. The unprecedented circumstance has already shifted customer demand to a huge extent; thus, to be abreast with the fancies in preferences, banks also need to accelerate their digitization process and channels of marketing to respond to clients' behavioral changes.

### References

Adaba, G. B, Ayoung, A. D and Abbott, P. (2019) Exploring the contribution of mobile money to well-being from a capability perspective, Electronic Journal of Information Systems in Developing Countries 85(5) DOI:10.1002/isd2.12079

Adams R, Jeanrenaud S, Bessant J, Overy P, Denyer D. (2012) Innovating for Sustainability. A Systematic Review of the Body of Knowledge. Network for Business Sustainability: Ontario

Akinyemi, B.E., and Mushunje, A., (2020) Determinants of mobile money technology adoption in rural areas of Africa. Cogent Social Sciences 6 (1).

https://doi.org/10.1080/23311886.2020.181 5963

Alkhowaiter, W.A., 2020. Digital payment and banking adoption research in Gulf countries: a systematic literature review. Int. J. Inf. Manag. 53, 102102.

https://doi.org/10.1016/j.ijinfomgt.2020.102102

Amel, D. F. and Martha S.-M. (2002), "Market Definition in Banking: Recent Evidence," The Antitrust Bulletin 47, pp. 63-89

Amit, S. (2020) "Long Read: Coronavirus and the Bangladesh economy: Navigating the global COVID-19 shutdown", London School of Economics

Asmild, M., Kronborg, D., Mahbub, T. and Matthews, K. (2021) Inefficiency patterns in family-owned banks in Bangladesh, Journal of Economic Studies, ISSN: 0144-3585 https://scholar.google.com/citations?view\_op=v iew citation&hl=en&user=PcmaTGwAAAAJ&cita tion for view=PcmaTGwAAAAJ:2osOqNQ5qMEC

Baabdullah, A.M., Alalwan, A.A., Rana, N.P., Kizgin, H., Patil, P., (2019) Consumer use of mobile banking (M-Banking) in Saudi Arabia: towards an integrated model. Int. J. Inf. Manag. 44, 38-52.

https://doi.org/10.1016/j.ijinfomgt.2018.09.002

Baret S, Celner A, O'Reilly M, Shilling M (2020). COVID-19 potential implications for banking and capital markets sector. Deloitte Insights. https://www2.deloitte.com/content/dam/insig hts/us/articles/6693 COVID-19-banking/DI COVID-19-banking.pdf

Barua, B. and Barua, S. (2021) COVID-19 Implications for Banks: Evidence from an Emerging Economy. SN Bus Econ 1, 19 [Available at: https://doi.org/10.1007/s43546-020-00013-w] Bive'e, K.I., (2020) E-Banking et performance des etablissements de cr edit: cas de SARA by Afriland First Bank (Master 2 Master Thesis). Catholic University of Central Africa

Bocken, N.M.P.; Short, S.W.; Rana, P.; Evans, S., (2014) A literature and practice review to develop sustainable business model archetypes; J. Clean. Prod., 65, 42–56.

Bolarinwa, O.A., (2015) Principles and methods of validity and reliability testing of questionnaires used in social and health science researches. Niger. Postgrad. Med. J. 22 (4), 195–201

Chen, X., You, X. and Chang, V. (2021) FinTech and commercial banks' performance in China: A leap forward or survival of the fittest? Technological Forecasting & Social Change, Volume 166, 120645 https://doi.org/10.1016/j.techfore.2021.120645

Chesbrough, H., (2010) Business model innovation: Opportunities and barriers. Long Range Plan, 43, 354-363.

Constantinides, E., (2014) Foundations of social media marketing. Procedia - Social and Behavioral Sciences 148, 40–57

Damak M, Freue C, Chugh G, Yalovskaya N, Tan M, Tan I et al. (2020). Banks In Emerging Markets 15 Countries, Three COVID-19 Shocks. S&P Global.

https://www.spglobal.com/\_assets/documents/ratings/research/2020-05-26-banks-in-emerging-markets-15-countries-three-COVID-19-shocks.pdf

De', R., Pandey, N., Pal, A., (2020) Impact of digital surge during COVID-19 pandemic: a viewpoint on research and practice. Int. J. Inf. Manag. 102171.

https://doi.org/10.1016/j.ijinfomgt.2020.102171

Evans, S., Vladimirova, D., Holgado, M., Fossen, K.V., Yang, M., Silva, E.A., and Barlow, C.Y (2017) Business Model Innovation for Sustainability: Towards a Unified Perspective for Creation of Sustainable Business Models, Business Strategy and the Environment, Bus. Strat. Env. 26, 597–608

Faber N, Jorna R, Van Engelen J. (2005) The sustainability of 'sustainability' – a study into

the conceptual foundations of the notion of 'sustainability'. Journal of Environmental Assessment Policy and Management 7(1): 1–33.

Fosso, W.S., Queiroz, M.M., Blome, C., Sivarajah, U., (2020) Fostering financial inclusion in developing countries: predicting user acceptance of mobile wallets in Cameroon. J. Global Inf. Manag.

Friedman, S. (2021), Why Your Marketing Plan Should Include Sponsorship, The Balance Small Business [Available At:

https://www.thebalancesmb.com/sponsorship-a-key-to-powerful-marketing-2295276]

Gayathri, K. V. S. (2017) Role of Service Marketing in Banking Sector with Special Reference to State Bank of India, National Conference on Marketing and Sustainable Development, October 13-14 http://www.aims-international.org/myconferen ce/cd/PDF/MSD3-4520-Done.pdf

Görg H, Krieger-Boden C, Nunnenkamp P (2020) Poor countries have the least-developed financial systems—that has to change. World Economic Forum.

https://www.weforum.org/agenda/2016/08/po or-countries-have-the-least-developed-financia l-systems-that-has-to-change

Grubor, A. and Jakša, O. (2018) Social Media Marketing: Engaging with Consumers in Digital Era, Proceedings of the ENTRENOVA-ENTerprise REsearch InNOVAtion Conference

Guttmann, A. (2019) Media spending worldwide 2014-2022, Statista [Available At: https://www.statista.com/statistics/273288/ad vertising-spending-worldwide/]

Hair, J., Black, W., Babin, B., Anderson, R., 2013. Multivariate Data Analysis: A Global Perspective, 7 ed. Pearson Publications, New Jersey

Hammerschlag, Z., Bick, G., Luiz John, M., (2020) The internationalization of African fintech firms: marketing strategies for successful intra-Africa expansion. Int. Market. Rev. 37 (2), 299–317. https://doi.org/10.1108/IMR-05-2019-0130

Islam, S. and Divadkar, Y. (2020) "How Bangladesh's leaders should respond to

economic threats of COVID-19", World Economic Forum

Jebarajakirthy, C., Das M., Maggioni I., Sands S., Dharmesti M., Ferraro C. (2021) Understanding on-the-go consumption: a retail mix perspective, J. Retailing Consum. Serv., 58, p. 102327, 10.1016/j.jretconser.2020.102327

Jebarajakirthy, C., Shankar, A., (2021) Impact of online convenience on mobile banking adoption intention: a moderated mediation approach. J. Retailing Consum. Serv. 58, 102323.

https://doi.org/10.1016/j.jretconser.2020.102

Kanu, I.A., (2020) COVID-19 and the economy: an African perspective. Journal of African Studies and Sustainable Development 3 (2). https://doi.org/10.13140/RG.2.2.18801.43362

Kavota, J.K., Kamdjoug, J.R.K., Wamba, S.F., (2020) Social media and disaster management: case of the north and south Kivu regions in the Democratic Republic of the Congo. Int. J. Inf. Manag. 52, 102068.

https://doi.org/10.1016/j.ijinfomgt.2020.102068

Khondker H. Bazlul (2020) "Navigating the socioeconomic perils of COVID-19 in Bangladesh", The Daily Star

Kickbusch, I., Leung, G.M., Bhutta, Z.A., Matsoso, M.P., Ihekweazu, C., Abbasi, K., (2020) COVID-19: How a virus is turning the world upside down. BMJ 369, m1336. https://doi.org/10.1136/bmj.m1336

Kwast, Myron L., Martha Starr-McCluer and John D. Wolken (1997), "Market Definition and Analysis of Antitrust in Banking," The Antitrust Bulletin 44, pp. 973-995

Lalon RM (2020) COVID-19 vs Bangladesh: Is it Possible to Recover the Impending Economic Distress Amid this Pandemic? (April 18, 2020). Manuscript. SSRN:

https://doi.org/10.2139/ssrn.357969

Lashitew, A. A., van Tulder, R., & Liasse, Y., (2019). "Mobile phones for financial inclusion: What explains the diffusion of mobile money innovations?", Research Policy, 48(5), pp. 1201-1215

Leech, N.L., Barrett, K.C. and Morgan, G.A. (2005) SPSS for Intermediate Statistics. Use and Interpretation. 2nd Edition, Lawrence Erlbaum Associates Inc., Mahwah.

Lüdeke-Freund, F., (2010) Towards a conceptual framework of 'business models for sustainability'. In Knowledge Collaboration & Learning for Sustainable Innovation; Wever, R., Quist, J., Tukker, A., Woudstra, J., Boons, F., Beute, N., Eds.; SSRN: Delft, The Netherlands

Mahbub, T. (2016) The performance of Bangladeshi commercial banks: the role of corporate governance, University of Manchester, PQDT-UK & Ireland https://scholar.google.com/citations?view\_op=v iew citation&hl=en&user=PcmaTGwAAAAJ&cita tion\_for\_view=PcmaTGwAAAAJ:u5HHmVD\_u08C

Mahbub, T., Barker, K. and Matthews, K. (2019), Other People's Money: The Profit Performance of Bangladeshi Family Dominated Banks, Journal of Behavioral and Experimental Finance, 21, 103-112

Malhotra, N.K. and Birks, D. (2006) Marketing Research: An Applied Approach. 3rd Edition, Prentice Hall, Upper Saddle River.

Mombeuil, C., 2020. An exploratory investigation of factors affecting and best predicting the renewed adoption of mobile wallets. J. Retailing Consum. Serv. 55, 102127. https://doi.org/10.1016/j.jretconser.2020.102127

N'Dri, L.M., Kakinaka, M., (2020) Financial inclusion, mobile money, and individual welfare: the case of Burkina Faso. Telecommun. Pol. 44 (3), 101926

https://doi.org/10.1016/j.telpol.2020.101926

Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric theory (3rd ed.). New York, NY: McGraw-Hill, Inc.

Osborne, J.W., Costello, A.B., (2004) Sample size and subject to item ratio in principal components analysis. Practical Assess. Res. Eval. 9 (11), 1–9

Parkash Manmahan (2020) "ADB on Bangladesh: High outbreak of COVID-19 may hurt economy of Bangladesh", The Daily Star

Pezullo, M. A. (1992) Marketing for bankers. Washington: American Bankers Association. ISBN 0-89982-317-3

Phan, D.H.B., Narayan, P.K., Rahman, R.E., Hutabarat, A.R, (2020) Do financial technology firms influence bank performance? Pacific-Basin Finance Journal, vol. 62, issue C DOI: 10.1016/j.pacfin.2019.101210

Sarangi, A. (2019) Marketing on Banking Sector, Journal of Business and Management, Volume 21, Issue 6. Ser. III, PP 27-31

Shankar, A. and Jebarajakirthy, C. (2019), "The influence of e-banking service quality on customer loyalty: A moderated mediation approach". International Journal of Bank Marketing, Vol. 37 No. 5, pp. 1119-1142. https://doi.org/10.1108/IJBM-03-2018-0063

Simon, K. A.M and Nika, N., (2021) State of the industry report on mobile money 2021, Bill and Melinda Gates Foundation. Retrieved from. https://www.gsma.com/mobilefordevelopment/ wp-content/uploads/2021/03/GSMA\_State-ofthe-Industry-Report-on-Mobile-Money-2021\_F ull-report.pdf

Singh, N., Sinha, N., Li ebana-Cabanillas, F.J., (2020) Determining factors in the adoption and recommendation of mobile wallet services in India: analysis of the effect of innovativeness,

stress to use and social influence. Int. J. Inf. Manag. 50, 191-205.

https://doi.org/10.1016/j.ijinfomgt.2019.05.022

Talom, F.S.G., Tengeh, R.K., (2020) The impact of mobile money on the financial performance of the SMEs in douala, Cameroon. Sustainability 12 (1), 183.

https://doi.org/10.3390/su12010183

Teece, D.J., (2010) Business models, business strategy and innovation, Long Range Plan, 43, 172-194

Uddin, S.M.S. and Suzuki, Y. (2011) 'Financial reform, ownership and performance in banking industry: the case of Bangladesh', International Journal of Business and Management, Vol. 6, No. 7, pp.28–39

World Bank (2020) "Bangladesh must Ramp up COVID-19 actions to protect its people, Revive Economy", Press release from World Bank

Yousufani M, Courbe J, Babczenko K (2020) How retail banks can keep the lights on during the COVID-19 crisis—and recalibrate for the future. https://www.pwc.com/us/en/library/COVID-19 /coronavirus-impacts-retail-banking.html

Zott C, Amit R, Massa L. (2011) The business model: recent developments and future research. Journal of Management 37(4): 1019-1042