

**CUSTOMER SATISFACTION WITH E-BANKING SERVICES OF
PRIVATE COMMERCIAL BANKS IN NEPAL**

A Dissertation submitted to Office of the Dean, Faculty of Management in partial fulfilment of
the requirements for the Master's Degree.

by

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May, 2025

Certification of Authorship

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled **“Customer Satisfaction with E-Banking Services of Private Commercial Banks in Nepal”**. The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor. It has been proposed and presented as part of requirements for any other academic purposes.

The assistance and cooperation that I have received during this research work has been acknowledged. In addition, I declare that all information sources and literature used are cited in the reference section of the dissertation.

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Nita Neupane

Report of Research Committee

Miss Nita Neupane has defended research proposal entitled “**Customer Satisfaction with E-Banking Services of Private Commercial Banks in Nepal**”, successfully. The research committee has registered the dissertation for further progress. It is recommended to carry out the work as per suggestions and guidance of supervisor Kamal Prakash Adhikari and submit the thesis for evaluation and viva voce examination.

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Approval Sheet

We, the undersigned, have examined the thesis entitled “**Customer Satisfaction with E-Banking Services of Private Commercial Banks in Nepal**” presented by Nita Neupane a candidate for the degree of master of Business Studies (MBS Semester) and conducted the Viva voce examination of the candidate. We hereby certify that the thesis is worthy of acceptance.

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Acknowledgements

This study entitled “**Customer Satisfaction with E-Banking Services of Private Commercial Banks in Nepal**” has been prepared in partial fulfillment for the Degree of Master of Business Studies (MBS) under the Faculty of Management, Tribhuvan University is based on research models involving the customer satisfaction and E-banking services of commercial banks in Nepal.

I have great satisfaction and pleasure to express my appreciation and sincerity to my thesis supervisor Kamal Prakash Adhikari, Shanker Dev Campus, TU for his excellent and effective guidance and supervision. I will remain thankful for his valuable direction useful suggestion and comments during the course of preparing this thesis without his help this work would not have come in this form. I also would like to extend my debt of gratitude Asso. Prof. Dr. Sajeeb Kumar Shrestha, Head of Research Department and I owe a deep debt of gratitude to, Asso. Prof. Dr. Kapil Khanal, Campus Chief of Shanker Dev Campus who provided me an opportunity to undertake this research work. Similarly, I would like to express my sincere to my friends for their support, encouragement and help for this study work.

I highly appreciate to all the staffs of respective banks, NRB Library, Shanker Dev Campus Library and TU Central Library for their valuable advices and support in collecting and presenting the necessary data. I would also like to express my thankfulness to my friends, my family members as well as all known people who supported as well as inspired me directly or indirectly to complete this thesis. With help and support, I have been able to complete this work. I would like to take the responsibility of any possible mistakes that may have occurred in the report. I would be delighted to welcome readers for their suggestion and recommendation to improve the report.

Nita Neupane

May, 2025

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ABBREVIATIONS

A	:	Agree
ANOVA	:	Analysis of Variance
D	:	Disagree
INGO'S	:	International Non-government Organizations
IPO	:	Initial Public Offering
LTD	:	Limited
MSQ	:	Minnesota Satisfaction Questionnaire
N	:	Neutral
NGO'S	:	National Government Organization
No.	:	Total number of observations
NRB	:	Nepal Rastra Bank
OECD	:	The Organization for Economic Co-operation & Development
STD.	:	Standard Deviation
SA	:	Strongly Agree
SD	:	Strongly Disagree
SPSS	:	Statistical Package for the Social Sciences

ABSTRACT

As a result, digital banking services are essential to commercial banks' ability to develop and offer new goods and services with distinctive features as well as to reroute and redesign their internal business procedures in response to external shifts. The study's goal was to ascertain how well digital marketing techniques performed in relation to Nepal's commercial banks. The study employed a descriptive and causal research design. The 20 commercial banks that operate in Nepal made up the study's population. Primary data for the study were gathered via self-administered questionnaires. In order to analyze the data, descriptive statistics were used. The performance and effects of digital marketing tactics were evaluated using regression analysis. The ATM has a positive and significant relationship, according to the study. There is little correlation between consumer satisfaction and online banking. Additionally, a high positive correlation was discovered at the 1% level of significance, with the strongest correlations being seen with mobile banking and customer happiness. In a similar vein, there is a substantial positive correlation between satisfaction and credit and debit cards.

The results of the regression analysis showed a linear association between customer happiness and ATM, mobile banking, and debit card usage. Customer satisfaction is significantly improved by ATMs. Additionally, it was shown that credit card and electronic fund services were positively negligible with regard to customer satisfaction, while debit card services are positively significant with regard to that same measure. However, internet banking is positively insignificant. Moreover, mobile banking is negatively insignificant with customer satisfaction.

Keywords: ATM, Digital banking, Mobile Banking, Customer Satisfaction

Chapter I

Introduction

1.1 Background of the Study

Electronic banking is the use of electronic means to transfer funds directly from one account to another, rather than by cheque or cash. Through reducing banks cost, electronic banking can increase bank income. E-banking generally means that a home user direct dials the bank via a modern or network card logging on to the internet via an internet services provider and then going to the bank's website before accessing the secure site via a password. At the Basel committee, E-banking is defined as the provision of retail and small value banking products and services through electronic channels. Such products and services can include deposit taking, lending, account management, the provision of financial advice, electric bill payment and the provision of other electronic payment. E-banking offers the convenience of conducting most of the banking transaction at a time that suits the customer. The customers can access funds and transfer funds between accounts, pay bills and make purchases 24 hours a day, 7 days week.

As technology advances, one of the newest innovations that banks have embraced is electronic banking, or e-banking. One of the channels for electronic banking is e-banking, which enables bank customers to conduct their financial operations electronically via the internet using a laptop or personal computer at their convenience and without being limited to traditional bank operating hours. E-banking is a cutting-edge delivery method that has a substantially cheaper cost structure than conventional delivery routes while offering longer wait times and better spatial convincing than traditional branch banking. As a result, banks and customers who are embracing new technology find e-banking to be quite appealing. Laura Woods and Barri Segal (2018) Today's consumers are accustomed to free online banking since it is so commonplace, and many banks solely conduct business online, which lowers overhead and allows them to offer savings account rates that are more competitive and generate larger profit margins.

Consumers are essential to any business's survival and success, and the banking industry is no exception. Therefore, it becomes necessary to keep customers rather than just appease them because doing so could boost bank profitability and performance. Every person's life is being impacted by technology in the modern era, and online banking is one of the

innovations that is influencing banking practices more quickly than before. Furthermore, due to a number of advantages like cost and time savings, customers are quickly switching from traditional banking to online banking. In the modern era, technology has a profoundly positive and significant impact on everyone's life. The rapid development of information technology has profoundly altered the global corporate and economic landscape and permeated the lives of millions of individuals. In the banking industry, technological advancements have sped up client transactions and communication. It is described as a bank's giving its clients access to information or services via online banking at any time from their homes or places of business.

It is seen as an additional channel that is used in conjunction with existing channels to offer convenience without requiring the payment for some expenses related to branch visits, such as traveling to the branch or standing in line. Online banking removes time constraints, location restrictions, and physical barriers to banking services (Morawetz, 2018). Early in the 1990s, credit card, ATM, and telephone banking services were the three main applications for e-banking services. Databases, information systems, and other technology have been incorporated into financial services on various levels throughout the past ten years. Following the development of internet access, local banks now run a secure website where customers may use online banking services such as online transfers, payments, and inquiries. To offer its clients internet banking capabilities, there are two main business models. The first is the incumbent bank, also referred to as the "bricks and clicks" model, which uses e-banking as a new service delivery channel and applies online banking as an addition to its traditional banking into a whole system. On the other hand, Yoon (2010) describes another type of bank as a "direct bank," "virtual bank," or "internet primary bank." It operates without branch offices and instead uses wireless networking, telecommunication networks, and the internet to offer banking services.

A nation's financial and economic development depends heavily and dynamically on its banks. Electronic banking, or e-banking, is one of the newest technologies that banks have embraced due to technological advancements (Mukherjee, 2004). E-banking is a rapidly expanding service that enables users to use a computer to obtain account-specific data and maybe conduct transactions from a distance. Customers of banks can conduct their financial transactions electronically using e-banking channels at any time that is convenient for them, using a personal computer, laptop, or mobile device, and without being limited to

traditional bank operation hours. In comparison to traditional branch banking, e-banking is an innovative distribution channel that offers shorter wait times, more spatial convenience, and a far more affordable pricing structure. In addition to saving the bank money on operations, e-banking increases client retention and happiness. E-banking is therefore highly appealing to banks and clients who are embracing new technologies.

The use of electronic methods to move money directly between accounts as opposed to using checks or cash is known as electronic banking. Electronic banking has the potential to boost bank profits by cutting expenses for banks. Most banking transactions may be conveniently completed at a customer's convenience using e-banking. Customers have round-the-clock access to their money, including the ability to move funds between accounts, pay bills, and make purchases (Koirala, 2019).

The banking industry and its clients had to wait 65 years after Nepal Bank Limited was established in 1937 to utilize E-banking services in Nepal (about 2002 A.D.). E-banking is still not very well-liked by clients who reside in Nepal's rural districts. Therefore, the impact of electronic banking on customer satisfaction and service delivery in Nepalese commercial banking is the main subject of this study. Furthermore, it centers on the potential of electronic banking within the framework of Nepalese commercial banks. However, practically every bank in Nepal has access to electronic banking these days. Additionally, these banks are expanding into rural areas in an effort to attract more clients by educating them about the latest developments in information technology.

1.2 Problem Statement

Over the past ten years, there has been a significant transformation in Nepal's banking sector. The banking sector used to operate with basic electronic devices like ATMs and SMS alerts. Due to this, all bank clients had to physically walk to the banking hall in order to complete basic tasks like making withdrawals, checking account balances, and verifying deposits. Long lines resulted from this, which was time-consuming, energy-demanding, and generally expensive. But things have changed recently because a number of financial institutions have brought electronic banking services to the Nepalese banking sector. The banking environment in Nepal has been enhanced by technological advancements such as ATMs, Electronic Funds Transfer at Point of Sale (EFTOPS), Internet banking, SMS alerts

and credit card, electronic fund transfer, Social influence and point on scale. They go on to say that these extremely profitable technologies significantly lessen the demand for manual services provided to bank customers, which enhances service delivery and boosts bank profitability.

Understanding consumer perception is therefore crucial for banks to address these concerns and improve the overall user experience. By identifying and mitigating the factors that contribute to negative perceptions, banks can enhance customer trust and satisfaction, ultimately fostering greater acceptance of digital banking services (Narayana & Paramashi, 2013).

- What is the present scenario of Nepalese commercial Bank under E-Banking Services?
- Is there any relationship between ATM, mobile banking, internet banking, debit card, credit card, electronic fund transfer, and customer satisfaction of Commercial Banks?
- Does ATM, mobile banking, internet banking, debit card, credit card, and electronic fund transfer effect on customer satisfaction of commercial banks?

1.3 Objective of the Study

It is an empirical matter to comprehend the relationship between online banking and performance. Therefore, the primary goal of the research is to investigate and evaluate the effects of commercial banks' e-banking services on customer satisfaction and service delivery. Furthermore, the research has delineated the subsequent goals:

- To analyze the present situation of commercial banks under E-Banking of Nepalese commercial banks.
- To examine the relationship of ATM, mobile banking, internet banking, debit card, credit card, electronic fund transfer, and customer satisfaction of Nepalese Commercial Bank.
- To analyze the impact of ATM, mobile banking, internet banking, debit card, credit card, and electronic fund transfer on customer satisfaction of Nepalese commercial banks.

1.4 Rationale of the Study

The commercial bank was the primary focus of the study with regard to "services delivery" and "customer satisfaction." This study adds to our understanding and is a valuable resource for academics. The banking industry's use of information and communication technology (ICT) has an impact on both the profitability of the banks and the provision of services. Many banks are gradually integrating ICT into their service delivery processes and phasing out their old banking methods. Commercial banks currently play a significant role in the economy and are becoming increasingly well-known both domestically and abroad thanks to their professional services and effective management. One of the primary services offered by commercial banks, on which the entire institution depends, is e-banking. Research on commercial banks' e-banking is very important to many different groups.

The majority of Nepalese people are still unaware of online transactions or e-banking; this study will assist them in understanding the concept of internet services that are accessible to them. The majority of the global economy today is dependent on financial institutions, which need IT help to remain afloat. As a result, this study will offer helpful input to the bank's IT policy maker and serve as a helpful resource for other commercial banks as they develop suitable plans. For students and academics who want to conduct additional research on the topic, the study will be extremely important. The results of this study will give other banks evidence about how to enhance their online banking offerings so that potential consumers will have a better overall experience, which will impact the bank's profit through revenue produced. It is anticipated and hoped that the study's findings would help with these and other pertinent topics.

1.5 Limitations of the Study

The goal of the study is to determine how customer satisfaction in Nepalese private banks is affected by the provision of electronic banking services.

- i. This study is concentrated on customer satisfaction with e-banking services of private commercial banks in Nepal.
- ii. Out of the total of 20 commercial banks, only five banks customer are taken as a sample.
- iii. This study is based on primary data.
- iv. This study used statistical tools like regression and correlation.

Chapter II

Literature Review

2.1 Theoretical Review

Diverse theories exist about digital marketing, with each defining its own paradigm and notion in the field. Marketing theories that show how digital marketing is growing and how it affects the banking industry are of particular relevance to the research. Some of these theories are highlighted below and include;

2.1.1 The Porter's five forces perspective

According to the theoretical viewpoint, a company that attains a competitive advantage through providing cost or benefit advantages will be in a position of superior performance (Porter, 1980). According to this concept, a firm's competitive advantage stems from external environmental issues it must address, such as creating obstacles for competitors to enter the market, differentiating its products, needing a certain amount of capital, and the cost of switching customers. (Lady et al., 2002). According to the idea, there are five factors that influence competition within an industry: the threat of new entrants, the rivalry between existing industry competitors, the bargaining strength of suppliers, the threat of replacement products, and the power of consumers (Porter, 1980). The idea goes on to state that, despite the remaining external dangers, a firm's competitive position is partially decided by the strengths and weaknesses of industry participants. Second, there is a chance that possible new competitors in the market, buyer and supplier negotiating power, and the danger of substitute products will all significantly lessen an organization's ability to compete (Hasan, & Cahyaningrum, 2024).

Industry structure dictates who will profit, but companies are not completely captive to it; instead, they can use their own strategies to affect the five forces. The five forces framework makes clear what matters and points managers in the direction of the elements that will give them the greatest long-term benefit. According to this concept, attaining a competitive edge is mostly based on how well one responds to demands unique to a given business. A very helpful method for considering and examining the type of competition that exists within a business is the five forces model. But the model paints a static picture of competition that overemphasizes the significance of industry and strategic group

structure as drivers of company profit rates, while downplaying the importance of innovation and individual company differences (Ghemawat et al., 2009).

2.1.2 The Technology Acceptance Model (TAM)

Davis (1986) introduced the TAM Model, which focuses on the factors that influence end users' acceptance of computers. TAM theorizes that two beliefs—perceived utility and perceived ease of use—have an impact on a person's behavioral intention to utilize a system. Perceived ease of use refers to how much a person believes utilizing the system would be error-free, whereas perceived utility is the degree to which a person believes utilizing the system will enhance his or her job performance. According to TAM, computer acceptance behaviors are mostly influenced by these two ideas (Oo, 2024).

The purpose of TAM is to offer a theoretically supported, parsimonious explanation of the factors influencing computer acceptance that may generally explain user behavior across a wide range of end-user computing technology and user populations. However, it may be particularly well adapted for modeling computer acceptance since it integrates knowledge gathered from more than ten years of IS research (Welch, & Worthington, 2010). According to TAM, a person's attitude toward using technology and their opinion of its utility can both contribute to explaining how strongly they intend to use it. According to (Rowley, 2011), technology ought to be simple to use and easy to learn. This suggests that users' perceptions of usability should positively impact their perceptions of trustworthiness and their inclination to employ internet marketing (Meihami, 2013).

2.1.3 Expectancy-disconfirmation theory

Expectancy-Disconfirmation Theory (EDT) is a concept used primarily in marketing and consumer behavior to explain customer satisfaction. It suggests that satisfaction or dissatisfaction is based on the comparison between expectations and actual experiences with a product or service. The expectancy-disconfirmation model has become the predominant approach in explaining citizen satisfaction with public services. It posits that citizens compare the performance of a service against their expectations of that service. Satisfaction occurs if the perceived performance meets or exceeds the expectations (Chakravartty, 2018).

Expectations-confirmation theory posits that expectations, coupled with perceived performance, lead to post-purchase satisfaction. This effect is mediated through positive or negative disconfirmation between expectations and performance. If a product outperforms expectations (positive disconfirmation) post-purchase satisfaction will result. If a product falls short of expectations (negative disconfirmation) the consumer is likely to be dissatisfied. Expectation confirmation theory involves four primary constructs: expectations, perceived performance, disconfirmation of beliefs, and satisfaction (Chakravartty, 2018).

Expectations:

Expectations refer to the attributes or characteristics that a person anticipates or predicts will be associated with an entity such as a product, service, or technology artifact. Expectations are posited to directly influence both perceptions of performance and disconfirmation of beliefs, and are posited to indirectly influence post-purchase or post-adoption satisfaction by way of a mediational relationship through the disconfirmation construct (Moraru, & Duhnea, 2018).

Perceived Performance:

Perceived performance refers to a person's perceptions of the actual performance of a product, service, or technology artifact. According to expectation confirmation theory, perceptions of performance are directly influenced by pre-purchase or pre-adoption expectations, and in turn directly influence disconfirmation of beliefs and post-purchase or post-adoption satisfaction. Perceived performance is also posited to indirectly influence post-purchase or post-adoption satisfaction by way of a mediational relationship through the disconfirmation construct (Agbada, 2008).

Disconfirmation of Beliefs:

Disconfirmation of beliefs refers to the judgments or evaluations that a person makes with respect to a product, service, or technology artifact. These evaluations or judgments are made in comparison to the person's original expectations. When a product, service, or technology artifact outperforms the person's original expectations, the disconfirmation is positive, which is posited to increase post-purchase or post-adoption satisfaction. When a product, service, or technology artifact underperforms the person's original expectations,

the disconfirmation is negative, which is posited to decrease post-purchase or post-adoption satisfaction (i.e., to increase dissatisfaction) (Ahmad & Al-Zu'Bi, 2011).

Satisfaction:

Post-purchase or post-adoption satisfaction refers to the extent to which a person is pleased or contented with a product, service, or technology artifact after having gained direct experience with the product, service, or artifact. Expectation confirmation theory posits that satisfaction is directly influenced by disconfirmation of beliefs and perceived performance, and is indirectly influenced by both expectations and perceived performance by means of a mediational relationship which passes through the disconfirmation construct. This theory helps organizations understand and manage customer satisfaction by aligning or exceeding customer expectations (Hamisah, 2013).

2.1.4 Equity Theory

Equity Theory is a concept from psychology and organizational behavior that focuses on fairness and how people perceive the balance between their contributions and rewards in comparison to others. Developed by J. Stacy Adams in the 1960s, the theory suggests that individuals are motivated by the desire for fairness in their relationships, especially in the workplace. Equity theory focuses on determining whether the distribution of resources is fair. Equity is measured by comparing the ratio of contributions (or costs) and benefits (or rewards) for each person (Kaur & Kiran, 2014).

Equity Theory, developed by J. Stacy Adams, explains how individuals assess fairness in relationships by comparing the inputs they contribute to the relationship and the outcomes they receive relative to others. In the context of digital banking, this theory offers valuable insights into customer satisfaction by analyzing how perceived fairness in service delivery impacts customer experience (Kaynak, 2015).

In digital banking, customers invest various resources, including, Time: Spent learning to use platforms, troubleshooting issues, or completing transactions. Effort: Required to navigate apps or websites and adapt to new features or updates. Money: Fees for certain banking services or subscriptions to premium features. Trust: Placed in the bank to handle personal and financial data securely. Outcomes in digital banking and the outcomes customers expect include: Convenience: Easy access to banking services anytime and

anywhere. Efficiency: Quick processing of transactions and services. Value for Money: Services that justify any fees charged or provide tangible benefits like rewards or savings. Customer Support: Effective resolution of issues or queries through digital or human channels. Data Security: Assurance that personal and financial information is safeguarded against cyber threats (Kaynak, 2015).

Perceived Fairness and Satisfaction

Equity theory suggests that customers assess satisfaction by comparing their inputs and outcomes to those of other customers or competing financial institutions. For instance: If a customer feels they are investing significant time and effort but receiving limited convenience or slow support, they may perceive inequity and experience dissatisfaction. Conversely, if they feel that the services provided exceed their investments, they perceive a positive equity balance, leading to higher satisfaction. Transparent Pricing: Clearly communicate service fees and demonstrate their value to avoid perceptions of being overcharged. Personalized Services: Leverage AI and customer data to offer tailored solutions that align with individual needs, making customers feel valued. Efficient Problem Resolution: Provide accessible customer support channels, such as chatbots or live agents, to address issues promptly. Continuous Improvement: Regularly update apps with user-friendly features, improved security, and bug fixes to enhance user experience. Customer Education: Offer tutorials or resources to reduce the effort customers need to invest in learning how to use digital platforms (Merrchat, 2018).

Challenges in Maintaining Equity

Digital banking faces unique challenges in maintaining perceived equity, including: Managing expectations across diverse customer demographics with varying digital literacy. Addressing concerns over cybersecurity and privacy breaches. Ensuring fair access to digital services in regions with limited internet infrastructure. Equity theory provides a valuable framework for understanding how fairness perceptions influence customer satisfaction in digital banking. By ensuring a balance between customer inputs and outcomes, banks can foster trust, loyalty, and long-term satisfaction. This requires continuous investment in user-centric technology, transparent communication, and responsive service delivery (Kwarteng, 2015).

According to Equity Theory, people compare the ratio of their inputs (e.g., effort, skills, time, and experience) to outcomes (e.g., pay, recognition, promotions) with that of others. If they perceive an imbalance or inequity either feeling under-rewarded or over-rewarded compared to others they experience emotional distress, which can lead to actions to restore balance. These actions might include reducing effort, seeking a raise, or altering perceptions of the situation. In essence, Equity Theory emphasizes that fairness and balance in exchange relationships are key to motivation and satisfaction (Merrchat, 2018).

2.1.5 Cognitive Dissonance Theory

Cognitive Dissonance Theory, developed by Leon Festinger in 1957, explains the mental discomfort or tension people experience when they hold two conflicting beliefs, values, or attitudes. This discomfort often motivates individuals to reduce the dissonance, either by changing their beliefs, acquiring new information to justify their behavior, or minimizing the importance of the conflict. The theory is often applied in situations where people need to justify difficult decisions, resolve inconsistencies between their attitudes and behaviors, or rationalize behavior that conflicts with their self-image. Cognitive dissonance was first investigated by Leon Festinger, arising out of a participant observation study of a cult that believed that the earth was going to be destroyed by a flood, and what happened to its members particularly the really Committed ones who had given up their homes and jobs to work for the cult when the flood did not happen. While fringe members were more inclined to recognize that they had made fools of themselves and to “put it down to experience,” Committed members were more likely to re-interpret the evidence to show that they were right all along (the earth was not destroyed because of the faithfulness of the cult members). Festinger’s (1957) cognitive dissonance theory suggests that we have an inner drive to hold all our attitudes and behavior in harmony and avoid disharmony (or dissonance). This is known as the principle of cognitive consistency.

Notice that dissonance theory does not state that these modes of dissonance reduction will actually work, only that individuals who are in a state of cognitive dissonance will take steps to reduce the extent of their dissonance. The theory of cognitive dissonance has been widely researched in a number of situations to develop the basic idea in more detail, and various factors have been identified which may be important in attitude change. When someone is forced to do (publicly) something they (privately) really don’t want to do,

dissonance is created between their cognition (I didn't want to do this) and their behavior (I did it) (Otech et al., 2019).

Forced compliance occurs when an individual performs an action that is inconsistent with his or her beliefs. The behavior can't be changed since it was already in the past, so dissonance will need to be reduced by re-evaluating their attitude toward what they have done. This prediction has been tested experimentally: (Pikkarainen, 2004)

Example of Cognitive Dissonance

Method

In their laboratory experiment, they used 71 male students as participants to perform a series of dull tasks (such as turning pegs in a peg board for an hour). They were then paid either \$1 or \$20 to tell a waiting participant (a confederate) that the tasks were really interesting. Almost all of the participants agreed to walk into the waiting room and persuade the confederate that the boring experiment would be fun (Pikkarainen, 2004).

2.1.6 Attribution Theory

Attribution theory, which was developed by Bernard Weiner in the 1970s and subsequently updated, suggests that an individual's willingness to engage in information seeking in a current situation is dependent on how the person attributes the causes of past success or failure of information seeking efforts. Attribution theory is a psychological concept that focuses on how individuals interpret and explain the causes of behavior, both their own and that of others. It explores how people attribute outcomes to either internal factors (like personality, effort, or ability) or external factors (such as luck, the actions of others, or situational influences). Developed primarily by psychologist Fritz Heider in the 1950s, this theory plays a key role in understanding perceptions of responsibility, motivation, and social interactions. There are two main types of attributions: Internal (dispositional) attribution: This is when people attribute behavior to personal factors like traits, abilities, or feelings. External (situational) attribution: This is when people attribute behavior to external circumstances or situational factors outside a person's control (Heider, 1950).

Attribution theory has been expanded upon by researchers like Harold Kelley and Bernard Weiner, who introduced concepts such as the co-variation model and the dimensions of causality, respectively. It helps explain how we form impressions, assess motives, and

make judgments about others, as well as the implications these judgments have on social dynamics and relationships (Hovland et al., 1987).

Attribution theory is how we attribute feelings and intentions to people to understand their behavior. For example, we may unconsciously apply this theory when we see someone shouting on public transport. You may blame their character, assuming they are an angry person. Alternatively, you might blame the situation they are in, such as, if the train is busy, it might make them nervous and more likely to act out. These two explanations relate to the main types of theories, dispositional and situational attribution (Robinson, 2000).

Dispositional Attribution

Dispositional attribution puts the cause of someone's behavior down to internal traits. These might include personality, core beliefs, and motivations. By attempting to explain intentional behavior, we tend to look internally and analyze the personality of an individual. By overstating the internal causes of someone's behavior and ignoring the external causes, we commit something called a fundamental attribution error. That's when we assume people's actions relate to the type of person they are and nothing else. Some further examples of dispositional attribution are: Your colleague receives a promotion, and you attribute this to their dedication to the role. A person studies at medical school, and you attribute this to their caregiving personality. A person is glaring at you on the bus, and you attribute this to them having a hostile personality (Segal & Woods, 2018).

Situational Attribution

Situational attribution looks less towards personality and more towards situations and events. We can think of this as a more external attribution type. This type of attribution is more common when explaining our behavior. We look outwards and blame circumstances outside of ourselves. This is because it is often easier than self-analyzing. Some examples of situational attribution include: Being late for work and blaming the weather or public transport. Failing an exam and blaming your teacher for not preparing you. Spilling a drink on the carpet and attributing it to the unevenness of the carpet (Singhal, 2008).

Attribution Theory: Biases and Errors

Sometimes, the process of attribution is our own attempt to explain certain behavior. It is often prone to natural biases. These can vary depending on whether they involve ourselves

or other people, or whether the behavior is dispositional or situational. Realizing these biases is the first step to combat them in our daily and professional lives and ensure our relationship with colleagues improves. Below are three of the most common biases (Thomas, 2019).

The Fundamental Attribution Error

When we are attributing causes to other people, it is common to attribute causes to internal factors. Although situational factors may be present, people often ignore these for perceived personality defects in the person. A good example of this bias is blaming an employee for being late for a meeting and attributing this to a personality flaw, such as laziness or habitual lateness. The next day, we may also make the same mistake, but it's unlikely we hold ourselves to the same standards. Instead, we are much more likely to attribute the lateness to situational factors like traffic problems (Wadesango, & Magaya, 2020).

2.1.7 Correspondent Inference Theory

First put forward by Edward Jones and Keith Davis in 1965, the two introduced this theory to explain how we make internal attributions. It suggests people are more likely to judge voluntary behavior instead of accidental behavior. During the attribution process, we see a clear correspondence between personality and behavior to make an internal attribution, for example, when we see a link between something behaving unkindly and being an unkind person. Jones Davis claimed we can base correspondence inference on five factors: Choice: If the behavior is voluntary, then it is likely internal. Accidental or intentional behavior: In this case, accidental is situational and intentional is personality-based. Social desirability: We are more sensitive to making inferences based on socially unacceptable behaviors. Hedonistic relevance: Whether the behavior is likely to benefit or harm us. Personalism: If we see the behavior as directly affecting us, then it is personal and not part of the situation (Wilson & Christella, 2024).

2.1.8 Kano Model

The Kano Model is a theory of product development and customer satisfaction created by Professor Noriaki Kano in the 1980s. It helps businesses understand how different features or attributes of a product or service affect customer satisfaction (Yoon, 2010).

The model categorizes product features into five main groups: Basic Needs (Must-be Attributes): These are fundamental features that customers expect. If they are missing, customers will be dissatisfied, but if they are present, they don't necessarily increase satisfaction. Performance Needs (One-dimensional Attributes): These are features that directly correlate with customer satisfaction. The better the performance or quality, the higher the customer satisfaction, and vice versa. Excitement Needs (Attractive Attributes): These are unexpected features that delight customers. Their absence doesn't cause dissatisfaction, but their presence can greatly increase satisfaction. Indifferent Attributes: These features neither increase nor decrease customer satisfaction. They are neutral. Reverse Attributes: These are features that some customers might appreciate, while others may see them as negative (Zanubiya et al., 2023).

The Kano Model emphasizes the importance of balancing these types of features in a product to maximize customer satisfaction. It's often used in product design, marketing, and user experience (UX) design to prioritize features that will most impact customer satisfaction (Zanubiya et al., 2023).

2.1.9 SERVQUAL Model

The SERVQUAL model is a framework used to measure service quality by evaluating the gap between customer expectations and their perceptions of the actual service delivered. It was developed by Parasuraman, Zeithaml, and Berry in the 1980s. The SERVQUAL model was made of ten dimensions of service quality when created; tangibles, reliability, responsiveness, Tangibility, credibility, security, competence, courtesy, understanding the customer, and access, Parasuraman et al., (1985) but later on these dimensions were reduced to five because some dimensions were overlapping (Tangibility, credibility, security, competence, courtesy, understanding customers and access) and they included, Tangibles- physical facilities, equipment's, and staff appearance. Reliability- ability to perform the promised service dependably and accurately; Responsiveness- willingness to help customers and provide prompt service; Assurance- knowledge and courtesy of employees and their ability to inspire trust and confidence; Empathy- caring, individual attention the firm provides its customers (Parasuraman et al., 1988).

These dimensions mainly focus on the human aspects of service delivery (responsiveness, reliability, assurance, and empathy) and the tangibles of service. According to study carried

out by Ladhari, (2009), it is recommended that the SERVQUAL model is a good scale to use when measuring service quality in various specific industries but that it is appropriate to choose the most important dimensions of this model that fit to that particular service being measured in order to assure reliable and valid results. In this regard, we will use this model because it takes into account customer's expectation of a service as well as perceptions of the service which is best way to measure service quality in service sector (Shahin, 2005). Buttle (1996) makes mentions of several researchers that have used the SERVQUAL model in various industries (retailing, restaurants, banking, Tangibility industry, airline catering, local government, hotels, hospitals, and education). He further suggests that service quality has become an important topic because of its apparent relationship to costs, profitability, customer satisfaction, customer retention and positive word of mouth and it is widely considered as a driver of corporate marketing and financial performance. In our study, we are more interested in service quality and customer satisfaction by using the SERVQUAL model to assess them in grocery stores.

Service quality and customer satisfaction have received a great deal of attention from both scholars and practitioners because of their relevancy and relationship according to Eshghi et al., (2008) and the main reason for focusing on these issues is improving overall performance of organizations (Magi & Julander, 1996). Customer satisfaction has been studied by some researchers using a single item scale Cronin and Taylor, (1992) means customer's overall feeling towards a service is asked to measure satisfaction while others use a multiple item scale Parasuraman et al., (1985, 1988) satisfaction is measured using various dimensions for example the SERVQUAL dimensions. Customer satisfaction is defined as a function of the customer's expectations and perceptions of performance according to the expectancy - disconfirmation paradigm (Tse & Wilton, 1988) and it is a construct closely related to perceived service quality (Magi & Julander, 1996).

These dimensions are used to assess service performance by identifying gaps between customer expectations and perceptions. It's commonly used in industries such as hospitality, retail, and healthcare to improve service quality.

2.1.10 Consumer Behavior Theories

Customer behavior theory is the study of how consumers make decisions about what to buy. By forecasting the how and when a customer will buy something, it helps marketers

and businesses profit from these behaviors. It is helpful to pinpoint the factors that affect these choices and to emphasize proactive behavior manipulation techniques. Understanding how and why consumers make decisions about what to buy is the goal of the complicated field of consumer behavior. To understand and forecast consumer behavior, numerous theories and models have been developed. The following are some important theories pertaining to consumer behavior: (Zeer, 2024).

Theory of Planned Behavior (TPB)

According to this idea, which was developed by Icek Ajzen, the most significant factor influencing whether someone would carry out a behavior is their intention to do so. In turn, three primary aspects impact intentions: The attitude towards the conduct, the perceived behavioral control (the ease or difficulty of completing the behavior), and the subjective norm (social pressure to perform or not execute the behavior). The theory of planned behavior (TPB) is a psychological framework used to predict and understand human behavior. It suggests that an individual's intention to engage in a particular behavior is the most immediate determinant of that behavior. According to TPB, three key factors influence behavioral intention: (Segal & Woods, 2018)

Attitude toward the behavior: This refers to the individual's positive or negative evaluation of performing the behavior. If they view the behavior as favorable, they are more likely to form a strong intention to perform it.

Subjective norms: These are the perceived social pressures to perform or not perform the behavior. It considers the influence of others, such as family, friends, or societal expectations.

Perceived behavioral control: This is the individual's perception of how easy or difficult it is to perform the behavior. It reflects past experiences and anticipated obstacles or facilitators.

These three components interact to shape an individual's intentions and, ultimately, their behavior. TPB is widely used in fields like health psychology, marketing, and social research to design interventions and predict behavioral outcomes (Segal & Woods, 2018).

Theory of Reasoned Action (TRA)

An earlier version of the Theory of Planned Behavior is this. It implies that a person's attitude toward a behavior and the subjective standard have an impact on their intention to

engage in that action. The Theory of Reasoned Action (TRA) is a psychological framework developed by Martin Fishbein and Icek Ajzen in the late 1960s to explain and predict human behavior based on attitudes and social influences. TRA posits that a person's behavior is determined by their intention to perform that behavior, which, in turn, is influenced by two key factors:

Attitude toward the Behavior: This refers to an individual's positive or negative evaluation of performing a specific behavior. It is shaped by the person's beliefs about the outcomes of the behavior and their evaluation of these outcomes. These represent the perceived social pressure to perform or not perform the behavior. It is influenced by the beliefs about whether important others (e.g., family, friends, and peers) approve or disapprove of the behavior and the individual's motivation to comply with these opinions (Sekaran, 2015).

In essence, TRA suggests that people make rational decisions about their behaviors by considering their attitudes, social norms, and intentions. However, the theory assumes that the behavior is under the individual's volitional control and does not account for external factors or constraints that might prevent them from acting on their intentions. TRA has been widely applied in fields like health promotion, marketing, and education to understand and influence behavior (Sekaran, 2015).

Maslow's Hierarchy of Needs

According to Abraham Maslow's thesis, people have a hierarchy of wants that goes from more fundamental physiological needs like food and shelter to more advanced needs like self-actualization. Where people fall on this hierarchy affects the way they behave as consumers, who use their purchases to try and satisfy unfulfilled wants. Maslow's Hierarchy of Needs is a psychological theory proposed by Abraham Maslow in 1943. It explains human motivation through a five-tier model of needs, often represented as a pyramid. Maslow suggested that lower-level needs must generally be met before individuals can focus on higher-level needs. It's widely used in psychology, education, and business to understand motivation and personal development (Maslow, 1943).

Cognitive Dissonance Theory

This hypothesis, which was developed by Leon Festinger, contends that when people's attitudes or beliefs don't match their actions, it causes them to feel uncomfortable, or cognitive dissonance. Customers may attempt to lessen this dissonance by altering their opinions or providing reasons for their actions, which may have an effect on their purchasing choices. Cognitive Dissonance Theory, proposed by psychologist Leon Festinger in 1957, suggests that when individuals hold two or more conflicting beliefs, attitudes, or behaviors, it creates a state of mental discomfort or tension known as dissonance. People are motivated to reduce this discomfort by changing their beliefs, attitudes, or behaviors, or by justifying or rationalizing the conflict (Festinger, 1957).

For example, if a person who values environmental protection continues to use plastic products, they might feel dissonance. To reduce this discomfort, they could either change their behavior (e.g., switch to reusable products), change their belief (e.g., convince themselves that plastic use isn't as harmful as others claim), or minimize the importance of the conflict (e.g., convince themselves that the benefits of convenience outweigh the environmental impact). Cognitive dissonance is a powerful motivator of human behavior, influencing decision-making, attitude change, and even justifications for choices people make (Festinger, 1957).

Consumer Decision-Making Process

The steps a customer takes when deciding what to buy are described in this model. It usually entails identifying the issue, gathering data, weighing your options, making a decision, and evaluating the purchase once it has been made. The consumer decision-making process refers to the steps individuals go through when deciding whether to purchase a product or service. It involves several stages, typically including the following: (Tharanikaran, 2017)

Problem Recognition: The consumer realizes they have a need or problem that requires a solution, such as a desire for a new phone or a need for a home appliance.

Information Search: Once the need is recognized, the consumer gathers information about possible solutions. This can be from various sources like personal experiences, word-of-mouth, advertisements, or online reviews.

Evaluation of Alternatives: The consumer compares different products or services based on criteria like price, quality, features, or brand reputation to identify the best choice.

Purchase Decision: After evaluating options, the consumer makes a decision on which product or service to buy, influenced by factors like price, promotions, or store experience.

Post-Purchase Behavior: After the purchase, the consumer reflects on the decision, and their satisfaction or dissatisfaction with the product may lead to repeat purchases, brand loyalty, or complaints.

This process may vary in complexity depending on the type of product, the consumer's knowledge, and their level of involvement in the purchase (Tharanikaran, 2017).

Diffusion of Innovation Theory

This hypothesis, which was created by Everett Rogers, describes how new inventions or products proliferate within a community. Based on their inclination to accept new items, it divides people into innovators, early adopters, early majority, late majority, and laggards. The Diffusion of Innovation Theory was developed by Everett Rogers in 1962. It explains how, why, and at what rate new ideas and technology spread within a culture. The theory focuses on the process by which an innovation is communicated over time among the participants in a social system. It identifies five main adopter categories based on their willingness to accept new innovations: (Rizqiyah & Surianto, 2024)

Innovators: These are the first individuals to adopt an innovation. They are willing to take risks and are often socially connected to the development of new ideas.

Early Adopters: These individuals are more integrated into the social system than innovators and are often seen as opinion leaders. They play a critical role in influencing others to adopt an innovation.

Early Majority: This group adopts new ideas just before the average member of society. They are more deliberate in their decision-making and tend to rely on recommendations from others.

Late Majority: These individuals are skeptical and adopt innovations only after the majority of society has already embraced them. They are typically influenced by peer pressure.

Laggards: These are the last to adopt an innovation, often due to tradition, skepticism, or lack of access. They are resistant to change and may only adopt innovations when they become mainstream.

The theory also identifies factors that influence the adoption process, including relative advantage (how much better an innovation is than what it replaces), compatibility (how well the innovation fits with existing values and practices), complexity (how difficult it is

to understand or use the innovation), trial ability (the ability to experiment with the innovation before full adoption), and observability (the degree to which the results of the innovation are visible to others). Diffusion of Innovation Theory is widely used in fields like marketing, public health, education, and technology adoption (Rizqiyah & Surianto, 2024).

Cultural Influence Theory

This idea places a strong emphasis on how culture influences consumer behavior. Decision-making, product selection, and usage are all influenced by cultural elements such as conventions, values, and beliefs. Cultural Influence Theory explores how culture shapes and influences individuals' behavior, values, attitudes, and perceptions. This theory suggests that culture acts as a powerful force in shaping one's worldview, social interactions, and cognitive development. It emphasizes that culture is not just a backdrop to human behavior but a key determinant in how people think, act, and relate to others.

Key components often explored within Cultural Influence Theory include: (Rizqiyah & Surianto, 2024)

Socialization: The process by which individuals learn and adopt the norms, values, and behaviors of their culture.

Cultural Norms and Values: How shared beliefs and practices guide behavior in various social contexts.

Cultural Diversity: The impact of different cultural backgrounds on shaping varied perspectives and practices.

Communication Styles: How cultural norms influence verbal and non-verbal communication, and how misunderstandings may arise due to cultural differences.

Power and Inequality: How culture informs societal structures, including hierarchies based on race, class, gender, etc.

Cultural Influence Theory is often applied in fields like psychology, sociology, anthropology, and intercultural communication, and it's key for understanding the interaction between culture and individual behavior (Rizqiyah & Surianto, 2024).

Social Identity Theory

This theory investigates the ways in which a person's social identity and self-concept impact their consumption decisions. Purchasing decisions are frequently made in accordance with social, ethnic, or cultural groups that an individual identifies with. Social Identity Theory

(SIT) is a psychological theory that explains how individuals derive their identity and self-concept from their group memberships, such as social, cultural, and familial groups. It was developed by Henri Tajfel and John Turner in the 1970s. The theory posits that people categorize themselves and others into various social groups, a process called "social categorization." Once categorized, people tend to favor their own group (called the "in-group") over others (the "out-group"), a phenomenon known as "in-group favoritism." This bias is often associated with stereotypes and prejudice (Tajfel & Turner, 1970).

Social Categorization: The process of identifying which groups we belong to and distinguishing between different groups (e.g., us vs. them).

Social Identification: The emotional significance attached to belonging to a particular group, which becomes central to an individual's self-concept.

Social Comparison: The tendency to compare one's in-group to out-groups to maintain a positive self-image and the group's status.

Through this framework, SIT explains phenomena such as in-group favoritism, intergroup conflict, and discrimination, as well as the desire for positive group distinction (Pun, 2018).

2.2 Empirical Review

Choudhury and Bharttachee (2016) investigated the relationship between customer loyalty and electronic banking channels using the survey approach. Data from a sample of 400 salaried workers chosen using the stratified random sampling method served as the study's foundation. Delivery channels for electronic banking services were assessed for their usability, affordability, ease of use, and self-control, and behavioral and attitudinal loyalty were used to gauge customer loyalty. The outcome demonstrated that customer loyalty is strongly positively impacted by electronic banking delivery channels.

Tharanikaran (2017) analyzed that the study's goal is to evaluate the level of customer satisfaction and service quality in the Batticaloa district's electronic banking environment. A questionnaire was created with item measures that capture the customer happiness and service quality components in order to accomplish these goals. To assess the assumptions in this 231-respondent study, a single sample t-test was run. The results of this study help practitioners, academics, and bank management create and implement strategies linked to consumer happiness and service quality in electronic banking. Electronic banking, or e-

banking, is a type of banking instrument that is required by customers and is legally constructed and developed. It enables cash transaction records to be transferred, installment payments to be made, and more. Regardless of the participant's location, electronic banking is used in conjunction with a PC and internet. According to Kim et al. (2011), the term "e-banking" refers to a broad category of banking services that involve the use of electronic, internet, and mobile technologies. The term "e-banking system" refers to a variety of systems, including automated teller machines (ATMs), computer, cable, internet, and, most recently, smartphone banking. These technologies are quickly becoming commonplace in the banking industry, where they are employed to reduce operational expenses for banks as well as to provide better services to customers who are tech-savvy and looking for simplicity.

Parajuli (2018) investigated how customer satisfaction in Nepalese private commercial banks was affected by the provision of electronic banking services. Examining the effect of e-banking service delivery on customer satisfaction in a private commercial bank in Nepal is the primary goal of the study. Seventy respondents who are happy with their banking services provided primary data for the study through the use of structured questionnaire procedures. A descriptive, informal comparative research design forms the basis of the study. The quantitative method was employed in this study to collect data for analysis. The replies to a mostly structured questionnaire survey were used as the basis for statistical analysis to test hypotheses. The self-administered questionnaire was used. Convenience sampling, or non-probabilistic sampling, was the method used for this investigation. In contrast to ATMs and online banking, customer happiness is regarded as a dependent variable. Services such as credit card, debit card, mobile banking, and electronic fund transfers are regarded as independent variables. SPSS was used to construct and analyze their correlation and regression.

Adhikari (2019) analyzed the effect of innovation and technology on productivity and profitability in Nepalese commercial banks. The impact of innovation and technology on the profitability and productivity of Nepalese commercial banks is investigated in this study. The dependent variables are profitability and productivity in banks. Mobile, e-payment, online, ATM, and point-of-sale banking are the independent variables. The respondents' thoughts about innovation and technology in Nepalese commercial banks are evaluated using the main data source. 160 respondents from 25 Nepali commercial banks

made up the study's sample. A structured questionnaire is created in order to fulfill the study's objectives. To examine the impact of innovation and technology on productivity and profitability in Nepalese commercial banks, multiple regression models are estimated. The results of the study demonstrated the beneficial effects of online banking on bank profitability and productivity. It suggests that an increase in online banking raises bank profitability and productivity. In a similar vein, ATM servicing boosts bank profitability and productivity. It implies that increased bank productivity and profitability are a direct result of improved ATM service.

Additionally, the outcome demonstrates that mobile banking improves bank profitability and productivity. When it comes to transactions, e-banking which is the way of the future offers consumer's tremendous advantages via ATMs, mobile banking, online banking, and other electronic delivery methods. Examining the impact of electronic banking on Nepal's commercial banks' financial performance is the primary goal of this study. For the analysis, both primary and secondary data were employed. Primary data were gathered via questionnaires, and secondary data were gathered via banks' websites and annual reports. Analytical and descriptive research methods were employed in this investigation. The findings were presented using multiple regression analysis, appropriate frequency tables, and a coefficient correlation to explain the link between the variables. The study's conclusion is that electronic channels, such as ATM cards and mobile banking, have a negligible and unfavorable effect on banks' profitability as measured by ROE and ROA. The only banking method that significantly and statistically improved bank profitability in terms of ROA and ROE was online banking. Major obstacles to the bank's development of its online services included customer ignorance, their degree of education, their familiarity with computers and the internet, electronic issues, security issues, issues with trust, and the nation's internet infrastructure.

Paudel (2020) examined on what determines customers' perception of banking communication? An empirical evidence from commercial banks of Nepal. This essay sheds light on the methods used by banking authorities to interact with clients and the efficiency of their instruments and strategies for bank growth. In the months of April through September of 2019, 373 clients with accounts at Nepali commercial banks were interviewed using a structured questionnaire technique. An Ordered Logit Regression Model and a Dummy Based Awareness Index were used to investigate how Nepalese clients perceived

banking communications. The Ordered Logit demonstrates that giving customers time to resolve their problems and offering DEMAT facilities were found to have a significant link with banking communication awareness level. The Awareness Index indicates that customers are only marginally aware of banking communication. Thus, this study suggests that giving customers' problems enough time to be addressed and that using DEMAT tools raises awareness in banking communication. By removing obstacles to communication and focusing on client happiness, this study improves communication in the banking industry.

Devkota (2020) researched on bankers' communication know-how: an analysis from commercial banks of Kathmandu valley. The purpose of this study is to examine the communication experiences of bankers working in commercial banks. The exploratory research design utilized in this study demonstrates the causal link between latent and observable variables. Using the purposive sample technique, the research creates a systematic questionnaire to interview 355 individuals. The outcome is derived from the Awareness Index and descriptive analysis.. According to the Employees Awareness Index, 12% of workers are not sufficiently informed about banking communication, followed by 46% of workers who are still somewhat aware and 37% of workers who are sufficiently aware.

Wadesango (2020) conducted research on how the performance of commercial banks is affected by digital banking services. This study attempted to analyze the impact of digital banking on Zimbabwe's commercial banks' financial performance in order to achieve this goal. A quantitative research approach was used. It is anticipated that the adoption of digitalization in Zimbabwe's banking industry will have an impact on how banks develop financial services and products, and as a result, on consumer happiness and bank performance. One commercial bank was the study's target population. Data collection was conducted using a data collection sheet. The Pearson correlation coefficient was useful in assessing how digital banking affected the banks' bottom lines. Multiple regression analysis, the other inferential test, was employed to examine the impact of digital banking on financial performance. The analysis showed that rising online client deposits made through digital banking platforms were the reason behind CBZ's ROA, a commercial bank in Zimbabwe. The study found that over the designated study period, there was an upward trend in the ratio of online bank transactions to total assets. ICT costs, fees, and commissions climbed further, contributing to an increase in the total asset ratio. According

to the study's findings, online banking transactions strongly and favorably predicted return on assets (ROA), and more online banking transactions resulted in higher ROA. The study suggests that in order to increase commercial banks' financial performance, bank management should improve digital banking.

Devkota (2021) investigated on factors influencing attitude toward online advertising in Kathmandu valley. The Kathmandu Valley's attitudes toward internet advertising are examined in this paper. In order to gather data, the study used a non-probability sampling technique and a descriptive cross-sectional research design. Data were gathered from 401 Kathmandu Valley internet shoppers. A structural equation model based on PLS was used to investigate the theories. Initially, the study looked at the relationship between positive aspects of the economy and attitudes toward internet advertising. The findings support the idea that positive aspects of the economy significantly impact people's attitudes about online advertising. The relationship between quality components and attitudes toward online advertising was also investigated in this article, and the results showed that attitudes toward online advertising in online platforms are significantly influenced by high-quality advertisement components. Results indicate that favorable aspects of online advertising and aspects of the industry that are beneficial to the economy have a big impact on people's perceptions of these kinds of ads.

Hossain (2021) looked at a study on how state-owned commercial banks in Bangladesh fared financially after adopting e-banking. This study looks at the connection between Bangladesh's state-owned commercial banks' financial performance and their use of e-banking. The panel data of the sample banks was analyzed using the pooled ordinary least square (OLS) estimate. The empirical results show that banks' profitability in terms of return on equity, return on assets, and net interest margin in the year of adoption is significantly impacted negatively by the adoption and implementation of e-banking. The outcome does, however, also demonstrate that e-banking significantly improves return on assets in the year after implementation.

Upadhyay (2022) examined on impact of relationship marketing on brand loyalty with reference to Nepalese commercial banks. The researcher works to investigate how Nepalese Commercial Banks' use of relationship marketing techniques influences their customers' brand loyalty. In addition to survey research design, both qualitative and

quantitative research are used. Self-administered questionnaires are employed, some of which are utilized to investigate how relationship marketing affects Nepalese commercial banks' ability to maintain brand loyalty. For the study, both primary and secondary data are employed. Following data analysis, Nabil Bank got the top spot. Because of their positive relationships and mutual trust, the majority of Chitwan customers are devoted to Nabil Banks. Relationship marketing actually has a significant effect on consumers' brand loyalty to commercial banks in China. Customers are completely devoted to Nabil Bank and Global IME Chitwan as a result of their great client relations and confidence in these banks.

Ghimire (2022) researched on digital banking adoption by customer of commercial banks in Nepal. The following specific goals served as the study's guidelines: analyzing the impact of perceived usefulness on digital banking adoption; assessing the impact of perceived ease of use on digital banking adoption; evaluating the impact of perceived credibility on digital banking adoption; and looking into the impact of convenience on digital banking adoption. For the aim of the study, 380 responses to an online questionnaire used to gather primary data were gathered. The study group consisted of both current and prospective users of digital banking services in Nepal, representing a wide range of varied groups. The findings indicate that customers' intentions to use digital banks are highly influenced by their perceptions of the ease of use, usefulness, reliability, and convenience.

Kandel (2022) examined on rebranding effect of Nepalese commercial banks on customer perception. This research studies the impact of rebranding strategies on customer perception. This study examines how rebranding tactics affect consumers' perceptions. The study's main focus is on revolutionary rebranding, which entails significant brand changes. The study's population consists of the new clients that the renamed commercial banks have recruited. There are 261 people in the survey's sample. The key data used in this study were gathered. Print versions of the questionnaires were provided. Purposive sampling is the method of sampling that has been used in this investigation. Descriptive and inferential statistics have been utilized to analyze the survey data that was gathered. For the purpose of descriptive analysis, the mean, standard deviation, minimum and maximum values have been determined. Correlation, regression, and the t-test have also been examined in relation to inferential statistics. The findings showed that perceived quality and product features had a favorable and significant link and impact on each other. Additionally, repositioning influences consumer perception favorably but not much. According to the report,

rebranding should only be carried out after giving considerable thought to how consumers feel about a company's goods and services. Rebranding initiatives can revitalize the company and provide a tactical instrument to foster a favorable customer perception.

Akhter (2022) conducted a study on Bangladeshi commercial bank customers to determine the elements that influence consumers' intentions to use online banking services. The modern internet banking system requires both e-business and e-commerce because of the expanding global economy. On the other hand, the success of the banking industry in this technology age is linked to encouraging bank customers to use online banking services. Therefore, the purpose of this study is to identify the variables that, in the Bangladeshi environment, influence commercial bank customers' intentions to use internet banking services. Based on previously published material, a survey questionnaire was created to determine the purpose of the study. In this study, the convenience sampling approach was employed. 410 bank customers were approached to request participation in the study in order to collect data. 180 responses, or 72% of the total, were obtained for the fully completed survey; the sample size was $n = 180$. SPSS version 23 was utilized for testing hypotheses and doing correlation analyses. The study's findings demonstrate the statistically significant influence of the following factors on the intention to use online banking services: perceived security risk (PSR), perceived usefulness (PU), perceived ease of use (PEU), social influence (SI), and consumer innovativeness (CI). It is determined that in order to increase bank users' desire to adopt and embrace general banking services through internet platforms in their online banking transactions, the bank management committee should make use of PU, PEU, SI, and CI. This report presents a number of important implications for the next research study and provides guidance for the bank management committee of a commercial bank.

Sambaombe (2022) looked at a study that used the TRA model to analyze the impact of internet banking on customer satisfaction in commercial banks, using the Stanbic main branch as a case study (Doctoral dissertation, University of Zambia). Using Stanbic Bank as a case study, the objective of this study was to determine the impact of online banking on customer satisfaction in commercial banks using the TRA model. The cross-sectional study design was used in this investigation. The Stanbic Bank headquarters in the Lusaka district served as the study's location. Bank customers were the study's target audience. An estimated 196 people made up the study's sample size. In this study, stratified sample

allocation was used to identify the kind of clients. A circular systematic random sampling method of selection was used to choose the respondents. To gather data, a closed-and open-ended questionnaire was employed. The association between consumer satisfaction with banking services and online banking was found using Kendall's tau-b correlation. To ascertain the impact of online banking on the outcome variable (consumer satisfaction), binary logistic regression was employed.

A slight positive association was found via Kendall's tau-b correlation between customer satisfaction and online banking use. Customer satisfaction was negatively impacted by the interaction between gender and "being male," having less than a secondary education, negative behavioral beliefs, negative attitudes, negative behavioral intentions, and not using internet banking. There was no significant correlation identified between the interaction of not using internet banking, being older than 36, having unfavorable normative attitudes, and having a bad customer perception and being unemployed. The results of using Kendall's tau-b correlation indicated a weakly positive association between customer satisfaction and using online banking. Moreover, connections between the following were discovered to be linked to customer dissatisfaction: gender of "being male," having completed secondary education or less, negative behavioral belief, negative attitude, negative behavioral intention, and not using internet banking. Consequently, in order to sustain or expand its clientele, the bank must take these factors into account in its strategic planning while striving to raise customer satisfaction. These results will help banks, customers of their services, and policymakers both public and private encourage financial inclusion.

Wuisan and Handra (2022) study focused on leveraging digital advertising to optimize online marketing strategies. The expansion of the internet is changing how businesses operate, especially those in retail settings where electronic commerce is the primary means of transaction processing. The purpose of this study is to look into the finest methods for implementing internet advertising and piquing consumers' interest in making a purchase. This study also employed a descriptive survey approach with verification. The population of this study is Bandung-based Lazada users, with a sample size of 96 individuals. The findings show that customers' intentions to make purchases on the Lazada website are directly impacted by the use of online advertising. The community has been impacted by the information technology industry's rapid development in supporting a wide range of

small and large company activities so they can be globally recognized. The most obvious effect is that, in addition to being recognized, it can boost profit and sales volume. One of the marketing channels with the most influence is digital marketing. In this instance, social media is being used in conjunction with digital marketing to boost sales. This is because, in the age of globalization, social media has a significant impact on e-commerce applications, and as a result, sales volume has increased significantly in comparison to traditional methods of selling. Digital marketing is widely regarded as the most efficient and successful kind of advertising, with the potential to greatly boost sales volume.

Pandey (2023) analyzed on impact of online banking on the profitability of Nepalese commercial banks. This study looks at how online banking affects Nepalese commercial banks' profitability. The dependent variables are return on equity and return on assets. Similarly, credit cards, internet, mobile, QR code, ATM, and point-of-sale banking are the chosen independent variables. The main data source is utilized to evaluate consumers' perceptions of online banking services. 163 respondents provided main and secondary data for the study. A structured questionnaire is created in order to fulfill the study's objectives. To determine the significance and impact of internet banking on the profitability of Nepalese commercial banks, regression models and correlation coefficients are estimated. According to the study, online banking has a positive impact on return on equity and return on assets, meaning that higher returns on equity and return on assets would result from better internet banking services. The return on equity and return on assets are also positively impacted by ATM banking, suggesting that the higher the return on equity and return on assets, the better the ATM banking service.

Meria et al. (2023) conducted study on application-based digital marketing tactics that increase consumer satisfaction. More sophisticated tools that can be employed as a medium in the development of customer-focused business operations are created as technology progresses. While a growing number of companies are moving from traditional to digital marketing, many of them are still struggling to put digital marketing concepts into practice. The significance of digital marketing in the current digital era and the ways in which technology advancements impact how companies engage with their clientele. Using digital marketing strategies in marketing campaigns is one method to integrate these technologies. This study aims to assess and investigate, using an application-based approach, how exposure to principles of digital marketing strategy can boost consumer satisfaction. This

study employed a descriptive research design, gathering and evaluating data in an impartial and methodical manner. Theories and empirical results from earlier studies are examples of secondary research data that are gathered via literature reviews. According to the findings, a successful digital marketing plan consists of the following elements: a thorough grasp of the target market and its segmentation; selection of the appropriate marketing platform; creation of engaging and pertinent content; search engine optimization; and continual customer contact and interest. The discussion's conclusions lead to the conclusion that, in order to select the most effective digital marketing strategy, firms need analyze both internal and external factors. This is known as an application-based digital marketing strategy.

Nuseir et al. (2023) investigated the effects of digital marketing techniques on customer experience. This study aims to investigate modern digital marketing techniques and technologies and their function in different marketing domains or activities. In order to enhance customer experience tools, the study also looks into market segmentation in the digital age. The survey also ascertains which approach has been recommended as being most effective in improving the customer experience. The research methodology includes a Systematic Literature Review (SLR), which entails selecting the most important publications, extracting and synthesizing data, and evaluating the selected publications' quality.

Kashyap et al. (2024) examined on empirical assessment of customer satisfaction of internet banking service quality – Hybrid model approach. This study proposes and employs an innovative hybrid methodology based on a combination of factor analysis and artificial neural network (ANN) modeling to predict customer satisfaction from identified service quality dimensions in a developing country, India. A qualitative study was conducted among Internet banking users to understand the perceptions of e-banking users. Data were collected from 208 randomly selected customers in India using a questionnaire. First, factor analysis was conducted to identify factors affecting customer satisfaction, and four factors were extracted: efficiency, reliability, security and privacy, and dealing with problems. Next, a neural network model was applied to the factor scores to validate the critical factors. Finally, a comparative analysis was performed between the actual ANN and the regression prediction results. The ability of a linear regression model to succeed is tested when approximating a nonlinear problem such as customer satisfaction. It was concluded

that the ANN model is a better fit than the linear regression model and is able to recognize complex connections between exogenous and endogenous variables. The results indicated that reliability, security, and privacy were the most influential factors.

Wilson and Christella (2024) examined on an empirical research of factors affecting customer satisfaction: a case of the Indonesian e-commerce industry. The purpose of this study is to analyze the effect of website design, reliability, time saved, product variety, and delivery performance towards customer satisfaction in the Indonesian e-commerce industry. The instrument for collecting the data is using the questionnaire. The number of samples that obtained in this study is 200 samples, in which, 15 of them should be omitted since those questionnaires weren't filled properly, resulted in a total of 185 samples being deemed usable and used for this study. The data were analyzed using PLS-SEM Method. The results of this study found reliability, time saved, product variety, and delivery performance has positive and significant effect toward customer satisfaction, in which product variety has the highest effect toward customer satisfaction among the other variables. However, this study also found out that there is no significant effect between website design and customer satisfaction. This study further suggests that company specializing in the e-commerce industry should always enhance their product and services to their customer, in which customers will be satisfied, thus increasing their likeliness to repeat their purchasing experience on the company in the future.

Hasan and Cahyaningrum (2024) researched on factors that influence customer loyalty through customer satisfaction mediation at bank Syariah Indonesia (BSI). The focus of this research is centered on providing high-quality customer service and Customer Relationship Management to customers, as well as the satisfaction generated by this strategy. Primary data from this research was collected through the use of research tools in the form of questionnaires filled in by previously selected samples. The studies demographic comprises customers of Bank Syariah Indonesia (BSI) located in the city of Malang. In order to determine the sample size for this study, Malhotra's (2009) method was implemented due to the unpredictability of the population size. Consequently, 225 samples were acquired in order to conduct this research. Utilizing Structural Equation Modeling Partial Least Square (SEM-PLS), this study was investigated. The results of this research demonstrate that customer loyalty and satisfaction are significantly influenced by the quality of service provided. Additionally, service quality can impact customer loyalty via the intermediary

mechanism of customer satisfaction. Customer relationship management does not have a substantial impact on customer satisfaction and loyalty. Customer satisfaction and customer relationship management are both ineffective mediators of consumer loyalty. Customer loyalty is substantially impacted by variables pertaining to customer satisfaction.

Zeer (2024) analyzed on factors affecting customer's satisfaction: mediating role of citizenship behavior. This study explores the mediating role of citizenship behaviors in the relationship between internal communication, recruitment and selection practices, and client satisfaction. The findings demonstrate that the model successfully explains substantial variances in client satisfaction (40.5%) and citizenship behaviors (36.7%), confirming the model's predictive reliability. The study establishes that effective internal communication and well-structured recruitment and selection processes significantly influence employee citizenship behaviors. These behaviors, in turn, have a profound positive effect on client satisfaction. The analysis accentuates the critical mediating role of citizenship behaviors in elevating client experiences, highlighting organizations' need to implement effective communication strategies and recruitment policies that promote a culture of positive organizational behavior. According to the current study's findings, insurance businesses in Palestine need to focus more on improving internal communication as well as recruiting and selection to address the current customers' satisfaction issues. This research enriches knowledge by empirically validating the mediating role of citizenship behaviors in the relationship between internal organizational practices and client satisfaction.

Purnamasari et al. (2024) examined on prediction analysis of customer satisfaction levels at company XXX using the classification method. The researcher aims to analyze and predict the level of customer satisfaction at Company XXX using the C4.5 classification method. Customer satisfaction is an important factor in maintaining customer loyalty and improving company performance. Using historical customer data for the last 1 year, we apply the C4.5 algorithm to predict customer satisfaction levels. The research results show that the C4.5 method has quite high prediction accuracy, which reaches 83%. It is hoped that the findings from this research can help XXX Company identify the factors that influence customer satisfaction and be able to take strategic steps to improve the quality of service.

Rizqiyah and Surianto (2024) examined on the influence of service quality, customer satisfaction and company image on customer loyalty at PTX. The purpose of this research is to find out and analyze the influence of service quality, customer satisfaction and company image on customer loyalty at PTX. In this research, researchers used a sample of 32 respondents. The sampling technique in this research uses a saturated sampling technique. The data in this study was taken using a questionnaire which was measured using a Likert scale. This research uses multiple linear regression analysis with the help of SPSS version 25 software. The results of this research show that the service quality variable has a partial effect on the customer loyalty variable with a calculated t value of $4.300 > t$ table value 1.694 , but the customer satisfaction variable with a calculated t value of $1.463 < t$ table value is 1.694 and the corporate image variable with a calculated t value of $0.688 < t$ table value of 1.694 has no partial effect on the customer loyalty variable. The results of this research also show that the service quality variable, customer satisfaction variable and company image variable simultaneously influence the customer loyalty variable.

OO (2024) analyzed on customer satisfaction and customer loyalty towards photography services in Yangon. The objective of this investigation is to investigate the factors that influence customer satisfaction and to evaluate the impact of customer satisfaction on consumer loyalty toward photography services in Yangon. Independent variables, which are influencing factors in this study, include tangibility, price, promotion, staff competence, trust, responsiveness, and process. The research methods employed were descriptive and quantitative. The data utilized was both primary and secondary. Application of the Cochran (1977) sampling formula to an unknown population yielded a sample size of 385 customers. The online survey employs straightforward random sampling to collect a structured questionnaire with a 5-point Likert scale from 385 customers. The application of regression analysis is essential for determining the impact of independent and dependent variables. The research determined that price, staff competence, trust, and process are the only factors that have a statistically significant positive impact on customer satisfaction. Tangibility, promotion, and responsiveness did not have a significant effect on customer satisfaction. According to the regression results, trust is the most effective factor in determining customer satisfaction, with process, staff competence, and price following in that order.

Yang and Man (2025) researched on factors affecting customer satisfaction in purchasing car. The objective of the research is to study the relevant factors that affecting customers'

satisfaction in purchasing Honda Civic car (model 2017). The authors obtained 12 customers list from 12 Honda car dealers. This research studied the factors (price, customers' services, brand image and quality) in influencing the customers' satisfaction. The results show that customers' services and quality have significant relationship towards customers' satisfaction. The findings would be useful for academicians to further study on factors related with this area or to find out whether similar to apply this to other industry as well.

Zanubiya et al. (2025) conducted study on application-based digital marketing tactics that increase consumer satisfaction. More sophisticated tools that can be employed as a medium in the development of customer-focused business operations are created as technology progresses. While a growing number of companies are moving from traditional to digital marketing, many of them are still struggling to put digital marketing concepts into practice. The significance of digital marketing in the current digital era and the ways in which technology advancements impact how companies engage with their clientele. Using digital marketing strategies in marketing campaigns is one method to integrate these technologies. This study aims to assess and investigate, using an application-based approach, how exposure to principles of digital marketing strategy can boost consumer satisfaction. This study employed a descriptive research design, gathering and evaluating data in an impartial and methodical manner.

Theories and empirical results from earlier studies are examples of secondary research data that are gathered via literature reviews. According to the findings, a successful digital marketing plan consists of the following elements: a thorough grasp of the target market and its segmentation; selection of the appropriate marketing platform; creation of engaging and pertinent content; search engine optimization; and continual customer contact and interest. The discussion's conclusions lead to the conclusion that, in order to select the most effective digital marketing strategy, firms need analyze both internal and external factors. This is known as an application-based digital marketing strategy.

Table 1
Summary of Empirical Review

Author	Title	Objectives	Variables	Methodology	Findings
Yang and Man (2025)	factors affecting customer satisfaction in purchasing car	The objective of the study is to examine the relevant factors that affecting customers' satisfaction in purchasing Honda Civic car	Indep: price, customers' services, brand image and quality Dep: Customer Satisfaction	Study employee regression analysis	The results show that customers' services and quality have significant relationship towards customers' satisfaction.
Zanubiya et al. (2025)	application-based digital marketing tactics that increase consumer satisfaction	The objective of the study is to assess and investigate, using an application-based approach, how exposure to principles of digital marketing strategy can boost consumer satisfaction	Indep: digital marketing strategy Dep: Customer Satisfaction	study employed a descriptive research design with regression analysis	The findings showed that thorough grasp of the target market and its segmentation; selection of the appropriate marketing platform; creation of engaging and pertinent content; search engine optimization; and continual customer contact and interest.
OO (2024)	customer satisfaction and customer	The objective of this investigation is to investigate	Indep: tangibility, price, promotion,	Employs straightforward random	The research determined that price, staff competence, trust,

	loyalty towards photography services in Yangon	the factors that influence customer satisfaction	staff competence, trust, responsiveness, and process	Depen: customer satisfaction	sampling to collect a structured questionnaire with a 5-point Likert scale	and process are the only factors that have a statistically significant positive impact on customer satisfaction. Tangibility, promotion, and responsiveness did not have a significant effect on customer satisfaction.
Rizqiyah and Surian (2024)	The influence of service quality, customer satisfaction and company image on customer loyalty at PT X	The purpose of this research is to find out and analyze the influence of service quality, customer satisfaction and company image on customer loyalty	Indep: service quality, customer loyalty, company image	Depen: customer satisfaction	Used multiple linear regression analysis with the help of SPSS version 25 software	The results of this research show that the Service Quality variable, Customer Satisfaction variable and Company Image variable simultaneously influence the Customer Loyalty variable.
Purnamasari et al. (2024)	Prediction analysis of customer satisfaction levels at company XXX using the	The researcher aims to analyze and predict the level of customer satisfaction at Company	Indep: customer loyalty, company performance	Depen: customer satisfaction	Used Regression analysis	The research results show that the C4.5 method has quite high prediction accuracy, which reaches 83%.

	classification method					
Zeer (2024)	Factors affecting customer's satisfaction: mediating role of citizenship behavior	This study explores the mediating role of citizenship behaviors in the relationship between internal communication, recruitment and selection practices, and client satisfaction	Indep: internal communication, recruitment and selection practices, and client satisfaction Depen: customer satisfaction	The study used statistical method and financial method	The findings demonstrate that the model successfully explains substantial variances in client satisfaction and citizenship behaviors, confirming the model's predictive reliability.	
Hasan and Cahya ningrum (2024)	Factors that influence customer loyalty through customer satisfaction mediation At Bank Syariah Indonesia (BSI)	The focus of this research is centered on providing high-quality customer service and Customer Relationship Management to customers	Indep: service quality, customer loyalty, customer relationship Depen: customer satisfaction	Utilizing Structural Equation Modeling Partial Least Square (SEM-PLS), this study was investigated	The results of this research demonstrate that customer loyalty and satisfaction are significantly influenced by the quality of service provided.	
Wilson and Christella (2024)	An empirical research of factors affecting	The purpose of this study is to analyze the effect of website design,	Indep: product variety, reliability, time saved, Depen: customer satisfaction	The data were analyzed using PLS-	The results of this study found reliability, time saved, product variety, and	

	customer satisfaction: a case of the Indonesian e-commerce industry	reliability, time saved, variety, and delivery performance towards customer satisfaction	website design, and delivery performance	Depen: customer satisfaction	SEM Method	delivery performance has positive and significant effect toward customer satisfaction, in which product variety has the highest effect toward customer satisfaction among the other variables.
Meria (2023)	Increasing consumers with satisfaction application based digital marketing strategies.	The purpose of this research is to evaluate and explore how exposure to digital marketing strategy concepts can increase customer satisfaction using an application basis.	Indep: digital marketing strategy	Depen: customer satisfaction	Descriptive research Design	The findings, shows digital marketing plan target market and its segmentation; selection of the appropriate marketing platform; creation of engaging and pertinent content; search engine optimization; and continual customer contact and interest.
Nuseir (2023)	Digital marketing strategies and the impact on customer	The aim of this study is to explore the contemporary digital marketing	Indep: digital marketing techniques and technologies		Survey Method	Positive customer experiences lead to these people becoming social media influencers, which boosts

	experience: A systematic review.	strategies and tools and the role played by these in various marketing activities or areas.	Depen: customer satisfaction		productivity and revenue for the firm.
Akhter (2022)	Determining factors of intention to adopt internet banking services: A study on commercial bank users in Bangladesh.	The aim of this study is to determine the influencing factors of intention to adopt internet banking services of commercial bank users' in the Bangladeshi context.	Indep: perceived security risk (PSR), perceived usefulness, ease of use, social influence and consumer innovativeness	Depen: customer satisfaction	survey questionnaire method The study found to increase bank customers' willingness to accept and use general banking services via online platforms for their online banking transactions, the bank management committee should make use of PU, PEU, SI, and CI.
Lacarel (2022)	Main uses of artificial intelligence in digital marketing linked to tourism.	The main objective of this review is to identify the main uses of artificial intelligence in digital	Indep: digital marketing, Artificial intelligence	Depen: customer satisfaction	Questionnaire Method Artificial intelligence has created new avenues for the tourism industry's digital marketing methods to flourish, providing numerous

		marketing strategies.			short-term opportunities.
Samba ombe (2022)	An analysis of online banking on customer satisfaction in commercial banks based on the TRA model: a case study Stanbic main branch (Doctoral dissertation, The University of Zambia)	The aim of this study was to establish the influence of online banking on customer satisfaction in commercial banks based on the TRA model using Stanbic Bank as a case study	Indep: banking services and online banking Depen: customer satisfaction	This study employed the cross-sectional study design.	According to the findings, there is a marginally favorable link between customer happiness and using online banking.
Wuisa n and Handr a (2022)	Maximizing online marketing strategy with digital advertising.	This study's goal is to investigate the best practices for online advertising implementation and capturing consumer interest in purchasing.	Indep: customers' intentions, social media, online services Depen: digital advertising	Survey Method	The findings show that customers' intentions to make purchases on the Lazada website are directly impacted by the use of online advertising.

Hossain (2021)	Effects of e-banking adoption on the financial performance of state-owned commercial banks in Bangladesh.	This study examines the relationship between e-banking adoption and the financial performance of state-owned commercial banks in Bangladesh.	Indep: return on equity, return on assets, and net interest margin Depen: adoption and implementation of e-banking in Bangladesh.	The pooled ordinary least square (OLS) estimate was applied	The outcome also demonstrates that, in the year after adoption, e-banking significantly improves return on assets.
Wadango (2020)	Impact of digital banking services on performance of commercial banks.	To investigate the effect of digital banking on financial performance of commercial banks in Zimbabwe.	Indep: online banking transactions Depen: financial performance	Quantitative research methodology was adopted.	According to the study's findings, online banking transactions strongly and favorably predicted return on assets (ROA), and more online banking transactions resulted in higher ROA.
Tharankaran (2017)	Service quality and customer satisfaction in the electronic banking	To assess the degree of service quality and customer satisfaction in the electronic banking context in Batticaloa district.	Indep: service quality, e-banking ATM, computer, internet, and, most	Questionnaire Method	The results of this study help practitioners, academics, and bank management create and implement strategies linked to consumer happiness

				recently, smartphone banking		and service quality in electronic banking.
				Depen: customer satisfaction		
Choudhury and Bhartt (2016)	The nexus between electronic banking channels and customer loyalty.	To examine the relation between electronic banking channels and customer loyalty	Indep: usability, affordability, ease of use, and self-control, and behavioral and attitudinal loyalty	Data collected from a sample of 400 salaried and random sampling method.	The outcome demonstrated that a customer loyalty is strongly positively impacted by electronic banking delivery channels.	
			Depen: customer loyalty			

2.3 Research Gap

During the review of previous studies, it was found that most of the researches Wilson and Christella (2024), Yang and Man (2023), Talapatra, Santos and Gaine (2021) has been conducted on the factors affecting customer satisfaction in saving and credit co-operative. During the review of the previous thesis of Prawira et al. (2022), it was found that this study uses five years of secondary data from two commercial banks while this study uses primary data from 400 respondents of commercial banks. Present study is based on the data taken from distributed questionnaire to 410 but only 400 questionnaire were returned.

By reviewing an earlier thesis it was found that OO (2024) only analyzed the customer satisfaction which influenced by tangibility, price, promotion, staff competence, trust, responsiveness, and process but this study has examined those internal factors that play important and role in customer satisfaction are ATM, Mobile Banking, Internet banking,

debit card, credit card, and electronic fund transfer,. This study also examines the impact and relationship of ATM, Mobile Banking, Internet banking, debit card, credit card and electronic fund transfer with customer satisfaction. Hasan and Cahyaningrum (2024) and Zeer (2024) have analyzed only the qualitative factors affecting customer's satisfaction with mediating variable citizenship behavior but this research is based on quantitative factors affecting customer satisfaction. Rizqiyah and Surianto (2024) has showed partial effect of service quality, customer satisfaction and company image on customer loyalty while this study shows ATM, Mobile Banking, Internet banking, debit card, credit card and electronic fund transfer, has significant and positive impact on customer satisfaction. To find out the subjective facts and to fulfill the gaps the present study is conduct.

Chapter III

Research Methodology

It goes into great detail about the approach the researcher used to carry out this investigation. It gives an explanation of the techniques used and the rationale behind their selection throughout the study's data collection phase. The study's research design comes first, then the population and sample, data collection methods, validity and reliability tests, data analysis, and software.

3.1 Research Design

The research design used for this study is causal and descriptive. Descriptive design is used to explain the many parts of online banking services. In a similar vein, the link between the independent variable (e-banking services) and the dependent variable (consumer happiness) can be ascertained by causal design.

The impact of e-banking service delivery on customer satisfaction in the banking sector in Nepal is investigated using a more informal research approach. A descriptive study is conducted, according to Sekaran and Bougie (2013), in order to identify and characterize the qualities of value of interest. The study collected data using a quantitative approach in order to analyze it. The responses from the primarily structured questionnaire survey were used as the basis for statistical analysis to test the hypothesis.

3.2 Population and Sample, and Sampling Design

The population is made up of many components from which study samples are chosen (Rubin & Babbie, 2016). The sample is a portion of the general population that has been chosen by the researcher to take part in the study. The whole population of Nepal is represented in this study by all 20 of the country's commercial banks. Out of total population of 20 commercial banks, the study used five commercial banks i.e. Nabil Bank Limited, Everest Bank Limited, Nepal SBI bank Limited, Himalayan Bank Limited and Nepal Investment Mega Bank Limited has been selected as the study's sample on the basis of profit earned, higher paid-up capital, improving EPS, higher deposit from customers of 2023. In fiscal year 2081/082, Nabil lead with highest net profit of Rs.3.24 Arba, following 3rd position, NIMB earned profit of Rs.2.83 Arba.

Sampling is done with the intention of spending less money, time, and effort. A total of 410 banking customers participated in the study; only 400 of them were deemed valid to be included in the analysis. These clients were chosen using a straightforward sampling method. Convenience sampling, or non-probabilistic sampling, was the method used for this investigation. Hands-on distribution of survey questions was done around the Kathmandu Valley to elicit answers from a range of responder groups. The participants in this study consented to participate in answering the questionnaire after being solicited as they entered the banking hall for business.

3.3 Nature and Sources of Data

Primary sources of data were used to collect and analyze the impact of e- banking services and customer satisfaction.

Primary Sources of data Collection

The major source of data for the research questions forms the basis of the study research. Primary data are first-hand observations made by the researcher in order to verify a hypothesis and subsequently serve as proof for claims made by the researcher. The researcher employed the questionnaire method to gather data in order to obtain primary data.

In addition to being informed of the purpose of the research and its primary goal, the respondents were asked to complete the questionnaire. This approach to data collection improved our knowledge of client satisfaction in Nepal's banking sector and e-banking services. The questionnaires were given out and collected at the respondent and researcher's convenience.

3.4 Data Collection Techniques

The process of obtaining information from specified respondents in order to address the research questions is known as data collection. The study used judgmental or purposive sampling technique to select the sample. The basic data formed the basis of this investigation. Observations, experiments, social surveys such as questionnaires and interviews are examples of primary data sources. The questionnaire develop and distribute through different social media like Facebook, Viber, Whatsapp, and Gmail and collected

responses from a customer of commercial banks in Nepal. The questionnaire method is employed in this study to collect data from participants. The questionnaire mainly included multiple-choice questions and Likert scale questions, which has a widely used rating scale that requires the respondent to indicate a degree of agreement or disagreement with each series of statements. The survey contains 30 questions using a five-point Likert scale for each question ranging from, “Strongly Disagree” to “Strongly Agree”, coded by 1 representing “Strongly Disagree” and 5 representing “Strongly Agree”

3.5 Method of Data Analysis

The frequency table was utilized, which provides an easy-to-read and interpret summary of each category's percentage. In addition to the descriptive analysis, the hypothesis was validated by correlation and regression analysis.

Descriptive Analysis

The respondents' demographic features, customer satisfaction, and e-banking services were all explained using descriptive statistics. The variables were described using calculated mean, standard deviation, frequencies, and percentages.

Reliability and Validity

Refers to the consistency or repeatability of a measurement. A reliable measure will produce similar results when repeated under the same conditions. Refers to the accuracy of a measure, meaning whether it measures what it is intended to measure. A valid measure accurately reflects the construct or concept it is designed to assess. A measure can be reliable but not valid (e.g., a scale that always gives the same wrong weight). A valid measure is always reliable (e.g., a scale that gives the correct weight consistently). It's important to strive for both reliability and validity in research to ensure the quality and trustworthiness of findings.

Correlation Analysis

The correlation coefficient was used to depict the association of e-banking services and customer satisfaction.

Regression Analysis

To examine the impact of e-banking services and customer satisfaction regression model was used. The model is specified as:

$$Y (CS) = \beta_0 + \beta_1 (ATM) + \beta_2 (IBS) + \beta_3 (MBS) + \beta_4 (CCS) + \beta_5 (DCS) + \beta_6 (EFTS) + e$$

Where,

Y=Customer Satisfaction

X₁, X₂, X₃, X₄ = ATM, IBS, MBS, CCS, DCS, EFT

β_0 = Regression Constant

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \dots$ = Regression Coefficient of ATM, IBS, MBS, CCS, DCS, EFT respectively.

e = Error

3.6 Research Framework and Definition of Variables

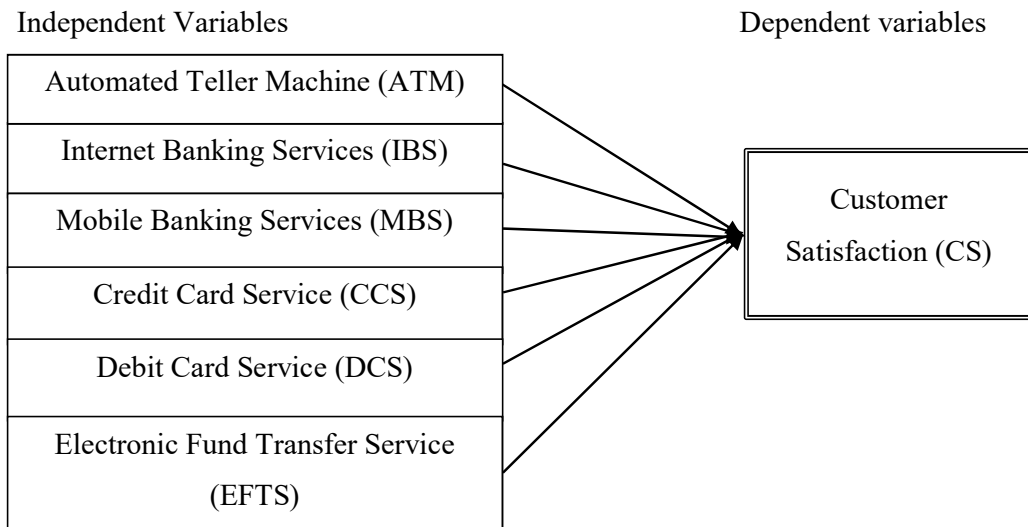


Figure 1

Research Framework

(Source: Tharanikaran, 2017)

Automated Teller Machine (ATM) Services

Automated teller machines suggest increased bank productivity during business hours. An automated teller machine, or ATM, is a type of telecommunications equipment that allows users to access financial services without the assistance of bank workers. The benefits of

ATMs were covered by Sasidharan and Mathews (2008). These benefits included access to a variety of banking operations, fund withdrawals, bill payments, fund deposits, access to statements, and round-the-clock banking services. ATMs are also practical, cutting-edge, safe, and serve as value-added services that draw in a large number of new customers.

Internet Banking Services

Internet banking is the process of delivering all standard banking services—such as checking one's balance, obtaining a statement of records, transferring trust to another record, paying charges, presenting and paying bills electronically, and so on—through the use of the internet rather than physically visiting a bank (Nath, 2003). Online services offered by internet banking include checking balances, ordering checks, getting instructions for moving money, creating accounts, and seeing account balances, as well as making payments, paying bills, transferring cash, saving and investing money, and printing money.

Mobile Banking Services

Wireless applications and short message services (SMS) technology allow access to mobile banking. There are numerous advantages to mobile banking. For example, the issue of not being able to access physical branches has been resolved as a result of these useful and affordable services. As a result, most people have access to financial services. Furthermore, because customers can complete transactions whenever they want, mobile phones have increased the quality of services (Schierholz & Laukkanen 2014).

Debit Card Services

When a customer uses a debit card to make a transaction, money is taken straight out of their checking account. Using debit cards to make purchases straight from your savings eliminates the need to carry cash or paper checks. Furthermore, when issued by well-known payment processors like Visa or Master Card, debit cards also known as check cards offer many of the same consumer protections as credit cards in addition to the convenience of the former.

Credit Card Services

A credit card is a small, rectangular piece of metal or plastic that is given out by a financial institution and allows its users to borrow money to pay for products and services. Credit card users are required to repay the amount borrowed, plus interest, and any other costs that

were agreed upon. Compared to other consumer loans, credit cards have higher annual percentage rates (APRs). Usually, a month after a purchase is made, interest is applied to the outstanding balance on the card.

Electronic Fund Transfer Services

An electronic funds transfer (EFT) is a digital transfer of money between bank accounts. It can be used to send and receive payments without the need for cash or paper checks. Electronic funds transfer (EFT) is the transfer of money from one bank account to another, either within a single financial institution or across multiple institutions, via computer-based systems.

The funds transfer process generally consists of a series of electronic messages sent between financial institutions directing each to make the debit and credit accounting entries necessary to complete the transaction. An electronic funds transfer starts when the sending customer send an electronic instruction with the purpose of making payment to the beneficiary or the receiving customer.

Customer Satisfaction

Customer satisfaction (CSAT) measures how happy customers are with a company's products, services, or overall customer experience. Businesses often measure customer satisfaction with surveys, feedback analytics, and other tools. Customer satisfaction is a measure of how happy customers are with a company's products, services, and overall experience. It's a key indicator of customer loyalty and retention.

Chapter IV

Results and Discussion

4.1 Demographic Study of Respondents

A demographic study of respondents refers to the analysis of the characteristics of individuals who participate in a survey, research study, or data collection process. This analysis helps researchers understand the composition of the sample and how various factors may influence the study's results. It includes; Age, gender, education level, occupation, income level, marital status, ethnicity or race, geographic location, religion, household size.

4.1.1 Profile of Respondents

In research, a respondent profile outlines the key characteristics of the individuals participating in a study, such as demographics, work experience, and other relevant details, to understand the sample's makeup and ensure it aligns with the research goals.

Table 2

Demographics characteristics of respondents

Respondent Character	No. of Responses	Percentage
Gender		
Male	136	34
Female	264	66
Total	400	100
Age		
Under 25	8	2
26-35	336	84
36-45	40	10
46-55	12	3
Over 55	4	1
Total	400	100.00
Present Position		
Manager	4	1
Officer	80	20
Worker	188	47
Other	128	32
Total	400	100.00
Earning Per Month		
Up to Rs.41000	12	3
Rs.41001- Rs.50000	64	16
Rs.50001- Rs.75000	280	70
Above Rs.75000	44	11
Total	400	100.00

Source: Survey

Out of 400 respondents, (53.72 percent) were males while the rest (46.28 percent) were females. The number of male respondents were 101 and the number of female respondents were 87. The majority of the respondents, i.e. (46.81 percent), were between 26 to 35 years of age, followed by respondents under the age of 25 (37.23 percent), 36 to 45 years (9.57 percent), 46 to 55 years (4.26 percent), and over 55 years (2.13 percent).

In terms of job position or designation, the majority of the respondents, i.e. (44.68 percent) belonged to the worker position, followed by Officers who were (20.74 percent), Managers were (18.62 percent), and people working in the other designation other than the stated one were (15.96 percent) and majority of the respondents has a per month income of under Rs.41000 (35.64 percent) followed by per month income between Rs.25,001 to Rs50,000 (33.51 percent), per month income between Rs.50,001 to Rs.75,000 (19.15 percent) and per month income of more than Rs.75,000 (11.70 percent).

4.1.2 Banking Industry Experiences of Respondents

The following table gives the break-up of respondents on the basis of their banking industry experience.

Table 3

Banking experience-wise distribution of respondents

Banking Experience	No. of Respondents	Percentage (%)
Up to 5 Years	4	1
5 Years to 10 Years	280	70
10 Years to 15 Years	64	16
15 Years to 20 Years	40	10
Above 20 Years	12	3
Total	400	100.00

Source: Primary data

From the table 3, it can be understood that 31 respondents constituting 16.49% of the total sample size of 400 have up to 5 years banking experience, 56 respondents making up for 29.79% of the total 400 have banking experience between 5 to 10 years, 57 respondents representing 30.32% of the total sample have banking experience between 10 to 15 years,

30 respondents representing 15.96% of the total sample have banking experience between 15 to 20 years. Further, it can be inferred that 14 respondents constituting 7.45% of the total 400 respondents have banking experience above 20 years.

4.2 Descriptive Statistics

Brief informational coefficients known as descriptive statistics are used to provide an overview of a specific data collection, which may be a sample or a representative of the full population. Measurements of central tendency and measurements of variability (spread) are the two categories into which descriptive statistics fall. The standard deviation, variance, minimum and maximum variables are measures of variability, whereas the mean, median, and mode are measures of central tendency.

Customer Satisfaction

Customer satisfaction, or CSAT, gauges how well a business meets customer expectations with its products, services, and overall customer experience. It shows how well your products or services are accepted by clients, which is a useful indicator of the state of your business.

Table 4

Descriptive Statistics of Customer Satisfaction

Statement	Mean	Std. Deviation
I am satisfied about the E-banking services of this bank.	2.7475	1.14762
I will strongly recommend other to use online banking of this bank.	2.9100	1.15985
I will continue to use electronic banking services in the future of the bank.	3.1500	1.12279
I am satisfied about time management of this bank.	2.6450	1.30316
The e-banking platform is easy to navigate and use.	2.5975	1.32661
I feel valued as a customer by the company.	2.9050	1.18722
I am satisfied with the speed of service delivery.	2.8700	1.11634
I am satisfied about time management of this bank.	2.8575	1.14037
The quality of the banking service is satisfactory.	2.7675	1.08922
The customer support team was helpful and responsive.	2.5625	1.09732

Source: SPSS Output

Table 4 shows the descriptive statistics of customer satisfaction. There are five statements are used to measure the variables. Each of respondents submitted their responses in the five point Likert scale.

Automated Teller Machine (ATM)

Thanks to automated teller machines (ATMs), which are electronic telecommunications devices, customers of financial institutions can conduct financial transactions, such as cash withdrawals, deposits, funds transfers, balance inquiries, and account information inquiries, at any time and without having to speak with bank employees directly.

Table 5

Descriptive Statistics of ATM

Statement	Mean	Std. Deviation
The ATM makes cash withdrawal very convenient.	2.9300	1.11049
There is less queuing the ATM.	3.0775	1.15318
Transaction on the ATM is secured.	2.9775	1.14686
ATM does not share my personal information with others.	2.9700	1.14778
I frequently use ATM services for cash withdrawals and other banking transactions.	2.8000	1.16765
Transaction on the ATM is reliable.	2.7900	1.26685
ATMs are conveniently located and accessible when needed.	2.8050	1.08855
ATM transactions are processed quickly and efficiently.	2.8275	1.15806
ATMs usually have sufficient cash to meet my withdrawal needs.	2.8575	1.11593
The fees associated with ATM transactions are reasonable and transparent.	2.6875	1.10811

Source: SPSS Output

Table 5 shows the descriptive statistics of ATM services. There are five statements are used to measure the variables. Each of respondents submitted their responses in the five point Likert scale.

Internet Banking Services

Customers of banks and other financial organizations can use internet banking, also known as online banking, e-banking, or virtual banking, to carry out a range of financial operations via the financial institution's website. Internet banking, also known as online banking or e-banking or Net Banking is a facility offered by banks and financial institutions that allow

customers to use banking services over the internet. Customers need not visit their bank's branch office to avail each and every small service.

Table 6

Descriptive Statistics of Internet Banking Services

Statement	Mean	Std. Deviation
Transaction via internet banking secured.	2.9150	1.10491
Transaction via internet banking is reliable.	3.2925	1.23522
Internet banking does not share my personal information with others.	3.1475	1.23676
Statement can be requested through internet banking.	3.0650	1.22864
I find Internet banking more convenient than visiting a physical branch.	2.9525	1.26857
I find it convenient to pay bills and transfer funds using internet banking.	3.5100	1.31690
Internet banking saves me time compared to visiting a bank branch.	3.3050	1.18342
I feel that internet banking provides a secure platform for financial transactions.	3.2225	1.32944
I rarely experience technical issues or downtime while using internet banking services.	3.0975	1.17322
The bank provides adequate support for resolving issues related to online banking.	3.0700	1.40358

Source: SPSS Output

Table 6 shows the descriptive statistics of internet banking services. There are five statements are used to measure the variables. Each of respondents submitted their responses in the five point Likert scale.

Mobile Banking

Wireless applications and short message services (SMS) technology allow access to mobile banking. There are numerous advantages to mobile banking. For example, the issue of not being able to access physical branches has been resolved as a result of these useful and affordable services. Mobile banking is a service provided by financial institutions that allows customers to conduct banking transactions remotely using a mobile device, typically a smartphone or tablet, through a dedicated app.

Table 7
Descriptive Statistics of Mobile Banking

Statement	Mean	Std. Deviation
Mobile banking makes banking very convenient.	2.7975	1.17044
Transaction on mobile banking is secured.	2.8475	1.16947
Mobile banking is easy to use.	3.1525	1.14784
Transactions on mobile banking is reliable.	2.5975	1.26669
Mobile banking does not share my personal information.	2.5800	1.32021
I feel confident that financial information is secure.	2.8225	1.13544
I prefer using mobile banking over traditional banking methods for most transactions.	2.8050	1.13366
I am well-informed about the features and benefits of mobile banking services	2.8750	1.11691
I can access all essential banking services through my mobile banking application.	2.8900	1.13186
I am satisfied with the overall experience of using mobile banking services.	2.7075	1.14465

Source: SPSS Output

Table 7 shows the descriptive statistics of mobile banking services. There are five statements are used to measure the variables. Each of respondents submitted their responses in the five point Likert scale. The overall mean of mobile banking services is 2.424 and standard deviation is 0.848.

Credit Card Services

A credit card is a small, rectangular piece of metal or plastic that is given out by a financial institution and allows its users to borrow money to pay for products and services. Credit card users are required to repay the amount borrowed, plus interest, and any other costs that were agreed upon. Credit card services are financial facilities that allow users to make purchases on credit, borrowing money up to a predetermined limit, and repaying the borrowed amount later. Credit cards are issued by banks and financial institutions, providing a line of credit that cardholders can use for various purchases, including online and offline payments.

Table 8
Descriptive Statistics of Credit Card Services

Statement	Mean	Std. Deviation
Credit card helps to buy in advance and pay later.	2.9600	1.12319
Credit card is very convenient while travelling.	2.9750	1.15008
Online/Living expenses payment is easier.	2.9375	1.16705
The e-banking platform provides easy access to credit card services.	2.8900	1.11175
I receive timely alerts and notifications for every credit card transaction.	2.7375	1.13879
The e-banking system provides sufficient fraud protection for credit card transactions.	2.6550	1.17449
I am satisfied with the speed and efficiency of online credit card payments.	2.7125	1.09903
I can easily set spending limits and manage my credit card through e-banking.	2.8475	1.11010
The process of applying for a credit card through e-banking is simple and user-friendly	3.0975	1.17108
The customer support for online credit card services is responsive and helpful.	2.9375	1.12328

Source: SPSS Output

Table 8 shows the descriptive statistics of credit card services. There are five statements are used to measure the variables. Each of respondents submitted their responses in the five point Likert scale. The overall mean of credit card services is 2.312 and standard deviation is 0.807.

Debit Card Services

When a customer uses a debit card to make a transaction, money is taken straight out of their checking account. Using debit cards to make purchases straight from your savings eliminates the need to carry cash or paper checks. Furthermore, when issued by well-known payment processors like Visa or Master Card, debit cards—also known as "check cards"—offer many of the same consumer protections as credit cards in addition to the convenience of the former.

Table 9
Descriptive Statistics of Debit Card Services

Statement	Mean	Std. Deviation
I feel that my bank provides adequate security measures for debit card transactions.	2.8850	1.11799
Transaction via debit card is reliable.	2.9125	1.13714
Debit card is easy to carry.	2.9225	1.20421
I am aware of the fraud protection measures provided by my bank for debit card transactions.	2.8200	1.11162
I can easily update or change my debit card PIN through e-banking services.	2.7050	1.17321
The debit card services provided by my bank are easy to use for online and offline transactions.	3.0725	1.21900
Debit card transactions are processed quickly without unnecessary delays.	3.2050	1.30470
The bank has effective fraud protection measures in place for debit card transactions.	3.1675	1.26231
My debit card is widely accepted at ATMs and POS machines for cash withdrawals and payments	3.2600	1.17296
I am satisfied with the overall debit card services provided by my bank.	3.0800	1.32021

Source: SPSS Output

Table 9 shows the descriptive statistics of debit card services. There are five statements are used to measure the variables. Each of respondents submitted their responses in the five point Likert scale. The overall mean of debit card services is 2.447 and standard deviation is 0.815.

Electronic Fund Transfer Services

The point-of-sale (POS) terminal, an electronic device used for credit and debit card transactions at retail venues including shops, restaurants, and hotels, is one of the most common ways to offer new banking services. Customers can use their credit or debit cards to conduct financial transactions around-the-clock thanks to it. Electronic Fund Transfer (EFT) services are transactions that move funds electronically between different financial institutions, bank accounts, or individuals, encompassing various methods like online banking, ATMs, and debit card transactions.

Table 10

Descriptive Statistics of Electronic Fund Transfer Services

Statement	Mean	Std. Deviation
Electronic Fund transaction is very secured and reliable.	3.3325	1.19395
Electronic fund transfer is the fast processing with reasonable cost.	3.3700	1.20280
Most efficient digital payment method in the Electronic fund transfer.	3.4825	1.20346
I receive clear instructions when initiating an EFT transaction.	3.3925	1.19667
My bank provides sufficient information regarding transaction limits and charges for EFT services.	3.3625	1.23690
I find Electronic Fund Transfer (EFT) services in e-banking convenient for making financial transactions.	3.3900	1.26368
EFT services in e-banking ensure secure and reliable transactions.	3.3410	1.20956
The processing time for EFT transactions is satisfactory.	3.1550	1.24291
I am aware of the transaction limits and fees associated with EFT services in my bank.	3.1475	1.24685
I feel confident using EFT services due to strong authentication and security measures.	3.0375	1.23690

Source: SPSS Output

Table 10 shows the descriptive statistics of electronic fund transfer services. There are five statements are used to measure the variables. Each of respondents submitted their responses in the five point Likert scale. The overall mean of electronic fund transfer services is 2.927 and standard deviation is 1.337.

Table 11

Descriptive Statistics of Factors of Customer Satisfaction

Statement	Mean	Std. Deviation
Customer Satisfaction	2.8012	.77736
ATM	2.8723	.78072
Internet Banking	3.1578	.72998
Mobile Banking	2.8075	.77692
Credit Card Services	2.8750	.77166
Debit Card Services	3.0030	.65919
Electronic Fund Transfer	3.2995	.76696

Source: SPSS Output

Table 11 shows descriptive statistics of factors of customer satisfaction. There are five statements are used to measure the variables. Each of respondents submitted their responses in the five point Likert scale. The overall mean of customer satisfaction factor is 2.584,

which is greater than 2, with standard deviation 0.709. This shows good organizational performance in context of customer satisfaction.

4.2.1 Measurement of reliability

Cronbach's alpha was used in this study to evaluate the consistency of item scales for continuous dependent and independent variables. The findings of the Likert scale questions' alpha value reliability test are displayed in table 1.

Table 12

Reliability Test

Variables	Cronbach's Alpha	No. of Items
Customer Satisfaction	0.755	10
ATM	0.745	10
Internet Banking	0.523	10
Mobile Banking	0.817	10
Credit Card Services	0.782	10
Debit Card Services	0.870	10
Electronic Fund Transfer	0.707	10

Source: Self-Survey, 2025

The statistics on reliability for the data obtained from the questionnaire survey are shown in Table 12. The Cronbach's alpha values for customer satisfaction, ATM, internet banking, mobile banking, credit card services, debit card services, and electronic fund transfer are 0.755, 0.745, 0.523, 0.817, 0.782, 0.870 and 0.707, in that order. The numbers demonstrate that the data from the questionnaire survey is trustworthy enough to continue with the analysis.

4.2.2 Relationship between factors of Satisfaction

The effectiveness of customer satisfaction was found out from the respondents through the usage of a single sample t-test. Six variables in total a debit card, credit card, Internet banking, mobile banking, and electronic fund transfers were taken into consideration as the primary determinants of the efficacy of customer satisfaction in this study.

Table 13

Correlation between effectiveness of Characteristics and Literacy

Variables	CS	ATM	IBS	MB	CCS	DCS	EFT
Satisfaction	1						
ATM	.610**	1					
P-Value	.000						
Internet Banking	.547**	.494**	1				
P-Value	.000	.000					
Mobile Banking	.828**	.660**	.598**	1			
P-Value	.000	.000	.000				
Credit Card	.843**	.787**	.541**	.715**	1		
P-Value	.000	.000	.000	.000			
Debit Card	.578**	.666**	.628**	.616**	.604**	1	
P-Value	.000	.000	.000	.000	.000		
Electronic Fund	.208**	.288**	.235**	.237**	.306**	.400**	1
P-Value	.000	.000	.000	.000	.000	.000	

Source: SPSS Output

The effective character is significantly correlated with the satisfaction. Different factors have shown the significant correlation. At first, the ATM has positive significant relation with coefficient 0.610. The relationship of the internet banking and customer satisfaction are significant with positive coefficient ($r = 0.547$). Also, it was found to be strongly positively correlated with significant at 1% level of significance followed by that with mobile banking and customer satisfaction ($r = 0.828$, $p\text{-value} = 0.000$). Similarly, credit card ($r = 0.843$, $p\text{-value} = 0.000$), debit card ($r = 0.578$, $p\text{-value} = 0.000$) and electronic fund transfer ($r = 0.208$, $p\text{-value} = 0.000$) shows positively correlated significant relation with customer satisfaction.

4.2.3 Regression Analysis

The impact of ATM, Mobile Banking, Internet banking, debit card, credit card, electronic fund transfer on customer satisfaction are analyzed in this section.

Table 14

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.921a	.848	.845	.30573

a. Predictors: (Constant), EFT Average, IBS Average, ATM Average, MB Average, DCS Average, CCS Average

Table 15

ANOVA Table

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	204.375	6	34.062	364.410	.000b
	Residual	36.735	393	.093		
	Total	241.109	399			

a. Dependent Variable: CS Average

b. Predictors: (Constant), EFT Average, IBS Average, ATM Average, MB Average, DCS Average, CCS Average

Table 16

Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	.214	.088		2.426	.016
ATM	-.299	.035	-.300	-8.565	.000
Internet Banking	-.023	.029	-.022	-.803	.423
Mobile Banking	.501	.031	.500	16.078	.000
Credit Card	.708	.036	.702	19.649	.000
Debit Card	.102	.037	.086	2.752	.006
Electronic Fund	-.069	.022	-.068	-3.133	.002

a. Dependent Variable: Customer Satisfaction

Source: SPSS Output

The multiple correlation coefficient ($R = 0.921$; $R\text{-square} = 0.848$) shows that 84.80% of the variation in customer satisfaction is explained by six variables viz. ATM, Mobile Banking, Internet banking, debit card, credit card, electronic fund transfer. The ANOVA for regression model shows that ($F = 364.410$; $p\text{-value} = 0.000$). So, there is positive and significant impact of ATM, mobile banking credit card and debit card on customer satisfaction at 1% level of significance while negative and significant impact of electronic

fund transfer on satisfaction. Similarly, there is insignificant and negative impact of internet banking services on customer satisfaction.

4.3 Discussions

The first purpose of this study was to analyze the present situation of commercial banks under E-Banking of Nepalese commercial banks. The finding of this study shows descriptive statistics of customer satisfaction. This findings shows overall standard deviation of credit card services is low compare to others which is similar to the findings of Akhter (2022) and Meria et al. (2023) but contradict to the findings of Vadivelu Tharanikaran (2017). The reason for such findings was because customers of the various banks viewed credit card services as a mean of avoiding long queues at the banking hall and a solution to driving through the numerous traffic of the city just to move to a commercial.

The second objective of the study was to examine the relationship of ATM, Mobile Banking, Internet banking, debit card, credit card and electronic fund transfer and customer satisfaction of Nepalese Commercial Bank. ATM has positive significant relation while the relationship of the internet banking and customer satisfaction are also significant with negative coefficient. This study is similar to the findings of Hossain (2021) and Wuisan and handra (2022) but contradict with the findings of Choudhury and Bharttachargee (2016). Also, it was found to be strongly positively correlated with significant at 1% level of significance followed by that with mobile banking and customer satisfaction. Similarly, credit card and debit card shows positively correlated significant relation with satisfaction. Additionally, the finding of this study support the findings of Choudhury and Bharttachargee (2016) but against with the findings of Wadesango (2020).

Lastly the third objective is to assess the impact of ATM, Mobile Banking, Internet banking, debit card, credit card and electronic fund transfer on customer satisfaction of Nepalese commercial banks. ATM has positive significant impact with customer satisfaction and this findings is related to the findings of Nuseir et al. (2023) while Sambaombe (2022) didn't support this findings. Also, Debit card services is positively significant with customer satisfaction but internet banking is positively insignificant with customer satisfaction which shows similar with the findings of Choudhury &

Bharttachee (2016). Likewise, internet banking and electronic fund was found to be negatively impact on customer satisfaction where internet banking is insignificant and electronic fund is significant at 0.01 level of significance. Moreover, mobile banking is positively significant on customer satisfaction which is similar to the findings of Wadesango (2020) but contradict to the findings of Kashyap et al. (2024).

Chapter V

Summary and Conclusion

This chapter includes the concluding summary of the whole thesis. The key findings based on the study objectively have been elaborated in this chapter. The further research conclusion and implications have also been included in this chapter.

5.1 Summary

The concept of job happiness is intricate and multidimensional, and it can have diverse meanings for individuals. Motivation and job satisfaction are typically associated, however the exact nature of this relationship is unclear. Motivation and satisfaction are two different things. Rather than being a product, customer happiness is more of an attitude. This study's primary goals are to determine the effects of independent variables such as ATMs, Internet banking, mobile banking, credit card, debit card, and electronic fund transfer services—on customer satisfaction, as well as to investigate the relationship between the independent and dependent variables and understand the composition of those satisfaction variables. The research employs descriptive statistics, specifically regression analysis and correlation. Correlation analysis and regression analysis are analyzed through SPSS version 23 to know the relation and effect of independent variable to dependent variables.

The study has used casual and descriptive research design. The population of the study was all employees of Airlines industry. Simple random and judgmental purposive sampling method was used to select the sample Airlines industry and conventional sampling method was used to select the respondents. The sample size was 400 respondents. Quantitative data were collected from employees.

To collect the information the researcher used the well-structured questionnaire. The questionnaire divided into seven segments. The first segment was related to demographic information of the respondents. The second segment was designed to measure work life balance on Airlines services variables. And last segment designed to collect the suggestion for improvement of work life balance. To measuring customer's experience and satisfaction the five point Likert scale was used.

During the survey work, questionnaire were distributed through the researcher himself and requests the respondents to manage proper time for the fill up the questionnaire. Data analysis was done using SPSS software version 23. The frequency, percentage were used to describe the nature of data. Mean and standard deviation were used to measure the experience of employees on Airlines service variables. And regression analysis was used to the describe relationship between independent variables and work life balance. The hypotheses were tested through the ANOVA results.

To collect the information the researcher used the well-structured questionnaire. The questionnaire divided into seven segments. The first segment was related to demographic information of the respondents. The second segment was related to interpersonal services of the financial institution. The third segment of questionnaire was related to ATM services of the financial institution. The fourth segment was related to mobile banking services of the financial institution. The fifth segment was related to complaint handling/problem-solving services of the financial institution. The sixth segment was designed to measure work life balance on banking services variables. And last segment designed to collect the suggestion for improvement of work life balance. To measuring customer's experience and satisfaction the five point Likert scale was used.

During the survey work, questionnaire were distributed through the researcher himself and requests the respondents to manage proper time for the fill up the questionnaire. Data analysis was done using SPSS software version 23. The frequency, percentage were used to describe the nature of data. Mean and standard deviation were used to measure the experience of employees on banking service variables. And regression analysis was used to the describe relationship between independent variables and work life balance. The hypotheses were tested through the ANOVA results. Finally, this study succeeded to find the impact of banking services on level of work life balance. The main theme of the thesis is satisfaction of the financial institutions employees towards quality of banking services. It can be seen that all banking service variables have positive impact on work life balance.

5.2 Conclusion

The study investigated the practices of e-banking services delivery in banking industry. Along with that, the study had also analyzed the impact of electronic banking services

delivery on customer satisfaction in Nepalese private commercial bank. Based on the result of the descriptive analysis study it can be concluded that the majority of current-banking users are between the age of 31 up to 40, gender wise the female are the dominant users, occupationally salaried and students are the majority users and educational level diploma and above diploma holders are the majority users and the banks do not keep full record of their customer profile in standardized way for easy reference. There is a relationship between demographic characteristics and customer satisfaction in e-banking than ordinary banking. Specifically, the study inferred that ATM, internet banking services, mobile banking services, credit card services, debit card services and electronic fund transfer services were insignificant with customer satisfaction. Further, the findings deduced that CCS has the lowest variation of 0.807 and ATM has highest variation of 0.848. This shows that banking institutions in Nepal have been providing credit card services more than other services. In a nutshell, e-banking services has impact in improving customer satisfaction, impact in reducing waiting time for customers to get bank services and impact in improving customers to control their account movements.

Furthermore, it can be inferred that while employees of financial institutions in Kathmandu are moderately satisfied with ATM services and the handling of complaints and problem-solving procedures provided by the institutions, they are satisfied with interpersonal services and mobile banking services. Additionally, getting a debit or ATM card is a major source of dissatisfaction for staff of financial institutions in Kathmandu. There is a mild suggestion made to the staff to enhance the quality of banking services offered by Kathmandu's financial institutions. Employees also recommend raising the standard of ATM services to include more necessities.

5.3 Implications

- i. Allocate funds for replicating the study in other banks due to varied challenges and advantages.
- ii. The complexities of e-banking patronage are extensive, requiring further research beyond a single study.
- iii. Despite numerous advantages, challenges hinder its optimal usage for both the public and banks.

- iv. Bankers should identify consumer demographics most sensitive to e-banking satisfaction.
- v. Banks should work to expand e-banking usage across different demographics (gender, age, education, vocation).
- vi. Expansion of e-banking is necessary to reduce customer visits to bank halls and minimize operational costs.
- vii. Banks should conduct official training sessions for customers to enhance understanding of e-banking services and associated fees.
- viii. Ensure true 24/7 service availability by addressing network issues, power failures, and technical problems.
- ix. Increase efforts to maintain and improve customer satisfaction.
- x. Conduct empirical surveys to measure customer satisfaction levels.

References

- Adhikari, S. (2019). Effect of innovation and technology on productivity and profitability in Nepalese commercial banks. *Journal of Management*, 7(1), 116-121.
- Agbada, J. (2008). Technological innovations and banking in Ghana: An evaluation of customer's perceptions. *Journal of Management and Economics*, 13(1), 42-58.
- Ahmad, A. M., & Al-Zu'Bi, H. A. (2021). E-banking functionality and outcomes of customer satisfaction: An empirical investigation. *International Journal of Marketing Studies*, 3(1), 11-27.
- Ahmad, A.M. (2011). Improving customer service in the banking industry-case of Ghana commercial bank (GCB)-Ghana. *International Business Research*, 5(4), 14-22.
- Akhter, A., Karim, M. M., Jannat, S., & Islam, K. A. (2022). Determining factors of intention to adopt internet banking services: A study on commercial bank users in Bangladesh. *Banks and Bank Systems*, 17(1), 125-136.
- Avasthi, O. A. (2001). Internet banking functionality in Nigeria and outcomes of customer satisfaction: An empirical Investigation. *International Journal of Academic Research in Business and Social Sciences*, 4(8), 17-31.
- Bhosale, M. & Nalawade, S. (2022). Customer loyalty and electronic-banking: A conceptual framework (Industry trend or event). *Journal of global information management*, 9(3), 5-15.
- Chaudhary, K. & Bharttacharya, P. (2016). Customer acceptance of online banking in developing economics. *Journal of Internet banking and commerce*, 13(1), 19-30.
- Connell, B. (2018). Varying impacts of electronic banking on the banking industry. *The Journal of Internet Banking and Commerce*, 20(2), 33-41.
- Datta, S. (2010). Customer perception and emergence of electronic banking: A case study on Kolkata. *International Journal of Banking, Risk and Insurance*, 3(1), 144-162.
- Devkota, N. (2021). Factors influencing attitude toward online advertising in Kathmandu valley. *PYC Nepal Journal of Management*, 14(1), 17-30.
- Devkota, N., Paudel, U. R., Bhandari, U., & Parajuli, S. (2020). Bankers' Communication Know-how: An Analysis from Commercial Banks of Kathmandu valley. *Quest Journal of Management and Social Sciences*, 2(1), 66-80.
- Earl, M. J. (2000). Evolving the e- business. *Business Strategy Review*, 11(2), 33-38.

- Fontinelle, A. (2019). E-Banking effects on customer satisfaction: The survey on clients in Jordan banking sector. *International Journal of Marketing Studies*, 10(2), 151-158.
- Garau, C. (2002). Online banking in transition economies: The implementation and development of online banking systems in Romania. *International Journal of Bank Marketing*, 20(6), 285-296.
- Gautam, J. (2015). The Financial Performance of Pure Play Internet Banks. *Journal of Management*, 11(2), 17-28.
- Ghimire, L. (2022). Digital banking adoption by customer of commercial banks in Nepal. *Journal of Management*, 1 (1), 1-62.
- Hamisah, A. A. (2013). The impact of electronic banking services on customer satisfaction in the Sudanese banking sector. *International Business Research*, 11(6), 102-124.
- Hasan, I., & Cahyaningrum, D. (2024). Factors that influence customer loyalty through customer satisfaction mediation at Bank Syariah Indonesia (BSI). *Journal Ecogen*, 7(2), 265-276.
- Hossain, M. I. (2021). Effects of e-banking adoption on the financial performance of state-owned commercial banks in Bangladesh. *Information Resources Management Journal (IRMJ)*, 34(4), 1-20.
- Hovland, T. C., Harvey, A. & Sherif, M. (1987). Total quality management as competitive advantage: A review and empirical study: *Strategic Management Journal*, 16(1), 15-37.
- Kandel, K. (2022). *Rebranding Effect of Nepalese Commercial Banks on Customer Perception* (Doctoral dissertation).
- Kandel, K. (2024). Effect of logo change on brand attitude: a case study of Mahindra at Nepal electricity authority. *Journal of Business and Social Sciences Research*, 9(1), 99-115.
- Kashyap, S., Gupta, S., & Chugh, T. (2024). An empirical assessment of customer satisfaction of internet banking service quality—Hybrid model approach. *International Journal of Quality & Reliability Management*, 41(1), 360-391.
- Kaur, C. & Kiran, R. (2014). Customer relationship management with special reference to Bangladesh. *Journal of international business research*, 19(1), 54-67.

- Kaynak, A. S. (2015). The impact of mobile banking on customer satisfaction. *International Journal of Trend in Scientific Research and Development, Special Issue, 15(2)*, 21-23.
- Khatri, J. R. (2017). Internet banking in Nepal: Use and Challenges. *Banking Journal, 3(2)*, 57-77.
- Koirala, U. (2019). E- Banking in Nepal- past, present and future! *The Nepalese Management Review, 16(1)*, 190-195.
- Kwarteng, U. (2015). Impact of electronic banking on customer satisfaction. *International Journal of Trend in Scientific Research and Development, Volume-2(Issue-5), 31(4)*, 978-982.
- Maharjan, A. (2018). Impact of electronic banking service delivery on customer satisfaction in Nepalese private commercial banks. *Journal of Management, 1(1)*, 1-55.
- Meihami, B. (2013). Modernization of banking system of Chechen republic in the 21st century. *International Journal of Management, 2(1)*, 23-45.
- Meria, L., Zanubiya, J., & Juliansah, M. A. D. (2023). Increasing consumers with satisfaction application based digital marketing strategies. *Startupreneur Business Digital (SABDA Journal), 2(1)*, 12-21.
- Merrchat, B. (2018). Digital marketing strategy for affinity marketing. *Digital Multimedia, 12(1)*, 1142-1160.
- Michael, Z. (2006). Measuring consumer satisfaction in internet banking. *Communications of the ACM, 51(4)*, 47-51.
- Miryala, T. (2015). Changes in the internet banking sector- UK. *Internet research on electronic networking applications and policy, 10(1)*, 19-35.
- Moraru, A., & Duhnea, C. (2018). E-banking and customer satisfaction with banking services. *Strategic Management, 23(3)*, 3-9.
- Mukharjee, D. (2004). Deconstructing consumer behavior: Theory and practice. *Journal of Consumer Behavior, 1(1)*, 9-21.
- Narayana, N. & Paramashi, O. (2013). An empirical investigation of the Turkish consumer's acceptance of internet banking services. *International journal of bank marketing, 19(4)*, 156-165.
- Nath, P. (2003). A model of trust in online relationship banking. *International Journal of Bank Marketing, 21(1)*, 5-15.

- Nsouli, T., & Schaechter, J. (2002). Consumer value creation in mobile banking services. *International Journal of Mobile Communications*, 3(4), 325-329.
- Nuseir, M. T., El Refae, G. A., Aljumah, A., Alshurideh, M., Urabi, S., & Kurdi, B. A. (2023). Digital marketing strategies and the impact on customer experience: a systematic review. *The Effect of Information Technology on Business and Marketing Intelligence Systems*, 1(1), 21-44.
- Oo, H. K. (2024) Customer satisfaction and customer loyalty towards photography services in Yangon. *Yangon University of Economics*, 11(2), 1-57.
- Otech, A., Ibok, V. A., & Nto, L. L. (2019). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49(4), 41-50.
- Pandey, S. (2023). Impact of online banking on the profitability of Nepalese commercial banks. *Perspectives in Nepalese Management*, 12(3), 301-317.
- Parajuli, N. (2018). Study of the Customer Behavior in Buying Groceries Online after the Global Pandemic in Nepal. *Nepalese Journal of Business*, 11(2), 158-175.
- Paudel, U. R. (2020). What determines customers 'perception of banking communication? An empirical evidence from commercial banks of Nepal. *Global Economy Journal*, 20(4), 1-21.
- Pikkarainen, M. D. (2004). Achieving customer satisfaction, loyalty, and retention through strategic Alignment. *Customer Retention in the Automotive Industry*, 5(2), 117-139.
- Pun, E. (2018). E-Banking and its Impact on Financial Performance in Nepalese Commercial Bank. *Journal of Management*, 5(2), 1-41.
- Purnamasari, E., Praditya, N. W. P. Y., & Verano, D. A. (2024). Prediction Analysis of Customer Satisfaction Levels at Company XXX Using the Classification Method. *Journal Information of Technology*, 11(3), 159-164.
- Rizqiyah, N. L. & Suriyanto, P. (2024). The influence of service quality, customer satisfaction and company image on customer loyalty At PT X. *Innovation Research Journal*, 5(1), 41-50.
- Robinson, I. (2000). Bureaucratic versus non-bureaucratic organization: Explaining form, function, and change in New Forms of Organizing. *Management and Organizational Studies*, 2(1), 33-40.
- Salhiel, H. A. (2013). Impacts of service quality on customer satisfaction: Study of online banking and ATM services in Malaysia. *International Journal of Trade, Economics and Finance*, 3(1), 1-9.

- Sambaombe, J. K. (2022). An analysis of the impact of online banking on customer satisfaction in commercial banks based on the TRA model (a case study of Stanbic bank Lusaka main branch). *Open Journal of Business and Management*, 10(1), 369-386.
- Sarlak, G. (2010). The impact of service quality delivery on customer satisfaction in the banking sector in Riyadh, Saudi Arabia. *International Journal of Business Administration*, 5(4), 12-27.
- Schierholoz, K., & Laukkanen, W. (2014). Customer satisfaction towards e-banking services. A study of selected banks in Gulbarga. *International Journal of Scientific Research*, 2(1), 35-38.
- Segal, B. & Woods, L. (2018). Customer satisfaction on banking services in Indian growing economy Nainital district. *SSRN Electronic Journal*, 10(2), 15-28.
- Sekraran, U. (2015). E-banking services quality and customer loyalty: The moderating effect of customer service satisfaction: Empirical evidence from the UAE banking sector. *Management Science Letters*, 1(1), 3663-3674.
- Shrestha, S., Devkota, N., Paudel, U., Bhandari, U., & Parajuli, S. (2020). Bankers' communication know-how: an analysis from commercial banks of Kathmandu valley. *Quest Journal of Management and Social Sciences*, 2(1), 80-99.
- Singh, A. (2018). E-banking and customer satisfaction with banking services. *Strategic Management*, 23(3), 3-9.
- Singhal, D. (2008). A Study on customer perception towards Internet banking: Identifying Major Contributing Factors. *The Journal of Nepalese Business Studies*, 11(1), 101-111.
- Subedi, P. P. (2019). Customer satisfaction in retail banking services in Nepal. *PYC Nepal Journal of Management*, 12(1), 45-58.
- Tharanikaran, V., Sritharan, S., & Thusyanthy, V. (2017). Service quality and customer satisfaction in the electronic banking. *International Journal of Business and Management*, 12(4), 67-83.
- Thomas, J. C. (2019). The Impacts of electronic banking on customer satisfaction in Ethiopian Banking Industry (The Case of Dashen and Wogagen Banks in Gondar City). *SSRN Electronic Journal*, 11(1), 1-27.
- Upadhyay, M. P. (2022). Impact of Relationship Marketing on Brand Loyalty with Reference to Nepalese Commercial Banks. *Journal of Balkumari College*, 11(1), 11.

- Wadesango, N., & Magaya, B. (2020). The impact of digital banking services on performance of commercial banks. *Journal of Management Information and Decision Sciences*, 23 (2), 343-353.
- Wilson, N., & Christella, R. (2024). An empirical research of factors affecting customer satisfaction: A case of the Indonesian e-commerce industry. *DeReMa Journal Management*, 14(1), 21-44.
- Wise, Z. & Ali, R. T. (2009). Customer perceived value, satisfaction, and loyalty: The role of switching costs. *Psychology and Marketing*, 21(10), 799-822.
- Woldie, A. (2008). E-Banking practices and customer satisfaction. A Case Study in Botswana. *SSRN Electronic Journal*, 22(2), 235-267.
- Wuisan, D. S., & Handra, T. (2022). Maximizing online marketing strategy with digital advertising. *Startupreneur Business Digital (SABDA Journal)*, 2(1), 22-30.
- Yoon, C. (2010). Online Banking Application Customer Satisfaction Measure. *Journal of Economics Science*, 20(1), 46-50.
- Zanubiya, J., Meria, L., & Juliansah, M. A. D. (2023). Increasing Consumers with Satisfaction Application based Digital Marketing Strategies. *Startupreneur Business Digital (SABDA Journal)*, 2(1), 12-21.
- Zeer, I. (2024). Factors Affecting Customers Satisfaction: Mediating Role of Citizenship Behavior. *International Journal of Academic Research in Business and Social Sciences*, 14(4), 1609-1622.

APPENDIX

Survey questionnaire on the Customer Satisfaction with E-Banking Services of Private Commercial Banks in Nepal

Dear Respondent,

I am a student of Shanker Dev College Affiliated to Tribhuvan University, pursuing a Master's in Business Studies. The questionnaire is intended to help the researcher get information on the impact of digital banking services on customer satisfaction. The purpose of the study is purely academic and information given will be treated with the highest degree of confidence. You have been selected as a key respondent for this study. Kindly, complete the questionnaire to enable the researcher complete the study. Please tick the answer which represents your opinion on the subject.

I appreciate your participation in this effort.

Thank you,

Nita Neupane

Section A: Demography of respondents

1. Please select your gender

Male Female

2. Please select your age (in years)

Under 25 26-35 36-45 46-55 Over 55

4. Please select your job position

Manager Officer Worker Other

5. Earning Per Months

Up to Rs.25000 Rs250001 to 50000 Rs.50001 to 75000 above Rs.75001

6. Banking Experience

Up to 5 years 5 to 10 years 10-15 Years 15-20 Years Above 20 years

Section B: Customer Satisfaction with E-Banking Services of Private Commercial Banks in Nepal

Please mark a tick in an appropriate response that best describes your view and perception towards performance and the satisfaction. [1- Strongly Disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree]

1. Customer Satisfaction

S.N.	Statement	1	2	3	4	5
A	I am satisfied about the E-banking services of this bank.					
B	I will strongly recommend other to use online banking of this bank.					
C	I will continue to use electronic banking services in the future of the bank.					
D	I am satisfied about time management of this bank.					
E	The e-banking platform is easy to navigate and use.					
F	I feel valued as a customer by the company.					
G	I am satisfied with the speed of service delivery.					
H	I am satisfied about time management of this bank.					
I	The quality of the banking service is satisfactory.					
J	The customer support team was helpful and responsive.					

2. ATM (Automated Teller Machine)

S.N.	Statement	1	2	3	4	5
A	The ATM makes cash withdrawal very convenient.					
B	There is less queuing the ATM.					
C	Transaction on the ATM is secured.					
D	ATM does not share my personal information with others.					
E	I frequently use ATM services for cash withdrawals and other banking transactions.					

F	Transaction on the ATM is reliable.
G	ATMs are conveniently located and accessible when needed.
H	ATM transactions are processed quickly and efficiently.
I	ATMs usually have sufficient cash to meet my withdrawal needs.
J	The fees associated with ATM transactions are reasonable and transparent.

3. Internet Banking Services

S.N.	Statement	1	2	3	4	5
A	Transaction via internet banking secured.					
B	Transaction via internet banking is reliable.					
C	Internet banking does not share my personal information with others.					
D	Statement can be requested through internet banking.					
E	I find Internet banking more convenient than visiting a physical branch.					
F	I find it convenient to pay bills and transfer funds using internet banking.					
G	Internet banking saves me time compared to visiting a bank branch.					
H	I feel that internet banking provides a secure platform for financial transactions.					
I	I rarely experience technical issues or downtime while using internet banking services.					
J	The bank provides adequate support for resolving issues related to online banking.					

4. Mobile banking

S.N.	Statement	1	2	3	4	5
A	Mobile banking makes banking very convenient.					
B	Transaction on mobile banking is secured.					
C	Mobile banking is easy to use.					
D	Transactions on mobile banking is reliable.					
E	Mobile banking does not share my personal information.					
F	I feel confident that financial information is secure.					
G	I prefer using mobile banking over traditional banking methods for most transactions.					
H	I am well-informed about the features and benefits of mobile banking services					
I	I can access all essential banking services through my mobile banking application.					

J	I am satisfied with the overall experience of using mobile banking services.
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5. Credit Card Services

S.N.	Statement	1	2	3	4	5
A	Credit card helps to buy in advance and pay later.					
B	Credit card is very convenient while travelling.					
C	Online/Living expenses payment is easier.					
D	The e-banking platform provides easy access to credit card services.					
E	I receive timely alerts and notifications for every credit card transaction.					
F	The e-banking system provides sufficient fraud protection for credit card transactions.					
G	I am satisfied with the speed and efficiency of online credit card payments.					
H	I can easily set spending limits and manage my credit card through e-banking.					
I	The process of applying for a credit card through e-banking is simple and user-friendly					
J	The customer support for online credit card services is responsive and helpful.					

6. Debit Card Services

S.N.	Statement	1	2	3	4	5
A	I feel that my bank provides adequate security measures for debit card transactions.					
B	Transaction via debit card is reliable.					
C	Debit card is easy to carry.					
D	I am aware of the fraud protection measures provided by my bank for debit card transactions.					
E	I can easily update or change my debit card PIN through e-banking services.					
F	The debit card services provided by my bank are easy to use for online and offline transactions.					
G	Debit card transactions are processed quickly without unnecessary delays.					
H	The bank has effective fraud protection measures in place for debit card transactions.					
I	My debit card is widely accepted at ATMs and POS machines for cash withdrawals and payments					
J	I am satisfied with the overall debit card services provided by my bank.					

7. Electronic Fund Transfer Services

S.N.	Statement	1	2	3	4	5
A	Electronic Fund transaction is very secured and reliable.					
B	Electronic fund transfer is the fast processing with reasonable cost.					
C	Most efficient digital payment method in the Electronic fund transfer.					
D	I receive clear instructions when initiating an EFT transaction.					
E	My bank provides sufficient information regarding transaction limits and charges for EFT services.					
F	I find Electronic Fund Transfer (EFT) services in e-banking convenient for making financial transactions.					
G	EFT services in e-banking ensure secure and reliable transactions.					
H	The processing time for EFT transactions is satisfactory.					
I	I am aware of the transaction limits and fees associated with EFT services in my bank.					
J	I feel confident using EFT services due to strong authentication and security measures.					

Thank You!

PAPER NAME

CUSTOMER SATISFACTION WITH E-BANKING SERVICES OF PRIVATE COMMERCIAL BANKS IN NEPAL

AUTHOR

Nita Neupane

WORD COUNT

16979 Words

CHARACTER COUNT

98787 Characters

PAGE COUNT

56 Pages

FILE SIZE

112.2KB

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May 15, 2025 12:04 PM GMT+5:30

REPORT DATE

May 15, 2025 12:05 PM GMT+5:30

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