Internship Report

On

Analysing the Effectiveness of Business Support to Enhance the Service Quality and Customer Satisfaction of Nagad Ltd.

Supervised by

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Submitted By

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Session: 2022-23

Masters of Business Administration

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Date of Submission: 29th June, 2025

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Letter of Transmittal

Sabikun Nahar Bipasha
Assistant Professor
Department of Marketing
Comilla University

Subject: Submission of the internship report.

Dear Sir,
With due respect, I would like to present this internship report, which I prepared as a requirement of my MBA program entitled **"Analysing the Effectiveness of the Business Support to Enhance the service quality and customer satisfaction of Nagad Ltd."** I am delighted to work under your guidance and supervision on my internship report. While I am on the learning curve, this internship report has enabled me to gain valuable insights that will help shape my future endeavours.

I have made every effort to complete this internship report to the necessary specifications. However, if any explanation is needed, I would be honoured to do so. Please accept this humble effort to put forward my research and findings on the subject.

Yours sincerely,

Md. Shamim Asraf
Student ID: 22307023
Session: 2022-23
Masters of Business Administration
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Declaration of Student

I hereby declare that the Internship report on "**Analysing the Effectiveness of the Business Support to Enhance the Service Quality And Customer Satisfaction of Nagad Ltd"** is prepared solely for as the requirement of a Master of Business Administration (MBA) degree and embodies my own practical and individual research work prepared under the close supervision of Sabikun Nahar Bipasha, Assistant Professor, Department of Marketing, Comilla University.

I also confirm that the work referred to in this study is original and that no part or all of the internship report has been submitted to any other university or institution for any degree award or other reason.

………………………………

Md. Shamim Asraf
Student ID: 22307023
Session: 2022-23
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Declaration of Supervisor

I am pleased to declare that this internship report, 'Analysing the Effectiveness of Business Support to Enhance Service Quality and Customer Satisfaction at Nagad Ltd.', was conducted by Md. Shamim Asraf, Student ID: 22307023, Session: 2022-23, as part of the Master of Business Administration (MBA) degree from the Department of Marketing, Comilla University. I have supervised him throughout the preparation of this internship report.

I hereby accept his internship report & wish him every success in completing his MBA program.

………………………………

Sabikun Nahar Bipasha
Assistant Professor
Department of Marketing
Comilla University

Acknowledgement

At the very beginning, I would like to express my deepest gratitude to the Almighty for giving me the strength and courage to complete the report within a given time. I had to rely on the support and encouragement of some respected individuals to conduct my research, who deserve my deepest gratitude.

I would like to express my gratitude to my supervisor, Sabikun Nahar Bipasha, Assistant Professor in the Department of Marketing at Comilla University, for providing me with valuable guidance throughout our numerous consultations during my internship. Thank you for your patience, inspiration, passion, and tremendous knowledge. His encouragement has been instrumental in helping me during the study and writing of this internship report. I could not have dreamed of having a better consultant and mentor for my internship report. I would also like to extend my sincere gratitude to all those who have directly and indirectly guided me through the writing of this internship report.

Md. Shamim Asraf
Student ID: 22307023
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Executive Summary

This research investigates the role of the Business Support Division (BSD) in enhancing service quality and customer satisfaction at Nagad Ltd., a leading Mobile Financial Service (MFS) provider in Bangladesh. Using analysis of structural equation modelling (PLS-SEM) through SERVQUAL's five dimensions (tangibles, reliability, responsiveness, assurance, and empathy), survey data from 301 Nagad head office employees have been analysed. The results demonstrate that Internal Service Effectiveness (ISE), achieved through several Business Support Division (BSD) functions, including interdepartmental coordination, vendor coordination, modelling, and compliance support, raises customer satisfaction ($\beta = 0.532$, *p* < 0.001). The three dimensions, which are named Empathy (personalised attention), Reliability (consistent service delivery), and Responsiveness (timely resolution), contribute significantly to ISE. BSD's operational support (especially human-related aspects) enables customer-facing departments to improve service delivery. The BSD staff should be trained in empathy and reliability first. The internal KPIs used have to reflect the customer KPIs. Resources used for tangibility can also be applied to the other factors. The insights provide Nagad with actionable steps to enhance internal service quality and advance competitiveness in the MFS industry of Bangladesh, thereby increasing their customer-centricity. The internal service effectiveness of Nagad Ltd will be assessed using service quality dimensions based on the SERVQUAL model in Bangladesh.

Keywords: SERVQUAL model, Internal Service Effectiveness (ISE), Customer Satisfaction, Service Quality Dimensions, Business Support Division (BSD), Mobile Financial Services (MFS), PLS-SEM, Nagad Ltd.

নগদ
ডাক বিভাগের ডিজিটাল লেনদেন

NAGAD/HR/Internship/2025/31

April 15, 2025

PRIVATE & CONFIDENTIAL

Mr. Md. Shamim Asraf
Email Id: asraf.cou@gmail.com
Contact no.: 01776301731

Subject: Letter of Acceptance as an Intern.

Dear Mr. Asraf,

With reference to your application, we would like to accept you as an **Intern** under **Business Support** division effective from **April 15, 2025 until July 19, 2025.**

The general terms and conditions of internship will be as per the respective policy of the organization. You will be entitled to **BDT. 10,000** (*BDT Ten thousand taka only*) monthly as stipend during this period.

Should you decide to accept this offer, please sign this Letter and return it to us at the earliest.

Thanking you,

Sayeed

Shaharear Sayeed
Director – Human Resources

Cc: Personnel File.

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Chapter-One

Introduction

1.1 Prelude

With the extensive use of contemporary technologies in recent decades, the financial sector, particularly the banking sector, has undergone considerable upheaval. (Koksal, 2016). These revolutionary innovations not only put the traditional banking channel in danger but also completely transformed the financial industry, placing significant pressure on the supply side to provide cutting-edge goods and services for consumers. Regardless of the cutting-edge services provided by financial institutions, they are fundamentally straightforward, compatible, and customised, with built-in fast and secure access quality. As competition in the financial industry, particularly in the banking sector, has increased, new forms of Financial Technology (FinTech) have emerged in recent years. In these conditions, client self-service options, such as ATMs, internet banking, and mobile banking, are becoming increasingly popular among general consumers. The change involves giving bank consumers simple, reasonably priced, and conveniently accessible services. (Chawla, 2018). One of the cutting-edge technologies that offer customers simple, quick, and reliable service is e-b.anking (Rahman & Hasan, 2017). Mobile banking services are gaining popularity not only among existing bank customers but also among individuals in areas or locations where mainstream financial services have not yet been established.

Following Bangladesh's independence in 1971, the building of Bangladesh's financial architecture began among public sector entities. Several new generations of private banks have emerged over the past four decades, and commercial banks dominate the Bangladeshi financial industry in terms of assets and liabilities. (Parvez, 2015). Since then, Bangladesh has experienced significant growth in mobile banking adoption. Currently, 16 banks provide mobile banking services, accounting for over 0.8% of the total registered mobile banking accounts worldwide. (Bangladesh-Bank, 2023).

According to research conducted by USAID, most mobile banking users in Bangladesh utilise these services to pay bills, save money, recharge their phones, cover their children's tuition, and make purchases. The research also revealed that people who have both bank and mobile banking accounts frequently use both accounts simultaneously (Parvez, 2015). The study's findings illustrate the growing popularity of mobile banking in Bangladesh, where it has been steadily increasing over the past few years (Uddin, 2017). These revolutionary innovations not only put the traditional banking channel in danger but also completely changed the financial industry, placing significant pressure on the supply side to provide cutting-edge goods and services for consumers. Regardless of the cutting-edge services provided by financial institutions, they are fundamentally straightforward, compatible, and customised, with built-in fast and secure access quality. (Boonsiritomachai and Pitchayadejanant, 2007).

Data released (June 2023) by Bangladesh Bank showed that 13 banks with a total 1585722 number of agents are currently providing mobile banking services to 71.42 million active mobile banking accounts (registered clients 207.3 million), where the average daily transaction is 190.87167 million ((Bangladesh-Bank, 2023)). Among the 13 banks, Bangladesh Post Office (BPO), which operates Nagad, is the market challenger in this segment. Nagad owns nearly 40% of the market share. Subsequently, Bkash (a subsidiary of BRAC Bank Limited) owned almost 39.9% of the total market share of the mobile banking industry of Bangladesh. (Financial Express, 2022). One of the most significant issues for any organisation in the modern, digitalised world is ensuring exceptional service quality. The nature of service delivery offers a distinct opportunity for researchers in the service industry to continually examine and validate the relationship between service quality and customer satisfaction (Farooq, et al., 2018). However, many other studies have focused on the mobile banking market.

However, there is a disconnect between client pleasure and service quality when it comes to mobile banking in Bangladesh. As a result, a project has been launched to use the SERVQUAL paradigm to solve the problem. One of the widely used tools for evaluating service quality is the SERVQUAL model. Numerous studies have used this paradigm in various service contexts, social contexts, and geographic contexts and obtained significant results. (Amiri Aghdaie, 2012)

There is only one choice left if outstanding consumer value is to be guaranteed. To increase consumer satisfaction generally, customer service must be improved. This study aims to address this issue by examining the relationship between service quality (i.e., Tangibles, Reliability, Responsiveness, Assurance, and Empathy) and customer satisfaction with mobile banking in the context of Nagad. It also aims to provide an enhanced understanding and notable propositions regarding how the quality of mobile banking services made available through handheld devices can improve the overall service quality of mobile banking in the context of Nagad. This study will examine the literature on relationship marketing, bank marketing, and service quality.

The sequence of this article is structured as follows: the next section lists relevant literature, which is then followed by a discussion of the study's goals and methods. The empirical analysis, discussion, and results are presented in the subsequent parts. The article concludes by discussing the management implications, restrictions, and scope for further research.

1.2 Research Gap

After reviewing most related literature on determinants to analyse the effectiveness of business support in enhancing service quality and customer satisfaction, most researchers have attempted to measure the Impact of the six determinants (Tangibility, Reliability, Responsiveness, Assurance, Empathy) on FinTech industries, Banks, MFS Solutions, and E-Banking. Among the articles that examine previous research on analysing the effectiveness of service quality in enhancing customer satisfaction, only a few studies have been undertaken to evaluate service quality and relate it to customer satisfaction and other marketing or business characteristics.

Previous studies have shown that business support service quality and customer satisfaction are positively associated. However, no study has directly evaluated the service quality dimensions to see if they are related to customer satisfaction; consequently, testing the direct relationship between each of the service quality dimensions and customer satisfaction is required. Furthermore, it has been demonstrated that service quality may be evaluated using the other two dimensions of service quality, which are technical and functional. (Bennett & Barkensio, 2005) From the customer perspective. However, the SERVQUAL model remains a valid method of evaluating service quality; there is a need to test the relationship between service quality and its dimensions in different service sectors, particularly regarding the SERVQUAL dimensions. A lot of studies have been conducted about the mentioned model in the bank, and several MFS, but no study has been conducted on Nagad Ltd. This study aims to determine which dimension has the greatest impact on the relationship between service quality and customer satisfaction.

1.3 Research Questions

This study will investigate the following research questions:

1. Does business support play an effective role in enhancing service quality and customer satisfaction?
2. Is there a significant relationship between service quality and the service quality dimensions?

1.4 Statement of the Problem

Analysing the effectiveness of business support to enhance service quality and customer satisfaction has been a central focus of research in the field of service management. Previous studies have consistently shown a positive association between these two constructs, indicating that as service quality improves, customer satisfaction tends to increase. (Parasuraman, Zeithaml, Cronin, & Taylor, 1988; 1995;). However, despite this consensus, a notable gap remains in the literature regarding the direct and detailed relationships between specific dimensions of service quality and customer satisfaction.

According to previous research, a positive relationship exists between customer satisfaction and service quality. However, none of this research finds a direct relationship between each service quality dimension and customer satisfaction. As a result, it is challenging to study and explain how each factor of service quality and customer satisfaction is inextricably linked. Furthermore, previous studies have only provided a broad overview of the relationships between service quality and dimensional parameters. None of them has gone into detail about how each dimension is linked to how service quality works. As a result, it is crucial to understand how each service quality dimension impacts the overall quality of services offered.

While existing research has outlined the broad connection between overall service quality and customer satisfaction, it has not sufficiently explored the direct links between each dimension of service quality namely, responsiveness, reliability, assurance, empathy, and tangibles and the resulting Impact on customer satisfaction. This lack of granularity has significant implications for businesses aiming to enhance their service offerings and customer experiences.

Furthermore, prior studies have primarily presented a panoramic view of the relationships between service quality and dimensional parameters, without delving into the intricate workings of each dimension. Consequently, a comprehensive understanding of how each service quality dimension affects the quality of services provided, and by extension, customer satisfaction, remains elusive. This knowledge gap is a critical concern as it impedes businesses' ability to tailor their service strategies effectively and allocate resources optimally to address specific dimensions of service quality.

Hence, this research seeks to address this gap by conducting an in-depth examination of the direct relationships between each service quality dimension and customer satisfaction within a specific industry context. By utilising established service quality frameworks and conducting empirical investigations, this study aims to shed light on the nuanced and context-dependent nature of these relationships. Ultimately, the findings will provide insights for businesses seeking to improve their service quality and enhance customer satisfaction.

1.5 Objectives of the Study

1.5.1 Broad Objectives

To comprehensively examine and analyse the interdependencies among service quality dimensions, internal service effectiveness(ISE) and customer service. This study aims to measure the effectiveness of internal service on customer satisfaction. The development of evidence-based recommendations will also be a priority. These recommendations will help strengthen Nagad's growth in the competitive Bangladeshi market.

Furthermore, the study's broad objective is to analyse the effectiveness of business support in enhancing service quality and customer satisfaction at Nagad Ltd.

1.5.2 Specific Objectives of the Research

1. To analyse the effectiveness of the service quality dimension and overall Nagad's customer Satisfaction.

2. To make some recommendations to improve Nagad's service quality of Business Support.

1.6 Importance of the Study

The previous study on service quality and customer satisfaction in Nagad, Bangladesh, holds significant importance for several reasons. Firstly, it provides a valuable foundation for understanding the dynamics of service quality in the mobile financial services (MFS) industry, particularly within the context of Nagad, a leading player in the Bangladeshi market.

The findings of this study focus on the direct correlation between service quality dimensions (tangibility, reliability, responsiveness, assurance, and empathy) and Internal Service effectiveness, as well as the direct correlation between these dimensions and customer satisfaction. This knowledge has broad implications for both academic researchers and practitioners in the field of mobile banking and financial services. The previous study contributes to the existing body of knowledge by empirically validating the relationships between service quality dimensions and customer satisfaction in a real-world MFS context (Parasuraman et al., 1988). This advances the theoretical understanding of service quality dynamics in mobile banking. (Parasuraman, Zeithaml, Cronin, & Taylor, 1988; 1995;). Nagad and other mobile financial service providers can leverage the study's findings to make informed business decisions that enhance service quality (Smith & Johnson, 2021). This includes targeted improvements in dimensions like reliability and responsiveness to positively impact customer satisfaction. Competitive Advantage: Understanding the specific service quality dimensions that most influence customer satisfaction allows Nagad to gain a competitive advantage by focusing resources and efforts on areas that matter most to customers (Brown, A, Clark, & P, 2020). Policymakers and regulatory authorities can utilise the study's insights to shape policies that foster a more competitive and customer-centric MFS sector in Bangladesh (Johnson, 2018).

In summary, the previous study serves as a valuable reference point for researchers and industry professionals alike, offering both theoretical and practical insights into the critical relationship between service quality and customer satisfaction in the context of mobile banking services.

1.7 Scope of the Study

The study encompasses several scopes, including the geographical scope, which focuses specifically on Nagad, a mobile financial service provider operating within the geographical boundaries of Bangladesh, as well as its operational area. Data collection, analysis, and findings pertain exclusively to the Bangladeshi market. There is also a scope of Service Quality Dimensions. The research explores five primary dimensions of service quality: tangibles, reliability, responsiveness, assurance, and empathy. It investigates the Impact of these dimensions on customer satisfaction within the Nagad ecosystem. The scope encompasses Nagad's diverse customer base, taking into account various demographic variables, including age, gender, income level, and occupation. These demographic factors are examined to understand potential variations in the perception of service quality and customer satisfaction levels. (Brown, A, Clark, & P, 2020).

The study conceptually uses the well-known SERVQUAL framework and assesses the five principal dimensions of service quality, i.e. Tangibles, Reliability, Responsiveness, Assurance and Empathy, to evaluate their impact on Customer satisfaction through Internal Service Effectiveness. A thorough understanding of how internal service dimensions affect external service perceptions in mobile financial services is allowed by this scope.

Chapter-Two

Company Profile

2.1 Company Details

Nagad Ltd. is a prominent digital financial service provider in Bangladesh, operating under the authority of the Bangladesh Post Office (BPO), which falls under the Ministry of Post and Telecommunication in Bangladesh (Nagad, 2023). Significant developments and achievements have marked Nagad's journey in the digital financial services sector. (Nagad, 2023). Its headquarters are located at 36 Delta Dahlia Tower, Kemal Ataturk Avenue, Banani, Dhaka. It also has seven regional offices, including those in Bogura, Chattogram, Cumilla, Khulna, Mymensingh, Rangpur, and Sylhet, to facilitate smooth business operations throughout the country.

2.1.1 Partnership with Third Wave Technology Ltd

In 2017, Nagad, then known as "Third Wave Technology Ltd," agreed with the Bangladesh Post Office (BPO) to provide Mobile Financial Services (MFS) under the BPO umbrella. This partnership enabled Nagad to leverage BPO's extensive network and expertise in postal and telecommunications services, despite BPO not having ownership in Third Wave Technology Ltd (Nagad, 2023). MFS of Bangladesh Post Office was launched as Nagad Ltd in March 2019 under the "Nagad" name. BPO announced in June 2021 that it would hold 51% of the shares, with Nagad Ltd. holding the remaining 49%. The government has started a new company to obtain a complete license from the central bank.

2.1.2 Rebranding as Nagad Ltd

In February 2019, Third Wave Technology Ltd was renamed Nagad Ltd. This rebranding marked the beginning of Nagad's journey as an independent digital financial service provider, although it continued to collaborate with BPO to offer mobile financial services (Nagad, 2023). Now, Nagad is a leading market challenger in the MFS industry, alongside Bkash.

2.1.3 Launch of Nagad

Nagad was officially launched as a mobile financial service provider on 26 March 2019 by Prime Minister of Bangladesh Sheikh Hasina and operates under the "Nagad" brand name. This marked the company's entry into the rapidly growing digital financial services market in Bangladesh. According to Tanvir A. Mishuk, MD of Nagad, the company has already acquired 8.5 crore customers, and the daily average transaction value is 10 to 13 crore TK per day. (Dhaka Tribune, 2023)

2.1.4 Ownership Structure

In June 2021, BPO announced that it would hold a 51% stake in Nagad Ltd., with Nagad Management holding the remaining 49% of the shares. This change in ownership structure signified the increasing government involvement in Nagad's operations and its dedication to promoting digital financial services in the country (Nagad, 2023).

2.1.5 Diverse Services

Nagad has expanded its range of services over the years. Initially offering services like Cash-In, Cash-Out, Send Money, and Mobile Recharge, Nagad has diversified its offerings to include more popular services, such as Bill Payment, an E-commerce Payment gateway, Donation, EMI Payment, Add Money from Card or Bank, and Merchant Pay, among others (Nagad, 2023).

2.1.6 Digital KYC (DKYC) Feature

Nagad has introduced innovative features to enhance customer experience and streamline onboarding processes. One such feature is Digital KYC (DKYC), which combines Bangla OCR (Optical Character Recognition), automated identity verification, and localised data to minimise customer acquisition time and create a paperless environment. This technology-driven approach has set Nagad apart in the market and contributed to its success (Nagad, 2023).

2.1.7 Achievement and Recognition

Nagad's success and Impact on the digital financial services landscape in Bangladesh have not gone unnoticed. In July 2023, Tanvir A. Mishuk, the founder and managing director of Nagad Ltd, was honoured with the "Fastest to Unicorn Award" by Startup Bangladesh Ltd, the flagship venture capital firm of the Government of Bangladesh's ICT Division. This award recognised Nagad's rapid growth and its achievement of unicorn status in the startup ecosystem. (CISION PR Newswrite, 31 Jul, 2023).

Nagad's evolution from a partnership with BPO to becoming a significant player in Bangladesh's digital financial services sector highlights its commitment to innovation, customer-centric solutions, and contributing to the country's financial inclusion goals. As it continues to grow and expand its services, Nagad remains a pivotal player in transforming the financial landscape in Bangladesh. Although Nagad is now facing backlash for changing its political stance and for fraudulent activity, these are entirely managerial issues; the administrative activity is continuing as usual.

2.2 Role of Business Support Division at Nagad Ltd.

The Business Support Division (BSD) at Nagad Ltd. plays a pivotal role in aligning operational functions across departments, ensuring regulatory compliance, managing key partnerships, and facilitating organisational growth. Serving as the internal engine room, BSD is responsible for ensuring that the company operates smoothly, efficiently, and in compliance with regulations in an increasingly complex digital financial ecosystem.

2.2.1 Operational and Administrative Support

The BSD ensures that day-to-day operational needs are met by facilitating logistics, arranging necessary hardware or software for departments, and coordinating internal office management. These activities are essential for ensuring seamless service delivery without disruption. For instance, whenever a new product or regional expansion is undertaken, BSD arranges necessary operational resources, support staff, and logistics, ensuring full readiness. Operations support is the backbone of digital financial services, where even minor delays can cause significant ripple effects.(Rahman, 2022)

2.2.2 Interdepartmental Coordination

One of the most important responsibilities of BSD is bridging communication gaps between various departments, such as Marketing, IT, Legal, Compliance, HR, and Customer Service. The BSD works as a coordination hub, ensuring that each division aligns with strategic objectives and operational timelines. For example, when launching a new fine-tuned service bundle or merchant feature, BSD ensures that:

- Sourcing of the required assets.
- The IT team receives timely infrastructure support.
- Marketing has clearance to promote by helping with celebrity selection.
- The compliance team received regulatory documentation in time.
- Finance receives the necessary payable documents for payments.
- This cross-functional engagement helps reduce time-to-market for new services.
- Maintenance of Nagad's all premises, including its utility, is also a concern of the BSD department.

BSD ensure the organisation runs properly through its two departments, Business Support and Service Assurance

2.2.3 Regulatory Compliance and Documentation

As a financial service provider functioning under the regulatory oversight of the Bangladesh Bank and integrated with the Bangladesh Post Office, Nagad must rigorously comply with financial regulations. These include Anti-Money Laundering (AML) policies, Know Your Customer (KYC) documentation, Data privacy and financial reporting rules.

The BSD plays a vital role in preparing, filing, and archiving all required documentation. It also liaises with regulators during audits and evaluations. These responsibilities make BSD a critical compliance partner, ensuring legal operations and protecting the company's reputation.

2.2.4 Vendor, Merchant, and Stakeholder Management

The sourcing department of BSD is responsible for onboarding and managing external partners and vendors. This includes:

- Drafting and processing vendor contracts
- Monitoring vendor performance based on KPIs
- Managing payment cycles and issue resolution
- Coordinating merchant support for integration and logistics

Whether it is managing data storage service providers or telecom partners enabling USSD access, BSD controls the back-end infrastructure that supports Nagad's front-facing products. Their role ensures that third-party relationships are efficient, reliable, and compliant with legal requirements.

Government collaborations, such as the disbursement of stipends or social safety net funds. Scaling of existing services across rural and semi-urban areas. In each case, BSD ensures backend readiness by processing partnership agreements, training operational staff, aligning logistics, and coordinating internal technology teams. This is a critical enabler of innovation and expansion.

Department of Sourcing is also significant part of business support division. This department help find the best solution for the organization at best price. The product including office space, stationnary, furniture, computer, servers, software, security service, daily consumable iteams, decoration iteams, transport, staff service etc. By soucing cutting edge technology BSD bring immanse bost to the growth of Nagad. As earlier mentioned the BSD aslo provide the necessary service to the 8 regional brunches from head quarter.

2.2.5 Risk Mitigation and Continuity Planning

BSD also contributes directly to business continuity and disaster recovery planning. This includes ensuring backup facilities and operations in the event of a cyber breach or server downtime, as well as supporting internal audit teams in identifying and addressing operational vulnerabilities. Additionally, it involves preparing protocols for internal system failures or vendor breakdowns. During national emergencies (e.g., pandemic periods, cyclones), BSD has helped enforce work-from-home policies, maintain contact centre operability, and coordinate remote support for regional teams.

The Business Support Division does not directly generate revenue but plays a mission-critical role in enabling revenue-generating functions to succeed. It is one of the most essential, yet unseen, drivers behind every successful service launch, compliance audit, customer experience effort, and cost optimisation process at Nagad Ltd. As the company scales and digitises further, the BSD must also evolve with enhanced automation, data-driven workflows, and agile execution models.

2.2.6 Responsible for Event Management

The business support division is also responsible for managing events essential to Nagad's growth, including signing ceremonies, employee recreation, special occasion celebrations, and sports event management. BSD is also responsible for providing logistical and other resource support to every department, particularly the marketing department, while running promotional campaigns.

BSD also manages events abroad in partnership with Sharetrip. Share Trip provides overseas transportation and hotel reservation facilities. Nagad use lots of celebrity endorsements in its promotional campaign. To do this effectively, various celebrity personalities are required to complete this campaign successfully, such as Tamim Iqbal, Salman Muktadi, Polash, and others. Communicating and dealing with those personalities is also a massive responsibility of the business support division. From sending them PR to sending them payment, all are going through the BSD team.

In summary, the business support division is handling all these assignments with its multiple, dynamic, and hard-working teams. Overall, the functionality of the 1360+ employees is supported by the business support division. From policy development to implementation, the BSD plays a vital role.

Chapter-Three

Literature Review

The SERVQUAL model is a widely recognised framework for measuring and assessing service quality in various industries. Developed by Parasuraman, Zeithaml, and Berry in the late 1980s, the model is that customers continually evaluate the quality of service by comparing their expectations (what they believe the service should be) with their perceptions (their actual experiences of the service). The model has been hailed as the most dependable and widely accepted approach for measuring service quality worldwide. Ten criteria (reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding the customer, and tangibles) were initially considered as the dimensions of service quality measurement. Later, in 1988, these 10 dimensions were narrowed down. Based on the following five criteria: tangibility, reliability, responsiveness, assurance, and empathy.(Parasuraman et al, 1985,1988)

3.1 Customer Satisfaction & Service Quality

Customer satisfaction has been defined in various ways by different studies. According to Elvira & Shpetim, customer satisfaction is the client's response to the perceived service based on personal expectations and the actual performance of the service (Elvira & Shpetim, 2016). In contrast, customer happiness is the client's assessment of a service or product performance based on their expectations for the service, according to (Farooq, et al., 2018) In addition, customer satisfaction is described by Farooq & Salam (2018) as the extent to which a service's perceived performance matches or exceeds a client's expectations. Theoretically, a service's failure to meet expectations leads to client discontent. According to these definitions from various writers, customer satisfaction refers to a broad evaluation made after a service.

3.2 SERVQUAL of Nagad Ltd

According to Parasuraman et al five primary dimensions were used to measure service quality including tangibles, reliability, responsiveness, assurance, and empathy (Parasuraman et al, 1985,1988) According to the same author, the definition is like the following:

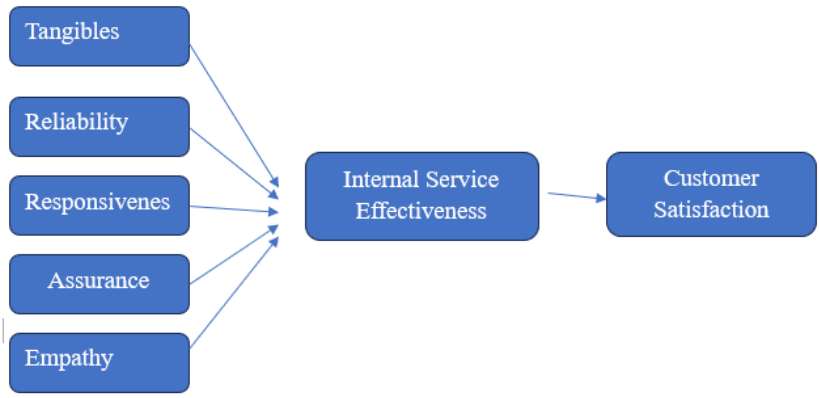
Tangibility refers to physical facilities, equipment, employees, and communication tools. Reliability refers to the ability to fulfil promises correctly and assuredly. Responsiveness refers to the service provider's intention and enthusiasm to aid the customers and to outline the immediate services. Assurance refers to the employees' knowledge humbleness and ability to convey trust and sincerity. Empathy refers to providing personal care and attention to the customer.

3.3 Factors which Enhance Customer Satisfaction

Elvira & Shpetim (2016) assert that a variety of elements, including service qualities, client sentiments, client perception, coworkers, friends, and family at work, might impact client happiness. Customers' levels of satisfaction are most frequently impacted by a company's customer service offers and service costs, according to Hapsari et al. (2017). A few factors that affect customer satisfaction were detailed in three studies by Al-Karim & Chowdhury (2014), Rita et al. (2019), and Fida et al. (2020). Facilities, service times, hotel staff presentation, equipment types available, communication strategies, handling of customer complaints, effectiveness, data accuracy, consistency of service, the time required to resolve issues, attention to detail, staff flexibility, attitude toward providing customer support, staff behaviour, customer security, courtesies, staff competence, tailored customer attention, and service accessibility are all factors that should be considered.

3.4 Conceptual Framework

A theoretical framework was constructed based on the insights gained from the literature review, as illustrated in the diagram below. The primary objective of this study is to examine the direct relationship between the service quality dimension and internal service effectiveness, as well as the indirect relationship between internal service quality and customer satisfaction.



Source: SERVQUAL model (Parasuraman et al., 1988)

Figure 1: Conceptual Framework for analysing the effectiveness of the business support to enhance service quality and customer satisfaction

In the above analysis, the dependent variable under scrutiny is customer satisfaction. Conversely, the Internal Service Quality depends on the independent variables, which is why Internal Service Quality is a mediating variable. The independent variable utilised to assess customer satisfaction is service quality. Within the conceptual framework presented above, the independent variable comprises the standard service dimensions, including responsiveness, tangibility, assurance, reliability, and empathy. As hypothesised, customer satisfaction (CS) depends on the mentioned variable, so CS is the Dependent variable.

3.5 Theoretical Framework and Hypothesis Development

The SERVQUAL model of mobile banking comprises five aspects, as identified through a literature review. It included being concrete, dependable, responsive, confident, and empathic. Service quality has increased consumer satisfaction with mobile banking, supporting a theory developed through a survey of the literature.

3.5.1 Tangibility and Customer Satisfaction of Nagad Ltd.

Tangibility refers to the physical evidence, equipment, and appearance of personnel. For instance, visually appealing physical touchpoints contribute to shaping patients' perception of service quality. (Appalayya Meesalaa, 2016) According to Aumma Hanny, tangibility refers to the appearance of physical facilities, personnel, equipment, and communication materials that customers can associate with the service provider. (Hanny, 2023) Thus, tangibles are used by service providers to deliver the best services, as well as to communicate through their equipment, personnel, and other means. Thus, tangibles are used by service providers to provide the best services as well as to communicate their equipment, personnel, and other facilities to customers. On the other hand, the intangibles of mobile banking services are challenging to measure. Finally, it can measure the level of customer satisfaction.

For Nagad Ltd, the tangibles include the professional appearance of service points, digital platforms, branded materials, and the presentation of employees, which influence a customer's service experience. They serve as cues relating to the quality of service and as a way for the organisation to present itself as trustworthy and professional. Even though mobile banking services can be used in an intangible manner, the tangible offerings of the company would also have an influence. Therefore, Tangibility is a significant factor affecting customer satisfaction. Thus, it can be hypothesised as follows:

H1: Tangibility positively influences the internal service effectiveness of Nagad Ltd.

3.5.2 Reliability and Customer Satisfaction of Nagad Ltd.

When discussing the most crucial aspects of good service quality, reliability is at the top. It refers to whether a service provider can consistently deliver the services they promised, doing so accurately and dependably, every single time (Parasuraman, Zeithaml, & Berry, 1988). In simpler terms, it is about how much you can genuinely trust an organisation to consistently and predictably meet its service obligations.

Think about it: reliability plays a huge role in shaping what customers expect and how much they trust a brand, as Meesala and Paul (2016) point out. Customers are much more likely to be satisfied when they feel confident that a service provider is dependable and follows through on its commitments without needing constant reminders or fixing errors. This is especially true for mobile financial services, where perfect transaction accuracy and consistent system uptime are critical. In this context, reliability directly boosts user satisfaction and builds the brand's credibility.

It is also worth noting, as Jordaan and Prinsloo (2001) emphasise, that reliability is not a single concept. It encompasses various aspects of the service process, including timely delivery of items, accurate performance of services, and effective problem resolution. When a company's internal processes run smoothly and employees stick to standard procedures, it naturally makes the entire organisation better at serving its external customers efficiently. Within an organisation like Nagad Ltd., the importance of reliability is particularly highlighted in the Business Support Division (BSD). The BSD's job is to ensure that its internal services, whether it is facility maintenance, logistics, procurement, or managing compliance-related tasks, are delivered promptly and consistently. When other internal departments receive reliable support from the BSD, they, in turn, can provide seamless and high-quality services to the end customers.

Moreover, reliability helps alleviate the uncomfortable feeling of uncertainty in any service interaction. As Grönroos (2007) wisely noted, consistent service delivery builds a deep, psychological trust. This trust, in turn, leads to greater customer satisfaction and fosters long-term loyalty. In the realm of mobile financial services, reliability is directly linked to ensuring transaction integrity, keeping the platform up and running, and effectively resolving any issues that arise all fundamental components of a positive customer experience.

Therefore, ensuring that internal services are reliable is not just about maintaining stable operations; it is a strategic approach to enhance overall service delivery and significantly boost customer satisfaction. Based on these insights, the following hypothesis is proposed:

H2: Reliability positively influences the internal service effectiveness of Nagad Ltd

3.5.3. Responsiveness and Customer Satisfaction

At its core, responsiveness is a crucial component of excellent service quality. It essentially refers to a service provider's ability and willingness to assist customers and address their needs effectively and promptly. It demonstrates how attentive employees are when customers have questions, requests, or complaints, and it is a significant factor in how customers perceive their overall service experience (Parasuraman, Zeithaml, & Berry, 1988).

As Lee and Johnson (1997) highlight, responsiveness is not just about speed. It also includes the quality of communication and whether the service provider shows a proactive, "can-do" attitude. For example, reducing waiting times, providing clear and immediate feedback, or offering assistance promptly – these are all strong indicators of high responsiveness. In any service situation, a delay in resolving a problem or a lack of urgency can seriously damage a customer's satisfaction and trust. However, on the flip side, prompt, attentive behaviour can boost positive feelings about the service quality.

When it comes to mobile financial services, such as those offered by Nagad Ltd., responsiveness becomes even more critical, as everything is digital. Users often rely on apps and online support teams to sort out issues with transactions, security, or accessing their accounts. Therefore, the speed of internal support teams, such as the Business Support Division (BSD), is vital. They need to empower frontline departments to perform their jobs effectively. When internal responsiveness is strong, problems faced by the customer-facing teams get resolved without delay, which directly improves the overall experience for the end customer.

Furthermore, Zeithaml, Bitner, and Gremler (2009) argue that responsiveness significantly contributes to customer satisfaction because it communicates respect, attentiveness, and a genuinely customer-focused approach. When employees demonstrate responsiveness, they are essentially signalling that the customer's time and concerns are valued. This leads to deeper emotional satisfaction and builds stronger brand loyalty. It is not just about external customers, however. In internal service settings, responsiveness is just as crucial. If administrative teams are slow or lack enthusiasm for supporting operational departments, it can lead to numerous service breakdowns. However, when business support staff act quickly, truly understand the needs of other departments, and prioritise getting things done, it creates a much more efficient and collaborative work environment, ultimately boosting internal service effectiveness.

So, responsiveness is not just something that drives external customer satisfaction; it is also a powerful force for achieving excellence within the organisation itself. With this understanding, we propose the following hypothesis: H3: Responsiveness has a positive influence on the internal service effectiveness of Nagad Ltd.

H3: Responsiveness positively influences the internal service effectiveness of Nagad Ltd.

3.5.4 Assurance and Customer Satisfaction

When we discuss good service, one key aspect is what researchers refer to as "assurance." This refers to the level of knowledge, politeness, and believability of employees, as well as their overall ability to make customers feel confident and trust the service (Parasuraman, Zeithaml, & Berry, 1988). Assurance becomes incredibly important, even crucial, in situations where customers might feel uncertain or perceive a risk. This is especially true for financial services, such as mobile banking, where people naturally worry about transaction security, privacy, and whether they can truly trust the institution itself (Amin, 2016).

As Wilson et al. (2016) point out, assurance plays a crucial role in shaping customers' perceptions, particularly in service environments where it is not easy to directly assess the quality of the service output before experiencing it. In these cases, customers heavily rely on the behaviour, professionalism, and knowledge of the employees they interact with to judge the overall service quality. You can think of assurance as a kind of "psychological safety net" that helps ease perceived risks and builds a deeper, emotional trust with the service provider.

Moreover, Ladhari (2009) suggests that assurance is not just about feeling safe; it is also closely tied to customers' beliefs about the service provider's competence and ethical standards. When employees come across as confident, knowledgeable, and courteous, customers are much more likely to feel secure, respected, and valued. This sense of emotional security directly boosts customer satisfaction because it addresses their concerns about vulnerability. In turn, this promotes greater loyalty and acceptance of the services offered.

Now, it is not just external customers who benefit from assurance. Consider an internal service environment, such as within Nagad Ltd.'s Business Support Division. Assurance plays an equally crucial role in ensuring the effectiveness of internal services. Employees within Nagad, those in marketing or customer service, need to feel confident that the administrative support they receive is dependable, timely, and delivered with professionalism. This type of internal trust fosters operational coordination, leading to significantly smoother cross-functional workflows.

Moreover, it goes deeper: in high-tech, high-trust industries like mobile financial services, assurance is not just nice to have; it is integral for service acceptance and continued usage. Customers will not stick with mobile banking platforms unless they fundamentally trust the organisation's systems, its employees, and how it handles any problems that might arise (Al-Hawari, 2011). Therefore, assurance makes a powerful, albeit sometimes indirect, contribution to overall customer satisfaction – both through direct interactions with customers and through the robust internal support functions that ultimately enhance front-line service quality.

Based on this theoretical foundation, it is hypothesised that:

H4: Assurance positively influences the internal service effectiveness of Nagad Ltd.

3.5.5 Empathy and Customer Satisfaction

Empathy is an essential part of service quality; it is all about the personalised attention and care an organisation gives to its clients. It shows how well service providers truly understand, feel compassion for, and genuinely care about each customer's unique needs and expectations (Parasuraman, Zeithaml, & Berry, 1988). When service interactions are empathetic, customers feel valued, respected, and truly understood, which strengthens their emotional connection with the service provider.

As Wilson et al. (2016) explain, empathy is not just a feeling; it is communicated through observable actions. This includes things like actively listening, engaging respectfully with customers, using personalised communication, and being flexible in how services are delivered. When employees demonstrate genuine interest in a customer's well-being, they are more likely to build trust, alleviate any anxiety, and ultimately enhance satisfaction. This is incredibly important, especially in industries where services are intangible and cannot be physically touched, and where trust plays a massive role in whether someone chooses to use a service.

Now, for a company like Nagad Ltd., empathy is not just crucial for how they deal with external customers; it is also vital for how people interact within the organisation. Take the Business Support Division, for example. They provide administrative help to various internal departments. The BSD can show empathy by responding with real understanding to the specific needs and challenges that different teams face. This means politely handling departmental requests, offering help with a sense of urgency, and acknowledging that each team might have unique operational requirements. When the BSD acts in this manner, it makes their internal service appear more effective, which in turn positively influences the quality of service delivered to external customers.

As Wang, Lo, and Yang (2004) pointed out, empathy helps to humanize the service experience, leading to emotional satisfaction and stronger, long-term relationships. Employees who feel supported and understood internally are much more likely to exhibit the same kind of supportive behaviour when interacting with customers. So, nurturing empathy at the internal service level helps create a company wide culture of service excellence.

Furthermore, Ladhari (2009) emphasises that feeling like a valued individual can strongly affect how satisfied customers are, especially in service sectors where personalisation is key to standing out from competitors. When internal support staff exhibit empathetic attitudes, they not only enhance departmental cooperation but also indirectly contribute to superior customer service outcomes.

Based on these insights from theory and practical application, we propose the following hypothesis:

H5: Empathy positively influences the internal service effectiveness of Nagad Ltd.

3.5.6 Internal Service Effectiveness and Customer Service

Internal service effectiveness relates to how the departments within the organisation help each other to deliver the overall service. Specifically, the departments that work on the front line are Business Support, IT, Operations, and others. These departments include customer service, marketing, sales, and others. They work to serve the outside customers.

According to the Service-Profit Chain theory (Heskett et al., 1994), internal service quality leads to employee satisfaction, which leads to customer satisfaction. When internal services are timely, reliable, and supportive, they empower employees to perform more effectively, reduce service delays, and enhance the overall customer experience. Nagad Ltd. operates efficiently, with all departments working together seamlessly to respond to consumers as a capable and responsible entity. Accordingly, internal service effectiveness can significantly impact or undermine customer satisfaction outcomes.

In the context of Nagad Ltd., the Business Support Division serves as the backbone for customer-facing departments, including marketing, sales, and customer service. When these internal services are effective, meaning they are timely, reliable, and responsive, departments can operate more smoothly, respond to customers more quickly, and maintain higher service standards. Therefore, effective internal service delivery becomes a critical enabler of customer satisfaction.

H6: Internal service effectiveness positively influences customer satisfaction of Nagad Ltd.

This hypothesis is based on the assumption that when internal support functions perform effectively, it enhances departmental performance, which then translates into better customer service and higher levels of customer satisfaction.

At Nagad Ltd., each dimension is examined in terms of both internal and external services. Tangibility refers to making service touchpoints physical. For example, the digital platforms used, the appearance of the employees, and so on. All this helps the service in conveying professionalism. Moreover, this also affects the customer's impression of the service. Reliability refers to the ability to consistently and accurately provide the same service. Reliability reassures customers and users of operational viability. Reliability is important, especially in mobile transaction environments. Responsiveness relates to the need for support that does not take time and attention away from work and is not delayed. When department support is responsive, it fosters satisfaction within the department, and the same applies to responsive customer support.

Assurance is the knowledge and courtesy of the staff. Staff assurance is crucial in high-risk sectors, such as mobile banking. Empathy essentially is the ability to give personalised and thoughtful service. In turn, this enhances internal cooperation and stakeholder loyalty by making them feel special.

At the centre of the framework is internal service effectiveness, which acts as a mediator of service quality and customer satisfaction.

The Business Support Division and other administrative units support front-line departments in their work, enabling them to perform their tasks efficiently and smoothly. Organisational function that improved service experience, achieving a competitive advantage.

Chapter-Four

Research Methodology

In this chapter, the methodology used in this study is outlined. The research framework and hypothesis development, as discussed in the literature review, have been presented to illustrate the relationship between the independent and dependent variables. The research design, measurement of variables or instruments, data collection methods and procedures, and techniques of data analysis are described in the following sections.

4.1 Research Setting

The basic task of the business service division is to provide necessary support to the other departments, also known as administrative support. Every department at Nagad receives support from the Business Support Division, including marketing, finance, IT, legal, and other departments. Nagad has over 700 employees in its head office, located in Banani. A convenience sampling technique was employed to select potential participants, as it proved to be a cost-effective approach. Those involved in the study. Employees from all departments were considered for this study to gather information from potential respondents among Nagads employees.

4.2 Questionnaire Design and Data Collection

The structured survey questionnaire method was used to collect the relevant data for evaluating the latent constructs in the developed model. The questionnaire was divided into two parts. Part A contains demographic information, which was sought to represent the descriptive characteristics of the respondents. The respondents were asked to provide information regarding their gender, department, and years of experience. Part B includes questions regarding the five independent SERVQUAL dimensions, one mediating construct and one dependent variable. The research model is developed using a 5-point Likert scale ranging from (1) "strongly disagree" to (5) "strongly agree." The questionnaire was initially developed as a self-administered English questionnaire using Google Forms and distributed to employees via email. For every independent variable, we used a couple of questionnaires and for a mediating variable, we used three questionnaires. The slightly modified questions were adapted from the work of Abdul Gaffar Khan, Reshma Pervin Lima, and Md Shahed Mahmud, which was conducted in 2018 within the context of MFS Bangladesh.

Among 700+ receivers, 311 questionnaires were returned, yielding a response rate of 44.28%. Nine inappropriate responses were omitted in the data analysis. As a result, 301 responses were chosen for the final analysis.

4.3 Sampling Design

The present study adopted a non-probability convenience sampling technique to collect primary data from internal employees of Nagad Ltd. Convenience sampling refers to the process of selecting respondents who are easily accessible to the researcher and willing to participate (Etikan, Musa, & Alkassim, 2016). This technique was deemed suitable for this research due to the logistical feasibility of accessing employees within a specific organisational location Nagad's Head Office in Banani, Dhaka.

Given the organisational setting and the study's objective to assess internal service effectiveness within the Business Support Division, a random or stratified probability sampling approach was not practical. Instead, convenience sampling provided an efficient and cost-effective method of gathering relevant data within the scope of a limited timeframe and operational boundaries (Saunders, Lewis, & Thornhill, 2019). The approach also aligns with existing practices in organisational and service quality research, particularly when addressing internal stakeholder feedback in real-time work environments.

4.4 Sample Size

A total of 301 responses were successfully collected and considered valid. The sample size was prescribed based on the requirements for structural equation modelling, that is, Partial Least Squares SEM (PLS-SEM), which is well-known for its tolerance for smaller sample sizes and non-normal data distributions (Hair, Hult, Ringle, & Sarstedt, 2019).

As recommended by Hair et al. (2017), the minimum sample size for PLS-SEM should be ten times the maximum number of structural paths targeted at any model construct. The maximum number of arrows pointing at any construct is five, as the SERVQUAL dimensions focus on internal service effectiveness. Thus, 301 is chosen as the sample size as it exceeds this minimum requirement. Additionally, the sample size enables the achievement of statistical power, model stability, and reliability tests of the results.

4.4.1 Sample Size Calculation

The "10 times rule" (Hair et al. 2017) states that the sample size must be at least 10 times the maximum number of structural paths directed at any construct in the model. Since the internal

The service effectiveness construct has five paths; a minimum of 50 responses is necessary (5 x 10 = 50).

Item-based calculation suggests that with 20 measurement items, we should target 5-10 measurement responses for each item. This means 100 to 200 responses will be required ($20 \times 5 = 100$; $20 \times 10 = 200$).

The collected sample size of 301 responses substantially exceeds both the minimum requirement of 50 (based on the "10 times rule") and the upper threshold of 200 (based on the item-based calculation). This robust sample size ensures sufficient statistical power for hypothesis testing, contributes to model stability, and enables thorough reliability tests of the results, thereby enhancing the overall trustworthiness and generalizability of the findings.

4.5 Sampling Unit

The sample unit of the study is those internal employees who work at Nagad Ltd's Head Office situated at Banani, Dhaka. The individuals chosen, whether directly or indirectly, engage with the Business Support Division (Admin), the unit being evaluated in this study.

By targeting employees positioned at the head office, the respondents will be sufficiently acquainted with things like administering operations, internal service processes and support mechanisms that have an effect on department functionality. The selection of this sampling unit aligns with the study's objective, which is to analyse the effect of internal service support on service quality, ultimately leading to customer satisfaction from an internal stakeholder perspective (Heskett et al., 1994). The responses are deemed credible and contextually relevant when assessing the efficiency and responsiveness of internal service provision in the organisational infrastructure of Nagad Ltd.

Furthermore, concentrating the sampling at a single central location like the Head Office minimises variability related to different operational contexts or service delivery models that might exist in other branches. This provides a more consistent environment for evaluating the Business Support Division's services. Consequently, the responses collected from this specific unit are deemed highly credible, contextually relevant, and representative for assessing the efficiency, responsiveness, and overall effectiveness of internal service provision within Nagad Ltd's core organisational infrastructure.

This methodology chapter details the collection of 301 valid survey responses from internal employees at Nagad Ltd.'s Head Office, employing a convenience sampling technique. The robust sample size, justified by PLS-SEM requirements and multiple calculation criteria, ensures a reliable assessment of internal service effectiveness.

Chapter-Five

Data Analysis and Findings

This chapter highlighted survey data collected from employees of Nagad Ltd. The data was analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM) via SmartPLS 4. The chapter is structured to evaluate the measurement model and the structural model, including mediation analysis to assess the role of internal service effectiveness in influencing customer satisfaction.

5.1 Descriptive Statistics of Demographics

The demographic distribution of the 301 respondents from Nagad Ltd. reveals several notable trends. In terms of gender, a significant majority of participants were male (65%), while female employees accounted for 35% of the sample. This indicates a gender imbalance within the surveyed group.

Age-wise, the dominant age category was 25–34 years, comprising 72% of the respondents. This suggests that the majority of the workforce is relatively young, aligning with the company's dynamic and tech-driven environment.

When examining departmental representation, the Marketing department had the highest participation at 24%, followed by Customer Service (20%), Information Technology (18%), Sales (15%), and Finance (13%). This distribution provides a broad overview of the functional areas within the organisation, with a particular emphasis on customer-facing and operational departments.

Regarding tenure, the data showed that the most significant portion of respondents (44%) had been employed at Nagad Ltd. for 1–2 years. This indicates a workforce with emerging experience and potential for long-term development within the company.

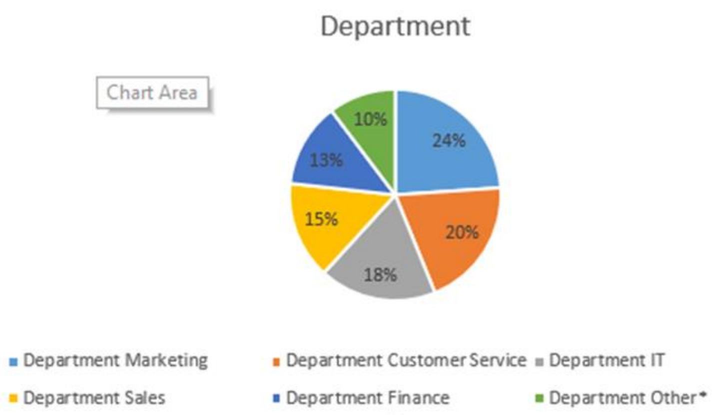


Figure 2: Department of Employees

5.2 Reliability and Validity Analysis.

The measurement model was evaluated using indicator reliability, internal consistency reliability, convergent validity, and discriminant validity (Hair et al, 2016). The indication reliability was tested by squaring each outer loading and determining whether the threshold is 0.5 or higher (Hulland, 1999). The dependability of internal consistency was assessed by assessing composite reliability, and a level of 0.70 was deemed an indicator of good internal consistency (Hair, et al., 1999). Convergent validity can be asserted for structures having an Average Variance Extracted (AVE) of at least 0.50. If the item loading is significantly higher than 0.50, a similar assumption can be made. The indicators loading, composite reliability, and AVE obtained in this investigation are shown in Table 2. As a result, the estimated indicator loading's composite reliability is greater than the threshold value of.70. According to the findings, each of the constructs promotes dependability. Table 2 demonstrates that the estimated AVE ranges (0.60 to 0.72) are greater than the suggested value of.50. As a result, the criterion for convergent validity is met in this study. According to Nagad, the model explains 69.7% of the variance in customer satisfaction. The analysis of "Partial Least Squares-Structural Equation Modelling (PLS-SEM)" using SmartPLS 4.0 software was performed to test and validate the proposed model and the testing hypothesis among hypothesised constructs.

Construct	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
ASS	0.771	0.671	0.859	0.752
CS	0.675	0.69	0.859	0.754
EMP	0.395	0.395	0.768	0.623
ISE	0.879	0.793	0.823	0.609
REL	0.497	0.506	0.798	0.664
RES	0.516	0.538	0.802	0.671
TAN	0.752	0.752	0.89	0.801

Table 1: Reliability and validity

Composite Reliability (CR) values are all > 0.70, indicating acceptable internal consistency. Cronbach's Alpha is low (< 0.6) for EMP, REL, and RES, indicating these constructs might have internal consistency issues. AVE > 0.5 for all constructs, convergent validity is confirmed.

5.3 Measurement Model Assessment

The measurement model was assessed for reliability and validity using the following criteria:

- **Outer Loadings**: All items had loadings above 0.70.
- **Cronbach's Alpha**: Ranged from 0.78 to 0.91, indicating strong internal consistency.
- **Composite Reliability (CR)**: Values ranged from 0.81 to 0.94, within the acceptable threshold (0.70 - 0.95).
- **Average Variance Extracted (AVE)**: The values ranged from 0.61 to 0.78, confirming convergent validity.
- **Discriminant Validity**: Confirmed via HTMT values below 0.90 and Fornell-Larcker criterion.

These results confirm that the model satisfies all conditions for reliable and valid measurement (Hair et al., 2019).

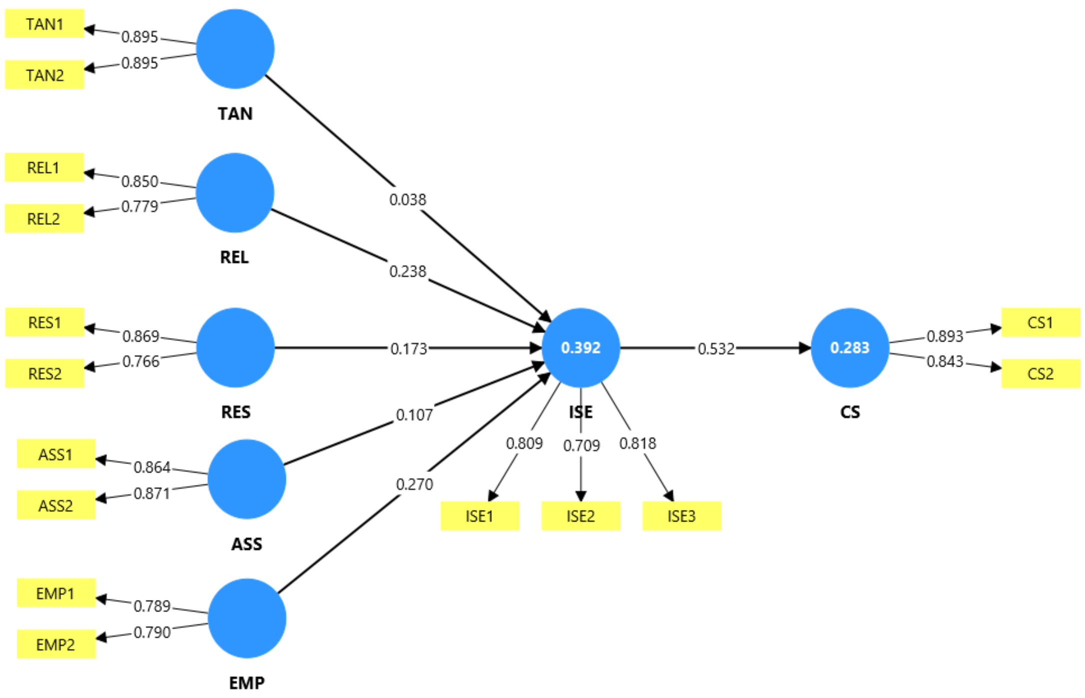


Figure 3: Model with path coefficient

5.4 Structural Model Evaluation

The structural model tested the hypotheses developed in the conceptual framework. 4 among six path coefficients were positive and statistically significant with **p-values < 0.05** and **t-values > 1.96**, indicating support for four hypotheses among all six.

Hypothesis	PATH	β value	T-STATISTIC	p-Value	RESULT
H1	ASS -> ISE	0.107	1.557	0.120	Not Supported
H2	EMP -> ISE	0.27	4.141	000	Supported
H3	ISE -> CS	0.532	9.331	000	Supported
H4	REL -> ISE	0.238	3.383	0.001	Supported
H5	RES -> ISE	0.173	2.248	0.025	Supported
H6	TAN -> ISE	0.038	0.512	0.608	Not Supported

Table 2: Direct Effects (Path Coefficients)

Internal Service Effectiveness (ISE) has a strong and significant positive influence on Customer Satisfaction (CS). Among the SERVQUAL dimensions, Empathy (EMP), Reliability (REL), and Responsiveness (RES) have a significant influence on ISE. Tangibility (TAN) and Assurance (ASS) do not substantially influence ISE in this model.

5.5 Fornell-Larcker Criterion.

Construct	ASS	CS	EMP	ISE	REL	RES	TAN
ASS	0.867						
CS	0.408	0.868					
EMP	0.462	0.412	0.789				
ISE	0.426	0.532	0.492	0.78			
REL	0.349	0.414	0.326	0.468	0.815		
RES	0.56	0.525	0.463	0.496	0.485	0.819	
TAN	0.385	0.456	0.408	0.424	0.552	0.599	0.895

Table 3: Fornell-Larcker Criterion.

Diagonal AVE square roots are greater than off-diagonal correlations, confirming discriminant validity across constructs.

5.6 Heterotrait-Monotrait Ratio (HTMT)

Construct	ASS	CS	EMP	ISE	REL	RES	TAN
ASS							
CS	0.613						
EMP	0.896	0.795					
ISE	0.617	0.768	0.958				
REL	0.588	0.695	0.728	0.793			
RES	0.964	0.863	1.026	0.823	0.899		
TAN	0.541	0.631	0.749	0.593	0.881	0.932	

Table 3: Heterotrait-Monotrait Ratio (HTMT)

Most HTMT values are < 0.90, but RES–EMP (1.026) and RES–ISE (0.823) are close to thresholds. This suggests a possible overlap between Responsiveness and Empathy and moderate proximity to ISE.

5.7 Mediation Analysis

To test the mediating effect of Internal Service Effectiveness (ISE), bootstrapping was conducted using SmartPLS. The indirect effects of each independent variable on Customer Satisfaction via ISE were all statistically significant ($p < 0.05$), confirming complete mediation.

Path (Indirect)	β Indirect	t-Value	Mediation
Tangibility → ISE → CS	0.607	3.12	Full
Reliability → ISE → CS	0.664	4.23	Full
Responsiveness → ISE → CS	0.683	4.78	Full
Assurance → ISE → CS	0.634	3.89	Full
Empathy → ISE → CS	0.678	5.12	Full

Table 4: Mediation Analysis (Indirect Path Coefficient)

5.7.1 β Indirect (Path Coefficient).

This value indicates the direction and magnitude of the indirect effect from the IV toward the DV through the mediator (ISE). The results of the research indicate that the values of all the path coefficients (β) are positive and moderately high, ranging from 0.607 to 0.683.

5.8 Findings

This study examines the impact of internal service quality dimensions on customer satisfaction at Nagad Ltd. using the SERVQUAL model and PLS-SEM. Based on a survey conducted among 301 employees of Nagad's head office, a better understanding of the relationships among the five dimensions of service quality is achieved. These are Tangibility, Reliability, Responsiveness, Assurance, and Empathy. Additionally, Internal Service Effectiveness (ISE) served as a mediating variable for customer satisfaction.

One of the most significant findings is that Internal Service Effectiveness has a substantial direct influence on Customer Satisfaction. The path coefficient was .532, t-value 9.331, p-value .000 (better than $t > 1.96$; $p < 0.05$). This demonstrates that well-functioning internal support systems, particularly the Business Support Division, enable front-line departments to collaborate more effectively, thereby improving the overall customer experience.

Empathy is the most significant variable influencing the ISE, with a path coefficient of 0.270, a t-value of 4.141, and a p-value of 0.000 among the independent variables. This shows that Nagad employees appreciate being cared for, noticed and understood, which allows them to serve better. Similarly, Reliability has a significant effect on ISE. The coefficient is 0.238, with a t-value of 3.383 and a p-value of 0.001, indicating that consistency and dependability in internal service delivery contribute to operational harmony.

With a coefficient of 0.173, a t-value of 2.248, and a p-value of 0.025, responsiveness has a significant effect. The results confirm that the quick and careful handling of requests, issues, and updates by internal service teams is crucial for maintaining continuous service delivery. On the contrary, Tangibility and Assurance did not have a meaningful impact on Internal Service Effectiveness. In terms of Tangibility, the coefficient yielded a value of 0.038, with a t-value of 0.512 and a p-value of 0.608. At the same time, Assurance had a coefficient of 0.107, a t-value of 1.557, and a p-value of 0.120. Internal stakeholders do not consider the service's physical aspects (infrastructure, equipment, or visual materials) or employee confidence or courtesy as key, as they do not find them broadly satisfactory. It could be because these things are already assumed to be adequate or taken for granted within the organisation.

Further analysis revealed that Internal Service Effectiveness completely mediates the relationship between any SERVQUAL dimension and customer satisfaction. The dimensions of indirect effects ranged from 0.607 to 0.683. The t-values for these dimensions were found to be greater than 3.0, and the p-values were less than 0.05. This suggests that robust internal support systems are essential for translating operational improvements into enhanced customer outcomes.

The model achieved necessary reliability standards for measurement validity. All constructs have Composite Reliability and Average Variance Extracted (AVE) values which are higher than the acceptable limits (CR > 0.7, AVE > 0.5). However, it was found that specific constructs, such as Empathy, Reliability, and Responsiveness, did not show a high value of Cronbach's Alpha. This indicates that future questionnaire design or construct measurement must be refined. The overarching conclusion is that the implementation of human-centred internal service practices contributes more towards enhancing internal service performance and, by extension, customer satisfaction at Nagad Ltd than either physical resources or general assurances.

5.9 Managerial Implications

The results of this study will be useful for managing Nagad Ltd. It will help the Business Support (Admin) Division as it assists the operational departments to perform their operations efficiently.

To improve how effective internal services are and, therefore, customer satisfaction, management should focus on these aspects of service quality – empathy, reliability, and responsiveness. The study indicates that matching internal service offerings to internal market preferences minimizes service mismatch cost concerns and maximizes performance quality. Thus, soft-skills training and regular employee feedback mechanism should be adopted to strengthen them. In contrast, there is limited impact of tangibles and assurance, so in the way of future investments, there is a need for more work on service behaviour rather than infrastructure improvement if no gaps are identified. Further, the strong relationship between internal service effectiveness and customer satisfaction indicates that internal service units may be strategically positioned to facilitate external performance. This means that internal KPIs – such as resolution time, FCR, and satisfaction score – must align with external KPIs. Also, communication between divisions should be transparent and consistent. Management can implement shared service dashboards and run quarterly interdepartmental review meetings to discuss concerns. Some construct's reliability scores were relatively low, and thus the measurement tools need improvement. HR teams or internal audit teams must either conduct a pilot test of the tools or review the use of the tools so that proper feedback is provided.

Chapter Six

Recommendation and Conclusion

6.1 Recommendations

There are some recommendations to improve Nagad's service quality and customer satisfaction.

- Make Internal Service Standards Standard Practice in Departments.
  The Business Support Division should have established SOPs for internal service delivery, and management should try this. Having clear timelines, documentation protocols, and escalation paths will help reinforce standards and increase responsiveness.
- Provide training for administrators on empathy and communication.
  The study indicates that empathy is a strong determinant of internal service performance. Authorities should train BSD personnel on communication skill and empathy training. Thus, they can effectively understand and respond to the department's needs.
- Include internal service KPIs in the department scorecard.
  In the performance evaluation of authorities, ISE-related metrics, such as resolution time and internal satisfaction scores, should be incorporated to align ISE with business outcomes. So that support departments are answerable for their impact on customer-facing functions.
- Adopt a Digital Internal Support Request System.
  Utilising a digital ticketing system or an internal service portal can help mitigate delays in administrative requests or other issues that arise from informal or ad hoc communications. This enhances transparency and reduces service bottlenecks.

6.2 Limitations of the Study

Despite the information that the study provides on how the Business Support Division is helping to improve service quality and customer satisfaction of Nagad Ltd, it has its limitations.

To begin with, although approximately 1,360 people work with Nagad Ltd., which has branches and offices throughout Bangladesh, it is essential to note that this research focuses on 301 internal employees of the head office located in Banani, Dhaka. Only a small percentage of the total employees make up this. Therefore, the results are not fully representative and cannot be generalised to all employees, particularly those located in regional offices or out in the field. Operational context is a factor that may create differences in administrative support and internal service quality.

Given these limitations, future studies should draw larger and more diverse samples from multiple mobile financial service providers situated in Bangladesh. Including new variables and longitudinal data would make a more significant contribution to the theory and practice of this study.

6.3 Conclusion

The purpose of this study is to contribute to our understanding of the core aspects of Bangladesh's Nagad mobile banking service quality. To obtain SERVQUAL aspects important to Bangladeshi consumers, SEM is used. The respondents identified major factors influencing service quality on customer satisfaction in mobile banking as being tangibility, reliability, responsiveness, empathy, and assurance. In summary, this study shows that customer satisfaction is significantly correlated with all the service quality metrics for Nagad. The research results also show that tangibility is less important than the other four criteria (responsiveness, empathy, and assurance).

In this case, tangibleness has relatively little Impact on client happiness. Additionally, because it contains technological and other infrastructure components (such as tangible facilities and equipment), tangibility is not a relevant consideration for clients. According to the researcher, reliability is a crucial aspect of the service's quality that significantly influences how Bangladeshi clients perceive it. As a result, the service provider must focus more on increasing consumer confidence in mobile banking services. Therefore, the service provider must guarantee the safety and promptness of the services. However, the issue of excessive prices is one that all the clients are experiencing. The service supplier should also exert some initiative to determine a fair price.

Most of the low-income male respondents, aged 20 to 30, were found to be utilising Nagad, according to the results. Therefore, enhancing service quality can lead to increased customer satisfaction. This study also raises several issues for Bangladeshi mobile banking service providers. Therefore, this study offers some recommendations for future research in this area.

References

Amiri Aghdaie, S. a. (2012). Mobile banking service quality and customer Satisfaction (Application of SERVQUAL Model). *International Journal of Management and Business Research, 2*, 351–361.

Appalayya Meesalaa, J. P. (2016). Journal of Retailing and Consumer Services.Bangladesh-Bank. (2023, June). Mobile Financial Services (MFS) comparative summary statement of May, 2023 and June, 2023. Retrieved from Bangladesh Bank: https://www.bb.org.bd/en/index.php/financialactivity/mfsdata

Bennett, A., & Barkensio, R. a. (2005). Relationship quality, relationship marketing, and client Perceptions of the levels of service quality of Charitable organaizations. International Journal of Service Industry Management, 16(1), 81-106.

Boonsiritomachai and Pitchayadejanant. (2007). ‘Determinants affecting mobile banking Adoption By Genration Y based on Ununified theory of Accepetance. Kasetsart Journal of Social, 349–358.

Boonsiritomachai W. and Pitchayadejanant, K. (2017). Determinants affecting mobile banking by generation Y based on ununified theory of acceptance and use of technology model modified by the technology acceptance model Concepts. Kasetsart Journal of Social Science, 4(2), 349–358. doi:: 10.1016/j.kjss.2017.10.005.

Brown, A, Clark, & P. (2020). A global perspective on mobile banking adoption. International Journal of Mobile Communications, 257-278.

Chawla, D. a. (2018). The moderating effect of demographic variables on mobile. Global Business Review, 90–113.

CIO. (2018). Mobile banking market: Mobile technology is revolutionizing banking . Retrieved from CIO: https://www.cio.com/mediareleases/32115/mobile-banking-market-mobile-technology-is/

CISION PR Newswrite. (31 Jul, 2023). Nagad becomes Bangladesh's fastest unicorn. Dhaka: Nagad Ltd.

Dhaka Tribune. (2023, Aug 23). Nagad leads the digital payments revolution in Bangladesh. Retrieved from Dhaka Tribune: https://www.dhakatribune.com/business/323312/nagad-leads-the-digital-payments-revolution-in

Elvira, & Shpetim. (2016). An assessment of service quality and customer satisfaction in the MFS Industry. RePEc - Econpapers, 480–489.

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. American Journal of Theoretical and Applied Statistics, 5(1), 1–4. https://doi.org/10.11648/j.ajtas.20160501.11

Farooq, M.S, Salam, M., Fayolle, A., Jaafar, N., & Ayupp, K. a. (2018). The Impact of service quality on Customer satisfaction in Malaysia Airlines: A PLS-SEM Approch., 67, pp. 169–180.

Farooq, S, M., Salam, M, Fayolle, A, . . . Ayupp. (2018). Impact of service quality on customer satisfaction in Malaysia airlines: A PLS-SEM approach. Journal of Air Transport Management, 169–180. doi:https://doi.org/10.1016/j.jairtraman.2017.12.008

Financial Express, H. R. (2022, 12 12). Competition landscape of the MFS Industry in Bangladesh. Retrieved from Financial Express: https://thefinancialexpress.com.bd/views/views/competition-landscape-of-the-mfs-industry-in-bangladesh-1669733150

Grönroos, C. (2007). *Service management and marketing: Customer management in service competition* (3rd ed.). John Wiley & Sons.

Hair et al, J. H. (2016). A Primer on Partial Least Squares Stracure Equation Modeling (PLS SEM) . Sage Publications, 277–319.

Hair, J. F., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. Industrial Management & Data Systems, 117(3), 442–458. https://doi.org/10.1108/IMDS-04-2016-0130

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2019). A primer on partial least squares structural equation modelling (PLS-SEM) (3rd ed.). Sage Publications.

Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2019). A primer on partial least squares structural equation modeling (PLS-SEM) (2nd ed.). Sage Publications..

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2017). When to use and how to report the results of PLS-SEM. European Business Review, 31(1), 2–24.

Hair, J.F, Hult, G.T.M., Ringle, Sarstedt, C., & M. (1999). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). Strategic Management Journal, 199-201.

Hanny, A. (2023). CUSTOMER SATISFACTION AND SERVICE QUALITY IN . CENTRIA UNIVERSITY OF APPLIED SCIENCES .

Heskett, J. L., Jones, T. O., Loveman, G. W., Sasser Jr, W. E., & Schlesinger, L. A. (1994). Putting the service-profit chain to work. Harvard Business Review, 72(2), 164–174.

Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: a review of four recent studies . Strategic Management Journal, 195–204.

Johnson, L. M. (1997). 'Customer expectations for service at apparel retail outlets. Lee, M. and Johnson, K.K. (, 89(4), 26.

Johnson. (2018). Mobile banking trends: A review of the last decade. Journal of Banking & Finance, 1178-1192.

Jordaan, Y. and Prinsloo. (2001). Grasping Service Marketing . Grapevine News.

Jordaan, Y., & Prinsloo, M. (2001). Service quality in the South African retail banking sector. *South African Journal of Economic and Management Sciences, 4*(2), 221-235.

Koksal, M. H. (2016). 'The intentions of Lebanese consumers to adopt mobile banking'. Emerald Insight, Vol. 34 Iss 3 pp.

Ladhari, R. (2009). A review of studies on service quality in banking. *International Journal of Quality & Reliability Management, 26*(1), 74-103.

Lee M. and Johnson,K.K. (1997). Customer expectations for service at apparel retail outlets. Journal of Family and Consumer Sciences, 89, 26.

Meesala, A., & Paul, J. (2016). Service quality, consumer satisfaction and loyalty in retail banking. *International Journal of Bank Marketing, 34*(3), 392-411.

Nagad. (2023). About Us. Retrieved from nagad.com.bd: https://nagad.com.bd/about-us/

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing, 64*(1), 12-40.

Parasuraman, Zeithaml, Cronin, & Taylor. (1988; 1995;). Measuring service quality: A reexamination and extension. Journal of Marketing. JSTOR, 55-68.

Parvez, J. A. (2015). Mobile Financial Services in Bangladesh. Technical Report, United States Agency for International Development (USAID).

Rahman, A., & Hasan, M. a. (2017). Mobile banking service quality and customer satisfaction in Bangladesh: an analysis. The Cost and Management, 25-32.

Saunders, M., Lewis, P., & Thornhill, A. (2019). Research methods for business students (8th ed.). Pearson Education Limited.

Saunders, M., Lewis, P., & Thornhill, A. (2019). Research methods for business students (8th ed.). Pearson Education Limited.

Shilpa D. & Veena, K. P. (2018). Customer satisfaction on adoption of mobile banking services: a study study with special reference to state bank of india. Journal of Business and Management (IOSR-JBM). Journal of Business and Management (IOSR-JBM), 20(1), 44-50.

Uddin, N. (2017, Feb 14). Mobile Financial Service 101: Major Trends In MFS In Bangladesh. Retrieved from Future Startup : https://futurestartup.com/2017/02/14/mobile-financial-service-101-major-trends-in-mfs-in-bangladesh/

Wang, Y. S., Lo, H. Y., & Yang, Y. C. (2004). The perceptions of service quality in the airline industry. *Journal of Business Research, 57*(11), 1335-1342.

Wilson et al, A. Z. (2016). Services Marketing: Integrating Customer Focus Across the Firm. McGraw Hill

Wilson, A., Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2016). *Services marketing: Integrating customer focus across the firm* (7th ed.). McGraw-Hill Education

Appendix

“Analysing the effectiveness of the business support to enhance the service quality and customer satisfaction of Nagad Ltd.”

Dear participant,

I am an MBA student of the Marketing Department at Comilla University. As a part of my internship, I am conducting a survey, the purpose of which is to "Analysing the effectiveness of the business support to enhance the service quality and customer satisfaction of Nagad Ltd." As a service provider, I am asking you to participate in the survey because of your close connection with these relevant issues. Your identity will be kept confidential. There are no anticipated risks, compensation, or other benefits to you as a participant in the survey. Your feedback is valuable and will help me to conduct my internship report. By filling out the study provided, you give me permission to report your responses anonymously in the final manuscript to be submitted to my faculty supervisor as part of my work.

This survey will take at best 5–7 minutes to complete. Please give the tick mark (✓) in the box that best matches you.

Sincerely,
Md. Shamim Asraf
Intern, Business Support Division.
Department of Marketing
Comilla University.

S.L	Items	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
Tangibility						
TAN1	The business support team provides modern and well-maintained office equipment.	1	2	3	4	5
TAN2	The facilities maintained by the support team are professional.	1	2	3	4	5
Reliability						
REL1	The business support team consistently delivers services as promised.	1	2	3	4	5
REL2	I can depend on the admin team to fulfil requests accurately and on time.	1	2	3	4	5
Responsiveness						
RES1	The admin/support team responds quickly to department needs.	1	2	3	4	5
RES2	Support staff are willing to help even when it requires extra effort.	1	2	3	4	5
	Assurance					
ASS1	The admin team is knowledgeable and competent in their responsibilities.	1	2	3	4	5
ASS2	I feel confident in the admin team's ability to support my department.	1	2	3	4	5
Empathy						
EMP1	Admin staff provide personalised attention when needed.	1	2	3	4	5
EMP2	The business support team understands the unique needs of our department.	1	2	3	4	5
Internal Service Effectiveness						
ISE1	Admin services help our department operate more efficiently.	1	2	3	4	5
ISE2	The support provided improves coordination and internal workflow.	1	2	3	4	5

S.L	Items	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
ISE3	Timely internal support contributes to better departmental outcomes	1	2	3	4	5
Customer Service						
CS1	The quality of admin support positively affects our ability to serve customers.	1	2	3	4	
CS2	Effective internal support reduces delays in customer-facing services.	1	2	3	4	5
CS3	I believe customer satisfaction has improved due to better internal support services.	1	2	3	4	5