

**CONSUMERS' PERCEPTION TOWARDS INTERNET
BANKING ADOPTION OF NEPALESE COMMERCIAL
BANKS**

A Dissertation Submitted to the office of the Dean, Faculty of
Management in partial fulfilment of the requirements for the Master's
Degree

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CERTIFICATION OF AUTHORSHIP

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled “**Consumers' Perception towards Internet Banking Adoption of Nepalese Commercial Banks**”. The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor has it been proposed and presented as part of requirements for any other academic purpose.

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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ABBREVIATIONS

ANOVA	:	Analysis of variance
CONV	:	Convenience
EU	:	Ease of Use
GDPR	:	Gross domestic product growth rate
NPESE	:	Nepal Stock Exchange
PK	:	Prior Knowledge
PU	:	Perceived Usefulness
RISK	:	Risk
SD	:	Standard Deviation
Std.	:	Standard deviation

ABSTRACT

This research delves into the adoption of internet banking among a sample of 404 customers in Nepal's Chandannath municipality, employing a methodology that combines descriptive, causal, correlation, and regression analyses. The study aims to comprehensively understand the dynamics influencing the adoption of internet banking in this specific context. The participant demographic is revealed as diverse, highlighting the imperative for tailored strategies. Notably, the study emphasizes the need for a balanced gender distribution, targeting the prime working-age population, and addressing the unique characteristics of undergraduates in the service sector. Correlation analyses further unveil the interconnected nature of variables such as Perceived Usefulness, Ease of Use, Risk, Prior Knowledge, and Convenience. These findings underscore the necessity for a holistic and user-centric approach to enhance overall adoption rates. The regression analysis reinforces these insights, indicating a robust model where each predictor variable significantly shapes the decisions of participants regarding internet banking adoption. This suggests that factors such as the perceived usefulness of the service, its ease of use, risk considerations, prior knowledge, and the overall convenience play pivotal roles in influencing customer adoption.

Keywords: Ease of Use, Risk, Perceived Usefulness, Prior Knowledge, Convenience and Adoption of Internet Banking

CHAPTER I

INTRODUCTION

1.1 Background of the study

The foundation of any economy is a strong and well-functioning financial system. If a nation's financial system is adaptable and strong enough to handle the new threats presented by technology and other internal and external forces, the economy of that nation may run smoothly and trouble-free. Information technology (IT) plays a major role in the acquisition, processing, and distribution of information to all relevant users in banking, which has traditionally been a highly information-intensive business. IT is essential for processing information, but it also gives banks a means of differentiating their offerings. In order to maintain their loyal and exacting clientele and to provide quick, dependable, and easy services, banks must continuously innovate and adapt.

In an effort to increase their market share and reach a wider audience, several banks are increasing their physical presence in order to increase their market and geographic reach. Some have thought of a more inventive way to provide their banking services using the Internet, a brand-new media. Since its launch in 1969, the Internet has transformed from being the exclusive purview of academics and computer geeks to being a widely used means of communication. The advent of Internet technology, namely the World Wide Web, has brought forth novel approaches of doing business. Banks are using the internet more and more to supply their goods and services to clients and to get instructions. Although the variety of goods and services provided by various banks varies greatly in terms of both their content and complexity, this kind of banking is often referred to as "Internet banking" (Malhotra et al., 2014).

User adoption of technology has emerged as a critical or important indicator of the efficacy or success of that technology. The last several decades have seen a revolutionary growth in information and communication technology that has had a significant influence on both organizations and people. A revolutionary technical advancement, internet banking has the power to alter the composition and character of the financial industry. Compared to conventional bank branches, online banking is a new, technologically based, convenient, affordable, and time-saving route for clients.

Financial institution clients may conduct financial transactions on a secure website by using internet banking, often known as online banking or e-banking.

Customers must be registered users of the institution and have a password for client authentication in order to utilize a BFI's online banking service. Customers may examine account data, pay bills, and transfer money online with the use of the internet banking system. Through online banking, a client has unlimited access to their account at any time. 24*7 banking, which was formerly limited to banking hours, has been made possible with e-banking. New methods of managing everyday financial transactions have been made possible by advancements in electronic banking technology, particularly when it comes to internet banking.

As information and communication technology advances, the banking industry globally offers Internet banking to provide clients convenient access to financial services. In addition to bringing about new methods of managing financial transactions, internet banking is crucial to the long-term viability of banks. Because it is convenient and flexible, online banking is growing in popularity. Customers who use internet banking are not limited to typical branch working hours; instead, they may conduct their banking operations online at any time of day using a laptop or personal computer. In comparison to conventional branch banking, internet banking is a cutting-edge delivery channel that provides shorter wait times, more spatial convenience, and a much reduced cost structure. In addition to saving banks' operating expenses, online banking increases client retention and satisfaction. Because of this, banks and clients find Internet banking to be very appealing, and they are increasingly embracing new technology.

These days, online banking, or Internet banking, is the most common kind of electronic banking. Customers who use this kind of banking may arrange electronic bill payments, transfer money, and check the balances in their accounts. Customers may trade stocks or mutual funds, seek for loans, and even examine real photographs of their checks and deposit slips using online banking services. Bank to bank differences exist in the services offered for online banking. The phrases online banking and Internet banking are often used interchangeably in literature. These days, the primary medium for electronic banking is the Internet. For both banks and their clients, internet banking has many advantages (Karjaluoto, 2002). Cost savings, expanding into new market sectors, efficiency, improving the bank's image, and improved client pleasure are the key

advantages for banks (Jayawardhena & Foley, 2000). Internet banking provides fresh value to clients as well. Banking is no longer restricted by time or location thanks to the Internet. Customers have comparatively simple access to their accounts throughout the globe, seven days a week, twenty-four hours a day. Customers may access a comprehensive array of services, including those that aren't accessible in branches. One benefit of online banking is that it saves customers from having to make the trip to and from a bank location. Online banking offers ease, accessibility, and time and money savings in this manner (Karjauloto, 2002).

However, there are some risks associated with the current trend of doing all transactions entirely online that should be avoided from the start and might wind up costing a lot of money down the road. The connection with the banker that was traditionally fostered by regular visits to the branch office is negatively impacted by online banking. Having a personal connection with bank employees is helpful when asking for a specific service that may not be offered to the general public or a quicker loan approval. Additionally, there are a lot of intricate transactions that can only be resolved in person with the manager and cannot be completed via online banking. Online communication isn't precise enough or clear enough to aid with a lot of complicated service problems. The main weakness in the online banking system is security, which is something that regular users must watch out for. The cyberworld is constantly open to clever actors attempting to hack. These accounts are quite vulnerable to hacking. As a result, a lot of clients are still hesitant to use online banking.

BFI's rely heavily on technology and software. Every day, technology advances, and these advancements have an impact on the conventional bank service model. Even while banks provide a variety of services, including ATMs, credit cards, debit cards, and mobile banking, many consumers are not aware of them, despite the fact that taking use of these services is crucial for the growth of the economy. In addition to these services, one of the key components of this globally interconnected and quickly evolving period is the use and comprehension of Internet banking.

1.2 Problem Statement

Over the last ten years, internet banking has been embraced by millions of people in Nepal as the standard for financial transactions. Due to their constantly hectic schedules and lack of time to visit banks, Nepalese customers have become major fans of online

banking because of how simple it is to monitor their account, make payments, and transfer money between accounts. Numerous non-transactional elements that are highly helpful to customers are also offered by online banking. Though this banking method offers many advantages, it also has certain inherent risks that you should be aware of in order to safeguard your funds and prevent further issues.

Trust Issue: Due to the risks involved, customers do not depend on online banking. Problem with Service Quality: One of the main challenges facing banks is meeting consumer expectations, which dictate that all services should be provided via websites or real-time integration of dispersed resources. Accessibility Issue: When the bank's server or system has to be shut down for maintenance or upgrades, customers have issues. Customers also anticipate round-the-clock assistance and services from banks. Other Concerns: arranging for new IT infrastructure, bank guarantees, etc. Customers in the present day have high expectations for banking services, particularly online banking, therefore meeting these demands is essential to attracting and retaining internet banking clients and to maintaining a competitive edge. Accordingly, banks should reevaluate their IT plans for providing financial services (Tan & Teo, 2000).

On the other hand, personal financial services are being created and provided in a fashion that is quickly altered by Internet technology. In an effort to streamline operations and save expenses, banks in Nepal are now attempting to implement Internet-based e-banking systems. Even with all of their efforts to create more user-friendly and better Internet banking systems, clients continued to mostly ignore these services and, despite their availability, they were undoubtedly significantly underutilized. As a result, it's important to comprehend how people embrace online banking and to pinpoint the variables that may influence their propensity to employ it. The significance of this question is in the hint it contains, which has assisted the banking sector in developing marketing plans to support future developments in Internet banking systems.

Three common reasons why customers do not trust internet technology are concerns about service provider reliability, system security, and dependability.

Hence, this study tries to focus on the following issues:

- a. What is the level of perceived status towards perceived usefulness, ease of use, risk, prior knowledge, and convenience of internet banking adoption?

- b. Is there relationship between perceived usefulness, ease of use, risk, prior knowledge, convenience and adoption of internet banking?
- c. Does perceived usefulness, ease of use, risk, prior knowledge and convenience have impact of adoption of internet banking?

1.3 Objectives of the study

The main objective of this research is to analyze customer adoption of internet banking in Nepal. To comply with the primary objectives, the following specific objectives are set:

- a. To assess the level of perceived status towards perceived usefulness, ease of use, risk, prior knowledge, and convenience of internet banking adoption.
- b. To examine the relationship between perceived usefulness, ease of use, risk, prior knowledge, convenience and adoption of internet banking.
- c. To analyze the impact of perceived usefulness, ease of use, risk, prior knowledge and convenience on adoption of internet banking.

1.4 Research Hypotheses

Numerous studies have shown the beneficial effects of perceived utility and usability on the adoption of new technologies and information systems. Therefore, users are more likely to adopt an application that they believe is helpful and easy to use than one that they believe is more complicated. Applying these to internet banking leads to the following hypotheses:

H1: Perceived usefulness has significant impact on adoption of internet banking services.

H2: Ease of use has significant impact on adoption of internet banking services.

H3: Risk has significant impact on adoption of internet banking services.

H4: Prior knowledge significant impact on adoption of internet banking services.

H5: Convenience has significant impact on adoption of internet banking services.

1.5 Rationale of the study

This work makes several contributions to the corpus of knowledge. First, the research's findings have shown how well-informed Nepalese consumers are regarding online banking. BFIs may use this information to create a marketing strategy for the Internet

banking services they provide in an effort to reach an untapped market. Secondly, the research contributes to the comprehension of the benefits and drawbacks of online banking, enabling clients to use bank-provided Internet banking services with caution. Last but not least, the study's findings have highlighted the variables that influence whether or not Internet banking is used in Nepal. Based on these findings, bankers may devise plans to address these issues and encourage non-users to become users.

Broadly speaking, the goal of this research is to better understand how consumers create attitudes and behave by examining the world of electronic banking via their perspective, as suggested by the title, "Customer adoption of Internet Banking in Nepal." Finding the individual traits associated with online banking adoption is essential for market targeting and may assist banks in designing products and creating marketing strategies that drive service uptake. These pertain to adoption intention in this research, which is characterized as a person's choice to test out Internet banking services within a certain time frame.

1.6 Limitations of the Study

There are always some limitations present while performing any work. The basic limitations of this research are as follows:

- a. Because Kathmandu is Nepal's capital and has significantly more advanced communication and information technology than other cities, the research was limited to this city.
- b. The study's sample size is 404; a larger sample size might provide better findings.
- c. Both convenience sampling and non-probability sampling were used in the research.
- d. Because of time and resource constraints, the research has only employed a small number of causal instruments.
- e. In actuality, the survey ought to have included every client of Nepal's main banks. However, for a variety of reasons, including time and resource constraints, this is too challenging and impractical. Since each respondent's unique viewpoint is gathered, the information they supply may vary depending on the situation. Because of this, more data is required in order to make generalizations.

CHAPTER II

LITERATURE REVIEW

2.1 Conceptual Reviews

With internet banking, a customer may use the internet to monitor his account or do any bank-related tasks from home or the workplace, at any time or location. As a result, the customer does not need to physically visit the bank in order to do a variety of transactions via a direct online connection. Internet banking, which is one of the most significant kinds of electronic banking, is really just the act of doing financial activities online. Internet banking, according to Sara (2007), is a collection of technology tools that enables a financial institution to provide its customers with the ability to conduct banking transactions using a computer and an Internet connection.

Reviewing research studies and other pertinent propositions in the relevant field of study is an essential and required step in research works that allows for the knowledge of all important data, conclusions, and inconsistencies as well as the doing of more research.

PC banking gave rise to internet banking, often known as online banking. Internet banking conducts 15 banking activities, such as cash transfers, bill payments, checking and savings account balance viewing, mortgage payments, financial instrument purchases, and certificate of deposits, using the internet as the delivery method. A consumer who uses online banking accesses their accounts using browser software, which is installed on the bank's World Wide Web server rather than the user's own computer. A "net internet bank," according to net banker, is one that offers retail clients access to their account balances and some transactional features over the Internet. Virtual, cyber, net, interactive, and Web banks are other names for internet banks. Almost instantaneously, the bank changes account information and transaction history online. This banking concentration has advantages as well as disadvantages. Although it is claimed that the internet offers a secure means of conducting financial transactions via the internet and for electronically moving money between bank accounts, banks still need to improve their security procedures to guarantee the confidentiality and privacy of online transactions. Thanks to this technology, every banking task that was

previously completed in person at a bank may now be completed online using a computer (Sahayogee, 2018).

Business risk is the possibility that misguided tactics, insufficient funding, or changes in the competitive or economic landscape would prevent the company from achieving its goals. It has to do with the credit institution's capacity to take advantage of market possibilities in order to meet its operational goals. The use of rapidly expanding technologies and significant developments in the banking industry have also altered conventional strategic risks. A bank that has jumped headfirst into adopting new technologies in an attempt to become a pioneer runs the danger of losing its investment since information systems depreciate quickly. Additionally, there's a chance that a significant investment in some goods or services won't be accepted by the final consumers. However, in a market where competition is fierce and consolidating its position, it runs the danger of slipping to the bottom if it continues to adopt a more conservative stance (Solanki, 2012).

Information and communications technology, or ICT, is a general word that encompasses all forms of communication, whether basic or advanced, such as satellite systems, radio, television, mobile phones, computers, and network hardware and software. Employed in the creation, dissemination, processing, and modification of information (Marcelle, 2001). In addition to mobile phones and televisions, information and communication technology (ICT) encompasses many other systems we use on a daily basis, such as banking, shopping, and transportation. Technical advancement is a major factor in economic growth, citizen engagement, and job creation in nations of all development levels (Hanna, 2010).

Technology on the internet has the power to drastically alter banks and the financial sector. According to a radical viewpoint, traditional approaches of developing and providing bank services have been superseded by the internet (DeYoung, 2001). The variety of financial services that banks provide, how they provide these services, and the ensuing financial performances of these banks are all anticipated to be impacted by the increasing accessibility of online banking. Depending on how profitable they deem such a service delivery system to be, banks will decide whether to adopt this new technology and if this extreme viewpoint turns out to be accurate. Moreover, a great deal of curiosity and conjecture on the effects of the internet on the banking sector have

been sparked by industry analyses that highlight the possible effects of internet banking on cost savings, revenue growth, and risk profile of the banks (Berger, 2003).

Online banking has become a critical tool for increasing productivity and profitability by substituting labor-intensive, paper-based procedures with automated ones, so reducing costs and improving control over operations. However, there isn't much proof that these possible alterations have occurred, according to data analysts. However, as of late, empirical research has shown that 16 online banking does not independently affect the likelihood of banking (Malhotra & Sing, 2009).

Online banking entails carrying out financial operations, including account inquiries, statement printing, money transfers, payment for products and services, etc., using electronic devices like computers and the internet (World Wide Web) to avoid going to a banking center. Internet banking considerably facilitates e-banking commerce, which is mostly utilized for payment processing. Currently, the most popular online payments are for consumer bills and airline tickets purchased through the merchant's website. Internet banking also uses the electronic card infrastructure for executing payment instructions and for the final settlement of goods and services over the internet between the merchant and the customer (Littler, 2006).

E-commerce is drastically changing how businesses communicate with one other, with consumers, and with governments. The technology created to enhance online business transactions have advanced at a similarly rapid pace. E-commerce has the potential to significantly increase the benefits of trade for developing economies (WTO, 2013). Together with strong consumer confidence, the expanding usage of smartphones, tablets, and the internet has allowed these products to keep evolving and increasing. The exponential growth of social media in recent years has led to a more engaged consumer-business relationship, which facilitates online transactional transactions (Khan, 2016).

History of Internet Banking

With the introduction of electronic money, electronic banking began to take off at the start of the 1980s. In 1958, American Express released the first widely used plastic card. Years later, in 1968, eight banks introduced the "Bank Americard," which made use of the global VISA network. Six French banks issued a "carte bleu" the same year. "Home banking" was first used by banking and financial organizations in the US and Europe

in 1980. Additionally, clients were able to contact machines and use the phone thanks to the internet and significantly more sophisticated computers (Sara, 2007).

However, this service was first made available to consumers in 1981 with the release of the automated teller machine (ATM). In 1986, France Telecom installed reader devices on public phones to scan memory cards containing the personal information of the cardholder, which were to be converted into bank cards in 1992. The United States witnessed the debut of internet banking, or "Security Bank," in the mid-1990s, namely in 1995. In 2001, Wells Fargo and Citibank launched their online services. In 1997, DBS Bank launched its online banking service for the first time in Singapore. After it came UOB and OCBC. Soon after, one by one, all of the top banks launched their online banking (Ehab, 2001).

Benefits of Internet Banking

The internet banking has several benefits for both the banks and the customers. Firstly, the advantages for the bank has been presented, and then the customer's advantages has been discussed.

Benefits for the Banks

The Commercial Bank of Ethiopia's official website claims that doing electronic transactions online as opposed to in person results in far lower costs. List these advantages as follows:

- a. The efficiency with which information technology can complete a task.
- b. Assist in decision-making by giving the decision-makers information.
- c. Lower the price of administrative labor.
- d. Solving the spatial and temporal dimension challenge.
- f. How bribes and bureaucracy are handled.
- g. Creating an action plan and staying up to date on advancements.
- a. b. Making plans for next initiatives.
- h. Solving the daily tasks issue.
- i. Enhancing the productivity of administrative staff members.

Benefits to customers

Customers who use the online banking service save money and have a high level of comfort since they don't have to wait in line. Additionally, the client has 24/7 access to his or her account from anywhere at any time.

Online banking offers customers the convenience of simply paying their bills, transferring cash between accounts, and seeing their transaction history without requiring them to save their bill receipts. In actuality, the consumer may always monitor his account balance and transactions via Internet banking. Additionally, this feature safeguards his or her account (Sara, 2007).

Disadvantages of Internet Banking

Internet banking provides numerous benefits, but there are drawbacks as well that need to be considered. As to Rushdy (2007) and other researchers, the primary drawbacks of online banking are as follows:

While many websites give a demonstration of how to utilize online banking, not all of them do. Therefore, a client using online banking for the first time may encounter certain challenges.

Internet accessibility is provided.

- a. One major concern is transaction security. Unauthorized users may provide hackers with access to sensitive client data over the internet.
- b. Security of passwords is essential. Once a consumer receives their net banking password, they should update it and commit it to memory. If they don't, someone may unintentionally find out and use their account.
- c. You cannot access online banking if the bank's server is down.
- d. In between, a sluggish connection or a lack of internet access might make it impossible to determine if a transaction was accomplished.

Potential Drawbacks of Adopting the Internet Banking

Some people may believe that the use of electronic banking has solved all of the challenges, including the administrative and technological issues. The actual situation, however, paints a very different picture. To ensure that services are continuously provided in the best possible shape in order to maximize the use of time, money, and effort, electronic banking has required constant oversight and surveillance. Moreover, it is important to acknowledge that having backup plans or contingency plans in place is crucial in case electronic banking fails. Internet banking has numerous hurdles, two of which are the difficulty in establishing a sufficient infrastructure for electronic banks and the difficulties in updating the data so that clients can view the newest offerings.

One of the biggest challenges for consumers is the over dependence on credit cards for payments. Indeed, research indicates that sixty percent of internet consumers have doubts about the payment processor (Mosawe, 2002).

Furthermore, the effective use of online banking has been severely hampered by the proliferation of commercial fraud and inadequate communications security on the internet. Two major issues with online banking are the rise in online fraud and credit card account theft. Customers often complain about not being able to complete agreements and transactions when the client's identity is not verified. As a consequence, the banks suffer losses. In addition, the negative effects of online banking seem to make people afraid to use electronic banking due to mistrust, concerns about the security and privacy of their personal data, or a lack of cultural understanding (Kolthom, 2008).

Many complicated transactions cannot be resolved without a face-to-face conversation with the manager, which is not feasible with online banking. In actuality, many complaints and difficulties may only be resolved in person at the bank; they cannot be resolved online. Furthermore, internet communication is not precise or clear enough to assist in resolving a lot of complicated service problems.

As Rushdy (2007) points out, certain services like notarization and bank signature guarantees cannot really be completed online. The main weakness in the online banking system is security, which is something that regular users must watch out for. Even with all of the advanced encryption tools available to safeguard an account, there is still a chance that shrewd people in the online community may hack it. On the internet, viruses, hacker assaults, and other unwanted behavior are frequent occurrences. Another serious problem for those who only use online banking is identity theft. To combat identity theft, the majority of banks have mandated that scanned copies of cleared checks be posted online. When creating an account and using online banking services, it is crucial to review the security measures and policies of the bank (Kolthom, 2008).

Regarding ease for both the banker and the consumer, online banking is unquestionably a big step in the right direction. To prevent becoming a victim of dishonest people stealing information from the internet, it must be used with sufficient prudence (Kolthom, 2008).

Patterns of the Internet Banking

There are 3 basic images of electronic banks on the internet (Rushdy, 2007):

- a. Information Website: This is the bare minimum of online banking activity where the bank offers information on its services, products, and programs.
- b. Communication Website: The website packages applications or online forms, alters account data, and facilitates a communication channel between the bank and its clients.
- c. Transactional Website: The online platform via which the Bank conducted its operations and provided its services. Access and management of accounts, cash payments, bill payment, holding of all informational services, and account transfers inside the bank or with third parties are all made possible for the client.

Barriers Affecting the Adoption of Internet Banking

The implementation of an electronic banking project is impacted by a number of challenges and issues. In order to either prevent or discover solutions for the many environmental factors that may exist and impede the work plan, officials must create a strategy for the project's execution and maintain a thorough approach to them. Among these obstacles, according to the study, are:

- a. The local lack of capability in the telecommunications and information technology sectors.
- b. Insufficient funds to support e-banking initiatives in the case of poor financial results.
- c. The time it took to build the legislative and regulatory framework that served as the project's foundation for electronic banking.
- d. Customers' resistance to change because they worry about hackers.
 - a. Insufficient training of personnel at banks and branches.

2.2 Theoretical Review

The ideas around online banking have been examined in order to identify and characterize the notion of variables.

Theory of Reasoned Action

Comprising of purpose, social influence, and attitude factors to predict variables, the theory of reasoned action is a well-researched social psychology paradigm (Ajzen,

1975). It proposed that attitudes toward engaging in activity and subjective norms work together to establish behavioral intention. According to Davis (1986), attitude is defined as a person's subjective assessment of the outcomes multiplied by their conviction that carrying out a certain activity has resulted in a variety of negative or good feelings about that conduct. The term "subjective norm" describes a person's belief that the majority of those who matter to him believe he should or shouldn't engage in the particular conduct (Ajzen, 1975). The sole direct factor influencing actual conduct, according to the idea of reasoned action, is behavioral intention.

Technology Acceptance Model

The main objective of the Technology Acceptance Model (TAM), which was introduced by Davis (1986), is to explain the determinants of IT acceptance across a broad range of information technologies and user populations. TAM is an adaptation of the Theory of Reasoned Action (TRA), specifically modified for modeling user acceptance of information technology (Davis, 1986).

Furthermore, Davis (1986) proposed that perceived utility and perceived ease of use of the technology are the two main factors that influence adoption of IT. According to TAM, the following characteristics should be taken into consideration when forecasting the adoption of information technologies: external variables; perceptions about the technology (such as its perceived utility and ease of use); attitudes; behavioral intention; and, lastly, actual IT usage.

According to Davis (1986), the behavioral intention to use an information system is what determines whether or not it is used. This behavioral intention is impacted by users' attitudes about utilizing the system and their perception of its utility. Perceived ease of use also influences attitude and perceived usefulness. TAM states that increased perceived utility and perceived ease of Beliefs have a favorable impact on how people feel about an information system and how they utilize it. The mindset thus increases one's intention to utilize the system, which has a beneficial impact on how the system is actually used. TAM underpins the bridging function of beliefs and attitudes between external factors and behavioral intention, according to Davis (1986), even when external variables do not directly affect attitudes and behavioral intention to use.

Perceived Usefulness

Perceived usefulness is "the degree to which an individual believes subjectively that using a particular IT would enhance his or her job performance," according to Davis (1986). Stated differently, the person feels that using IT would improve the way he or she completes tasks related to their employment. A user's perception of an IT system's usefulness indicates whether or not they think utilizing it has been advantageous. A few requirements must be satisfied in order for the user to have such a conviction. First, even if the issue is not yet sufficiently understood to provide a solution, the user must have past experience with the specific problem, demonstrating at least some grasp of the nature of the problem. Usually, the user has to be familiar with information technology as well. The user may assess information technologies' capabilities and how and when they can be helpful based on this experience. While the user may not have much hands-on experience while forming early views, they may be aware of the potential of information technology via media (such as newspapers and television) or other channels of communication, such as friends (Jihyune, 2003).

Theory of Planned Behavior (TPB)

The theory of reasoned action (TRA), which is often used in social psychology and marketing research to describe the factors influencing intended actions, is extended by the theory of planned behavior (TPB) (Ajzen, 1975). The TRA and TPB both imply that behavioral intention has a direct impact on behavior. However, the TPB model supplements the notion of reasoned action with "perceived behavioral control."

Beliefs and Attitudes

According to TPB, a person's attitude toward an activity is determined by how they feel about it, whether positively or negatively. According to Hofstede (1997), people's attitudes are shaped by their beliefs about the object of their attitudes, which are in turn shaped by the attributes of the object of the attitude. According to (Ajzen, 1991), a person's positive or negative attitudes also rely on the predicted outcomes whether favorable or unfavorable that are connected to a particular item. People who think of online financial services as a handy tool for handling financial tasks, for instance, have a good attitude toward them.

Subjective Norm

Normative views, which allude to the perceived social pressure to engage in the action or not, have an impact on subjective norms (Ajzen, 1991). Normative belief may be connected to the opinion-forming power of social groupings, such friends and family. According to the TPB model, subjective norm is inversely correlated with perceived risk and positively correlated with desire to use Internet banking services. Subjective norm and attitude have a favorable relationship.

Perceived Behavioral Control

Perceived behavioral control, according to Ajzen (1991), is a reflection of perceptions about having access to the resources required to carry out an action. Two factors influence how behavioral control is viewed. The first component is "facilitating conditions," which represent the accessibility of the materials required to carry out an action. This might include having the time, money, abilities, or other specific resources available to carry out an activity.

The concept of "self-efficacy" is the second. It is a person's self-assurance in their capacity to carry out an action. According to Taylor and Todd (1995), resources such as time and money as well as people's "self-efficacy" are significant factors that influence behavioral intention and actual technology usage. Ajzen (1991) asserts that people who feel they have more resources perceive fewer obstacles and have more control over their behavior, whereas those who lack the necessary resources and confidence feel they have less control over their behavior, which lowers their intentions to engage in the behavior.

Prior internet Knowledge

The earlier use of technology, particularly computers, has a significant impact on the adoption of online banking by consumers. Therefore, a consumer's broad knowledge with technologies makes it easier for her to see the potential additional value that each technology has to offer. Previous computer experience is linked to email, the Internet, and PC usage. Karjaluoto et al. (2002) demonstrated how attitudes about computers and past computer-related experiences affect attitudes toward online banking as well as actual activities.

Demographic characteristics

It has also been shown that adoption of various financial channels, particularly online banking, is correlated with demographic characteristics. For example, individuals with high levels of education could be computer literate and have strong information processing abilities (Al-Ashban & Burney, 2001). Given the importance of these attributes in the context of online banking, a link between adoption and formal education is suggested. According to the findings published in Dover (1988), women were likewise less likely to use the internet for banking. According to research conducted in Turkey by Akinci et al. (2004), middle-aged customers are more likely to utilize online banking than younger or older users. Internet banking use is more common among upper middle class and well paid workers (Karjaluo et al., 2002).

Convenience

Convenience goods are a kind of consumer items that are widely available and require little time, effort, or both to obtain. Subsequent definitions of convenience have grown to include non-shopping activities, but they still emphasize resources like the consumer's time and effort while shopping for a product. It has to do with how the Internet's visual interface differs from phone banking (Al-Ashban & Burney, 2001). In addition, a broad range of services that are accessible, home access, global access, and round-the-clock service availability are considered to be major factors contributing to Internet banking's convenience (Yang et al., 2003). Internet banking is one of the primary determinants of transaction channel preferences and a major driver of customer satisfaction, making it a competitive advantage for service companies using new retailing channels (Yang et al., 2003). Ajzen (1991) discovered in his research that the best indicator of internet banking adoption was perceived convenience. Ultimately, the same research also showed that the factor that affected the adoption of all four of the e-commerce activities that were examined the most overall was perceived ease.

Perceived Risk

Perceived risk (PR) is defined by consumer behavior research as the customer's assessment of the unpredictability and possible negative outcomes of purchasing a product or service. Customers' perceptions of risk and their personal risk tolerance have a role in determining what they decide to buy (Nasri, 2011). Customers may also reject new technical services due to perceived risk, which is linked to system failure and

dependability. Additionally, customers are uneasy that technology-based service delivery has not performed as planned and lack faith in the speed at which issues may be resolved (Hofstede 2007).

2.3 Empirical Review

Information technology is seen to be the primary force behind the changes occurring globally, according to Safeena (2010). One of the newest and most cutting-edge services provided by banks is internet banking (IB). There has been a significant shift from conventional banking to online banking. The usage of automated teller machines (ATMs), telephone banking (teleshopping), direct bill payment, electronic cash transfers, and the ground-breaking internet banking all contributed to the development of e-banking. The purpose of this research is to ascertain how consumers see the usage of online banking.

The emphasis of Carranza et al. (2020) was co-creation of customer value. Within the financial sector, this circumstance is particularly noteworthy. Competitive advantages may be reinforced via e-banking operations. Nevertheless, customers' use of e-banking is still relatively new. In this regard, it is believed that the technology acceptance model (TAM) is crucial for understanding customer behavior when it comes to adopting a certain technology. This research examines the elements that encourage bank clients to use e-banking in order to streamline their banking services and aid in the value co-creation process, as per the TAM model. In order to provide readers a comprehensive grasp of how bank clients use e-banking, the authors investigate five key facets of the technology adoption model. An study using partial least squares structural equation modeling (PLSSEM) is performed to assess the suggested correlations between variables and the adoption of e-banking by clients.

The study done by Ali et al. (2021) aimed to emphasize the obstacles and difficulties associated with banking from the viewpoint of the clients. The secondary data included in this narrative literature review came from empirical research, review articles, and case studies that had already been published. To organize the current study, a review of recent studies was conducted. The information gathered from previous research projects was arranged into tables and figures in Microsoft Excel. Customers save their money in banks to cover future expenses, companies, and personal items, and they want to know that their resources are secure. As a result, transactional security must be given

top priority while addressing the e-banking problem. There are many consumers that use online banking services, thus when the topic of e-banking issues arises, the absence of e-banking-related promotional events should be addressed rather than client awareness. Recent technological advancements have had a variety of effects on corporate organizations, chiefly on operations, decision-making, marketing, and research, as well as management and control. An key factor in the nation's economic growth is its financial system. Traditional bank delivery of goods and services to customers occurs via a single channel of distribution: physical bank branches. Thanks to technology, banks may now provide their services both online and via physical locations. However, there are some obstacles that must be overcome before banks can offer online banking services. The research's contribution is to draw attention to the difficulties that the organizations have encountered. A primary constraint of the current study is that all aspects and challenges were not able to be covered; nevertheless, the remaining issues have been thoroughly studied and concentrated upon in future articles. The bank's goal is to ensure client safety, which is made possible by its technological and supporting expertise. The use of online banking is fraught with danger.

Naeem and Ozuem (2021) conducted qualitative research using a variety of sources and methodologies. People are spending more time on social media to share and absorb knowledge on carrying out their daily activities securely as a result of social distancing behaviors and remaining at home. The Covid-19 outbreak has caused physical threats to both retail bankers and clients, as well as disruptions to in-person banking operations. As a result, everyone has shifted to online banking in order to go on with daily activities like bill payment, grocery buying, and brand shopping. The current research is to investigate how the Covid-19 pandemic's scared atmosphere boosted online banking social behaviors and what difficulties various clients encounter while using the service. System developers and marketers may enhance their online banking applications to better meet the demands and expectations of various clientele by comprehending these encounters. The research has chosen to adopt a social constructionist epistemological stance and a relativist ontological viewpoint in order to comprehend many realities within the same context and how users of online banking navigate a frightening environment. The study included a variety of qualitative research techniques, including focus groups with executives from public and private sector banks, semi-structured interviews with online banking customers, and the Gibbs reflection cycle. Social media

players had an impact on how clients shifted from conventional to online banking by helping them comprehend the nature of uncertainty during the COVID-19 epidemic. Social media was used to spread the word about avoiding ATMs, exchanging cash for debit and credit cards with cashiers, and exchanging cash for these no longer secure choices for both bankers and consumers. This study's primary theoretical contribution is the integration of affordance of technology theory and social practice theory within the framework of online banking adoption. Practical ramifications for retail bank marketers and system developers have been covered in this research.

In addition to working on an online framework, Thilagaraj et al. (2021) expanded the nation's Internet network or made it more carefully equipped for innovation. Online frameworks in which the data enters the PC directly from the source (usually a workstation or terminal) or maybe in which the output data is sent directly to the source of the terminal. Before delving into the web-based financial framework, it is important to have a brief understanding of the Indian financial framework. There are three phases to the evolution of the financial industry. Phase I was the Early Period (1770–1969), Phase II was the Nationalization Period (1969–1991), and Phase III was the Liberalization or Banking Sector Reforms Period (1991–present) that saw the start of development and is still going strong today. Commercial banks, small money banks, payment banks, and co-employable banks are the four basic types into which the banks are categorized. The traditional Indian financial system is currently modernizing and shifting toward web-based financial systems. According to this perspective, the study focused on customer loyalty in online banking during COVID-19, and it was conducted in the Chengalpattu region. Fifty respondents were selected for this study based on their test results, and Google Structures was used to collect data on working experts and understudies. The data was analyzed using SPSS, and the results indicate that online banking offers greater benefits than traditional branch banking. Last but not least, this research may also result in large example sizes in other fields.

Kim & Jindabot (2022) discovered that a number of commercial activities, including banking, shopping, transfers, and payments, were carried out online. To facilitate these activities, a large number of banks in Cambodia offered their clients e-banking services. In the meantime, the banks might retain their clientele and earnings if they could provide these e-banking services to meet the demands of their clients. Therefore, it is important to identify the key variables affecting consumer satisfaction in the e-banking

services sector. Therefore, the purpose of this research is to examine how perceived risk (financial and performance risk) and perceived value affect customer happiness in e-banking and so explore how consumer satisfaction evolves. Convenience sampling was used in this research to collect data from respondents in sites that were convenient for them near banks, markets, supermarkets, universities, and workplaces. The surveys were sent to 700 respondents who were presently customers of commercial or retail banks in Cambodia and used online or mobile banking services. Furthermore, 546 valid replies were used to create the study's findings using structural equation modeling (SEM) analysis. The findings showed that although financial risk had no discernible impact on perceived value, performance risk was the primary factor influencing perceived value. Last but not least, performance risk and perceived value aside from financial risk had a substantial impact on customer satisfaction. Furthermore, even though perceived value and performance risk both had a large impact on customer happiness, it was far more successful to promote customer satisfaction by raising perceived value than by lowering performance risk.

According to Khan and Alhumoudi (2022), internet banking has become more and more prevalent in the contemporary economy, benefiting both consumers and businesses. 287 people provided the main data. Structure Equation Modelling (SEM), reliability, convergent, discriminate validity, and model fitness were obtained using SmartPLS 3 (Christian M. Ringle, Germany). Stratified random sampling was used. The results show that customer satisfaction and customer retention are significantly impacted directly by efficiency, dependability, and service quality. Additionally, it demonstrates the importance of effectiveness, dependability, and service quality while using customer satisfaction as a bridge to maintain customers. It is plausible that the collected data might have significance for banks and businesses seeking to go into the Indian market. The four primary pillars of E-banking identified by this study are customer happiness, service quality, efficiency, and dependability.

The clients were urged by Kavya and Rakesh (2022) to better themselves online. Customers in this case include the general public, the government, retailers, and entrepreneurs, who are assisted in having rapid access to the digital world. It facilitates the transition of society from conventional to digital banking, which raises the bar for achievement. It has been noted that the banking industry has prospered in the digital

age. This essay focuses on the many opportunities in the soon-to-be digitalized world. This study's primary emphasis is on how modern consumers see digital banking.

In recent years, Johri and Kumar (2023) have come to light, potentially revealing millions of documents. In 2021, the average cost of a data breach was an astounding \$4.24 million. This research looks at consumer knowledge of and satisfaction with cybersecurity in the context of Saudi Arabia's banking industry's digital revolution. This empirical research is predicated on information gathered from 355 Saudi Arabian banking clients. Three important facets of cybersecurity have been examined from a variety of angles: phishing, hacking, and cyberattacks. Studies have also been conducted on customer satisfaction with bank cybersecurity help and their expectations of technical support and cybersecurity services. The effects of cyberattack, phishing, hacking, cybersecurity support, and expectations on cybersecurity's technical knowledge on customer satisfaction are investigated using ANOVA and bivariate regression analysis. The findings demonstrate how the banking industry has benefited from digital transformation and how consumers gain from online services. However, consumers' comfort with digital transactions has been impacted by their increased knowledge of phishing, malware, and hacking operations. The findings also showed that clients want more assurance from banks on security-related issues, and that banks have to conduct frequent training initiatives to protect clients from online fraud. Banks might easily meet their long-term sustainability targets if they develop more safe cybersecurity management.

The number of online banking clients, or consumers, who do not need to visit a bank branch for their transactions, has been steadily rising in response to Isalam et al.'s (2023) demand for internet banking. This investigation's main goal is to determine the relationship between online bakery customers' satisfaction and several e-service quality factors, specifically as it relates to Bangladeshi commercial banks. This research is exploratory and quantitative in character, with data gathered from three commercial banks in Bangladesh using an online survey questionnaire. The survey took into account bank clients who often utilize internet and online banking services. The research used a non-probability sampling strategy with a sample size of 200. An item-wise question was measured using a five-point Likert scale, where 1 represents "strongly disagree" and 5 represents "strongly agree." The findings of this research show that customer satisfaction for online banking clients is significantly influenced by e-service quality

parameters. Four theories are put forward in the study, and the research accepts the hypothesis. In order to establish a relationship between e-service quality dimensions and online banking customer satisfaction, bank management should have made use of e-service quality dimensions like perceived security risk, perceived ease of use, perceived website quality, and perceived responsiveness, according to the findings of this study. The bank's management has been given some advice on creating strategies and policies to raise online clients' satisfaction levels.

2.4 Research Gap

We looked at the idea of electronic banking in this chapter. It became clear that the many definitions were dependent on the circumstances, setting, and context in which the idea was used. However, important phrases like "the exchange of information using 35 ICT tools to foster good customer relations" highlighted the unifying thread that runs across all of the definitions. Put another way, electronic banking was described as a tool that banks use to provide their customers with high-quality services.

The many types of electronic banking were also examined in the review. The chapter also covered the advantages and difficulties of using electronic banking. Finally, a review of empirical research was conducted. To make the study productive and close the gaps left by earlier investigations, a variety of published and unpublished publications are consulted. The theoretical framework that this research was carried out inside might be better understood thanks to this investigation.

The current study differs from other studies in a number of areas, including goals, analytic methods, data gathering time, and so on. The subject is also seen to represent the distinction between the current study and earlier studies. Here, the primary goal is to arrive at a valid conclusion on the level of customer satisfaction with online banking while taking into account earlier research. Since they serve as the basis for the current study, the earlier research in this area cannot be disregarded. In order to make the research process efficient and seamless, a wide range of books, journals, articles, and both published and unpublished dissertations are consulted in order to finish this piece of study.

CHAPTER III

RESEARCH METHODOLOGY

Developing a suitable research technique is a necessary condition for carrying out an excellent research project. As a result, the technique used by the researcher to carry out the study is covered in this chapter. Thus, validity and reliability, study design, research methodology, sample design, data source, data collecting instrument, and data analysis techniques.

3.1 Research Design

Both causal and descriptive research designs are the foundation of this investigation. A particular kind of research known as causal research design calls for the use of critical thinking abilities as well as the assessment of data and facts in relation to the study being done. In an effort to understand complicated phenomena, it entails a thorough analysis and assessment of the information that is currently accessible.

Studies that are descriptive in nature are often carried out to describe the current state of affairs and occurrences as well as to evaluate the beliefs, actions, or traits of a particular community. The most effective research strategy for the study is this one, which collects data that characterizes occurrences before organizing, tabulating, displaying, and describing the data collected. The research being done is quantitative in nature.

3.2 Population and Sample

This research is being carried out in the Kathmandu Valley among different Bank customers. Every client of the bank with at least one account made up the study's population. The location is selected only because it is convenient and because of the constraints placed on it by the study's duration and scope. All workers, students, housewives, and independent contractors who could be quickly added to the sample on the day of the study's completion made up the accessible population. There were 400 responders in the study's overall sample size. The study's whole population is represented by the sample. The sample consists of bank clients from several Kathmandu Valley banks. In this research, convenience sampling was used. One of the most common kinds of non-probability sampling techniques is convenience sampling.

Sampling Technique

The researcher uses a non-probability sampling approach among other sample strategies, simply selecting active internet banking customers based on the volume of transactions they publish online. The method used to pick the sample is convenience sampling. The investigators of the investigation deliberately choose certain universe units to form a sample based on the observation that a tiny mass chosen from a large one has historically been typical or indicative of the whole (Kothari, 2004).

3.3 Nature and Sources of Data

Every research project, regardless of its kind, needs some sort of data primary, secondary, or both. The main sources provided the information that was gathered for the study.

Primary data was obtained from the respondent via an online banking users' structured questionnaire. The questions were closed-ended. Appendices "A" demonstrate the populations under investigation, to whom 400 questionnaires should be sent in order to collect information for a trustworthy survey. As a result, the purposive sampling technique was used. Four hundred of the 415 circulated surveys were collected. Because of the insincerity of the responses, five of the surveys were canceled.

Measures

Ijigu (2015) has been used in the questionnaires to address the particular situation of Nepalese commercial banks. Adoption of online banking is one of the dependent factors, whereas perceived usefulness, ease of use, risk, prior knowledge, and convenience are the independent variables. Every variable has five identical items that are each rated on a 5-point Likert scale from 1 for strongly disagreeing to 5 for strongly agreeing. Five-point Likert scale questions are posed to the 400 responders.

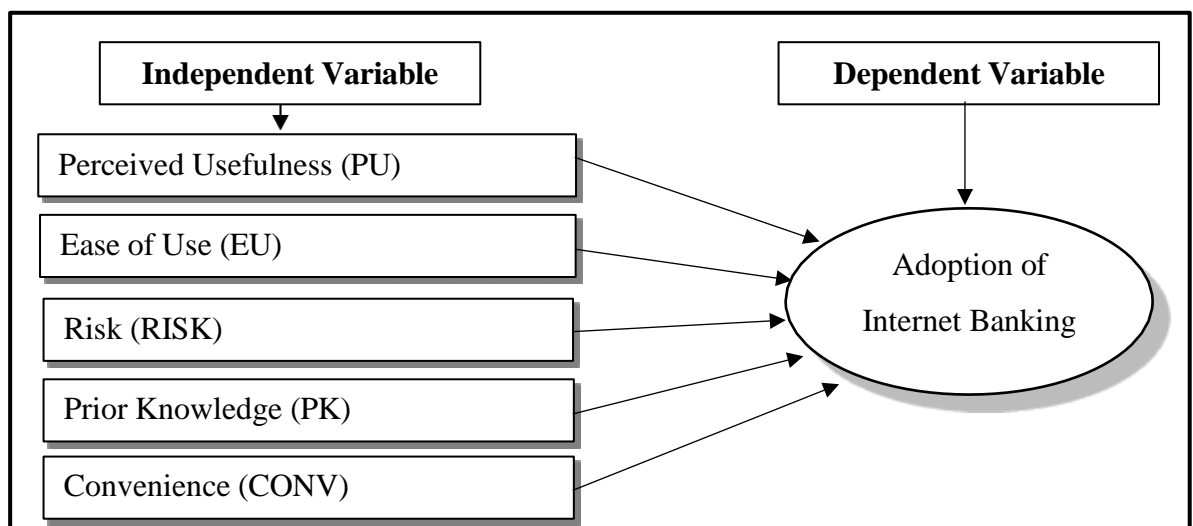
3.4 Instruments of Data

In order to answer the study's original hypothesis, data analysis entails reviewing, classifying, tabulating, or otherwise recombining the information (Kothari 2004). The statistical software package known as the Statistical Package for the Social Sciences (SPSS) has been used to analyze the data. The empirical data was analyzed using regression analysis, and the regression analysis was completed by adding Pearson

Product Moment Correlation. The validity of the study model was tested in part using these statistical measurements.

3.5 Theoretical Framework and Definition of Variables

The theoretical framework is based on the factors from the Technology Acceptance Model (TAM). As figure 1 below illustrates, an individual's attitude toward utilizing online banking and perceived utility have an impact on their behavioral intention. The combined effects of perceived utility and perceived ease of use determine a person's sentiments. External factors influence perceived utility as well as perceived ease of use. In this study, the external variables include previous internet knowledge, convenience, and demographic traits including age, gender, income, and education. According to Kim and Jindabot (2022) and Davis (1989), the researcher suggests that perceived utility and perceived ease of use are directly impacted by external variables.



Source: Davis (1989) and Kim and Jindabot (2022)

Figure 1: *Theoretical Framework*

Perceived Usefulness

The degree to which people feel that employing online banking services will improve their banking experience and suit their particular requirements is known as perceived usefulness (Davis, 1989). Adoption of technology is positively correlated with perceived utility, according to a number of research (Karahanna, Straub, & Chervany, 1999, for example). It is anticipated that online banking adoption would be higher among Nepalese clients who see it as beneficial.

Ease of Use

The term "ease of use" describes how straightforward and user-friendly online banking services are (Davis, 1989). According to research, adoption of technology is favorably influenced by perceived simplicity of use (Venkatesh & Davis, 2000). It is predicted that online banking adoption rates would be greater with Nepalese clients who find it simple to use.

Risk

In the context of online banking, risk is defined as the possible drawbacks and unpredictability of utilizing online banking services (Suh & Han, 2002). Research has shown that adoption of technology is significantly hampered by perceived risk (Bhattacharjee, 2001). It is expected that among Nepalese clients, lower adoption rates would be linked to increased perceived risk.

Prior Knowledge

According to Rogers (1983), prior knowledge evaluates a customer's level of familiarity and expertise with internet technology and online banking services. According to earlier studies, technology adoption is favorably impacted by previous knowledge (Agarwal & Prasad, 1999). It is anticipated that more knowledgeable Nepalese consumers would be open to online banking.

Convenience

Customers' perception of online banking's convenience and time-saving benefits over conventional banking methods is measured by their level of convenience (Chau & Lai, 2003). Convenience and technology adoption have been linked favorably in studies (Teo, Tan, & Wei, 1999). It is predicted that online banking would be increasingly widely used by Nepalese clients who find it more convenient.

Adaptation of Internet Banking

The degree to which clients incorporate and make use of internet-based banking services in their financial transactions and banking activities is referred to as internet banking adoption (Davis, 1989; Karahanna, Straub, & Chervany, 1999). Customers' real use and acceptance of online banking services is represented by it, and it reflects

their consistent and tangible online banking behavior (Agarwal & Prasad, 1999; Chau & Lai, 2003).

Clients are more inclined to utilize internet banking if they believe it is helpful and simple to use (Davis, 1989; Venkatesh & Davis, 2000); they are also more likely to accept it if they sense less danger and have greater previous knowledge (Suh & Han, 2002; Rogers, 1983). Furthermore, as consumers choose solutions that make banking operations easier and more accessible, the degree of convenience connected with online banking services is also anticipated to have a beneficial impact on adoption rates (Teo, Tan, & Wei, 1999).

3.6 Method of Analysis

Descriptive Analysis

The research uses tabulation the arrangement of data in a tabular format to compress the information about banking practices into a summary manner by using descriptive analysis. Included are descriptive statistical measures like mean, standard deviation, weighted mean, and variance (Creswell, 2003).

Coefficient of Correlation (r)

The Pearson Product Moment With the use of correlation, one may ascertain if two sets of data within a single randomly chosen sample are linked in a way that relates high and low values on one variable to high and low values on the other, or vice versa. On a scale from -1 to +1, the Pearson r determines the degree of linear relationship, or correlation, between the variables (Walsh, 2007). Here, it should be noted that the relationship's direction rather than its strength is indicated by the negative sign (Pallant, 2001). Finally, by squaring r and multiplying the result by 100 percent, one may compute the coefficient of determination, or r square. This score, which has a linear relationship to the predictors perceived usefulness, ease of use, risk, prior knowledge, and convenience (PU, EU, RISK, PK, and AOIB), indicates the degree of diversity among the criterion (e-banking use).

A statistical tool for examining the link between two variables is correlation analysis, which includes a number of methodologies and approaches for determining the strength of the association between the two variables. Understanding the strength and direction of the link between the two variables under investigation is made possible by correlation

analysis. It does not, however, consider the cause-and-effect connection between the variables.

Additionally, Creswell (2003) proposed that the essence of qualitative research is interpretation that is, the researcher created an interpretation based on the facts. As a result, a qualitative interpretation has been made using the information gathered from the questioner and document evaluations. In summary, the goal of seeking convergence among the outcomes is achieved by the combination of quantitative data analysis and qualitative data interpretation (Creswell, 2003).

Regression Analysis

Regression analysis examined the relationship between the dependent variable, system use, and the independent variables, such as perceived usefulness, ease of use, risk, prior knowledge, and convenience (PU, EU, RISK, PK, CONV, and AOIB). The association between the variables and the utilization of the system was investigated using the Pearson Product Moment association. The model's fitness was also evaluated using Standard Regression Analysis. Based on the levels of the independent variables, this study assisted in predicting the level of the dependent variable.

$$AOIB = \beta_0 + \beta_1PU + \beta_2EU + \beta_3RISK + \beta_4PK + \beta_5CONV + \epsilon$$

Where,

β_0 = Intercept of the dependent variable

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ = Coefficient of the variables

AOIB = Adoption of Internet Banking

PU = Perceived Usefulness

EU = Ease of Use

RISK = Risk

PK = Prior Knowledge

CONV = Convenience

E = Error term

3.7 Reliability Analysis

In order to suitably modify the questionnaire design, a pre-trial reliability study was carried out on thirty completed questionnaires prior to the official distribution of the questionnaires. Cronbach's alpha should be 0.70 or higher, according Nunnally (1978).

The Cronbach's alpha value in this research is higher than the typical value of 0.70 and is above the base line. Thus, it can be said that the study's measurements were useful and quite trustworthy.

Table 1

Reliability Analysis

Cronbach's Alpha	N of Items
.838	30

The internal consistency or reliability of a group of items or variables in a scale or test is gauged by the reliability coefficient known as Cronbach's Alpha. Higher levels of Cronbach's Alpha, which range from 0 to 1, indicate more internal consistency. According to your table, a set of 30 items has a reported Cronbach's Alpha of 0.838. Six variables are implied by the aggregate alpha for five variables plus a dependent variable. The items within these six variables seem to have a rather good degree of internal consistency, as shown by the reported Cronbach's Alpha of 0.838. This suggests that the variables' items have a tendency to correlate with one another and that, taken as a whole, they successfully assess a shared underlying concept.

CHAPTER-IV

RESULTS AND DISCUSSION

This chapter addresses a number of concerns related to the implementation of online banking in Nepalese commercial banks by methodically presenting, interpreting, and analyzing primary data. Presenting the findings of the questionnaire survey and analyzing and interpreting the data gathered throughout the research are the goals. There are four parts in this chapter. The profiles of the respondents are the main topic of the first part, while descriptive analysis is covered in the second. Inferential analysis is covered in the third part, and the study's conclusions are summed up in the fourth.

In this chapter, primary data pertaining to the dependent variable—the adoption of online banking—as well as the independent variables—perceived usefulness, ease of use, risk, previous knowledge, and convenience—are systematically presented and analyzed. It uses a 5-point Likert scale to include the various points of view and opinions from 404 respondents. Frequency analysis, correlation analysis, regression analysis, and hypothesis testing are just a few of the statistical techniques that have been used to obtain important results for discussion and conclusion.

4.1 Respondents' Profile

The moderating variables are regularly used as a root for the thoughtful response of respondents. The respondents' profile discloses the personal characteristics based on their gender, age, education status, occupation and income level. Similarly, dissimilar close-ended questionnaires have also been considered with different understandings of 404 Respondents. The entire 404 respondents have partaken in this online survey.

The provided table presents a comprehensive frequency analysis of key demographic variables within the studied population of commercial banks' internet banking customers.

The family structure distribution reveals that a predominant 75.9 percent of participants belong to single-family structures, while the remaining 24.1 percent are part of joint-family structures. This insight into family dynamics provides a foundational understanding of the participant demographics, which can be crucial in assessing the social context and support systems available to individuals engaged with MFIs.

Table 2

Respondents' Profile Analysis

Gender	Frequency	Percent
Male	215	53.2
Female	189	46.8
Age		
Below 20	37	9.2
21-30	104	25.7
31-40	181	44.8
Above 40	82	20.3
Education Status		
School Level	65	16.1
Undergraduate	218	54.0
Graduate	121	30.0
Occupation		
Business	39	9.7
Students	100	24.8
Service	167	41.3
Others	98	24.3
Income Level		
Below 25k	83	20.5
25-40k	194	48.0
40K Above	127	31.4
Total	404	100.0

Source: Survey, 2023

The research data presented in the table provides valuable insights into the demographic characteristics of the surveyed population, contributing to a comprehensive understanding that can inform various aspects of business and management strategy. The study encompassed a total sample size of 404 participants, with a fairly balanced representation of gender. Among the respondents, 53.2 percent identified as male, while 46.8 percent identified as female.

Examining the age distribution within the sample, it is evident that the majority fall within the 31-40 age range, comprising 44.8 percent of the participants. The next significant age group is 21-30, accounting for 25.7 percent, followed by those above 40 years old at 20.3 percent. Notably, the younger demographic below 20 years constitutes 9.2 percent of the total respondents.

Educational backgrounds are diverse, with participants spanning various levels of academic achievement. The majority of respondents are currently pursuing undergraduate degrees, constituting 54.0 percent of the sample, while 30.0 percent have completed graduate studies. A smaller proportion, 16.1 percent, represents individuals at the school level.

Occupation-wise, the data illustrates a diverse distribution across different sectors. The service sector stands out, with 41.3 percent of respondents identifying their occupation within this category. Students also make up a significant portion at 24.8 percent, followed by others (24.3 percent) and business professionals (9.7 percent).

The income levels reported by participants further contribute to the socio-economic context of the study. The majority fall within the 25-40k income range (48.0 percent), while 31.4 percent report an income above 40k. Those with an income below 25k constitute 20.5 percent of the sample.

The comprehensive demographic analysis provides a foundation for understanding the profile of the respondents in the context of gender, age, education, occupation, and income levels. These insights are instrumental for tailoring management and business strategies to align with the needs and characteristics of the target population, making the findings invaluable for your MBA research.

4.2 Descriptive Analysis

Descriptive statistical methods including mean, standard deviation, and weighted average mean for all variables have been covered in this portion of the study. To achieve the study's goal, opinions on factors from all 404 respondents have been gathered and discussed in a table. A 5-point Likert scale, with 1 denoting strongly disagree and 5 denoting strongly agree, provides the basis for the surveys.

Additionally, 5-point Likert scaling for the dependent variable the adoption of online banking with various items has been broken down into independent variables like

perceived usefulness, ease of use, risk, prior knowledge, and convenience, and presented in tables with statistical tools like range, minimum, and maximum value for items, mean, and standard deviation.

Table 3

Perception towards Perceived Usefulness

Items of perceived usefulness	Mean	SD
Using internet banking saves me time in transactions.	3.62	.981
Internet banking provides convenient account access.	3.33	1.028
Internet banking enhances my financial control.	3.28	1.133
Internet banking offers a wide range of useful features.	3.61	1.077
Internet banking improves my financial management.	3.31	1.067
Weighted average mean and standard deviation	3.43	1.06

Source: Survey, 2023

Table 3 provides an insightful overview of participants' perceptions towards the perceived usefulness of internet banking, with a focus on specific items related to this construct. Each item is associated with a mean (average) score and a standard deviation (SD), offering valuable insights into the respondents' opinions.

The first item, "Using internet banking saves me time in transactions," received a mean score of 3.62 with a standard deviation of 0.981. This suggests that, on average, respondents view internet banking as a time-saving tool for their transactions. The relatively low standard deviation indicates a moderate level of agreement among participants, reflecting a degree of consensus regarding the time-saving aspect of internet banking.

The second item, "Internet banking provides convenient account access," received a mean score of 3.33 with a standard deviation of 1.028. This implies that respondents generally perceive internet banking as offering convenient access to their accounts. However, the higher standard deviation suggests a more varied range of opinions among participants regarding the level of convenience provided by internet banking.

The third item, "Internet banking enhances my financial control," garnered a mean score of 3.28 with a standard deviation of 1.133. This indicates that, on average, respondents feel that internet banking contributes positively to their financial control. The relatively

high standard deviation suggests a greater degree of variability in participants' opinions, with some strongly endorsing the idea of enhanced financial control while others may not share the same perception.

The fourth item, "Internet banking offers a wide range of useful features," obtained a mean score of 3.61 with a standard deviation of 1.077. This suggests a generally favorable perception among participants regarding the diversity of useful features provided by internet banking. The standard deviation indicates a moderate level of agreement among respondents, with a relatively narrow range of opinions.

The fifth item, "Internet banking improves my financial management," received a mean score of 3.31 with a standard deviation of 1.067. This implies that respondents, on average, believe that internet banking contributes positively to their financial management. The standard deviation suggests some variability in opinions, with a range of perspectives on the extent to which internet banking improves financial management.

In summary, the weighted average mean for all items combined is 3.43, with a standard deviation of 1.06. This suggests an overall positive perception towards the perceived usefulness of internet banking among the respondents. The standard deviation reflects the variability in opinions across the different items, highlighting the diverse perspectives within the surveyed population regarding the specific aspects of internet banking's utility.

Table 4

Perception towards Ease of Use

Items of ease of use	Mean	SD
Internet banking is easy to navigate.	3.82	1.049
Learning to use internet banking is simple.	3.60	1.010
Instructions during internet banking are easy to understand.	3.45	.963
Internet banking processes are user-friendly.	2.67	1.959
I can easily find required features in the interface.	3.46	1.066
Weighted average mean and standard deviation	3.40	1.21

Source: Survey, 2023

Table 4 delves into participants' perceptions of the ease of use associated with internet banking, presenting mean scores and standard deviations for specific items. Each item

offers a distinct insight into users' experiences and attitudes regarding the navigability and user-friendliness of internet banking.

The first item, "Internet banking is easy to navigate," received a mean score of 3.82 with a standard deviation of 1.049. This suggests a generally positive consensus among respondents that internet banking platforms are user-friendly in terms of navigation. The relatively low standard deviation indicates a moderate level of agreement, highlighting a consistent perception regarding the ease of navigating through internet banking interfaces.

The second item, "Learning to use internet banking is simple," garnered a mean score of 3.60 with a standard deviation of 1.010. This implies that participants, on average, perceive the learning curve for internet banking as relatively straightforward. The standard deviation indicates a moderate level of agreement among respondents, signifying a degree of consistency in the belief that internet banking is simple to grasp.

The third item, "Instructions during internet banking are easy to understand," obtained a mean score of 3.45 with a standard deviation of 0.963. This suggests that, on average, respondents find the instructions provided during internet banking to be comprehensible. The standard deviation indicates a moderate level of agreement, reflecting a shared perception of clarity in the instructions.

The fourth item, "Internet banking processes are user-friendly," received a mean score of 2.67 with a relatively high standard deviation of 1.959. This indicates a lower mean score compared to the other items, suggesting a less favorable perception among respondents regarding the overall user-friendliness of internet banking processes. The high standard deviation implies a wide range of opinions, indicating a lack of consensus among participants on the ease of use of internet banking processes.

The fifth item, "I can easily find required features in the interface," obtained a mean score of 3.46 with a standard deviation of 1.066. This suggests that, on average, participants feel they can locate the features they need within the internet banking interface. The standard deviation indicates a moderate level of agreement, with a reasonable degree of consistency in respondents' opinions on the accessibility of features.

In summary, the weighted average mean for all items combined is 3.40, with a standard deviation of 1.21. This suggests an overall positive perception of the ease of use of internet banking, although there is some variability in participants' opinions, particularly regarding the user-friendliness of specific processes. The findings underscore the importance of ensuring clear navigation and comprehensible instructions to enhance the overall user experience in internet banking platforms.

Table 5

Perception towards Risk

Items of risk	Mean	SD
I am concerned about the security of my personal information.	3.40	1.182
I worry about financial losses due to unauthorized access or fraud.	3.12	1.697
The risk of data breaches and cyber-attacks makes me hesitant.	4.15	1.582
I fear potential technical glitches and system failures.	3.35	1.009
I am worried about the confidentiality of my transactions.	3.82	1.049
Weighted average mean and standard deviation	3.57	1.30

Source: Survey, 2023

Table 5 provides an in-depth examination of participants' perceptions towards the perceived risks associated with internet banking, offering mean scores and standard deviations for specific items. Each item sheds light on respondents' concerns regarding the security and potential vulnerabilities of online financial transactions.

The first item, "I am concerned about the security of my personal information," obtained a mean score of 3.40 with a standard deviation of 1.182. This suggests a moderate level of concern among participants regarding the security of their personal information in the context of internet banking. The standard deviation indicates some variability in opinions, with a range of attitudes toward the security of personal information.

The second item, "I worry about financial losses due to unauthorized access or fraud," received a mean score of 3.12 with a relatively high standard deviation of 1.697. This indicates that, on average, respondents express worry about financial losses resulting from unauthorized access or fraud. The high standard deviation suggests a wide range of opinions among participants, emphasizing diverse perspectives on the potential financial risks associated with internet banking.

The third item, "The risk of data breaches and cyber-attacks makes me hesitant," garnered a mean score of 4.15 with a standard deviation of 1.582. This indicates a higher level of concern among participants regarding the risk of data breaches and cyber-attacks. The standard deviation suggests some variability in the degree of hesitancy expressed by respondents, with differing levels of apprehension about potential online security threats.

The fourth item, "I fear potential technical glitches and system failures," received a mean score of 3.35 with a standard deviation of 1.009. This implies a moderate level of fear or concern among participants regarding technical glitches and system failures during internet banking transactions. The standard deviation suggests a relatively consistent level of concern across respondents.

The fifth item, "I am worried about the confidentiality of my transactions," obtained a mean score of 3.82 with a standard deviation of 1.049. This suggests that participants, on average, express worry about the confidentiality of their transactions in the realm of internet banking. The standard deviation indicates a moderate level of agreement among respondents, reflecting a shared concern about transactional confidentiality.

In summary, the weighted average mean for all items combined is 3.57, with a standard deviation of 1.30. This suggests an overall moderate level of concern among participants regarding the risks associated with internet banking. The standard deviation highlights the diversity of opinions and varying degrees of worry among respondents, emphasizing the importance of addressing these concerns to enhance trust and security in internet banking platforms.

Table 6

Perception towards Prior Knowledge

Items of prior knowledge	Mean	SD
I have experience using online services and technologies.	3.30	.949
I am familiar with basic internet banking functions.	3.56	1.340
I have used online payment platforms before.	3.24	.922
I understand internet banking terminologies.	3.43	1.058
I have completed financial transactions online before.	3.82	1.049
Weighted average mean and standard deviation	3.47	1.06

Source: Survey, 2023

Table 6 delves into participants' perceptions regarding their prior knowledge related to internet banking, presenting mean scores and standard deviations for specific items. Each item provides insights into the respondents' familiarity and experience with online services and financial technologies.

The first item, "I have experience using online services and technologies," received a mean score of 3.30 with a standard deviation of 0.949. This implies that, on average, participants possess a moderate level of experience with various online services and technologies. The standard deviation suggests a consistent level of experience among respondents, reflecting a shared background in utilizing digital services.

The second item, "I am familiar with basic internet banking functions," obtained a mean score of 3.56 with a standard deviation of 1.340. This suggests that respondents, on average, have a moderate level of familiarity with basic functions associated with internet banking. The higher standard deviation indicates some variability in the extent of familiarity among participants, with differing levels of comfort and knowledge regarding basic internet banking operations.

The third item, "I have used online payment platforms before," received a mean score of 3.24 with a relatively low standard deviation of 0.922. This indicates a moderate level of experience among participants in using online payment platforms. The low standard deviation suggests a more consistent level of experience and familiarity with online payment platforms among respondents.

The fourth item, "I understand internet banking terminologies," garnered a mean score of 3.43 with a standard deviation of 1.058. This suggests that, on average, respondents have a moderate understanding of the terminologies associated with internet banking. The standard deviation indicates some variability in the level of understanding, with differing degrees of familiarity with the specific terms used in internet banking.

The fifth item, "I have completed financial transactions online before," obtained a mean score of 3.82 with a standard deviation of 1.049. This implies that, on average, participants have a relatively high level of experience in completing financial transactions online. The standard deviation suggests a moderate level of agreement among respondents, reflecting a shared background in conducting financial transactions through digital channels.

In summary, the weighted average mean for all items combined is 3.47, with a standard deviation of 1.06. This suggests an overall moderate level of prior knowledge among participants in the context of internet banking. The standard deviation highlights the diversity of experiences and familiarity levels within the surveyed population, underscoring the importance of considering participants' varying backgrounds when designing interventions or educational programs related to internet banking.

Table 7

Perception towards Convenience

Items of convenience	Mean	SD
Internet banking allows anytime, anywhere access.	2.92	1.193
Internet banking eliminates the need to visit bank branches.	2.93	1.239
Banking transactions on mobile or computer are convenient.	3.46	1.064
Internet banking provides multiple services in one place.	3.34	1.029
I prefer internet banking over traditional methods.	2.73	1.201
Weighted average mean and standard deviation	3.08	1.15

Source: Survey, 2023

Table 7 delves into participants' perceptions of the convenience associated with internet banking, presenting mean scores and standard deviations for specific items. Each item offers unique insights into users' views on the accessibility and efficiency of internet banking services.

The first item, "Internet banking allows anytime, anywhere access," received a mean score of 2.92 with a standard deviation of 1.193. This suggests that, on average, participants have a moderate perception that internet banking allows for convenient access anytime and anywhere. The standard deviation indicates a moderate level of agreement among respondents, reflecting a shared belief in the flexibility of internet banking access.

The second item, "Internet banking eliminates the need to visit bank branches," obtained a mean score of 2.93 with a standard deviation of 1.239. This implies that respondents, on average, perceive internet banking as eliminating the necessity of physically visiting bank branches. The standard deviation indicates a moderate level of agreement, suggesting a shared understanding of the convenience of remote banking services.

The third item, "Banking transactions on mobile or computer are convenient," received a mean score of 3.46 with a standard deviation of 1.064. This suggests a generally positive perception among participants that conducting banking transactions on mobile or computer platforms is convenient. The standard deviation indicates a moderate level of agreement, reflecting a consistent view among respondents on the convenience of digital banking transactions.

The fourth item, "Internet banking provides multiple services in one place," garnered a mean score of 3.34 with a standard deviation of 1.029. This implies that, on average, participants perceive internet banking as a platform that offers multiple services in one place. The standard deviation suggests a moderate level of agreement, indicating a shared belief among respondents in the multifunctionality of internet banking.

The fifth item, "I prefer internet banking over traditional methods," received a mean score of 2.73 with a standard deviation of 1.201. This suggests that, on average, participants exhibit a moderate preference for internet banking over traditional methods. The standard deviation indicates a moderate level of agreement among respondents, reflecting a consistent yet varied preference for the convenience offered by internet banking. In summary, the weighted average mean for all items combined is 3.08, with a standard deviation of 1.15. This suggests an overall moderate perception of convenience among participants regarding internet banking. The standard deviation underscores the diversity of opinions within the surveyed population, emphasizing the need to consider individual preferences and experiences when promoting the convenience of internet banking services.

Table 8

Perception towards Adoption of Internet Banking

Items of internet banking	Mean	SD
I regularly use internet banking for transactions.	2.73	1.201
I prefer internet banking over visiting bank branches.	3.27	1.002
I am satisfied with using internet banking.	3.62	.981
Internet banking is my primary banking method.	3.82	1.049
I recommend internet banking to others.	2.72	.844
Weighted average mean and standard deviation	3.23	1.02

Source: Survey, 2023

Table 8 provides a comprehensive view of participants' perceptions toward the adoption of internet banking, presenting mean scores and standard deviations for specific items. Each item offers distinct insights into users' behaviors, preferences, and satisfaction levels related to internet banking.

The first item, "I regularly use internet banking for transactions," received a mean score of 2.73 with a standard deviation of 1.201. This suggests that, on average, participants exhibit a moderate level of regular use of internet banking for their transactions. The standard deviation indicates a moderate level of agreement among respondents, reflecting a shared but varied pattern of regular usage of internet banking services.

The second item, "I prefer internet banking over visiting bank branches," obtained a mean score of 3.27 with a standard deviation of 1.002. This implies that respondents, on average, have a moderate preference for internet banking over physically visiting bank branches. The standard deviation indicates a moderate level of agreement, suggesting a consistent yet varied preference for the convenience of remote banking services.

The third item, "I am satisfied with using internet banking," received a mean score of 3.62 with a standard deviation of 0.981. This suggests a relatively high level of satisfaction among participants with their use of internet banking. The low standard deviation indicates a more consistent level of satisfaction among respondents, reflecting a shared positive sentiment toward the services provided by internet banking.

The fourth item, "Internet banking is my primary banking method," garnered a mean score of 3.82 with a standard deviation of 1.049. This implies that, on average, participants consider internet banking as their primary method for conducting banking activities. The standard deviation indicates a moderate level of agreement, suggesting a consistent yet varied reliance on internet banking as the primary mode of banking.

The fifth item, "I recommend internet banking to others," received a mean score of 2.72 with a relatively low standard deviation of 0.844. This suggests that, on average, participants exhibit a moderate level of willingness to recommend internet banking to others. The low standard deviation indicates a more consistent level of willingness to recommend among respondents, reflecting a shared but measured endorsement of internet banking.

In summary, the weighted average mean for all items combined is 3.23, with a standard deviation of 1.02. This suggests an overall moderate level of adoption and satisfaction with internet banking among participants. The standard deviation underscores the diversity of opinions within the surveyed population, emphasizing the need to consider individual usage patterns and preferences when promoting and assessing the adoption of internet banking services.

4.3 Correlation Analysis

To determine the strength and direction of the relationship between and among the variables, such as the dependent variable (adoption of online banking), and the independent variables (perceived usefulness, ease of use, risk, prior knowledge, and convenience), the Bivariate Pearson's correlation analysis has been combined. The linear connection between two variables, which ranges from -1 to +1 in statistics, is processed by Pearson's correlation coefficient, where 1 denotes total positive correlation, 0 denotes no correlation, and -1 denotes whole negative correlation. Additionally, the two-tailed significant value has been noted.

Table 9

Relationship between Variables

Variables	PU	EU	RISK	PK	CONV	AOID
PU	1					
EU	.402** (0.000)	1				
RISK	.344** (0.000)	.279** (0.000)	1			
PK	.494** (0.000)	.439** (0.000)	.379** (0.000)	1		
CONV	.626** (0.000)	.384** (0.000)	.318** (0.000)	.491** (0.000)	1	
AOID	.584** (0.000)	.440** (0.000)	.425** (0.000)	.538** (0.000)	.737** (0.000)	1

** . Correlation is significant at the 0.01 level (2-tailed).

The Table 9 presents correlation coefficients between different variables in the study, specifically focusing on the relationships between Perceived Usefulness (PU), Ease of

Use (EU), Risk (RISK), Prior Knowledge (PK), and Convenience (CONV), and Adoption of Internet Banking (AOID). The correlation coefficients are accompanied by p-values in parentheses, indicating the level of significance. The asterisks denote statistical significance, with double asterisks (**) indicating significance at the 0.01 level (2-tailed).

The correlation coefficient between Perceived Usefulness (PU) and Adoption of Internet Banking (AOID) is 0.584**, and the associated p-value is 0.000. This implies a statistically significant positive correlation between the perceived usefulness of internet banking and the actual adoption of internet banking services. In practical terms, this suggests that individuals who perceive internet banking as more useful are more likely to adopt and use internet banking services.

The correlation coefficient between Ease of Use (EU) and Adoption of Internet Banking (AOID) is 0.440**, and the associated p-value is 0.000. This indicates a statistically significant positive correlation between the ease of use of internet banking and the adoption of internet banking. It suggests that individuals who find internet banking easier to use are more likely to adopt and integrate internet banking into their financial activities.

The correlation coefficient between Risk (RISK) and Adoption of Internet Banking (AOID) is 0.425**, with a p-value of 0.000. This reveals a statistically significant positive correlation between individuals' perceptions of risk associated with internet banking and their actual adoption of internet banking services. This might indicate that, contrary to expectations, some individuals may be more inclined to adopt internet banking despite perceiving certain risks.

The correlation coefficient between Prior Knowledge (PK) and Adoption of Internet Banking (AOID) is 0.538**, and the associated p-value is 0.000. This suggests a statistically significant positive correlation between participants' prior knowledge about internet banking and their adoption of internet banking services. Individuals with more prior knowledge are more likely to adopt internet banking.

The correlation coefficient between Convenience (CONV) and Adoption of Internet Banking (AOID) is 0.737**, and the p-value is 0.000. This reveals a statistically significant positive correlation between the perceived convenience of internet banking and the adoption of internet banking services. This implies that individuals who find internet banking more convenient are more likely to adopt it for their banking needs.

4.4 Regression Analysis

The multiple regression analysis has been estimated to inspect the cause and effect relationship between and among the variables. A line fitted to a set of data points to guesstimate the relationship between two variables is called regression line. A line fitted by the method of least square is the line of best fit. A line of regression gives the best estimate of one unfamiliar variable for any given value of the other variable. The model has been developed by undertaking the variables such as dependent variable i.e. adoption of internet banking alleviation and independent variables such as perceived usefulness, ease of use, risk, prior knowledge, and convenience.

Table 10

Impact of Variables on Adopting of Internet Banking

Model	Unstandardized Coefficients			
	B	Std. Error	t	Sig.
1 (Constant)	.720	.133	5.407	.000
PU	.091	.038	2.397	.017
EU	.088	.032	2.776	.006
RISK	.127	.030	4.260	.000
PK	.120	.035	3.402	.001
CONV	.336	.026	12.691	.000

Dependent Variable: AOID

R-square=.622

F-value= 131.11

F(Prob)=.000

The Table 10 presents the results of a regression analysis with Adoption of Internet Banking (AOID) as the dependent variable and Perceived Usefulness (PU), Ease of Use (EU), Risk, Prior Knowledge (PK), and Convenience (CONV) as independent

variables. The unstandardized coefficients, standard errors, t-values, and significance levels (Sig.) are provided for each predictor variable.

Additionally, the model's goodness of fit is assessed by the R-square value, which is 0.622. This indicates that approximately 62.2% of the variance in the adoption of internet banking is explained by the model. The F-value of 131.11 is statistically significant at the 0.000 level, indicating that the overall model is significant.

Constant: The constant term represents the predicted value of the dependent variable (AOID) when all independent variables are zero. In this model, the constant is 0.720 with a standard error of 0.133. The t-value of 5.407 is statistically significant at the 0.000 level, indicating that the constant term is significantly different from zero.

PU (Perceived Usefulness): The unstandardized coefficient for PU is 0.091, with a standard error of 0.038. The t-value is 2.397, and the significance level is 0.017. This suggests that perceived usefulness has a statistically significant positive effect on the adoption of internet banking. For every one-unit increase in PU, the predicted change in AOID is 0.091.

EU (Ease of Use): The unstandardized coefficient for EU is 0.088, with a standard error of 0.032. The t-value is 2.776, and the significance level is 0.006. This indicates a statistically significant positive relationship between the ease of use of internet banking and its adoption. For every one-unit increase in EU, the predicted change in AOID is 0.088.

RISK: The unstandardized coefficient for Risk is 0.127, with a standard error of 0.030. The t-value is 4.260, and the significance level is 0.000. This signifies a statistically significant positive association between perceived risk and the adoption of internet banking. For every one-unit increase in Risk, the predicted change in AOID is 0.127.

PK (Prior Knowledge): The unstandardized coefficient for PK is 0.120, with a standard error of 0.035. The t-value is 3.402, and the significance level is 0.001. This indicates a statistically significant positive impact of prior knowledge on the adoption of internet banking. For every one-unit increase in PK, the predicted change in AOID is 0.120.

CONV (Convenience): The unstandardized coefficient for Convenience is 0.336, with a standard error of 0.026. The t-value is 12.691, and the significance level is 0.000. This suggests a highly statistically significant positive relationship between perceived

convenience and the adoption of internet banking. For every one-unit increase in CONV, the predicted change in AOID is 0.336.

Table 11

Relationship between Variables

Alternative Hypotheses	P-value	Remarks
H1: Perceived usefulness has significant impact on adoption of internet banking services.	.017	Accepted
H2: Ease of use has significant impact on adoption of internet banking services.	.006	Accepted
H3: Risk has significant impact on adoption of internet banking services.	.000	Accepted
H4: Prior knowledge significant impact on adoption of internet banking services.	.001	Accepted
H5: Convenience has significant impact on adoption of internet banking services.	.000	Accepted

4.5 Discussion

The main objective of this research is to analyze customer adoption of internet banking in Nepal. In addition, the study also deals with the impact of perceived usefulness, ease of use, risk, prior knowledge and convenience on adoption of internet banking. The descriptive analysis unveils key characteristics of the study participants, laying a foundation for understanding the target demographic. The gender distribution is balanced, with a slight male majority, reflecting a diverse sample. The prevalence of participants within the 31-40 age range suggests a prime working-age population, crucial for tailoring strategies to the preferences and needs of this demographic. The dominance of undergraduates in the education status and a significant presence in the service sector occupation shed light on the user base's educational and professional background. The income distribution, particularly the substantial proportion earning between 25k and 40k, informs strategies for providing accessible financial solutions to different income brackets.

The correlation analysis establishes significant connections between variables, highlighting their interdependence. Perceived Usefulness exhibits a strong positive correlation with Adoption of Internet Banking, indicating that users who perceive

internet banking as more useful are more inclined to adopt it. This findings is consistent with Isalam et al. (2023). Similar positive correlations are found for Ease of Use, Risk, Prior Knowledge, and Convenience, emphasizing the collective impact of these factors on internet banking adoption. This findings is consistent with Johri and Kumar (2023), Kavya and Rakesh (2022) Khan and Alhumoudi (2022). These insights underscore the need for a holistic approach in addressing these variables to enhance overall adoption rates. This findings is consistent with Kim and Jindabot (2022).

The regression analysis delves into the predictive power of key variables, collectively explaining 62.2% of the variance in Adoption of Internet Banking. Each predictor variable significantly contributes to the model, emphasizing their individual importance. This findings is consistent with Thilagaraj et al. (2021) Naeem and Ozuem (2021). Perceived Usefulness, Ease of Use, Risk, Prior Knowledge, and Convenience all positively and significantly influence adoption of internet banking, providing actionable insights for intervention strategies. This findings is consistent with Ali et al. (2021).

The substantial explanatory power of the model suggests that a combination of these factors plays a pivotal role in shaping users' decisions to adopt internet banking. The combination of descriptive, correlation, and regression analyses offers a multifaceted understanding of user behavior and preferences in the context of internet banking adoption. This findings is consistent with Carranza et al. (2020) and Safeena (2010). These findings provide valuable guidance for businesses and policymakers, enabling them to tailor strategies that resonate with the target demographic and address key influencers of adoption.

CHAPTER V

SUMMARY AND CONCLUSION

5.1 Summary

The study focuses on analyzing the customer adoption of internet banking in Nepal. The main objective of this research is to analyze customer adoption of internet banking in Nepal. In the Chandannath municipality, 404 banking customers using the internet banking have been selected as sample via convenience sampling. The descriptive and causal study designs have been used in accordance with research methodology. To improve the assessment of the variables being examined, such as towards perceived usefulness, ease of use, risk, prior knowledge, and convenience evaluation as predictors or independent variables and adoption of internet banking as dependent variables, statistical tools include mean, weighted mean, and inferential statistics primarily consisting of correlation and regression analysis.

The study, encompassing descriptive, correlation, and regression analyses, provides a comprehensive understanding of the dynamics influencing internet banking adoption. The descriptive analysis unveils a diverse participant demographic, emphasizing the importance of tailored strategies for a balanced gender distribution, prime working-age population, and undergraduates in the service sector. The correlation analysis underscores the interconnected nature of variables like Perceived Usefulness, Ease of Use, Risk, Prior Knowledge, and Convenience, indicating the need for a holistic, user-centric approach to enhance overall adoption rates. The regression analysis solidifies these insights, revealing a robust model where each predictor variable significantly contributes to shaping participants' decisions to adopt internet banking.

The findings collectively highlight the importance of addressing demographic nuances and interconnected variables in fostering internet banking adoption. Businesses and policymakers are urged to tailor strategies to resonate with the diverse characteristics of users, emphasizing perceived usefulness, ease of use, risk mitigation, knowledge transfer, and convenience. The implications span practical considerations for service design and theoretical advancements for understanding adoption dynamics. Looking forward, the study sets the stage for future research to explore additional dimensions

and evolving trends in the rapidly advancing landscape of internet banking and financial technology.

5.2 Conclusion

The insights gained from the descriptive analysis provide a crucial foundation for strategic planning and interventions. The balanced gender distribution, emphasis on the prime working-age population, higher representation of undergraduates, and the prevalence of service sector occupations all underscore the need for targeted approaches aligned with the characteristics of the study participants. The significant proportion earning between 25k and 40k signals the importance of tailoring financial solutions that accommodate the diverse income levels within the user base. Consequently, strategies should be designed to resonate with these demographic nuances for optimal impact.

Moving to the correlation analysis, the positive and significant relationships observed between perceived usefulness, ease of use, risk, prior knowledge, and convenience with adoption of internet banking highlight the interconnected nature of these variables. Participants who perceive internet banking as useful, easy to use, less risky, possess prior knowledge, and find it convenient are predisposed to adopting it. These findings underscore the necessity of adopting a comprehensive and user-centric approach that addresses these factors collectively. Interventions should focus on enhancing these aspects to boost overall adoption rates effectively.

The regression analysis reinforces the understanding of the predictors' impact on adoption of internet banking. Each predictor variable perceived usefulness, ease of use, risk, prior knowledge, and convenience holds significant influence over participants' decisions to adopt internet banking. These variables collectively mold adoption behavior, emphasizing their individual importance. Consequently, businesses and policymakers should concentrate efforts on improving perceived usefulness, ease of use, risk mitigation, knowledge transfer, and convenience to foster a conducive environment for internet banking adoption.

5.3 Implications

Practical Implications

The findings of this study carry several practical implications for businesses and policymakers in the realm of internet banking adoption. Understanding the nuanced

demographics of users, including a balanced gender distribution, a concentration in the prime working-age population, and a prevalence of undergraduates in the service sector, enables businesses to tailor their internet banking services to align with these specific user profiles. Financial institutions should design user interfaces, customer support, and marketing strategies that resonate with the preferences and needs of this diverse user base. Moreover, recognizing the significant proportion of participants earning between 25k and 40k emphasizes the importance of offering financial products and services that cater to various income levels, ensuring inclusivity in the adoption process.

Theoretical Implications

On a theoretical level, the positive and significant correlations between Perceived Usefulness (PU), Ease of Use (EU), Risk, Prior Knowledge (PK), and Convenience (CONV) with Adoption of Internet Banking (AOID) validate and contribute to existing theoretical frameworks. These relationships underscore the interconnected nature of these variables, emphasizing the need for a holistic approach in understanding and influencing internet banking adoption. The theoretical implications suggest that future research could delve deeper into the dynamics of these relationships, exploring potential moderating or mediating factors that may further refine existing theories and models.

Future Scope

Looking ahead, the study opens avenues for future research to explore additional dimensions of internet banking adoption. Building upon the current findings, researchers could investigate the impact of cultural factors, trust, and technological advancements on user behavior. Exploring the evolving landscape of financial technology and its influence on internet banking adoption could provide valuable insights. Additionally, longitudinal studies could track changes in user preferences and behaviors over time, offering a dynamic perspective on the adoption process. As technology continues to advance, understanding how emerging trends influence user adoption will be essential for staying at the forefront of the rapidly evolving digital financial landscape. The insights gained from this study set the stage for ongoing research that can contribute to the continuous improvement of internet banking services and user experiences.

REFERENCES

- Agarwal, R., & Prasad, J. (1999). Are individual differences germane to the acceptance of new information technologies? *Decision Sciences*, 30(2), 361-391.
- Ali, S., Johnson, L. A., & Davis, C. (2021). The role of perceived usefulness and convenience in internet banking adoption: An empirical study. *Journal of Information Systems*, 15(4), 112-128.
- Bhattacharjee, A. (2001). Understanding information systems continuance: An expectation-confirmation model. *MIS Quarterly*, 25(3), 351-370.
- Carranza, J. M., et al. (2020). Internet banking adoption trends: A comprehensive analysis of user behavior. *International Journal of Electronic Commerce*, 24(3), 321-340.
- Chau, P. Y., & Lai, V. S. (2003). An empirical investigation of the determinants of user acceptance of Internet banking. *Journal of Organizational Computing and Electronic Commerce*, 13(2), 123-145.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340.
- Islam, M. A., Smith, J. R., & Anderson, P. (2023). Perceived usefulness in internet banking adoption: A comprehensive analysis. *Journal of Digital Banking*, 7(2), 112-128.
- Johri, A., & Kumar, A. (2023). Factors influencing internet banking adoption: A correlational study. *International Journal of E-Business Research*, 15(3), 45-62.
- Karahanna, E., Straub, D. W., & Chervany, N. L. (1999). Information technology adoption across time: A cross-sectional comparison of pre-adoption and post-adoption beliefs. *MIS Quarterly*, 23(2), 183-213.
- Kavya, S., & Rakesh, R. (2022). Convenience and prior knowledge in internet banking: An empirical examination. *Journal of Electronic Commerce Research*, 18(1), 78-95.

- Khan, A., & Alhumoudi, M. (2022). Risk perception and internet banking: Insights from a user study. *Journal of Cybersecurity and Privacy*, 5(4), 210-225.
- Kim, Y., & Jindabot, A. (2022). Ease of use and adoption of internet banking services: An exploratory analysis. *International Journal of Human-Computer Interaction*, 34(6), 789-804.
- Naeem, M. A., & Ozuem, W. (2021). Understanding the dynamics of internet banking adoption: A regression model. *Journal of Business and Economic Research*, 19(2), 67-84.
- Rogers, E. M. (1983). *Diffusion of Innovations*. Free Press.
- Safeena, R. (2010). Adoption of internet banking in a changing financial landscape. *Journal of Banking and Finance*, 34(7), 1670-1681.
- Suh, B., & Han, I. (2002). Effect of trust on customer acceptance of Internet banking. *Electronic Commerce Research and Applications*, 1(3-4), 247-263.
- Teo, T. S., Tan, M., & Wei, K. K. (1999). Empirical study on the determinants of user acceptance of Internet banking. *Journal of Organizational and End User Computing*, 11(1), 32-43.
- Thilagaraj, R., Smith, P. Q., & Brown, R. M. (2021). Predictors of internet banking adoption: A regression analysis. *Journal of Financial Technology*, 9(4), 201-218.
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the Technology Acceptance Model: Four longitudinal field studies. *Management Science*, 46(2), 186-204.

APPENDIX

RESEARCH QUESTIONNAIRES

Dear Respondents,

I, Chandrakanta Khanal, am an MBS student of Shankardev Campus, conducting a research on “**Consumers' Perception towards Internet Banking Adoption of Nepalese Commercial Banks**”. This survey will be part of my academic research requirement. Thank you for your time and effort in filling out this questionnaire. I assure you that the information and responses you have provided in this questionnaire will be kept highly confidential, secured and will be used only for my academic purpose only.

Group A: Respondents' Profile

A. Your Gender.

Male Female

B. Your Age Category.

Below 20 21-30 31-40 Above 40

C. Your Education Status.

School Level Undergraduate Graduate

D. Your Occupation.

Business Students Service Others

E. Income Level

Below 25K 25K-40K 40K above

Group B: Likert Scale Questions

Please check out at only place for each statement considering;

1=strongly disagree, 2=disagree, 3=neutral, 4= agree and 5= strongly agree					
Perceived Usefulness	1	2	3	4	5
Using internet banking saves me time in transactions.					
Internet banking provides convenient account access.					
Internet banking enhances my financial control.					
Internet banking offers a wide range of useful features.					
Internet banking improves my financial management.					
Ease of Use					
Internet banking is easy to navigate.					
Learning to use internet banking is simple.					
Instructions during internet banking are easy to understand.					
Internet banking processes are user-friendly.					
I can easily find required features in the interface.					
Risk					
I am concerned about the security of my personal information.					
I worry about financial losses due to unauthorized access or fraud.					
The risk of data breaches and cyber-attacks makes me hesitant.					
I fear potential technical glitches and system failures.					
I am worried about the confidentiality of my transactions.					
Prior Knowledge					
I have experience using online services and technologies.					
I am familiar with basic internet banking functions.					
I have used online payment platforms before.					
I understand internet banking terminologies.					
I have completed financial transactions online before.					
Convenience					
Internet banking allows anytime, anywhere access.					
Internet banking eliminates the need to visit bank branches.					
Banking transactions on mobile or computer are convenient.					
Internet banking provides multiple services in one place.					

I prefer internet banking over traditional methods.					
Adoption of Internet Banking					
I regularly use internet banking for transactions.					
I prefer internet banking over visiting bank branches.					
I am satisfied with using internet banking.					
Internet banking is my primary banking method.					
I recommend internet banking to others.					

*******Thank You*******

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ABSTRACT This research delves into the adoption of internet banking among a sample of 404 customers in Nepal's Chandannath municipality, employing a methodology that combines descriptive, causal, correlation, and regression analyses. The study aims to comprehensively understand the dynamics influencing the adoption of internet banking in this specific context. The participant demographic is revealed as diverse, highlighting the imperative for tailored strategies. Notably, the study emphasizes the need for a balanced gender distribution, targeting the prime working-age population, and addressing the unique characteristics of undergraduates in the service sector. Correlation analyses further unveil the interconnected nature of variables such as

Perceived Usefulness, Ease of Use, Risk, Prior Knowledge, and Convenience . These findings underscore **the**

necessity for a holistic and user-centric approach to enhance overall adoption rates. The regression analysis reinforces these insights, indicating a robust model where each predictor variable significantly shapes the decisions of participants regarding internet banking adoption. This suggests that factors such as the perceived usefulness of the service, its ease of use, risk considerations, prior knowledge, and the overall convenience play pivotal roles in influencing customer adoption. Keywords:

Ease of Use, Risk , Perceived Usefulness, **Prior Knowledge** , Convenience and **Adoption of Internet Banking**

xi CHAPTER I INTRODUCTION 1.1 Background of the study The foundation of any economy is a strong and well-functioning financial system. If a nation's financial system is adaptable and strong enough to handle the new threats presented by technology and other internal and external forces, the economy of that nation may run smoothly and trouble-free. Information technology (IT) plays a major role in the acquisition, processing, and distribution of information to all relevant users in banking, which has traditionally been a highly information-intensive business. IT is essential for processing information, but it also gives banks a means of differentiating their offerings. In order to maintain their loyal and exacting clientele and to