

**ONLINE PAYMENT SYSTEM IN NEPAL: A STUDY OF
FACTOR INFLUENCING CUSTOMER TRUST IN ONLINE
TRANSACTION**

A Dissertation submitted to the office of Dean, Faculty of Management in partial
fulfillment of the requirements for Master's degree

By

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CERTIFICATION OF AUTHORSHIP

I hereby corroborate that I have not researched and submitted the final draft of dissertation entitled "**Online Payment System in Nepal: A Study of Factor influencing Customer Trust in Online Transaction**" The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor it has been proposed and presented as part of requirements for any other academic purposes.

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

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Rojan Bajracharya

REPORT OF RESEARCH COMMITTEE

Mr Rojan Bajracharya has defended research proposal entitled “**Online Payment System in Nepal: A Study of Factor influencing Customer Trust in Online Transaction**”, successfully. The research committee has registered the dissertation for further progress. It is recommended to carry out the work as per suggestions and guidance of supervisor Dr. Binita Manandhar and submit the thesis for evaluation and viva voce examination.

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We, the undersigned, have examined the thesis entitled “**Online Payment System in Nepal: A Study of Factor influencing Customer Trust in Online Transaction**” presented by Rojan Bajracharya for the degree of master of Business Studies (MBS Semester). We hereby certify that the thesis is worthy of acceptance.

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Rojan Bajracharya

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ABBREVIATION

ATM- Automated Teller Machine

CVV-Card Verification Value

E-Commerce - Electronic Commerce

EPG – Electronic Payment Gateway

NCHL- Nepal Clearing House Limited

NRB - Nepal Rastra Bank

PASW- Predictive Analytics Software

PC- Personal Computer

PLS-SEM- Partial Least Square Structural Equation Modeling

POS- Point of Sale

PSO- Payment System Oversight

PSP-Payment Service Provider

RTGS- Real Time Gross Settlement System

SCT – Smart Choice Technology

SCT MoCo- Smart Choice Technology Mobile Corporation

SMS- Short Message Service

SPSS- Statistical Package for the Social Sciences

ABSTRACT

This study aimed to explore the factors that shape trust among Nepalese customers in online transactions. It employed a survey approach, adapting and adjusting a questionnaire derived from previous research, which was administered to 432 participants. The questionnaire's reliability was assessed using the Cronbach Alpha Formula. Data analysis utilized statistical methods and SPSS software. The research specifically investigated the impact of independent variables such as Perceived Risk, Perceived Technology, Perceived Online Security, Dispute Management, and Perceived Reputation on customers' trust in online transactions, the dependent variable. Descriptive analysis, mean calculations, and logistic regression models were applied to assess the relationships among these variables.

Significant findings revealed that several factors positively influence customers' trust in online transactions. Notably, Perceived Online Security and Perceived Reputation were identified as significant influencers of customer trust. These insights could be valuable for banking professionals and policymakers aiming to bolster trust in online transactions. The study suggested further research to uncover additional factors that affect customer trust and influence decisions regarding the adoption of online payments.

Keywords: Perceived Risk, Perceived Technology, Perceived Online Security, Dispute Management, Perceived Reputation, Customer Trust on Online Transaction

CHAPTER 1: INTRODUCTION

1.1 Background of the study

A payment denotes the exchange of monetary value between parties, whereas a payment system encompasses the entire process of transferring funds from the payer to the payee, including institutions, methods, participants, regulations, procedures, and standards. This forms the core of the financial system. Over time, payment methods have evolved from physical cash and coins to checks, electronic payments via debit and credit cards, and now, online payments through mobile wallets and cards. The shift towards a cashless economy began in Sweden in the early 1960s with the promotion of digital wage payments, marking a significant move towards a society where transactions rely on digital information, minimizing the use of physical cash by leveraging internet, phone, and other electronic channels (Henley, 2016). In cashless transactions, funds are typically transferred between accounts using tools like ATMs, debit and credit cards, and POS systems.

The effectiveness of online payment systems depends on several factors, including the participation of providers (such as institutions, corporations, and banks) and users (like merchants and cardholders) (Das & Agrawal, 2010). To diminish dependence on cash, countries focus on improving access to financial services, promoting broad acceptance among merchants, fostering competition, addressing macroeconomic and cultural influences, and upgrading technology and infrastructure (Thomas, Jain, & Angus, 2013).

Currently, Singapore stands out globally with only 39% of its economic transactions being conducted in cash, closely followed by the Netherlands at 40%, and both France and Sweden at 41%. Singapore also leads in the Trajectory Score for the Growth of Cashless Payments with a score of 39, ahead of the Netherlands at 20 and France at 14 (Thomas, Jain, & Angus, 2013).

In Nepal, Nabil Bank introduced credit cards in 1984, followed by Himalayan Bank installing ATMs in 1985 to enable card transactions. Kumari Bank initiated Internet Banking services in 2002, and Laxmi Bank introduced SMS/Mobile Banking in 2004 (Banstola, 2007). Nepal enacted "The Electronic Transaction Act" in 2008 to oversee and regulate these technological developments.

1.2 Problem statement

Throughout history, cash has traditionally dominated global transactions, but technological advancements have profoundly impacted various facets of the global economy, including transportation, lifestyles, systems, procedures, and transactions. Today, every country is adapting to these technological changes, particularly within payment systems.

The shift from physical cash to digital transactions offers numerous benefits, such as quicker and more convenient transactions, leading to widespread adoption globally. This system is also valued for its capability to allow governments to monitor payments, aiding in the detection of illicit activities such as money laundering and terrorism financing.

Conversely, cash payments pose challenges in verifying the payer's legal identity, address, and contact information. Additionally, cash transactions involve costs related to printing, transportation, and storage, and are associated with higher rates of crimes such as robbery, extortion, and burglary. Cash transactions also facilitate the circulation of illicit funds and contribute to corruption.

The global shift towards cashless systems has spurred Nepal to consider adopting these technologies. However, as a least developed country, Nepal faces significant challenges such as inadequate infrastructure and low literacy rates, which undermine confidence in these systems.

As infrastructure improves, financial institutions and the government need to educate the public on using digital platforms for financial transactions. Building trust and confidence among Nepalese consumers is essential to encourage the uptake of online payment methods. While many studies have explored the importance and economic impact of online payment systems and customer engagement, this research focuses specifically on the factors influencing customer trust in these systems. Its aim is to understand why customers choose to adopt or avoid online transaction channels. In light of this, the research aims to respond to the following queries:

- What are the factors affecting customer's trust in online transaction in Nepal?
- What are the roles of those factors in online transaction?
- How do customers perceive online payment system?

1.3 Objectives of the study

The main objective of the study is to examine the factors influencing customer trust in online transaction. Other specific objectives are:

- To assess the factors affecting customer's trusts in online transaction in Nepal.
- To analyze factors that play the most crucial role in influencing customer trust.
- To examine the customers perception towards online transaction in Nepal.

1.4 Hypothesis of the Study

Five null hypotheses have been drawn for the purpose of identifying relationship between dependent and independent variables in this study. These hypotheses were drawn from the theoretical framework of the study.

H1: There is significant relationship between perceived risk and customer trust in online payment system

H2: There is significant relationship between perceived technology and customer trust in online transaction

H3: There is significant relationship between perceived online security and customer trust in online transaction

H4: There is significant relationship between dispute management and customer trust in online transaction

H5: There is significant relationship between perceived reputation and customer trust in online transaction

1.5 Significance of the study

This topic has become increasingly important due to the global emphasis on advanced payment systems that streamline commerce and ensure secure financial transactions. Despite a growing number of Nepalese customers engaging in online payment systems, progress has been slower than expected. The findings of this study could provide valuable guidance for organizations in Nepal to optimize their online payment systems, programs, initiatives, and promotional strategies effectively.

Furthermore, this research seeks to enhance understanding of the factors that cultivate trust among Nepalese customers in online payment systems. It aims to identify the primary determinants influencing customer trust and evaluate whether Nepalese online service providers are effectively addressing these factors to enhance customer confidence in using online payment systems.

In short, this study aims to provide insightful findings for online service providers and governmental entities, facilitating efforts to encourage broader adoption of online payment systems among customers.

1.6 Limitations of the study

The limitations of the study are as follows:

- This study is concentrated on factors influencing customer trust in online transaction.
- This study is carried out among people of Kathmandu Valley only. Thus the findings may not be generalizable for the whole population.
- This study is based on primary data.
- Only selected financial and statistical tools are used in this study.
- Only limited factors such as (perceived risk, perceived technology, perceived online security, dispute management and perceived reputation) has been taken into consideration for the analysis.

CHAPTER 2: LITERATURE REVIEW

A literature review is an academic document that consolidates and synthesizes current knowledge on a specific subject, emphasizing significant discoveries and theoretical and methodological contributions. It serves as a secondary source and does not present original experimental research. Typically found in scholarly journals, literature reviews should not be confused with book reviews, which can also appear in the same journals. They are indispensable across nearly all academic fields. A focused literature review may form part of a peer-reviewed journal article presenting new research, aiding in situating the study within the existing literature and providing context for the reader. Usually, such reviews precede the methodology and results sections of an article.

This particular review begins by introducing the concepts of m-commerce and m-payments, outlining future expectations and challenges in this field. It then distinguishes m-payments from other electronic payment methods. The second section delves into the concept of trust, elucidating its characteristics and various types. The third section investigates trust within m-commerce and its significance for m-payments. The fourth section specifically addresses trust in m-payments, discussing the hurdles in establishing trust and identifying critical factors influencing consumer trust in mobile payments. The chapter concludes by summarizing the gaps in current research literature, proposing a research model, and presenting research hypotheses.

2.1 Introducing Online Payment System

Online payment refers to an electronic method facilitated by an intermediary between banks, enabling instantaneous transactions. Compared to traditional methods, online payment systems offer greater convenience, speed, efficiency, and cost-effectiveness. Users can swiftly complete transactions using a PC or mobile device connected to the internet. Online banking exemplifies a common online payment method where users, shopping online, link their bank accounts to make direct payments via credit or debit cards. Additionally, third-party online payment systems like E-sewa and Khalti have become popular in e-commerce. These services act as intermediaries, establishing a networked payment mode between banks and online platforms, facilitating and overseeing transactions.

Third-party online payment providers offer a variety of online payment systems tailored to benefit small and medium-sized enterprises. These platforms create a convenient trading environment that facilitates fast payment processing after purchases and helps to reduce the risks inherent in money transfers. Banks also stand to gain from these systems by broadening their business scope and focusing their efforts on enhancing and maintaining their infrastructure.

However, online payment systems are not without risks. Financial vulnerabilities can arise during transactions, and fierce market competition can have adverse effects. For example, in China, more than 40 electronic payment companies operate, leading to market uniformity. Additionally, there are legal and regulatory challenges, underscoring the necessity for appropriate legislation governing online payments (Min & Yu, 2015).

A payment involves transferring monetary value from one party to another. Therefore, a payment system encompasses the entire process of fund transfer, including institutions, methods, participants, regulations, procedures, and standards. Specifically, an online payment system refers to transferring funds using digital devices such as mobile phones and the internet.

Online Payment System in Nepal

Online payment systems play a crucial role in enhancing the efficiency of monetary flow within an economy. A deficient payment system not only prolongs transaction times and increases costs but also undermines confidence in the overall financial system. As a result, central banks globally prioritize the establishment of efficient and dependable settlement systems to uphold financial stability and ensure the smooth operation of the monetary framework. These factors prompted the central bank of Nepal to enhance its payment system, with a focus on examining the historical evolution of the institutions involved in this development. Modern payment systems, including online business transactions, are heavily reliant on information technology (Timilsina, 2019).

Nepal's journey in developing its payment system began with the establishment of Nepal Rastra Bank, the central bank, in 1956, which exercised direct oversight over all

financial institutions in the country. Until 1968, there were no specialized payment services, and banks offered limited payment capabilities restricted to transactions between payers and payees within the same branch. In the early 1970s, the banking sector started promoting the use of checks (Timilsina, 2019).

A pivotal moment arrived in 1990 when commercial banks and other financial institutions introduced digital payments and established clearinghouse facilities. Nabil Bank pioneered card banking with the issuance of credit cards in 1990, followed by Kumari Bank's introduction of internet banking in 2002 and Laxmi Bank's SMS banking in 2004. Nepal's first ATM was installed by Himalayan Bank in 1995. In 2001, Smart Choice Technology (SCT) was founded, laying the groundwork for a nationwide SCT network. The advent of e-Sewa in 2006 marked a significant leap forward in digital transactions, catalyzing major advancements in Nepal's payment system landscape (Timilsina, 2019).

2.2 Means for Online Payment in Nepal

i. Internet Banking

The rapid expansion of the internet in the mid-1990s prompted banks to adopt it as a platform for providing banking services. Internet banking enables customers to manage their bank accounts and perform transactions over the internet. Initially, banks create web pages to inform customers about their offerings. More advanced internet banking includes features like account access, intra-bank fund transfers, bill payments, and online shopping. Customers are given a login ID and password to access and manage their accounts from their computers.

There are two primary methods for implementing internet banking: traditional banks with physical branches can add online banking services, or banks can establish themselves solely as internet-based entities without physical branches (Mosteanu. D, et al., 2020).

ii. Mobile Banking

Mobile banking in Nepal is rapidly expanding due to the growing number of mobile users. It offers enhanced convenience compared to internet banking by allowing customers to conduct transactions anytime and anywhere without needing a computer.

Mobile banking services, accessible via SMS, are particularly advantageous in areas with unreliable internet connectivity. Since its introduction, mobile banking has become popular for its user-friendly interface, enabling users to manage bank accounts, perform transactions, pay bills, transfer funds across different banks, request cheques, and check balances directly from their mobile devices. The rising adoption of smartphones has significantly contributed to the growth of mobile banking users in Nepal, currently totaling 13.9 million, marking a 23.48% increase (NRB, 2021).

iii. Credit/ Debit card

Electronic cards like debit, credit, and international travel cards play a crucial role in facilitating online transactions. These cards, issued by banks or financial institutions, allow customers to perform electronic transactions at POS terminals and ATMs, as well as make online purchases by entering their card number and CVV code. In Nepal, these cards are widely used for POS transactions and cash withdrawals, and their importance is growing for online purchases and international transactions such as paying tuition fees. According to the NRB, Nepal has over 7.5 million cardholders, including 63,775 prepaid card users, 160,297 credit card users, and 7,329,202 debit card users (NRB, 2020).

iv. Mobile wallet

Mobile wallets simplify online transactions through mobile applications, partnering with retail stores, online shops, utility providers, and other entities to provide a convenient payment solution. While mobile wallets do not directly connect to personal bank accounts, customers can fund them using mobile banking services. Popular mobile wallets in Nepal, such as e-Sewa, IME Pay, and Khalti, offer a range of services including utility payments, school fees, travel ticket bookings, and hotel reservations.

v. Connect IPS

Connect IPS, launched by NCHL in July 2018 (as per NRB, 2020), is a popular payment system that facilitates instant utility payments and fund transfers through its web and mobile app interfaces. Users link their bank accounts to Connect IPS, allowing them to choose from multiple accounts for online payments within a single platform.

2.3 Benefits of Online Banking

Online banking services offered by banks benefit both the institutions and their customers, providing numerous practical and economic advantages, such as reduced business operating costs and increased efficiency (Banstola, 2007).

i. Benefits from Institutional point of view

Online services reduce the need for customers to visit bank branches, thereby decreasing the demand for physical staff. Expanded service offerings not only boost revenue but also strengthen the bank's competitive position. Banks benefit from improved financial inclusion, reduced operational costs, and better resource management. Additionally, banks can use transaction patterns and customer behavior data to innovate and introduce new products and services (Banstola, 2007).

ii. Benefits from customer point of view

Customers Customers can easily utilize banking services via mobile apps or computers, eliminating the necessity to visit a bank branch. This saves time and bypasses queues, particularly for utility payments or shopping. Online banking reduces the risk of physical cash loss and is designed with user convenience in mind. The availability of online payment systems round the clock empowers customers to make purchases at any hour.

iii. Benefit from merchants point of view

Online payments empower merchants to handle cash and records digitally, enhancing sales through functionalities like instant payments, coupons, and referral programs. This capability attracts a larger customer base and enables merchants to analyze sales data, gaining insights into purchasing behaviors and effectively planning their marketing strategies.

2.4 Payment Gateway

A payment gateway is crucial for handling online transactions, acting as a crucial intermediary between merchants' websites and financial institutions. It verifies and authenticates payment details, including checking user accounts and fund availability before granting approval for transactions. In Nepal, examples of payment gateways

include Khalti, IME Pay, Fonepay, and e-Sewa (Kyaw Zay Oo, 2019). The payment gateway ensures the secure and successful completion of transactions by confirming them with the bank. Subsequently, the bank adjusts the funds in the respective accounts, and transaction details are made available for review. Payment gateways are indispensable for ensuring the seamless operation of online transactions (Kyaw Zay Oo, 2019).



Online payment process showing the work of payment gateway

2.5 Types of Online Payment System in Nepal

i. eSewa

eSewa stands as Nepal's foremost online payment gateway, offering a diverse range of payment services. Users can easily settle utility bills, transfer funds, and conduct transactions through mobile phones and the internet using the eSewa digital wallet. It also serves as a platform for financial institutions to carry out their operations. Since its inception, eSewa has built a strong reputation among users by streamlining and improving access to online payment solutions.

ii. Khalti

Khalti is a well-known mobile wallet and online payment gateway in Nepal that allows users to maintain a balance and use it for online purchases, utility payments, and school

fees. Known for its user-friendly interface and ease of use, Khalti provides Nepalese customers with a reliable choice in the online marketplace, offering flexibility to switch services if needed.

iii. IME Pay

IME Pay is a reputable digital wallet and online payment platform in Nepal that offers a wide range of payment services, including settling internet bills, purchasing tickets, and facilitating money transfers. To encourage usage, IME Pay rewards customers with points for each transaction, thereby fostering customer loyalty and boosting confidence in their online payment solutions.

iv. ipay

ipay is another online payment gateway in Nepal functioning as a mobile wallet, enabling users to deposit funds for utility bill payments, online shopping, and money transfers. To attract customers, ipay offers reward points for transactions that can be redeemed for discounts on future transactions.

v. SCT MoCo

SCT MoCo, a division of SCT (Smart Choice Technologies), is a mobile app designed for SCT cardholders to oversee their bank accounts. Established in 2001, SCT provides ATM services and operates as an authorized online payment gateway under Nepal Rastra Bank. SCT MoCo enhances security with two-factor authentication, bolstering customer trust in online transactions.

vi. Nabil Electronic Payment Gateway (EPG)

The Nabil Electronic Payment Gateway enables customers to utilize their debit and credit cards for online purchases. Any customer possessing a bank account and a card can avail of this service. The participation of a well-regarded institution such as Nabil fosters confidence among both customers and merchants in the e-commerce industry.

vii. Himalayan Bank Enhanced E-Commerce Payment Gateway

Himalayan Bank Ltd. launched this payment gateway to streamline online transactions for customers using electronic cards issued in Nepal or internationally, as well as for e-commerce merchants. As one of Nepal's longstanding and reputable banks, the

introduction of this gateway enhances trust in online payment systems for both customers and merchants.

2.6 Customer Trust in Online Payment

Trust is essential in interpersonal relationships, requiring both parties to have a high level of confidence to maintain positive interactions. It encompasses qualities such as belief, reliability, truthfulness, predictability, honesty, credibility, and responsiveness, which are commonly cited in discussions about trust. Despite its frequent use, trust is intricate and multifaceted, making its precise definition challenging (McKnight & Chervany, 2001b). Furthermore, trust has been extensively examined across diverse fields including psychology, management, communication, sociology, economics, and political science (McKnight & Chervany, 2001b). Psychologists see trust as a personal characteristic, sociologists as a social structure, and economists as a factor influencing economic decision-making (Lewicki, 2006). Scholars from different disciplines often hold conflicting views on trust. For instance, sociologists David Lewis and Weigert (1985) argue that trust cannot be reduced to specific human traits, which contrasts with psychological perspectives. Consequently, trust definitions vary widely across disciplines, complicating efforts to formulate a comprehensive and precise understanding.

Trust is essential for online transactions, where each step requires careful execution to ensure security. Despite its common use, trust remains challenging to define precisely due to its complex nature. While online payment systems have gained popularity worldwide, Nepal faces unique challenges with many people lacking access to banking services and the internet. Even among those with access, there is often reluctance to use these services.

Consumer trust in online payments reflects their belief in and reliance on these services and apps. Trust significantly influences the adoption of online payment systems, as customers who trust online transactions are more likely to use such systems. Multiple studies have linked consumer trust to the adoption of mobile commerce, highlighting a strong connection between trust in mobile payments and their uptake. However, achieving widespread adoption is difficult without a comprehensive understanding of how to build and influence this trust (Alqatan & Singh, 2012).

2.7 Empirical Review

(Alyabes & Alsalloum, 2018) conducted a study titled "Factors Influencing Consumers' Perception of Electronic Payment in Saudi Arabia." The study aimed to explore what factors shape how Saudi consumers view e-payment systems. Using multiple regression analysis, the researchers analyzed the collected data and discovered that factors such as benefits, ease of use, and self-efficacy significantly impact Saudi consumers' perceptions of e-payment systems. However, the study did not find significant correlations between trust, security, and how consumers perceive e-payment systems. This underscores the importance for service providers to focus on enhancing the positive aspects of e-payment systems while also addressing concerns related to security and trust.

(Kaur, Shefali, & Barthwal, 2021) conducted a study titled "Factors Influencing the Adoption of E-payment Systems Amidst the COVID-19 Pandemic." The study aimed to explore the factors affecting the adoption of e-payment services and to examine whether consumer intentions are shaped by Perceived Usefulness, Perceived Security, Perceived Ease of Use, Perceived Benefits, and Perceived Health and Security. The researchers employed multiple linear regression and one-way ANOVA methods to analyze the data. The study concluded that perceived Ease of Use and perceived Benefits were the primary determinants influencing consumers' intentions to adopt e-payment systems. Furthermore, perceived Health Security was identified as an additional positive factor contributing to the adoption of e-payment systems.

(Bappy & Chowdhury, 2020) conducted research titled "Antecedents of Trust in Online Banking: A Bangladeshi Perspective" to explore the factors impacting trust in online banking within Bangladesh. The study concentrated on variables including perceived security, perceived privacy, and bank reputation. Multiple regression analysis was utilized to analyze the data collected. The results highlighted that perceived privacy stood out as the most influential factor predicting trust among Bangladeshi consumers in the context of online banking. The study recommended that improving perceived security, privacy, and overall bank reputation could significantly enhance trust in online banking services.

(Ganesh & Rahman, 2018) conducted a study titled "Factors Influencing Customers' Decisions on Digital Payments: Recommendations for Tiruchirappalli District." The research sought to identify the key factors that predict customers' choices when engaging in digital payments. The study utilized regression analysis to examine the collected data. It found that factors such as payment security, ease of use, and trust in the payment system were the most significant determinants influencing customers' decisions regarding digital payments.

(Roy & Sinha, 2017) conducted a study titled "Factors Influencing Customers' Adoption of Electronic Payment: An Empirical Analysis." The research aimed to uncover the factors affecting the adoption of electronic payment systems from the customer's perspective. The study employed multiple regression and Structural Equation Modeling (SEM) methods to analyze the data. It found that perceived usefulness, perceived ease of use, and perceived security are significant factors influencing customers' attitudes toward electronic payments. Furthermore, the study indicated that perceived risk does not have a substantial impact on customers' perceptions of electronic payments.

(Sumathy & KP, 2017) conducted a study titled "Digital Payment System: Perception and Concern among Urban Consumers," published in the International Journal of Applied Research. The research aimed to investigate the attitudes and concerns of urban consumers regarding digital payment systems. The study employed statistical methods including one-way ANOVA, independent sample t-test, and ranking techniques to analyze the data. It revealed that factors such as safety, fraud, and overall attitude significantly influence consumer perceptions towards digital payment systems.

(Teoh et al., 2015) conducted research titled "Factors Influencing Consumer Perception of Electronic Payment: An Empirical Analysis," published in Internet Research. The study sought to determine the factors that shape Malaysian consumers' perceptions of electronic payment (e-payment). The researchers utilized multiple regression analysis to analyze the collected data. The results revealed that factors such as benefits, self-efficacy, and ease of use play significant roles in influencing how consumers perceive e-payment systems.

(Wulandari et al., 2018) conducted a study titled "Factors Affecting the Adoption of Electronic Money," published in the International Journal of Civil Engineering and Technology. The research aimed to uncover the factors that impact consumers' acceptance of e-money, employing the Technology Acceptance Model (TAM) to assess perceived factors. The study employed multiple regression analysis to analyze the collected data. Results showed that perceived usefulness, perceived ease of use, and perceived benefits significantly influence the adoption of e-money. Additionally, approximately 36% of the variance in adoption was attributed to unspecified factors.

Binti Tasin, N. (2017) conducted research titled "Factors Influencing Customers' Trust in Online Shopping among Bank Executives." The study aimed to investigate the factors affecting consumer trust in Malaysia and to analyze the correlation between trust and purchasing decisions. Using T-tests, multiple regression, and correlation analysis, the research explored how personality traits influence trust in online shopping. The results revealed that trust in online shopping is affected by variables such as information quality, online consumer reviews, and website quality. Additionally, the study highlighted that trust plays a significant role in influencing online purchasing decisions.

(Ahmed et al., 2017) conducted research titled "Factors Influencing Consumer Purchasing Behavior in Online Shopping in Pakistan." The study aimed to investigate the factors that impact consumers' buying behavior in the realm of online shopping within Pakistan. Utilizing regression analysis and ANOVA, the research identified that domain-specific innovativeness and shopping orientations play a positive role in influencing consumers' behavior towards online shopping. The study concluded that the growth of electronic stores in Pakistan has notably heightened consumer interest in online shopping.

Pattan et al. (2018) conducted research titled "Consumer Perception towards Regular Use of E-payment Systems in Indore Division." The study aimed to examine the factors that impact consumers' perceptions of using e-payment systems. Through multiple regression analysis, the research identified that factors like security, ease of use, and the availability of the payment system significantly influence how consumers perceive and adopt e-payment systems.

Ling et al. (2017) conducted research titled "Online Trust for Online Purchase Intention in Malaysia." The study aimed to evaluate how perceived technology and perceived risk influence online trust and subsequently impact online purchase intention. Using confirmatory factor analysis (CFA), the study analyzed the data and found a positive correlation between perceived technology and online trust, as well as between perceived risk and online trust. The study concluded that businesses should focus on enhancing perceived technology, mitigating perceived risk through improved privacy and security measures, and bolstering online trust by maintaining integrity, delivering on promises, and ensuring high service quality, including robust customer service and reliable logistics information. These strategies are essential for increasing consumers' willingness to engage in online purchases.

(Al-Jahwari et al., 2018) conducted a study titled "Factors Influencing Customer Satisfaction of Online Shopping in Oman – Youth Perspective," published in *Humanities and Social Sciences Reviews*. The research aimed to evaluate how factors like product quality, application safety, delivery guarantee, and promotional offers impact customer satisfaction in online shopping. The study employed Chi-square analysis and Kolmogorov-Smirnov ranking analysis to analyze the data. It determined that product quality and service guarantee significantly contribute to the comfort and satisfaction of online shoppers. The study concluded that enhancing customer satisfaction in online shopping can be achieved by improving information reliability, promptly responding to customer inquiries, and effectively addressing customer complaints.

Ponte et al. (2015) conducted a study titled "Influence of Trust and Perceived Value on the Intention to Purchase Travel Online: Integrating the Effects of Assurance on Trust Antecedents." The objective was to investigate how consumers' perceptions of information quality, privacy, and security influence trust, and subsequently affect the intention to purchase travel online. The study utilized the partial least squares (PLS) technique for data analysis. The findings suggest that online purchase intention is significantly influenced by perceived value and trust. Specifically, perceived information quality and perceived security emerged as the primary predictors of perceived trust among consumers.

Manikandan et al. (2017) conducted research titled "An Empirical Study on Consumer Adoption of Mobile Wallets with Reference to Chennai City." The study aimed to investigate the factors impacting consumers' decisions to adopt mobile wallets and the challenges users face. ANOVA was employed for data analysis. The findings indicated that factors like brand loyalty and shopping convenience play a significant role in influencing the adoption of mobile wallets. The study predicts substantial growth in the adoption of mobile wallets in the future.

2.8 Research Gap

There are several promising areas for future research in understanding the factors that influence customer trust in online payment systems in Nepal. Firstly, investigating how cultural norms and values specific to Nepal shape trust in online transactions could yield valuable insights. Secondly, exploring Nepalese customers' concerns regarding security, including perceptions of data security and privacy, could deepen our understanding of strategies to build trust.

Additionally, studying perceived risks associated with online payments, the functionalities of payment platforms, and the impact of regulatory frameworks on trust would provide crucial insights. Evaluating the effectiveness of educational campaigns aimed at enhancing awareness about online security could also be pivotal. Finally, conducting comparative studies between Nepal and other countries could highlight unique challenges and opportunities in fostering trust in online payment systems.

Addressing these research gaps has the potential to advance our knowledge and support initiatives aimed at fostering trust and increasing the adoption of online payments in Nepal.

CHAPTER 3: RESEARCH METHODOLOGY

The research method section provides a detailed overview of the procedures and rationale employed to investigate a research problem. It delineates the specific methodologies used to collect, select, process, and analyze data, which allows readers to evaluate the credibility and dependability of the study. This section discusses the methods for data collection or generation and analysis, including techniques such as literature reviews, interviews, surveys, and other research methods that may incorporate both contemporary and historical information. Typically, it includes five primary components: the research design and plan, details about the population and sample size, the nature of the data, its sources, and the instrumentation used, the method of analysis, and the research framework that defines variables, often discussed in the first subsection.

3.1 Research Design

The term "research design" refers to the structured framework and methodology employed to achieve the objectives of a study through systematic data analysis. It involves the systematic collection and analysis of variables identified in the research problem using specific methods and procedures. This chapter aims to delineate and discuss the methodology applied in the study, detailing the selected approaches and tools that were deemed appropriate to achieve the research objectives. Through this process, the researchers endeavor to establish the credibility and reliability of their thesis using a clear and methodical approach.

A research design acts as a comprehensive blueprint outlining the methods and procedures for collecting and analyzing data. It provides a strategic plan for determining how to acquire and analyze the requisite data essential for the study's objectives.

The study relies on a primary survey for its findings. It employs both quantitative and qualitative methodologies to assess and interpret the results. The relationship between customer trust and its determinants is explored through hypothesis testing. The research utilizes a structured questionnaire as an efficient tool for data collection.

Statistical tests and analyses support the research findings. Quantitative data were analyzed using Statistical Package for the Social Sciences (SPSS) software and

Microsoft Excel. Cronbach's alpha is employed to evaluate the reliability of scales, particularly suited for multipoint-scale items and widely recognized for assessing inter-item consistency reliability.

3.2 Population and Sample Size

A sample represents only a part of a population that allows for drawing conclusions about the entire population. Sampling involves selecting this subset based on which judgments or inferences about the population are made (Etikan, Musa, & Alkassim, 2016). This study focuses on investigating the factors that influence customer trust in online transactions, with the population consisting of individual customers or merchants actively involved in transactions. The sample for this study will include 432 respondents selected from diverse categories such as businesspersons, working professionals, retirees, students, and others engaged in financial transactions.

The research will utilize a survey-based methodology, guided by the objectives outlined in the initial chapter, which seeks to explore the factors impacting customer trust in online transactions.

3.3 Nature and Sources of Data, and the Instrumentation of Data Collection

The primary data collection method for this study is a questionnaire, widely recognized for its effectiveness in gathering data. Standardized questionnaires with multiple-choice questions and rating scales are extensively used to meet the study's objectives. Additionally, original data collection techniques are employed later in the research process to gather and analyze data in order to generate meaningful insights.

A structured questionnaire adapted from previous studies such as "Which dimensions affect private shopping e-customer loyalty?" (Durmus, 2013) and "Antecedents of Trust in Online Banking: A Bangladeshi Perspective" (Bappy & Chowdhury, 2020) serves as the main instrument for this study. This questionnaire is customized to align with the specific research objectives. Its selection as the primary tool is based on its appropriateness for achieving the research goals effectively.

Data collected through the questionnaire are analyzed using the statistical software SPSS. The aim of this analysis is to describe and interpret the collected data within the theoretical framework established from relevant literature on this topic. The questionnaires are sent to respondents by e-mail, social networking sites, and, in certain

cases, printed sets. The distribution of questionnaires is done electronically and physically. The goal of the study is clearly stated on the questionnaire page for each respondent, ensuring they understand why the study is being conducted. This approach eliminates any suspicions or biases and encourages respondents to provide honest opinions. Furthermore, questions are crafted for clarity and understanding, avoiding vague or ambiguous phrases, ensuring respondents can answer easily and accurately, thereby minimizing errors.

3.4 Method of Analysis

Data analysis was carried out using IBM SPSS 25.0 and MS Excel software. These applications supported a range of analyses including general, descriptive, and inferential techniques. General analysis focused on examining the frequency and percentage distributions of respondents. Descriptive analysis involved computing measures like central tendency and dispersion to summarize the data. Inferential analysis included tasks such as calculating correlation coefficients, conducting regression analyses, performing one-way ANOVA to compare groups, determining significance levels, and testing hypotheses. Below is a synopsis of the statistical analyses conducted.

3.4.1 Mean

The mean typically refers to the average value obtained by adding all data points together and dividing by the total number of data points. While there are various types of mean, the term "mean" commonly refers to the arithmetic mean (Academy, 2020).

3.4.2 Standard Deviation

Standard deviation is a statistical metric used to gauge the extent of deviation of a set of numbers from their mean, achieved by taking the square root of the variance. Variance quantifies the average squared difference of each data point from the mean, giving more weight to deviations farther from the mean compared to those closer. This approach ensures that positive and negative deviations do not cancel each other out, maintaining a non-zero variance. It is derived as the square root of variance, indicating the degree of variability of each data point relative to the mean. Larger deviations from the mean result in higher standard deviation, reflecting greater dispersion within the dataset. Conversely, smaller deviations lead to lower standard deviation. Thus, a wider

distribution of numbers in the dataset corresponds to a higher standard deviation (Hargrave, 2020).

3.4.3 Correlation

Correlation is a statistical metric used to gauge the strength of association between two variables. It measures the extent to which variables co-vary, expressed as a single value ranging from -1 to +1, known as the correlation coefficient (denoted as r). Values closer to +1 indicate a strong positive correlation, whereas values near -1 suggest a strong negative correlation.

For this study, the Pearson correlation coefficient is chosen because the variables exhibit a normal distribution. It computes correlations between responses given on a Likert scale to assess the relationships between independent and dependent variables across all samples.

3.4.4 Anova Test

ANOVA, or Analysis of Variance, is a statistical technique designed to decompose the overall observed variance within a dataset into two distinct components: systematic factors and random factors. Systematic factors are those that exert a statistically significant influence on the dataset, while random factors do not. ANOVA is widely utilized by analysts to evaluate how independent variables affect the dependent variable in regression studies (Kenton, 2019).

3.4.5 Regression Analysis

Regression is a statistical technique used to evaluate the strength of the relationship between a dependent variable (often represented as Y) and several independent variables. Its main objective is to forecast an outcome based on historical data. Therefore, regression analysis is employed to predict how a dependent variable will behave based on the behavior of multiple independent variables. In this study, linear regression is chosen for its fundamental and widespread application in predictive analysis. This approach estimates coefficients for a linear equation that incorporates one or more independent variables to best forecast the value of the dependent variable. At the core of regression analysis is the process of fitting a single line through a scatter plot that represents data points. Generally, there are two primary types of regression models that are commonly used in research. They are simply discussed below:

- **Simple linear regression model**

Simple linear regression is a statistical technique used to analyze the relationship between a solitary independent variable and a dependent variable by fitting a linear equation.

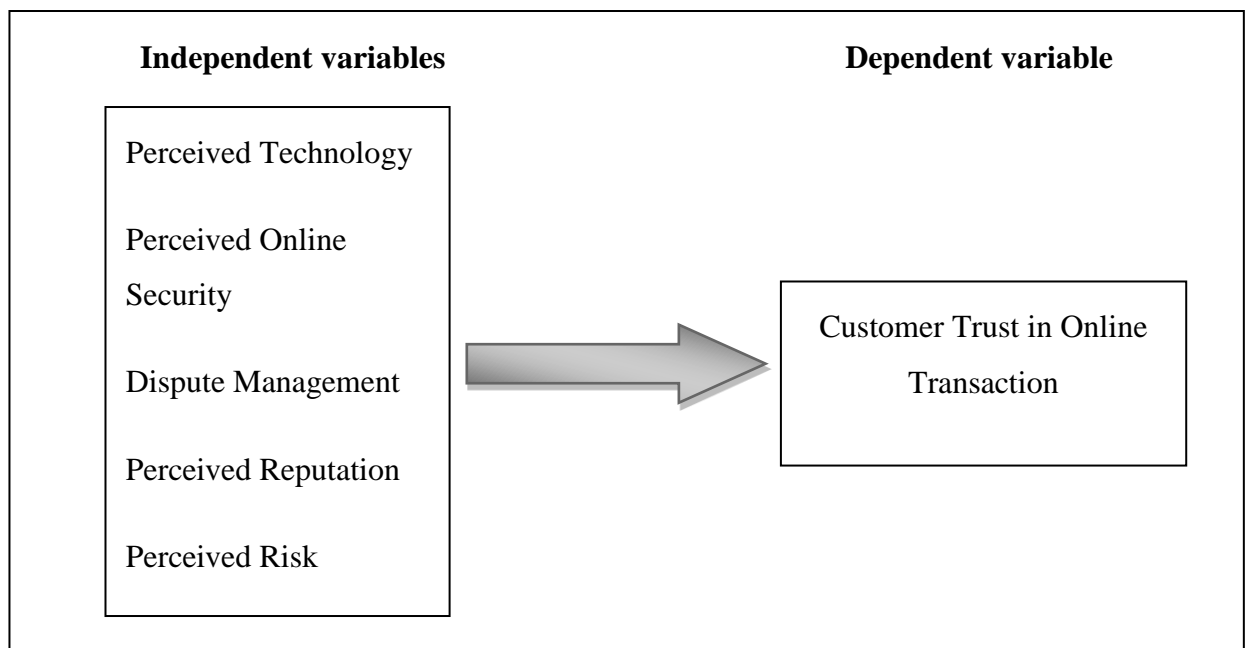
- **Multiple regression model**

The multiple regression model assesses how a single dependent variable relates to several independent variables, requiring the inclusion of two or more predictor variables. This study employs five independent variables, making the use of a multiple regression model appropriate.

3.5 Research Framework and Definition of the Variables

A research framework has been utilized to direct the study's attention towards variables, demonstrating the impact of different independent variables on the dependent variable. Figure 3 illustrates the research framework adopted for this study.

Figure 3: Research framework



3.5.1 Perceived Technology

(Ling et al., 2011) highlighted in their study that factors such as perceived ease of use and perceived usefulness have a significant influence on online purchase intentions. They emphasized that perceived usefulness, which includes clear and valuable information on websites, reduces information asymmetry, influences information processing behavior, and enhances levels of online trust. According to (Koufaris,

Hampton-Sosa, & William, 2004), perceived ease of use refers to how customers subjectively perceive the effort required to learn and navigate a website. (Davis, 1989) proposed that perceived usefulness is related to an individual's belief in how using a particular system will improve their work performance. Therefore, further research is needed to explore the strong impact of perceived technology on online trust and purchase intentions.

3.5.2 Perceived Online Security

(Wang & Lin, 2003) pointed out that a significant barrier to the adoption of e-commerce is the perceived lack of internet security. Concerns related to security include vulnerabilities in credit card information, potential threats from hackers, and concerns about the reliability of suppliers. These issues are major sources of anxiety for consumers. According to (Teo, 2002), consumers may also be apprehensive about online providers rejecting agreements after transactions. Additionally, worries about disclosing personal information (Yoon, 2000) and the potential for errors in online payments (Napitupulu & Kartavianu, 2014) further contribute to negative perceptions of online shopping.

3.5.3 Dispute Management

Dispute management in e-commerce is crucial, focusing on leveraging technology to prevent, handle, and resolve conflicts. Online Dispute Resolution (ODR) has its roots in Alternative Dispute Resolution (ADR), which traditionally occurs through face-to-face interactions (Hiroki & Colin, 2017). Given the complexity of online transactions involving multiple parties, technological errors can complicate matters, underscoring the importance of effective dispute management to swiftly address issues. Successfully resolving disputes enhances consumer trust in online payment systems. As society increasingly embraces digital platforms, ensuring individuals and consumers receive equitable resolutions to their online issues as promptly as they would offline is becoming indispensable (Hiroki & Colin, 2017).

3.5.4 Perceived Reputation

Reputation and size are commonly acknowledged as influential factors in shaping consumer trust towards seller organizations (Jarvenpaa, Tractinsky, & Saarinen, 1999). Recent findings by Ponte et al. (2015) indicate that an online store's reputation acts as

a crucial quality signal based on past consumer experiences. According to (Li, Kim, & Park, 2007), perceived reputation plays a vital role in reassuring buyers about a seller's competence, integrity, and ethical standing, which are influenced by information gathered from diverse sources. Consumers' perception of an online store's reputation mirrors their acknowledgment of the seller's transparency and customer-centric ethos (Li, Kim, & Park, 2007). Given the significant repercussions of unreliable practices for reputable e-commerce entities, it is imperative to explore the impact of perceived reputation on consumer trust thoroughly.

3.5.5 Perceived Risk

Despite advancements in safety measures, consumers still view transactions in the digital realm as fraught with risk (Li, Kim, & Park, 2007). According to (Kim, Ferrin, & Rao, 2007), consumer risk perceptions refer to uncertainties stemming from electronic transactions. Perceived risk encompasses uncertainties and potential negative outcomes associated with engaging in an activity (Dowling & Staelin, 1994). It is essential to recognize that perceived risk is subjective, and consumers may only acknowledge issues if they perceive them personally, even if these issues have existed for an extended period (Li, Kim, & Park, 2007).

CHAPTER 4: RESULTS AND DISCUSSION

This chapter provides a systematic examination, interpretation, and analysis of primary data concerning the factors affecting consumer trust in online transactions in Nepal. It presents findings obtained from a survey that were rigorously scrutinized and evaluated using statistical methods such as factor analysis, regression analysis, reliability analysis, and validity analysis conducted with SPSS software. The collected survey data underwent statistical analysis using SPSS, and the results of hypothesis testing are presented and discussed based on tables generated by the software. The findings from hypothesis testing are subsequently summarized and discussed in detail.

The objective of this chapter is to analyze and interpret the data collected during the study and to present the results of the questionnaire survey. This chapter is structured into five sub-sections. The first sub-section focuses on profiling the respondents and describing their demographic characteristics. The second sub-section conducts descriptive analysis, examining the collected data using frequency analysis and measures of central tendency. The third sub-section performs inferential analysis, which includes correlation and regression analyses of the collected data. The fourth sub-section involves hypothesis testing. Finally, the fifth sub-section of this chapter discusses and draws conclusions by analyzing and interpreting the data collected on factors influencing customer trust in online transactions.

4.1 Demographic Profile of the Respondents

This section is dedicated to analyzing and interpreting the demographic information gathered from the questionnaires. Respondents are categorized based on various demographic characteristics, offering insights into the profiles of participants in the study. The demographic profile encompasses variables such as gender, age, occupation, years of professional experience, level of education, and marital status.

4.1.1 Gender of the Respondents

Table 1: Gender of the Respondents

Gender	Frequency	Percent (%)
Male	266	61.57%
Female	166	38.43%
Total	432	100%

Table 1 categorizes respondents into male and female groups, presenting the frequency and percentage distribution based on gender. Among the total 432 responses collected, males comprise 61.57%, while females constitute 38.42% of the respondents.

4.1.2 Age

Table 2: Age Group of the Respondents

Age	Frequency	Percent (%)
Below 25	74	17.12%
25-35	326	75.46%
35-45	28	6.48%
Above 45	4	0.92%
Total	432	100.00%

Table 2 categorizes respondents into four age groups: below 25, 25-35, 35-45, and above 45, displaying the frequency and percentage distribution within each group. Respondents below 25 years old make up 17.12%, those aged 25-35 constitute 75.46%, individuals aged 35-45 account for 6.48%, and those above 45 years old represent 0.92% of the total respondents.

4.1.3 Education Background

Table 3: Education background of respondents

Background	Frequency	Percent (%)
School Level	14	3.24%
+2	78	18.06%
Undergraduate	192	44.44%
Graduate	148	34.26%
Total	432	100.00%

Table 3 provides the frequency distribution and percentage distribution of respondents based on their educational backgrounds. Respondents' education levels are classified into four categories: School level, +2, Undergraduate, and Graduate. Among the total 432 respondents, 3.24% have completed school level education, 18.06% have completed +2 education, 44.44% are undergraduates, and 34.26% are graduates.

4.1.4 Occupation

Table 4: Occupation

Occupation	Frequency	Percent (%)
Student	76	17.59%
Salaried	258	59.72%
Self employed	74	17.12%
House wife	10	2.31%
Unemployed	14	3.24%
Total	432	100.00%

Table 4 displays the frequency distribution and percentage breakdown of respondents' occupational statuses across five categories: student, salaried, self-employed, housewife or unemployed. Out of the total 432 responses collected, 17.59% of

respondents were students, 59.72% were salaried employees, 17.12% were self-employed, 2.31% were housewives, and 3.24% were not engaged in any occupational activity. The table indicates that the largest proportion of respondents were salaried employees, while the smallest proportion were housewives.

4.1.5 Involvement in Online Transaction

Table 5: Involvement in Online Transaction

Involvement in online transaction	Frequency	Percent (%)
Yes	420	97.22%
No	12	2.78%
Total	432	100.00%

Table 5 presents the frequency distribution and percentage breakdown of respondents based on their involvement in online transactions. The majority of respondents, comprising 97.22%, have participated in online transactions, while only 2.78% have not engaged in online transactions.

4.1.6 Frequency of Online Transaction

Table 6: Frequency of Online Transaction

Frequency of Online Transaction	Frequency	Percent (%)
Daily	112	25.93%
Once in a week	132	30.56%
Rarely	176	40.74%
Never	12	2.78%
Total	432	100.00%

Table 6 illustrates the distribution of respondents based on their frequency of engagement in online transactions. Respondents were queried about the frequency of their online purchasing activities, which were categorized into four groups: daily,

weekly, rarely, and never. Specifically, 25.93% of respondents engage in online transactions daily, 30.56% participate weekly, 40.74% are involved rarely, and 2.78% have never engaged in online transactions.

4.1.7 Fraudulent Experience

Table 7: Fraudulent Experience in Online Transaction

Fraud experience in online transaction	Frequency	Percent (%)
Yes	86	20%
No	346	80%
Total	432	100.00%

Table 7 displays the distribution of respondents based on their experience with fraudulent activities in online transactions. Specifically, 20% of respondents reported experiencing fraudulent incidents in online transactions, while 80% indicated they have not encountered any fraudulent activities in online transactions.

4.2 Descriptive Study of Research Variables

Descriptive analysis was performed to calculate scores such as the mean and standard deviation for each survey variable. This analysis aimed to highlight the importance of each variable based on responses from survey participants. Descriptive statistics summarize details about the sample and its measurements, including averages and variability.

The SPSS output provided mean scores for 26 items (questions), each reflecting specific aspects of the survey. Descriptive statistics were utilized to analyze the data obtained through a questionnaire. The questionnaire employed a 5-point rating scale ranging from 1 (Strongly disagree) to 5 (Strongly agree) to gather responses for the research. The rating scale ranges from 1 to 5 as follows:

1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly agree

There were 26 opinion statements used to assess six variables, comprising five independent variables ("Perceived Risk," "Perceived Technology," "Perceived Online Security," "Dispute Management," and "Perceived Reputation") and one dependent variable ("Customer Trust in Online Transaction"). Descriptive statistics involve fundamental statistical techniques used to summarize data from a particular dataset. Mean and standard deviation are employed to summarize the variables obtained through questionnaires during the data collection process.

4.2.1 Perceived Risk

"Perceived Risk" serves as an independent variable in this study, and it is defined by four distinct opinion statements: "I have privacy concerns regarding online payment systems," "I believe that my online payment sites may use my personal information without permission," "I feel very concerned about divulging my personal and financial data to other parties," and "I believe that conducting online payments can present financial risks." The concept of Perceived Risk was evaluated through four questions posed to the respondents.

Table 8: Descriptive Analysis of Perceived Risk

Opinion Statement	N	Mean	Std. Deviation
I have privacy concern regarding online payment system.	432	4.12	0.906
I believe that my online payment sites may use my personal information without permission	432	4.08	0.972
I feel very concerned about divulging my personal and financial data to other parties	432	4.19	0.942
I believe that conducting online payment can present financial risk	432	3.90	1.088

Table 8 displays the results of the descriptive analysis for Perceived Risk based on four measurement statements. Each of the 432 respondents provided their responses using a Five-Point Likert Scale (where 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, and 5=strongly agree). The mean values for the items are 4.12, 4.08, 4.19, and 3.90, indicating an overall positive response.

The statement "I feel very concerned about divulging my personal and financial data to other parties" received the highest mean score of 4.19, suggesting it was the most strongly agreed upon statement. In contrast, the statement "I believe that conducting online payment can present financial risk" received the lowest mean score of 3.90, indicating it was the least agreed upon statement.

Table 8 also shows that the highest standard deviation among the items is 1.088, indicating more variability in responses for the statement "I believe that conducting online payment can present financial risk". Conversely, the lowest standard deviation is 0.906, suggesting that responses for the statement "I have privacy concern regarding online payment system" were less varied among respondents.

4.2.2 Perceived Technology

"Perceived Technology" is an independent variable in this study, characterized by four distinct opinion statements: "I am concerned about the performance of my online device when conducting online payments," "I worry that my device may lack the capability to handle online payments," "I trust that online payments are safeguarded against technical malfunctions and issues," and "I believe online payments are vulnerable to accidental alteration or destruction during transmission over telecommunication networks." The respondents were asked four questions related to Perceived Technology.

Table 9: Descriptive Analysis of Perceived Technology

Opinion Statement	N	Mean	Std. Deviation
I have concern about the performance of online device when it comes to conducting online payment	432	4.16	0.779
I am afraid that my device may not have the ability to conduct online payment	432	3.60	1.345
I believe that online payments are protected from technical malfunction and issues	432	3.84	0.970
I believe that online payments are susceptible to being accidentally altered or destroyed during transmission over the telecommunication network	432	4.01	0.987

Table 9 presents the descriptive analysis of Perceived Technology, which includes four statements used to assess respondents' perceptions. Each of the 432 participants provided their responses using a Five-Point Likert Scale (1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree). The mean values for the items are 4.16, 3.60, 3.84, and 4.01, indicating an overall positive response.

The statement "I have concern about the performance of my online device when conducting online payments" has the highest mean of 4.16, indicating strong agreement among respondents. Conversely, the statement "I am afraid that my device may not have the ability to conduct online payment" has the lowest mean of 3.60, indicating less agreement.

Table 9 also reveals that the statement "I am afraid that my device may not have the ability to conduct online payment" has the highest standard deviation of 1.345,

indicating more variability in responses. On the other hand, the statement "I have concern about the performance of my online device when conducting online payments" has the lowest standard deviation of 0.779, indicating more consistent responses among the respondents.

4.2.3 Perceived Online Security

To investigate the influence of Perceived Online Security on Customer trust in online transactions, four specific items were employed. Descriptive analysis was conducted for each question pertaining to "Perceived Online Security," and an overall summary of this variable is outlined below:

Table 10: Descriptive Study of Perceived Online Security

Opinion Statement	N	Mean	Std. Deviation
There is availability of secure mode for transmitting information in online payment.	432	3.97	0.739
I feel secure about online payment system.	432	3.75	0.837
I have confidence in the overall security of online banks.	432	3.58	0.925
I do not feel insecure while making my transaction with online application.	432	3.61	0.947

Table 10 provides a descriptive analysis of Perceived Online Security using four statements aimed at assessing this variable. Each of the 432 respondents provided their responses on a Five-Point Likert Scale (where 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, and 5=strongly agree). The mean values for the statements are 4.52, 5.05, 4.76, and 5.45, indicating an overall positive response.

The statement "There is availability of secure mode for transmitting information in online payment" has the highest mean of 4.52, suggesting it is the most agreed-upon statement. Conversely, the statement "I have confidence in the overall security of online banks" has the lowest mean of 3.58, indicating it is the least agreed-upon statement.

Table 10 also reveals that the statement "I do not feel insecure while making my transaction with online application" has the highest standard deviation of 0.987, indicating more variability in responses among the respondents. Conversely, the statement "There is availability of secure mode for transmitting information in online payment" has the lowest standard deviation of 0.739, indicating less variability in responses.

Next, to explore whether Customer trust in online transactions is influenced by Dispute Management, four specific items were utilized. "Dispute Management" is another independent variable in this study, and descriptive analysis was conducted for each question. The overall descriptive study of this variable is presented below:

Table 11: Descriptive Study of Dispute Management

Opinion Statement	N	Mean	Std. Deviation
Online payment sites provides me with convenient option for returning purchased items	432	3.42	1.121
Online payment sites takes care of problems promptly	432	2.96	1.057
Online payment sites offers meaningful guarantee	432	3.16	1.057
It offers the ability to speak to a live person if there is problem	432	3.44	1.031

Table 11 provides a descriptive analysis of Dispute Management, utilizing five statements for measurement. Each of the 432 respondents rated these statements on a Five-Point Likert Scale (1=strongly disagree, 2=disagree, 3=neutral, 4=agree,

5=strongly agree). The mean ratings for the statements are 3.42, 2.96, 3.16, and 3.44, indicating generally positive responses.

The statement "It offers the ability to speak to a live person if there is a problem" received the highest mean rating of 3.44, indicating the highest level of agreement among respondents. Conversely, "Online payment sites take care of problems promptly" received the lowest mean rating of 3.16, indicating the least agreement.

Table 11 also illustrates that the statement "Online payment sites provide me with a convenient option for returning purchased items" has the highest standard deviation of 1.121, indicating more variability in responses from the respondents. On the other hand, the statement "It offers the ability to speak to a live person if there is a problem" has the lowest standard deviation of 1.031, indicating more consistent responses among respondents.

4.2.5 Perceived Reputation

To assess how Perceived Reputation influences Customer trust in online transactions, this study utilized four specific measurable items. Perceived Reputation is considered an independent variable in this research. The following provides a descriptive analysis of each question and an overall descriptive study of this variable:

Table 12: Descriptive Study of Perceived Reputation

Opinion Statement	N	Mean	Std. Deviation
I believe that my provider of online payment system is honest	432	3.75	0.910
I believe that my online payment system has a reputation of being trustworthy	432	4.00	0.922
I believe that my online payment system provider has a concern for customers	432	3.78	0.816

I believe my online payment system provider is well known.	432	4.09	0.892
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Table 12 displays a descriptive analysis of Perceived Reputation using four statements as metrics. Each of the 432 respondents rated these statements on a Five-Point Likert Scale (1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree). The average ratings for the items are 3.75, 4.00, 3.78, and 4.09, indicating generally positive responses.

Among these statements, "I believe my online payment system provider is well known" received the highest average rating of 4.09, indicating the highest level of agreement. Conversely, "I believe that my provider of online payment system is honest" had the lowest average rating of 3.75, indicating the least agreement.

Additionally, Table 12 reveals that the statement "I believe that my online payment system has a reputation of being trustworthy" has the highest standard deviation of 0.922, suggesting more varied responses from respondents. In contrast, the statement "I believe that my online payment system provider has a concern for customers" has the lowest standard deviation of 0.816, indicating more consistent responses among respondents.

4.2.6 Customer Trust in Online Transaction

In this study, Customer trust in online transactions was employed as the dependent variable, which was assessed through six different opinion statements: "The service provider of digital payment is trustworthy," "Online payment system is secure to use," "I trust the system and processes backing my transaction," "I trust the information provided during the online payment process," "I have faith in the effort taken by the provider to ensure the online payment system to conduct my transaction is safe," and "The online payment system gives me a reliable impression." The respondents were asked six questions related to Trust in Online Transaction.

Table 13: Descriptive Study of Trust in Online Transaction

Opinion Statement	N	Mean	Std. Deviation
The service provider of digital payment is trustworthy	432	3.87	0.826
Online payment system is secure to use	432	3.93	0.823
I trust the system and processes backing my transaction	432	3.94	0.871
I trust the information provided during the online payment process	432	3.97	0.867
I have faith in the effort taken by the provider to ensure the online payment system to conduct my transaction is safe	432	3.96	0.788
The online payment system gives me a reliable impression	432	3.92	0.852

Table 13 presents a descriptive analysis of Trust in Online Transactions using six statements as measures. Each of the 432 respondents rated these statements on a Six-Point Likert Scale (1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree). The average ratings for the items are 3.87, 3.93, 3.94, 3.97, 3.96, and 3.92, indicating generally positive responses.

Among these statements, "I trust the information provided during the online payment process" received the highest average rating of 3.97, indicating the highest level of agreement. Conversely, "The service provider of digital payment is trustworthy" had the lowest average rating of 3.87, indicating the least agreement.

Additionally, Table 13 indicates that the statement "I trust the system and processes backing my transaction" has the highest standard deviation of 0.871, suggesting more varied responses from respondents. In contrast, the statement "I have faith in the effort

taken by the provider to ensure the online payment system to conduct my transaction is safe" has the lowest standard deviation of 0.788, indicating more consistent responses among respondents.

4.3 Analysis of Relationship and Significance among the Variables

Inferential Test

The purpose of this section is to delineate the methodology for analyzing the empirical results and testing the hypotheses posited in the previous chapter. Inferential statistics are employed to draw conclusions from sample data to the larger population it represents. These statistical techniques allow researchers to infer population parameters using one or more samples. Inferential analysis tests hypotheses to determine if observed differences between groups or variables are statistically significant or attributable to chance. It provides new insights by predicting and generalizing based on sample data. This section specifically concentrates on two analytical methods: Correlation Analysis and Regression Analysis.

4.3.1 Correlation Analysis

Correlation Analysis was performed to examine the associations between variables. Pearson's correlation coefficient was utilized for variables with categorical responses. A correlation matrix was generated to assess the magnitude and direction of relationships among the study variables. A positive correlation signifies that both variables generally increase or decrease together, whereas a negative correlation indicates that as one variable rises, the other tends to decrease. Table 14 depicts these correlations visually.

Table 14: Correlation of Customer Trust in Online Transaction

Correlations		
Independent Variables		Customer Trust in Online Transaction
Perceived Risk	Pearson Correlation	0.504
	P-value	0.000
	N	432
Perceived Technology	Pearson Correlation	0.567
	P-value	0.000
	N	432
Perceived Online Security	Pearson Correlation	0.699
	P-value	0.000
	N	432
Dispute Management	Pearson Correlation	0.524
	P-value	0.000
	N	432
Perceived Reputation	Pearson Correlation	0.755
	P-value	0.000
	N	432

Relationship between Perceived Risk and Trust in Online Transaction

The Pearson correlation coefficient between Perceived Risk and Customer trust in online transactions is 0.504, suggesting a positive correlation between these variables. The p-value for Perceived Risk is below 0.01, indicating statistical significance in this relationship.

Relationship between Perceived Technology and Trust in Online Transaction

The Pearson correlation coefficient between the independent variable Perceived Technology and the dependent variable Customer trust in online transactions is 0.567,

indicating a positive correlation between these variables. The statistical analysis shows a p-value of less than 0.01, confirming that this correlation is statistically significant.

Relationship between Perceived Online Security and Trust in Online Transaction

The Pearson correlation coefficient between Perceived Online Security and Customer trust in online transactions is 0.699, suggesting a positive correlation between these variables. The p-value, which is less than 0.01, indicates that this correlation is statistically significant.

Relationship between Dispute Management and Trust in Online Transaction

The Pearson correlation coefficient between the independent variable Dispute Management and the dependent variable Customer trust in online transactions is 0.524, indicating a positive correlation between these variables. A p-value of less than 0.01 confirms that this correlation is statistically significant.

Relationship between Perceived reputation and Trust in Online Transaction

The Pearson correlation coefficient between the independent variable Perceived Reputation and the dependent variable Customer trust in online transactions is 0.755, suggesting a positive correlation between these variables. The p-value being less than 0.01 indicates that this correlation is statistically significant.

4.3.2 Regression Analysis

The main objective of multiple regressions is to explore the intricate relationship between multiple independent or predictor variables and a dependent or criterion variable. In statistical modeling, regression analysis is a methodological approach used to estimate connections among variables. It encompasses various techniques for modeling and analyzing multiple variables, focusing on the relationship between a dependent variable and one or more independent variables.

While correlation analysis determines whether a strong relationship exists between two variables, it does not specify the precise nature of that relationship. In contrast, regression analysis provides insights into both the direction and magnitude of the

relationship between variables. It is employed to describe relationships and to make predictions based on data.

Thus, to gain a comprehensive understanding of the factors influencing customer trust in online transactions in Nepal, regression analysis is employed. This study investigates the impact of independent variables such as Perceived Risk, Perceived Technology, Perceived Online Security, Dispute Management, and Perceived Reputation on the dependent variable.

Multiple Regression Model

$$\hat{Y} = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5$$

Where,

\hat{Y} = Customer Trust in Online Transaction

X_1 = Perceived Risk

X_2 = Perceived Technology

X_3 = Perceived Online Security

X_4 = Dispute Management

X_5 = Perceived Reputation

B_i = Coefficient of slope of regression model

Table 15: Model Summary for Customer Trust in Online Transaction

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.811	0.658	0.654	0.41280

a. Independent Variables: Perceived Risk, Perceived Technology, Perceived Online Security, Dispute Management and Perceived Reputation

b. Dependent Variable: Trust in Online Transaction

The model summary provides the R-square, also referred to as the coefficient of determination, which elucidates the variability in the data. As depicted in Table 13, the

R-square value stands at 0.658, indicating that 65.8% of the variance in Customer Trust in Online Transactions is accounted for by Perceived Risk, Perceived Technology, Perceived Online Security, Dispute Management, and Perceived Reputation. However, 34.2% of the variance remains unexplained in this study, suggesting the presence of other significant variables influencing Customer Trust in Online Transactions that were not considered.

Similarly, the adjusted R-square is 0.650, signifying that 65% of the variance in Customer Trust in Online Transactions is explained by the variables included in the model. The standard error of the estimate, denoted as 0.41280 in the model summary, represents the variability of observed values from the regression line, measured in units of 0.41280.

Table 16: ANOVA for Trust in Online Transaction

Model	Sum of Squares	Df	Mean Square	F	Sig.
M Regression	139.749	5	27.950	164.020	.000
Residual	72.592	426	0.170		
Total	212.342	431			

a. Independent Variables: Perceived Risk, Perceived Technology, Perceived Online Security, Dispute Management and Perceived Reputation

b. Dependent Variable: Trust in Online Transaction

Based on the ANOVA results, the obtained p-value is 0.00, which is lower than the specified alpha value of 0.01. This finding suggests that the model successfully predicts the association between the dependent variable and the independent variables. Therefore, the independent variables (Perceived Risk, Perceived Technology, Perceived Online Security, Dispute Management, and Perceived Reputation) are considered statistically significant in explaining the variance observed in Trust in Online Transactions.

Table 17: Regression Coefficient (Trust in Online Transaction)

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
Constant	0.555	0.129		4.307	0.000
Perceived Risk	0.048	0.041	0.055	1.171	0.242
Perceived Technology	0.024	0.043	0.028	0.558	0.577
Perceived Online Security	0.362	0.043	0.349	8.469	0.000
Dispute Management	0.032	0.032	0.038	1.005	0.316
Perceived Reputation	0.419	0.040	0.464	10.513	0.000

- a. Dependent Variable: Perceiver Risk, perceived Technology, Perceived Online Security, Dispute Management and Perceived Reputation
- b. Independent Variable: Customers trust in online transaction

Taking five dimensions of Trust in online transaction i.e., Perceived Risk, Perceived Technology, Perceived Online Security, Dispute Management and Perceived Reputation as independent variable (X1, X2, X3, X4 and X5) and Customers Trust in Online Transaction as the dependent variable, the model is constructed with the equation as below:

$$Y_1 = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e_i$$

Based on the coefficients, the regression equation for Customers Trust in Online Transaction can be written as:

$$Y1 = 0.555 + 0.048X1 + 0.024X2 + 0.362X3 + 0.032X4 + 0.419X5$$

4.4 Hypothesis Testing

This section focuses on testing the hypotheses established for the study. Each hypothesis compares two opposing statements to determine which one is more strongly supported by the data collected from the sample.

Each hypothesis is tested individually using statistical analysis software (SPSS). For each dependent variable, four alternative hypotheses were formulated to examine their relationships with the independent variables in this research. The evaluation of each hypothesis is based on Pearson's correlation coefficient.

The testing of each hypothesis regarding the relationships between independent variables and the dependent variable is discussed below:

Hypothesis 1

H1: There is significant relationship between Perceived Risk and customers trust in online transaction

The regression analysis shows that there is insignificant relationship between Perceived Risk and Customer trust in online transaction. Since the p-value is greater than alpha (i.e., $0.242 > 0.05$), the relationship is not significant.

Hence, the alternative hypothesis (H1) is rejected.

Hypothesis 2

H2: There is significant relationship between Perceived Technology and Customers Trust in online Transaction

The regression analysis shows that there is insignificant relationship between Perceived Technology. Since the p-value is greater than alpha (i.e., $0.577 > 0.05$), the relationship is not significant.

Hence, the alternative hypothesis (H2) is rejected.

Hypothesis 3

H3: There is significant relationship between Perceived Online Security and Customers trust in Online Transaction.

The regression analysis shows that there is significant relationship between Perceived Online Security and Customers trust in Online Transaction. Since the p-value is less than alpha (i.e., $0.000 < 0.05$), the relationship is not significant.

Hence, the alternative hypothesis (H3) is accepted.

Hypothesis 4

H4: There is significant relationship between Dispute Management and Customers Trust in online Transaction.

The regression analysis shows that there is insignificant relationship between Dispute Management and Customers Trust in online Transaction. Since the p-value is greater than alpha (i.e., $0.316 > 0.05$), the relationship is not significant.

Hence, the alternative hypothesis (H4) is rejected.

Hypothesis 5

H5: There is significant relationship between Perceived Reputation and Customers trust in Online Transaction

The regression analysis indicates a significant relationship between Perceived Reputation and Customer trust in Online Transactions. This is evidenced by a p-value of less than the alpha level (i.e., $0.000 < 0.05$), confirming the statistical significance of the relationship.

Hence, the alternative hypothesis (H5) is accepted.

4.5 Discussion of the Findings

Trust serves as a mediator between customer characteristics and perceptions such as e-commerce knowledge, perceived technology, perceived online security, dispute management, and perceived risk, influencing their purchasing intentions. This study

emphasizes robust correlations between trust and factors such as perceived risk, perceived technology, perceived online security, dispute management, and perceived reputation.

Businesses and governments should acknowledge the critical significance of customer trust and its influencing factors, prioritizing these elements to bolster the adoption of online payments.

The research indicates a significantly higher usage of online payments among respondents who are users compared to non-users. Interestingly, the study reveals that among users, online payment engagement is not frequent, with 25.93% engaging in online payments daily and 30.56% weekly. Furthermore, 20% of respondents have encountered fraud in online transactions, underscoring the pivotal role of trust in facilitating secure online transactions.

Overall, the primary objective of this study is to enhance understanding of the factors influencing customer trust in online transactions. The research focuses on significant factors such as perceived risk, perceived technology, perceived online security, dispute management, and perceived reputation, which play pivotal roles in shaping customers' decisions to engage in or avoid online transactions.

During the study, a structured questionnaire employing closed-ended questions and a Five-Point Likert Scale (ranging from 1=Very strongly disagree to 5=Very strongly agree) was utilized. This questionnaire was developed based on existing literature from various countries and tailored to gather insights into factors impacting customer trust in online transactions. The survey was conducted both through direct contact and via the Internet to reach respondents effectively.

The sample included respondents of diverse demographics including gender, age groups, industries, job positions, work experience levels, and organizational sizes. A total of 432 respondents from Kathmandu Valley participated in the survey.

To ensure reliability, internal consistency was assessed using Cronbach's alpha coefficient. The results indicated strong reliability across the constructs, with Cronbach's alpha values ranging from 0.768 (for Dispute Management) to 0.899 (for

Perceived Reputation), surpassing the recommended threshold of 0.60 for social studies, indicating excellent reliability.

Through Pearson correlation analysis, it was determined that the independent variables exhibit positive relationships with the dependent variable, Customer Trust in Online Transactions. Notably, Perceived Reputation showed the highest correlation coefficient of 0.755 with Customer Trust in Online Transactions, indicating it has the most significant impact on customer trust. In contrast, Perceived Risk demonstrated the lowest correlation at 0.504, suggesting a comparatively weaker influence on customer trust.

Additionally, multiple regression analysis indicated that three variables—Perceived Risk, Perceived Technology, and Dispute Management—lack a significant relationship with Customer Trust in Online Transactions, as their p-values exceed the alpha level. However, Perceived Online Security and Perceived Reputation demonstrated a statistically significant relationship with Customer Trust in Online Transactions.

Numerous previous studies have consistently highlighted trust as a pivotal factor in e-commerce contexts (Li, Kim, & Park, 2007). Particularly, perceived reputation consistently emerges as the most influential factor in fostering trust, whereas perceived technology has not shown significant influence, echoing findings from various research studies (Li, Kim, & Park, 2007).

The primary aim of this study was to identify the dimensions of trust factors impacting online transactions. The findings underscored a significant association between Perceived Online Security, Perceived Reputation, and customer trust in online transactions.

CHAPTER 5: SUMMARY AND CONCLUSION

This research employed a survey to investigate the determinants of customer trust in online transactions. After collecting and analyzing data from the survey questionnaire, correlation and regression analyses were performed to fulfill the study's goals. The results were interpreted to derive conclusions and general insights.

Drawing from the study findings, recommendations were proposed and suggestions for future research were outlined. Furthermore, this chapter outlines directions for future research endeavors.

5.1 Summary

The main objective of this study was to investigate and analyze the factors impacting customer trust in online transactions within the context of Nepalese customers. Drawing from a review of relevant literature, various independent and dependent variables were identified. The independent variables examined included Perceived Risk, Perceived Technology, Perceived Online Security, Dispute Management, and Perceived Reputation. Among these variables, it was observed that Perceived Online Security and Perceived Reputation significantly influenced customer trust in online transactions. However, factors such as Perceived Risk, Perceived Technology, and Dispute Management did not exhibit significant influence on customer trust among Nepalese customers, particularly those residing in the Kathmandu area.

This research targeted consumers experienced with banking operations and involved in regular payment transactions, encompassing students, employees, and homemakers. Respondents predominantly received questionnaires via social media, email, and messaging platforms. The study's conceptual framework was constructed around the independent and dependent variables identified in the literature review.

The third chapter of the research study provides a detailed overview of its methodology. Convenience sampling was utilized as the data collection method, involving a sample of 432 individuals who completed a self-administered questionnaire. Respondents accessed the questionnaire through email, direct messages, and shared links.

Reliability was evaluated using Cronbach's alpha, yielding coefficients ranging from 0.768 to 0.899, demonstrating the strong reliability of the research instrument.

The study is descriptive and predominantly relies on primary data collection methods. The demographic profile examined includes seven elements: gender, age, occupation, educational background, participation in online transactions, frequency of online transactions, and encounters with fraudulent activities.

The major findings of the study are:

The majority of respondents were male, comprising 61.57% of the total, while females accounted for 38.42%.

Most respondents fell into the 25-35 age group, constituting 75.46% of the total, followed by those below 25 at 17.12%, 35-45 at 6.48%, and above 45 at 0.92%.

Out of 432 responses, 3.24% of respondents completed school level, 18.06% completed +2 education, 44.44% were undergraduates, and 34.26% were graduates.

Regarding occupation, among the 432 respondents, 17.59% were students, 59.72% were salaried employees, 17.12% were self-employed, 2.31% were housewives, and 3.24% were not engaged in any occupational activity. The data indicates that the majority of respondents were salaried employees, with housewives being the least represented.

The majority of respondents, 96.76%, have engaged in online transactions, while only 3.24% have never been involved in online transactions.

Out of the 432 respondents, 25.93% engage in online transactions daily, 30.55% participate once a week, 40.28% rarely engage in online transactions, and 3.24% have never engaged in online transactions.

Regarding fraudulent experiences in online transactions among the 432 respondents, 80.10% have not encountered any fraudulent incidents, while 19.90% have experienced fraud.

The Pearson correlation coefficient between Perceived Risk and Customer trust in online transactions is 0.504, indicating a positive association between these variables. The p-value associated with Perceived Risk is less than 0.01, indicating that this correlation is statistically significant.

The Pearson correlation coefficient between Perceived Technology and Customer trust in online transactions is 0.567, suggesting a positive relationship between these variables. A p-value of less than 0.01 confirms that this correlation is statistically significant.

The Pearson correlation coefficient between Perceived Online Security and Customer trust in online transactions is 0.699, indicating a positive correlation between these variables. Similarly, the p-value being less than 0.01 demonstrates that this correlation is statistically significant.

The Pearson correlation coefficient between the independent variable Dispute Management and the dependent variable Customer trust in online transactions is 0.524, indicating a positive correlation between these variables. A p-value of less than 0.01 indicates that this relationship is statistically significant.

The Pearson correlation coefficient between the independent variable Perceived Reputation and the dependent variable Customer trust in online transactions is 0.755, indicating a positive correlation between these variables. A p-value of less than 0.01 confirms that this relationship is statistically significant.

The R-square value of 0.65 indicates that overall, 65% of the variance in Customer trust in online transactions can be explained by Perceived Risk, Perceived Technology, Perceived Online Security, Dispute Management, and Perceived Reputation.

The standard beta coefficients for Perceived Risk, Perceived Technology, Perceived Online Security, Dispute Management, and Perceived Reputation are 0.055, 0.028, 0.349, 0.038, and 0.464, respectively. Higher beta values suggest a stronger influence of the independent variable on the dependent variable. Therefore, Perceived Reputation has the most significant impact on Customer trust in online transactions.

During this study, five hypotheses were tested to assess the impact of different variables on Customer Trust in Online Transactions. The p-values for Perceived Online Security and Perceived Reputation were found to be less than 0.05, indicating statistical significance, whereas the p-values for Perceived Risk, Perceived Technology, and Dispute Management exceeded 0.05. Consequently, Hypotheses one, two, and four were rejected, while Hypotheses three and five were accepted. This underscores that Perceived Online Security and Perceived Reputation are two significant factors that strongly influence customer trust in online transactions, thereby affecting decisions regarding online transaction adoption.

From the regression analysis, equations were formulated for the variables: Perceived Risk, Perceived Technology, Perceived Online Security, Dispute Management, and Perceived Reputation. These dimensions of Customer Trust in Online Transactions were treated as independent variables (X1, X2, X3, X4, and X5), with Customer's Trust in Online Transactions serving as the dependent variable. The model is constructed with the equation as follows:

$$Y_1 = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5$$

Based on the coefficients, the regression equation for Customer's Trust in Online Transaction can be written as:

$$Y_1 = 0.555 + 0.048X_1 + 0.024X_2 + 0.362X_3 + 0.032X_4 + 0.419X_5$$

5.2 Conclusion

This study aimed to investigate the influence of five specific factors on customers' trust in online transactions. Using a descriptive analytical approach, the researcher examined variables including Perceived Risk, Perceived Technology, Perceived Online Security, Dispute Management, and Perceived Reputation. A questionnaire adapted from previous research was customized and distributed to 432 respondents to collect data, and its reliability was assessed using Cronbach's Alpha formula. Statistical analysis of the data was conducted using SPSS software.

The study provides insights into the factors contributing to customer trust in online transactions, analyzing the relationships between key determinants such as Perceived Risk, Perceived Technology, Perceived Online Security, Dispute Management, and

Perceived Reputation, and their impact on customer trust. The significance of these variables in influencing customer trust was evaluated through correlation and regression analysis.

The study found that Perceived Online Security and Perceived Reputation significantly influence customer trust in online transactions. This aligns with the findings of (Bappy & Chowdhury, 2020), who also observed a strong correlation between online security and perceived reputation. However, this contrasts with the research of (Wijoseno, 2017) which reported no significant relationship between perceived reputation and online trust. Conversely, Perceived Risk, Perceived Technology, and Dispute Management were not found to have a significant impact on customer trust in online transactions. These results diverge from previous studies such as those by (Wijoseno, 2017) and (Ling et al., 2011), which identified significant relationships between perceived risk, perceived technology, and online trust.

From this study, it can be concluded that Perceived Online Security and Perceived Reputation are pivotal factors influencing customer trust in online transactions. These dimensions play a critical role in shaping customers' decisions regarding the adoption of online payment systems or their avoidance of further online transactions.

5.3 Implications

The study indicated that Perceived Online Security and Perceived Reputation play significant roles in influencing customer trust in online transactions, positively impacting trust levels in these transactions.

Based on these findings, financial institutions and merchants are advised to prioritize improvements in online security measures and invest in research aimed at enhancing transaction safety continuously. Given the strong correlation between perceived online security and customer trust in online transactions, it is recommended that governments, financial institutions, payment gateways, and payment service providers focus on communicating their efforts to enhance security measures to customers. They should also educate customers about ongoing initiatives to prevent online data theft and highlight the security protocols in place to mitigate risks. Furthermore, companies should concentrate on enhancing their reputation in online transactions by delivering

excellent and user-friendly services, ensuring prompt customer responses, and maintaining transparency in online operations.

Despite the constraints and limitations inherent in this study, it offers significant opportunities for future research based on its findings. While the study identifies current factors that influence customer trust in online transactions, it recognizes that these factors may evolve over time. The research has accounted for 65% of the variation through the analyzed factors, leaving 35% of the variation attributed to unidentified factors that merit for the further investigation for the future researchers.

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APPENDIX 1

Dear Respondent,

I am an MBS student at Shankardev Campus, Tribhuvan University. As a part of the academic requirement of the university, I am conducting a research entitled “Online payment system in Nepal: A Study of Factor Influencing Customer Trust in Online Transaction”

I would be thankful if you could take around five to ten minutes to complete this questionnaire and support to complete my work. Please take a few moments to read over all the questions carefully. This is purely an academic purpose by me with utmost confidentiality. Please use the blank box to fit the number of your respective response. Your honest opinion is extremely valuable for completing this research.

Section 1 Respondent Profile

Name (optional)

Gender

Male

Female

Age Group

Below 25

25-35

35-45

Above 45

Marital status

Married

Unmarried

Education background

School level

+2

Under Graduate

Graduate

Other

Occupation

Student

Salaried

Self-employed

Housewife

Unemployed

Have you been involved in online purchasing?

Yes

No

How often do you involve in online purchasing

Everyday

Once in a week

Rarely

Never

Have you ever experienced fraudulent in online payment?

Yes

No

How do you rate current online payment system in Nepal in term of trustworthy

(1 being the least and 5 being the highest)

1

2

3

4

5

Section 2

Perceived Risk

Rate the following items on a scale of 1-5 (1, strongly disagree; 2, disagree; 3, neutral; 4, agree, 5; strongly agree)

Statements	1	2	3	4	5
a. I have privacy concern regarding online payment system					
b. I believe that my online payment sites may use my personal information without permission					
c. I feel very concerned about sharing my personal and financial data to other parties					

d. I believe that conducting online payment can present financial risk					
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Perceived Technology

Rate the following items on a scale of 1-5 (1, strongly disagree; 2, disagree; 3, neutral; 4, agree, 5; strongly agree)

Statements	1	2	3	4	5
a. I have concern about the performance of online device when it comes to conducting online payment					
b. I am afraid that my device may not have the ability to conduct online payment					
c. I believe that online payments are protected from technical malfunction and issues					
d. I believe that online payments are susceptible to being accidentally altered or destroyed during transmission over the telecommunication network					

Perceived Online Security

Rate the following items on a scale of 1-5 (1, strongly disagree; 2, disagree; 3, neutral; 4, agree, 5; strongly agree)

Statements	1	2	3	4	5
a. There is availability of secure mode for transmitting information in online payment					
b. I feel secure about online payment system					
c. I have confidence in the overall security of online banks					

d. I do not feel insecure while making my transaction with online application					
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Dispute management

Rate the following items on a scale of 1-5 (1, strongly disagree; 2, disagree; 3, neutral; 4, agree, 5; strongly agree)

Statements	1	2	3	4	5
a. Online payment sites provides ma with convenient option for returning purchased items					
b. Online payment sites takes care of problems promptly					
c. Online payment sites offers meaningful guarantee					
d. It offers the ability to speak to a live person if there is problem					

Perceived Reputation

Rate the following items on a scale of 1-5 (1, strongly disagree; 2, disagree; 3, neutral; 4, agree, 5; strongly agree)

Statements	1	2	3	4	5
a. I believe that my provider of online payment system is honest					
b. I believe that my online payment system has a reputation of being trustworthy					
c. I believe that my online payment system provider has a concern for customers					
d. I believe my online payment system provider is well known.					

Trust in Online Transaction

Rate the following items on a scale of 1-5 (1, strongly disagree; 2, disagree; 3, neutral; 4, agree, 5; strongly agree)

Statements	1	2	3	4	5
a. The service provider of digital payment is trustworthy					
b. Online payment system is secure to use					
c. I trust the system and processes backing my transaction					
d. I trust the information provided during the online payment process					
e. I have faith in the effort taken by the provider to ensure the online payment system to conduct my transaction is safe					
f. The online payment system gives me a reliable impression					

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ABSTRACT This study aimed to explore the factors that shape trust among Nepalese customers in online transactions. It employed a survey approach, adapting and adjusting a questionnaire derived from previous research, which was administered to 432 participants. The questionnaire's reliability was assessed using the Cronbach Alpha Formula. Data analysis utilized statistical methods and SPSS software. The research specifically investigated the impact of independent variables such as Perceived Risk, Perceived Technology, Perceived Online Security, Dispute Management, and Perceived Reputation on customers' trust in online transactions, the dependent variable. Descriptive analysis, mean calculations, and logistic regression models were applied to assess the relationships among these variables. Significant findings revealed that several factors positively influence customers' trust in online transactions. Notably, Perceived Online Security and Perceived Reputation were identified as significant influencers of customer trust. These insights could be valuable for banking professionals and policymakers aiming to bolster trust in online transactions. The study suggested further research to uncover additional factors that affect customer trust and influence decisions regarding the adoption of online payments.

Keywords: Perceived Risk, Perceived Technology, Perceived Online Security, Dispute Management, Perceived Reputation, Customer Trust on Online Transaction

CHAPTER 1: INTRODUCTION

1.1 Background of the study

A payment denotes the exchange of monetary value between parties, whereas a payment system encompasses the entire process of transferring funds from the payer to the payee, including institutions, methods, participants, regulations, procedures, and standards. This forms the core of the financial system. Over time, payment methods have evolved from physical cash and coins to checks, electronic payments via debit and credit cards, and now, online payments through mobile wallets and cards. The shift towards a cashless economy began in Sweden in the early 1960s with the promotion of digital wage payments, marking a significant move towards a society where transactions rely on digital information, minimizing the use of physical cash by leveraging internet, phone, and other electronic channels (Henley, 2016). In cashless transactions, funds are typically transferred between accounts using tools like ATMs, debit and credit cards, and POS systems. The effectiveness of online payment systems depends on several factors, including the participation of providers (such as institutions, corporations, and banks) and users (like merchants and cardholders) (Das & Agrawal, 2010). To diminish dependence on cash, countries focus on improving access to financial services, promoting broad acceptance among merchants, fostering competition, addressing macroeconomic and cultural influences, and upgrading technology and infrastructure (Thomas, Jain, &