

DETERMINANTS OF THE INTENTION TO USE NEPALESE CENTRAL BANK DIGITAL CURRENCY

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CERTIFICATION OF AUTHORSHIP

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled “**DETERMINANTS OF THE INTENTION TO USE NEPALESE CENTRAL BANK DIGITAL CURRENCY**”. The work of this dissertation has not been submitted previously for the purpose of conferral of any degree nor has it 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 declared that all information sources and literature used are cited in the reference section of the dissertation.

Himkala Bohora Bhattarai

September 2024

REPORT OF RESEARCH COMMITTEE

Mrs. Himkala Bohora Bhattarai has defended research proposal entitled “**DETERMINANTS OF THE INTENTION TO USE NEPALESE CENTRAL BANK DIGITAL CURRENCY**“, 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 Keshar Singh Khati and submit the thesis for evaluation and viva voce examination.

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We have examined the dissertation entitled “**DETERMINANTS OF THE INTENTION TO USE NEPALESE CENTRAL BANK DIGITAL CURRENCY**” presented by Mrs. Himkala Bohora bhattarai for the degree of Masters of Business Studies. We hereby certify that the dissertation is acceptable for the award of degree.

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Any remaining errors are mine.

Himkala Bohora Bhattarai

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ABBREVIATIONS

A	:	Awareness
ANOVA	:	Analysis of Variance
IUCBDC	:	Intention to use center bank digital currency
MBS	:	Master in Business Studies
N	:	Number
PEU	:	Perceived ease of use
PT	:	Perceived trust
PU	:	Perceived usefulness
SD	:	Standard Deviation
SI	:	Social influence
SPSS	:	Statistical Package for the Social Sciences
TU	:	Tribhuwan University

ABSTRACT

The problem of the research are What is the current status of awareness, Perceived ease of use, Perceived usefulness, Social influence, and Perceived trust to the Intention to use center bank digital currency? What are the relationship of awareness, Perceived ease of use, Perceived usefulness, Social influence, and Perceived trust to the Intention to use center bank digital currency? Do the awareness, Perceived ease of use, Perceived usefulness, Social influence, and Perceived trust impacted to the Intention to use center bank digital currency? The objectives are set on the basis of the problem they are; To assess the current status of awareness, Perceived ease of use, Perceived usefulness, Social influence, and Perceived trust to the Intention to use center bank digital currency. To analyze relationship of awareness, perceived ease of use, perceived usefulness, social influence, and perceived trust to the intention to use center bank digital currency. To examine the impact of perceived ease of use, perceived usefulness, social influence, and perceived trust to the intention to use center bank digital currency. The descriptive and casual comparative research design has been employed. The population under consideration for this research comprises all the user of center bank digital currency and the sample is calculated by using the formula. This study used the primary data and they are collected using the questionnaire. The descriptive statistics, correlation and regression are conducted. They found that the given result shows that the all the variables are in the nature of fluctuating, became the range and standard deviation have more variation found. The relationship of variables Perceived trust, Awareness, Perceived usefulness and Social influence and Intention to use center bank digital currency are positive and significant. The Perceived ease of use and intention to use center bank digital currency are negative and insignificant. The impact of Perceived trust, Awareness, Perceived usefulness, Social influence positive and significant to the Intention to use center bank digital currency. The impact of Perceived ease of use to the Intention to use center bank digital currency negative and significant.

Keywords: *Perceived trust, Awareness, Perceived usefulness, Perceived ease of use, Social influence and Intention to use center bank digital currency*

CHAPTER-I

INTRODUCTION

1.1 Background of the Study

The rapid advancement of digital technology has drastically transformed the global financial environment, leading to substantial changes in how financial transactions are conducted, managed, and regulated. One of the most significant developments during this digital transformation is the rise of digital currencies, which have introduced new models in both personal and institutional finance (Saif Almuraqab, 2020). Digital currencies, known for their ability to enable instant, borderless transactions, have increasingly become a hub for innovation within the financial sector. In this context, Central Bank Digital Currency (CBDC) has gained considerable attention from policymakers, financial institutions, and the public. CBDC, a digital form of a country's fiat currency issued and regulated by the central bank, has the potential to revolutionize monetary systems, offering greater security, efficiency, and inclusivity in financial transactions (Adeleye et al., 2024).

CBDC is positioned to tackle various challenges inherent in traditional financial systems, such as the high costs of cross-border payments, financial exclusion of the unbanked, and the inefficiencies in cash-reliant economies. By providing a government-backed digital alternative to physical cash, CBDC can also help mitigate risks associated with privately issued cryptocurrencies, which often operate outside regulatory frameworks and pose threats to financial stability (Sun & Li, 2024). The introduction of CBDC thus presents a unique opportunity to modernize financial infrastructures and support the shift toward a more digital, inclusive, and resilient economy (Srivastava et al., 2024).

In Nepal, the prospect of introducing a Central Bank Digital Currency (CBDC) is becoming increasingly significant. Nepal Rastra Bank (NRB), the country's central bank, is actively examining the potential advantages and challenges of adopting CBDC as part of its broader initiative to modernize Nepal's payment systems and promote a cashless economy (Srivastava et al., 2024). Given Nepal's diverse and dispersed population, CBDC could play a pivotal role in enhancing financial inclusion by providing a secure and accessible digital payment solution, especially in remote regions where traditional banking infrastructure is lacking. Additionally,

CBDC could help reduce dependence on cash, thereby improving transparency in financial transactions and addressing issues such as money laundering and tax evasion (Firstian Aldhi et al., 2024).

Nevertheless, the successful introduction and adoption of CBDC in Nepal will depend on understanding the factors that influence public intention to use this financial tool. It's important to note that financial technology innovations, though promising, are not always readily accepted by the public (Maharani et al., 2024). The intention to use CBDC is likely influenced by key factors, including individuals' perceptions, beliefs, and social environments (Rank, 2023). Among these, awareness, perceived ease of use, perceived usefulness, social influence, and perceived trust are particularly critical in shaping the adoption of CBDC in Nepal.

Awareness plays a foundational role in the adoption of any new technology. In the case of CBDC, it refers to how well individuals understand its existence, features, and potential benefits (Raharjo, 2023). Higher awareness among the public can lead to better comprehension of CBDC's utility, fostering a more positive attitude towards its use and increasing the likelihood of adoption (Baraba & Mahmudi, 2023).

Perceived ease of use is another important factor, representing the degree to which individuals believe that using CBDC will be simple and free of complications. If potential users view CBDC as a convenient and accessible option for financial transactions, they are more likely to adopt it (Nurahmasari et al., 2023). This perception is tied to the design and usability of the CBDC system and the overall user experience it offers. A well-designed CBDC platform that prioritizes ease of use could significantly boost adoption among various population groups, including those with limited experience in digital financial services (Moro-Visconti et al., 2023).

Perceived usefulness refers to the belief that using CBDC will offer tangible benefits that improve financial transactions by making them more efficient, secure, and convenient compared to traditional payment methods (Erwanti & Prasetyani, 2023). When individuals view CBDC as providing clear advantages—such as lower transaction costs, quicker payments, and enhanced security features—their likelihood of adopting it increases (Ma et al., 2022). In a setting like Nepal, where access to reliable financial services is still a challenge for many, perceived usefulness can be a powerful motivator for CBDC adoption.

Social influence also plays a significant role in the uptake of new technologies, especially in collectivist societies like Nepal. It refers to the extent to which individuals feel that important people in their lives, such as family members, friends, or community leaders, expect or encourage them to use CBDC (Ferrari, 2022). In societies where communal relationships and social networks heavily impact decision-making, the opinions and attitudes of peers and local influencers can greatly affect a person's intention to adopt new technologies. Positive encouragement from one's social network can thus serve as a key driver in CBDC adoption (Khando et al., 2022).

Lastly, perceived trust in CBDC is crucial for its broader acceptance and use. Trust includes confidence in both the currency itself—its stability, reliability, and security—and in the institutions that issue and regulate it, particularly the central bank. Factors such as the credibility of the central bank, the security features of the digital currency, and the transparency of the regulatory framework around it are likely to influence trust in CBDC. When individuals have confidence in the stability and integrity of CBDC, as well as the central bank's ability to effectively manage it, their intention to use it will be positively affected (Seldal & Nyhus, 2022).

This study aims to investigate these factors and their influence on the intention to use Nepalese CBDC. By analyzing the roles of awareness, perceived ease of use, perceived usefulness, social influence, and perceived trust, this research seeks to provide valuable insights into what will drive public adoption of CBDC in Nepal. A deeper understanding of these factors will help policymakers, financial institutions, and Nepal Rastra Bank craft strategies that ensure the successful introduction and acceptance of CBDC, aligning it with the needs and expectations of the Nepalese people (Pandey, 2022).

1.2 Problem Statement

The rapid advancement of digital financial technologies over the past decade has dramatically transformed the global financial landscape, giving rise to various innovative solutions aimed at improving the efficiency, security, and accessibility of financial transactions (Tanoto et al., 2021). Among these innovations, Central Bank Digital Currency (CBDC) has emerged as a promising alternative to traditional currency, with the potential to revolutionize the issuance, distribution, and use of money. As a digital version of a nation's fiat currency, issued and

regulated by the central bank, CBDC is seen as a critical step toward modernizing financial systems and advancing the digital economy (Lantang et al., 2021). As nations worldwide explore the opportunities and challenges of CBDC implementation, the Nepal Rastra Bank (NRB) has begun assessing the possibility of introducing a Nepalese Central Bank Digital Currency (Alber & Dabour, 2020).

However, the success of this initiative depends largely on the public's willingness to adopt and use CBDC. While CBDC has the potential to boost financial inclusion by offering underserved populations access to digital financial services, reduce transaction costs by streamlining payment processes, and modernize Nepal's payment system by decreasing dependence on cash, the factors influencing Nepalese individuals' intention to adopt CBDC are not well understood (Saif Almuraqab, 2020). Public adoption of CBDC is not guaranteed; it relies on a complex set of factors that shape individuals' perceptions, attitudes, and behaviors toward this new form of digital currency (Pandey, 2022).

This study seeks to fill this critical gap in the literature by exploring the main determinants of the intention to use Nepalese CBDC. Specifically, it will examine how factors such as CBDC awareness, perceived ease of use, perceived usefulness, social influence, and perceived trust influence individuals' intentions to adopt this digital currency. While these factors are recognized as important in the adoption of other financial technologies, their specific impact on CBDC adoption in Nepal has not been thoroughly investigated (Khando et al., 2022). Understanding the significance and relationships between these factors is vital for predicting public readiness to embrace CBDC and identifying possible barriers to its adoption.

The insights from this study will be invaluable for the Nepal Rastra Bank (NRB) and other key stakeholders involved in the development and promotion of CBDC. By gaining a deeper understanding of what encourages or deters the public from adopting CBDC, stakeholders can devise targeted strategies to promote its use, address concerns, and maximize its benefits (Seldal & Nyhus, 2022). Without a clear grasp of these determinants, there is a risk that CBDC adoption could be low, limiting its potential advantages and hindering broader efforts to modernize Nepal's financial system and enhance financial inclusion. Therefore, this study seeks to provide comprehensive insights into the factors that will influence the successful implementation and widespread use of Nepalese CBDC, thereby contributing to the ongoing

efforts to modernize Nepal's financial system and support the transition towards a more inclusive and digitally-enabled economy.

The problem of the study is clear by the research question and they are;

- i. What is the current status of awareness, Perceived ease of use, Perceived usefulness, Social influence, and Perceived trust to the Intention to use center bank digital currency?
- ii. What are the relationship of awareness, Perceived ease of use, Perceived usefulness, Social influence, and Perceived trust to the Intention to use center bank digital currency?
- iii. Do the awareness, Perceived ease of use, Perceived usefulness, Social influence, and Perceived trust impacted to the Intention to use center bank digital currency?

1.2 Objectives of the study

The objectives of the study are:

- i. To assess the current status of awareness, Perceived ease of use, Perceived usefulness, Social influence, and Perceived trust to the Intention to use center bank digital currency.
- ii. To analyze relationship of awareness, perceived ease of use, perceived usefulness, social influence, and perceived trust to the intention to use center bank digital currency.
- iii. To examine the impact of perceived ease of use, perceived usefulness, social influence, and perceived trust to the intention to use center bank digital currency.

1.3 Hypothesis of the Study

The hypothesis statement are;

H1: There is the significant relationship of awareness, perceived ease of use, perceived usefulness, social influence, and perceived trust to the intention to use center bank digital currency.

H2: There is the significant impact of perceived ease of use, perceived usefulness, social influence, and perceived trust to the intention to use center bank digital currency.

1.5 Rationale of the Study

The global financial landscape is undergoing a significant transformation with the rise of digital currencies, among which Central Bank Digital Currency (CBDC) is emerging as a

groundbreaking innovation. As a digital version of a nation's fiat currency, CBDC has the potential to improve financial inclusion, increase payment system efficiency, and reduce reliance on physical cash. In light of this, the Nepal Rastra Bank (NRB) is considering the introduction of a Nepalese CBDC to modernize the country's financial infrastructure and promote a cashless economy.

However, the success of CBDC in Nepal depends largely on public acceptance and usage. Despite its potential advantages, the factors that shape the intention to use CBDC in the Nepalese context remain unclear. This knowledge gap poses a significant challenge for policymakers and financial institutions aiming for the widespread adoption of CBDC.

This study is motivated by the need to identify and understand the key factors that influence Nepalese individuals' intention to use CBDC. Five factors stand out as particularly important in this context: awareness, perceived ease of use, perceived usefulness, social influence, and perceived trust.

Awareness is the first step in adopting any new financial technology. In the case of CBDC, understanding the level of awareness among the Nepalese population regarding its existence, benefits, and potential impacts is crucial. A higher level of awareness is likely to result in greater interest and a stronger intention to adopt the currency. This study will assess the current awareness levels and how they affect the intention to use CBDC.

Perceived ease of use is a critical factor in CBDC adoption. If CBDC is seen as complicated or difficult to use, it may face resistance, especially in Nepal, where digital literacy varies widely. This study will examine how the perceived ease of use impacts the intention to adopt CBDC, emphasizing the importance of user-friendly design.

The perceived benefits of CBDC over traditional payment methods will significantly influence adoption. Users need to recognize clear advantages, such as increased security, convenience, or cost savings, to be motivated to transition to a new currency system. This research will explore how perceived usefulness affects the intention to use CBDC among the Nepalese population.

In collectivist societies like Nepal, the opinions and behaviors of others play a crucial role in individual decision-making. Social influence, particularly from family, friends, and

community leaders, can either encourage or discourage the adoption of new technologies. This study will analyze the role of social influence in shaping the intention to use CBDC, offering insights into how social dynamics can be leveraged to promote adoption.

Finally, trust is a fundamental element in the acceptance of any currency, digital or otherwise. The degree to which individuals trust the CBDC, as well as the institutions that issue and regulate it, will be critical in determining their willingness to adopt it. This study will explore the level of trust in Nepal's CBDC and how it influences users' intention to use it.

1.6 Limitations of the Study

Limitations for this study are following.

- i. This study focuses on five key determinants—awareness, perceived ease of use, perceived usefulness, social influence, and perceived trust. While these variables are crucial, the study may not capture other potential factors influencing the intention to use CBDC, such as demographic characteristics, financial literacy, economic conditions, or cultural factors. The exclusion of these variables could limit the comprehensiveness of the findings.
- ii. The study relies on self-reported data collected through questionnaires, which may be subject to biases such as social desirability bias or recall bias. Respondents may overestimate or underestimate their awareness, perceived ease of use, or perceived trust, leading to potential inaccuracies in the data.
- iii. The technology landscape, including digital currencies, is rapidly evolving. As such, the findings of this study is become outdated quickly as new technologies, regulations, and market dynamics emerge.
- iv. The study is conducted within the specific socio-economic and cultural context of Nepal. The determinants identified in this study is differ in other countries or regions with different cultural, economic, and technological environments.
- v. Since CBDC is a relatively new concept, especially in the context of developing countries like Nepal, there is limited prior research to draw upon. This limitation may affect the theoretical framework and the interpretation of the results, as the study is exploring largely uncharted territory.

CHAPTER-II

LITERATURE REVIEW

The literature review, an essential component of this chapter, entails a thorough examination of a particular section of the existing body of knowledge. This process involves summarizing, categorizing, and comparing previous research, literature reviews, and theoretical studies. The review is organized into three separate sections.

2.1 Theoretical Review

Central Bank Digital Currency (CBDC) is a digital version of a nation's sovereign currency, issued and controlled by the central bank. Like physical cash, it represents a liability of the central bank but exists exclusively in digital form. The theoretical basis for CBDC is grounded in several important principles from economics, finance, and monetary theory. Familiarity with these concepts is essential to understanding the potential impacts and advantages of CBDC in today's financial system (Ma et al., 2022).

Monetary Sovereignty and Central Bank Control

CBDC is founded on the principle of monetary sovereignty, which refers to a nation's authority to regulate its own currency and monetary policy. Through the issuance of CBDC, a central bank can retain control over the money supply within a digital economy, ensuring that the national currency remains the primary medium of exchange as the use of physical cash decreases. This control enables central banks to more efficiently execute monetary policies, including managing inflation, interest rates, and overall economic stability (Seldal & Nyhus, 2022).

Digitalization of Money

CBDC represents the digitalization of currency, aligning with the global shift toward digital transformation in the economy. Unlike cryptocurrencies such as Bitcoin, which function on decentralized networks without government backing, CBDC is a digital form of fiat currency, fully supported and regulated by the central bank. This move toward digital currency seeks to improve the efficiency, security, and inclusiveness of the financial system, enabling faster, more affordable, and widely accessible transactions (Alber & Dabour, 2020).

Financial Inclusion

A key theoretical rationale for CBDC is its potential to improve financial inclusion. In numerous developing nations, a significant portion of the population remains unbanked or under banked, with limited access to conventional financial services. By utilizing digital platforms like smartphones, CBDC could offer these individuals a secure and convenient way to engage with the financial system, helping to bridge the gap in financial inclusion (Moro-Visconti et al., 2023).

Payment System Efficiency and Cost Reduction

CBDC is proposed to enhance the efficiency of payment systems by lowering transaction costs and speeding up transactions. Traditional payment methods, particularly cross-border transfers, are frequently slow, costly, and susceptible to errors. CBDC could simplify these processes by offering a standardized digital currency that is easy to transfer, settle, and track. Furthermore, by reducing dependence on physical cash, CBDC could help cut costs related to printing, transporting, and securing currency (Nurahmasari et al., 2023).

Monetary Policy Implementation

The implementation of CBDC could offer central banks novel mechanisms for conducting monetary policy. For instance, central banks might use CBDC to directly adjust interest rates by either paying or charging interest on digital currency balances. This feature could improve the central bank's ability to address economic changes and ensure stability. Additionally, CBDC could facilitate more accurate monitoring and management of money flows, proving especially valuable for managing liquidity during periods of crisis (Baraba & Mahmudi, 2023).

Security and Anti-Counterfeiting

CBDC is believed to provide superior security features compared to physical cash and certain existing digital payment systems. By utilizing advanced encryption, blockchain technology, or other secure digital ledgers, CBDC could lower the risk of counterfeiting and fraud. Additionally, the traceability of digital transactions aids in anti-money laundering (AML) and counter-terrorism financing (CFT) measures, facilitating more effective monitoring and enforcement (Alber & Dabour, 2020).

Competition with Private Digital Currencies

The emergence of private digital currencies and cryptocurrencies presents a challenge to central banks' control over the monetary system. The theory behind CBDC posits that by introducing a state-backed digital currency, central banks can offer a stable and secure alternative to private digital currencies, which may be volatile or lack regulatory oversight. CBDC could act as a counterweight, ensuring that the official currency remains the primary medium of exchange (Rank, 2023).

Economic Stability and Crisis Management

During financial crises or periods of instability, CBDC could provide a more resilient form of currency. Unlike bank deposits, which face withdrawal risks during a banking crisis, CBDC would be a direct claim on the central bank and deemed risk-free. This characteristic could help avert bank runs and offer a secure refuge for savings amid economic upheaval (Srivastava et al., 2024).

Privacy and Data Security Concerns

A key element of the CBDC theory is balancing the advantages of traceability with concerns about privacy and data security. Although CBDC transactions can be monitored more effectively to deter illegal activities, there is a potential risk to individual privacy rights. The design of CBDC systems must carefully address how to safeguard users' data while maintaining the currency's integrity and security (Maharani et al., 2024).

Challenges of Implementation

Despite the theoretical advantages, implementing CBDC presents considerable challenges. These include technological hurdles, the necessity for strong cybersecurity measures, potential disruptions to the banking sector, and the risk of compromising financial stability if not managed effectively. The theory of CBDC also emphasizes the critical role of public trust and acceptance, which are essential for the success of any new currency (Raharjo, 2023).

2.2 Empirical Review

2.2.1 Empirical review in international context

Adeleye et al. (2024) explores the adoption of digital currencies across Africa, offering a thorough analysis that compares the region's progress with global trends. As digital currencies gain momentum worldwide, Africa is at a pivotal moment in its financial evolution. This study

investigates the factors affecting digital currency adoption in various African countries, examining socio-economic, technological, and regulatory aspects. By employing a comparative approach, it highlights both successful cases and unique challenges within Africa. Key factors such as financial inclusion, regulatory environments, technological infrastructure, and cultural perceptions are analyzed to understand the complexities of digital currency adoption. The research also considers the impact of global trends, international collaborations, and regulatory efforts on Africa's digital currency landscape, aiming to provide insights for policymakers, financial institutions, and stakeholders to support digital currency adoption in the region.

Sun & Li (2024) studied the factors influencing the intention to use central bank digital currencies. Their methodology involved using questionnaires to gather data on user intentions, employing non-probability sampling, and utilizing structural equation modeling. They found that perceived ease of use and perceived usefulness of central bank digital currencies are interrelated.

Srivastava et al. (2024) assessed users' behavioral intentions toward adopting digital payment FinTech services in India, using both the Unified Theory of Acceptance and Use of Technology (UTAUT) and the Technology Acceptance Model (TAM). They found that effort expectancy, performance expectancy, and perceived enjoyment significantly impact customer satisfaction, with effort expectancy and performance expectancy being influenced by perceived enjoyment. Financial literacy did not moderate the relationship between effort expectancy, performance expectancy, facilitating conditions, and behavioral intention.

In another study, Srivastava et al. (2024) examined the behavioral intentions of different generational groups (Gen Y and Gen Z) regarding digital payment FinTech services in India. They used UTAUT and TAM as theoretical frameworks, incorporating financial literacy and customer satisfaction. The findings indicated that customer satisfaction, effort expectancy, and performance expectancy significantly affect behavioral intention. Additionally, effort expectancy and performance expectancy are influenced by perceived enjoyment, while self-efficacy impacts perceived enjoyment. Financial literacy did not moderate the relationships between effort expectancy, performance expectancy, facilitating conditions, and behavioral intention.

Firstian Aldhi et al. (2024) emphasized the urgent need to understand the dynamics of digital adoption among Indonesian MSMEs in the post-COVID era using the UTAUT model. They conducted a quantitative study with purposive sampling of MSMEs that have used fintech payment systems for at least one year, resulting in a sample of 399 respondents from Surabaya, Indonesia. Using SEM-PLS with SmartPLS-4, they found that performance expectancy, effort expectancy, and social influence significantly impact behavioral intention, while facilitating conditions did not significantly affect behavioral intention or use behavior. This research contributes to the theoretical understanding of digital adoption by extending the UTAUT model's relevance and confirming the influence of specific factors on the acceptance of FinTech payment solutions.

Maharani et al. (2024) explored how financial technology factors and service features influence consumer choices when selecting digital wallets for financial transactions, using a quantitative approach. Data was gathered through questionnaires from FIA students at UNISMA who use the OVO application. The study found that consumer preferences (Y) are affected by both financial technology variables (X1) and service features (X2). The F test results confirmed that these independent variables significantly influence consumer preferences, supporting the alternative hypothesis (Ha) and rejecting the null hypothesis (Ho). The coefficient of determination showed an R-squared value of 0.299, indicating that financial technology and service features together account for 29.9% of the variation in consumer preferences, with the remaining 70.1% attributed to other factors not examined in the study.

Rank (2023) investigated fintech as an innovation strategy for digital payment services among the millennial generation. This quantitative and descriptive research examined how fintech impacts consumer behavior and preferences, analyzed its effect on the traditional banking sector, and assessed the opportunities and challenges related to fintech adoption. The study highlighted significant relationships between fintech adoption opportunities and challenges, as well as its potential for future growth.

Raharjo (2023) studied digital payment loyalty in Indonesia, using online questionnaires for data collection and conducting correlation and regression analyses. The study found that cultural factors, such as acceptance of inequality and collectivism, significantly influence

brand loyalty. A superior customer experience was identified as crucial for maintaining loyalty. However, issues like gender imbalance and gaps in financial literacy among young consumers were also noted. The study suggests that businesses need to navigate Indonesia's cultural context, improve customer experiences, and promote financial literacy to succeed in the market.

Baraba and Mahmudi (2023) examined how perceived usefulness, perceived ease of use, perceived security, and perceived risk affect millennials' attitudes toward using digital banking. Additionally, they looked at whether these attitudes influence actual digital banking behavior. The research, conducted with a sample of 111 undergraduate students using convenience sampling and online questionnaires, found that perceived usefulness, ease of use, and security positively impacted attitudes toward digital banking, while perceived risk had a negative effect. Furthermore, positive attitudes towards digital banking significantly influenced its use.

Nurahmasari et al. (2023) explored the relationship between perceived usefulness, perceived ease of use, and self-efficacy on consumers' intention to use digital banking services, guided by the Technology Acceptance Model (TAM). Analyzing survey data from 150 Generation Z individuals using multivariate techniques, the study found that perceived usefulness had a greater impact on attitudes and intentions towards digital banking than perceived ease of use and self-efficacy. Thus, enhancing consumers' perception of the usefulness of digital banking services is crucial for increasing their adoption.

Moro-Visconti et al. (2023) investigated how financial literacy and ease of digital payments impact the sustainability of MSMEs in Medan Tembung Sub-District. Using a quantitative descriptive approach with data from 157 MSMEs, collected through questionnaires, the study found that both financial literacy and digital payments positively influence MSME sustainability. The results indicated that improving MSME operators' understanding of financial literacy and digital payments is essential for enhancing business performance and continuity. The F-test results also confirmed that these factors have a significant combined effect.

Erwanti and Prasetyani (2023) analyzed factors influencing the intention to use CBDC using the Technology Acceptance Model. Data from 565 respondents were collected via questionnaires and evaluated using Partial Least Squares Structural Equation Modeling (PLS-

SEM). The study found that perceived usefulness, perceived ease of use, hard trust, and soft trust significantly impact the intention to use CBDC in Indonesia, while personal innovativeness affects perceived usefulness and ease of use.

Ma et al. (2022) investigated consumer acceptance of central bank digital currencies, modifying the Technology Acceptance Model (TAM), Theory of Reasoned Action (TRA), and Extended Valence Framework (EVF) to include perceived privacy, security, system quality, and benefits. Using data from 325 questionnaires, the study applied structural equation modeling to find that perceived privacy, security, and system quality are crucial predictors of perceived trust, which in turn predicts consumer interest and intention. These factors are key to influencing consumers' intentions.

Ferrari (2022) conducted a qualitative analysis of EU policymaking documents to understand how technological imaginaries influence the transformation of payment infrastructures into the platform economy. The study revealed that technologies are often promoted based on industry trends rather than their actual benefits and risks. It also highlighted that the assumption that a liberalized market would improve choices is flawed, as platform mutation can lead to monopolization and market power abuses.

Khando et al. (2022) conducted a thorough literature review on emerging digital payment technologies and their associated challenges. The study systematically categorizes digital payment technologies into four main types: card payments, e-payments, mobile payments, and cryptocurrencies. It also identifies key challenges in these technologies, which are grouped into social, economic, technical, awareness, and legal themes. This classification and the outlined challenges offer valuable insights for both researchers and practitioners in developing a comprehensive digital payment strategy.

Seldal and Nyhus (2022) explored whether the increased use of digital payment methods, such as mobile payments, raises the risk of financial vulnerability. They examined whether findings from the USA are applicable to other countries and investigated the willingness to use social media companies for money transfers and share bank account information with third-party services, in light of recent EU legislation. Data from a representative sample of the Norwegian adult population revealed differences in financial behavior between users and non-users of various digital payment methods. The study highlights the need for further research in other

countries to fully understand the implications of increased financial digitalization, especially as COVID-19 has accelerated online spending and adoption of new payment technologies.

Pandey (2022) studied digital payment systems and consumer perceptions in India, using primary data from 200 respondents and secondary data from various sources including articles and the RBI's website. The research found that consumers' perceptions of digital payment tools influence their payment behavior. Positive perceptions of digital payments, combined with negative views of cash, drive the adoption of digital methods. Contrary to traditional beliefs, Indian consumers are willing to accept some fraud risks due to the greater convenience offered by digital payments. The impact of fraud varies depending on the transaction's purpose.

Tanoto et al. (2021) investigated the factors influencing interest in using financial technology in OVO applications among accounting students at Prima Indonesia University. Using a questionnaire and accidental sampling with 102 respondents, the study found that while convenience and benefits did not significantly affect interest in using the technology, security and trust did. Overall, convenience, benefits, security, and trust collectively had a significant impact on interest in using financial technology for digital payments.

Lantang et al. (2021) assessed customer satisfaction with financial technology in digital payments among students at the University of Sam Ratulangi. Using a descriptive analysis approach and quantitative methods with a sample of 100 respondents, they found that both ease of use and facilities provided had a significant positive effect on customer satisfaction. The study, using SPSS 26 software, determined that 51% of customer satisfaction could be explained by these factors, with the remaining 49% attributed to other variables not explored in the study.

Pertiwi and Purwanto (2021) examined how financial literacy, performance expectations, and business expectations influence interest in adopting Fintech services. They also explored whether the level of education enhances this effect for millennials. Using snowball sampling, they surveyed 150 Fintech users who are interested in continuing with these services. The data was analyzed using SEM-PLS, revealing that financial literacy, business expectations, and performance expectations positively influence interest in Fintech services. However, the study found that education level did not significantly strengthen this influence, contrary to the research hypothesis.

Rachmawati et al. (2020) investigated how users in Jakarta, Bogor, Depok, Tangerang, and Bekasi (Jabodetabek) respond to digital payments trends, specifically OVO. Utilizing a quantitative approach, they distributed online questionnaires via social media, collecting responses from 200 OVO users, 76% of whom had experience with e-wallets. The study found that performance expectancy, effort expectancy, and perceived security significantly impact the intention to use OVO. However, social influence and cultural factors did not significantly affect this intention.

Alber and Dabour (2020) explored how social distancing restrictions have influenced FinTech growth across 10 countries, including the US, UK, Egypt, UAE, Saudi Arabia, Japan, South Korea, Italy, India, and Nigeria, during March to June 2020. The study found that social distancing positively affected digital payments in sectors like retail, recreation, groceries, pharmacies, transit stations, and workplaces, though no significant effects were observed for parks and residential areas.

Saif Almuraqab (2020) examined the predictors of digital currency acceptance in the UAE using a survey design. The research concluded that digital currency is generally accepted in the UAE.

Tan et al. (2019) developed a framework for evaluating the FinTech landscape, focusing on Indonesia. The study highlighted that financial stability is crucial for sustainable growth in the financial sector. It addressed how technology-enabled innovations, driven by customer preferences for convenience, speed, and cost, are reshaping financial services. Conducted over seven months with millennials in Jakarta, Depok, and Tangerang, the research used quantitative analysis to find that while FinTech adoption is growing in emerging markets, it remains dominated by small players. The study identified emerging technologies, such as big data and mobile tech, as key drivers of innovation and opened new business opportunities in the financial sector through IT collaborations.

Table 1

Summary of Empirical review an international Context

S.N	Name of the article	Author/ date	Objectives	Methodology	Finding and conclusion
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1	User Perception and Acceptance of Central Bank Digital Currency in Developed and Developing Countries: An Empirical Study using Technology Acceptance Model.	Sun & Li, (2024).	To examine the factors influencing central bank digital currency and the intention to use it.	The research methodology includes collecting data on user intentions through a questionnaire, utilizing non-probability sampling and applying a structural equation model.	The perceived ease of use and perceived usefulness of central bank digital currency are interconnected.
2	Adoption of digital payment FinTech service by Gen Y and Gen Z users: evidence from India	Srivastava et al. (2024)	To assess users' behavioral intentions regarding the acceptance and adoption of digital payment FinTech services in India.	This study utilized both the Unified Theory of Acceptance and Use of Technology (UTAUT) and the Technology Acceptance Model (TAM) as its theoretical framework.	Effort expectancy, performance expectancy, and perceived enjoyment significantly impacted customer satisfaction, with effort expectancy and performance expectancy being notably affected by perceived enjoyment. Additionally, self-efficacy had a significant effect on perceived enjoyment. However, financial literacy did not moderate the relationship between effort expectancy, performance expectancy, facilitating conditions, and behavioral intention.
3	Financial Technology in Recovery: Behavioral Usage of Payment Systems by Indonesian MSMEs in the Post-Pandemic Era	Firstian Aldhi et al. (2024)	To emphasize the significance and urgency of grasping the evolving dynamics of digital adoption among Indonesians	This research employed a quantitative approach, utilizing purposive sampling for data collection. Data analysis was conducted using SEM-PLS with SmartPLS-4.	The findings reveal that Performance Expectancy, Effort Expectancy, and Social Influences significantly impact Behavioral Intention. However, Facilitating Conditions do not notably affect Behavioral Intention. Additionally, Behavioral Intention significantly influences the usage behavior of fintech payment systems in MSMEs. This research

- advances theoretical knowledge by applying the UTAUT model in a new context, thereby broadening the model's applicability.
- 4 The Influence of Financial Technology and Service Features on Consumer Preferences for Choosing a Digital Wallet in Financial Transactions Maharani et al. (2024) To examine how financial technology variables and service features influence consumer decisions. Data were collected using questionnaires, targeting FIA students from the 2020 cohort at UNISMA who are users of the OVO application. The study's findings indicate that consumer preferences (Y) are influenced by financial technology variables (X1) and service features (X2). The F test results support the alternative hypothesis (Ha) and reject the null hypothesis (Ho), demonstrating that these independent variables impact the dependent variable. The coefficient of determination reveals an R-squared value of 0.299, suggesting that financial technology (X1) and service features (X2) together account for 29.9% of the variation in consumer preferences.
- 5 Financial technology as an innovation strategy for digital payment services in the millennial Rank (2023) To assess how fintech serves as an innovative strategy for digital payment services targeting the millennial generation. This research is quantitative and descriptive in nature. He discovered a significant relationship between the opportunities and challenges of fintech adoption and its potential for future growth.
- 6 The Gen Z's Digital Payment Loyalty in Indonesia. Raharjo (2023) To investigate digital payment loyalty in Indonesia, data were gathered through an online questionnaire. Correlation and regression analysis conducted. They found that cultural factors, such as acceptance of inequality and collectivism, significantly shape brand loyalty. Additionally, providing an excellent customer experience proves to be a key factor in fostering this loyalty.

- | | | | | | |
|---|--|-----------------------------|---|--|--|
| 7 | Understanding the Millennial Generation Behavior in Using Digital Banking | Baraba and Mahmudi (2023) | To assess how perceived usefulness, perceived ease of use, perceived security, and perceived risk influence the millennial generation's attitude towards digital banking. | This study employs a quantitative approach, focusing on the millennial generation represented by undergraduate students. It uses a convenience sampling method, with data collected through online questionnaires distributed via Google Forms. | The study found that perceived usefulness, perceived ease of use, and perceived security have a significantly positive impact on attitudes toward using digital banking, while perceived risk has a significantly negative effect on these attitudes. |
| 8 | The Intention to Use Digital Banking Services among Gen Z in Indonesia Based on Technology Acceptance Model (TAM). | Nurahmasari et al. (2023) | To explore how perceived usefulness, perceived ease of use, and self-efficacy influence consumers' intentions to use digital banking services, utilizing the Technology Acceptance Model. | Multivariate data analysis techniques were employed to analyze survey data collected from 150 Generation Z respondents. | The study's findings reveal that perceived usefulness has a stronger impact on attitudes toward and intentions to use digital banking services than perceived ease of use and self-efficacy. |
| 9 | FinTech and digital payment systems valuation | Moro-Visconti et al. (2023) | To investigate how financial literacy and the ease of digital payments affect sustainability | The study employs a quantitative descriptive approach and focuses on a population of 157 MSMEs in the Medan Tembung Sub-District. Data were gathered from both primary and secondary sources using questionnaires distributed through a simple random sampling method. | The study found that a good grasp of financial literacy positively and significantly impacts the sustainability of MSMEs in the digital age, and digital payments also have a positive and significant effect on MSME sustainability. The results indicate that MSME performance will improve notably if business owners enhance their understanding of financial literacy and digital payment methods. The F-test results further show that both financial literacy and digital payment ease together |

- 10 The platformization of digital payments: The fabrication of consumer interest in the EU FinTech agenda. Ferrari (2022) To explore through a qualitative analysis of official documents how specific technological concepts influence EU policymaking. Correlation and regression analysis. They discovered that technologies deemed desirable are selected based on industry interests and trends, rather than an evaluation of their benefits and risks. Additionally, the belief that a liberalized market will provide more and better options is flawed, as the platformization of markets poses risks of monopolization and abuse of market power.
- 11 The emerging technologies of digital payments and associated challenges: a systematic literature review Khando et al. (2022) To offer an in-depth review of the current literature on emerging digital payment technologies and their related challenges Through a methodical review of current empirical research They identified major challenges in digital payment technologies, grouping them into five broad themes: social, economic, technical, awareness, and legal. This classification and categorization of payment technologies and their challenges can help both researchers and practitioners better understand and develop a comprehensive digital payment strategy.
- 12 Financial vulnerability, financial literacy, and the use of digital payment technologies. Seldal and Nyhus (2022) To examine whether using digital payment methods, such as mobile phone payments, increases the risk of financial vulnerability. Utilizing data gathered from a representative sample of the adult population in Norway The results indicate that further research from various countries outside the USA is needed to fully understand the impacts of increased digitalization of financial services. Additionally, with COVID-19 driving more spending online and expanding the availability of new payment technologies,

- this research becomes even more relevant.
- 13 A Study on Digital Payments System & Consumer Perception: An Empirical Survey. Pandey (2022) To investigate the digital payments system and consumer perceptions. To explore consumer perceptions of digital payments, a questionnaire consisting of 10 main questions and 6 sub-questions was created to gather data from respondents. The study reveals that perceptions of digital payment tools significantly influence individuals' payment behaviors. People's adoption of digital payments is influenced not only by a positive view of these tools but also by a negative perception of cash. Contrary to common belief, Indian customers are inclined to accept digital payment methods despite concerns about online fraud, due to the greater convenience they offer. Additionally, the impact of fraud on digital payments varies depending on the transaction's purpose.
- 14 The Influence of Convenience, Benefits, Security and Trust on the Interest in Using Financial Technology in OVO Applications as a Digital Payment. Tanoto et al. (2021) To gather data and assess how convenience, benefits, security, and trust affect the interest in using financial technology. This study employed accidental sampling to collect data from a total of 102 respondents at Prima Indonesia University. The findings of this study reveal that while convenience and benefits do not significantly affect the interest in using financial technology through OVO applications, security and trust do have a substantial impact on this interest.
- 15 The influence of ease of use and facility towards customer satisfaction on Fintech digital payment. Lantang et al. (2021) To assess the level of customer satisfaction among students regarding the use of financial technology in digital payments. Quantitative research methods were employed for this study, involving a sample of 100 respondents. The study used non-probability purposive sampling, and data were collected through a questionnaire. The study found that both Ease of Use (X1) and Facility (X2) had a significant positive impact on Customer Satisfaction (Y), with an F-count of 50.397. Additionally, each of these factors individually contributes positively and significantly to customer satisfaction. The adjusted R-

				administered via Google Forms.	squared value of 0.510 indicates that 51% of the variation in customer satisfaction can be attributed to Ease of Use and Facility.
16	Analysis of adopting millennial generation financial technology (fintech) services.	Pertiwi and Purwanto (2021)	To assess how financial literacy, performance expectations, and business expectations influence the interest in adopting Fintech services.	The study targets individuals who are currently using Fintech and are interested in continuing its use. It employs snowball sampling, a non-probability technique, with a sample size of 150 participants. Data analysis is conducted using the SEM-PLS method, which is based on variance.	The analysis of responses from millennial participants supports the hypothesis that financial literacy, business expectations, and performance expectations can enhance interest in adopting Fintech services. However, the hypothesis regarding the moderating effect of education does not align with the research findings.
17	The dynamic relationship between FinTech and social distancing under COVID-19 pandemic: Digital payments evidence.	Alber and Dabour (2020)	To explore the growth opportunities for FinTech within the constraints of social distancing.	This study was carried out across 10 countries: United States, United Kingdom, Egypt, United Arab Emirates, Saudi Arabia, Japan, South Korea, Italy, India, and Nigeria between.	The findings suggest that social distancing could impact digital payments, particularly in sectors such as retail and recreation, grocery and pharmacy, transit stations, and workplaces. However, there was no significant evidence of its effect on parks or residential areas.
18	Predicting determinants of the intention to use digital currency in the uae: empirical study	Saif Almuraqab (2020).	To examine the factors that predict the acceptance of digital currency among the people of the UAE.	Using survey design.	The research found that digital currency is widely accepted in the UAE.
19	Financial technology as an innovation strategy for digital payment services in the millennial generation.	Tan et al. (2019)	To create a framework for evaluating the Financial Technology landscape, which has been adopted by several companies in Indonesia.	This research, conducted over a period of 7 months, involved millennial respondents who had previously engaged in FinTech transactions in	The findings reveal that FinTech has been embraced in certain rapidly growing emerging markets and frontier economies, though it remains dominated by smaller players. Additionally, advancements in

Jakarta, Depok, technologies such as
and Tangerang. the internet, big data,
The study utilized mobile technology,
quantitative data and computing power
analysis to are driving innovations
evaluate the in financial services.
research findings.

2.2.2 Empirical Review in Nepalese Context

Pathak (2024) investigated various digital payment methods offered by financial institutions through an exploratory study based on secondary data. The data were gathered from books, journals, newspapers, and relevant websites. The study highlights that Nepal is addressing its weaknesses in digital payments by implementing rules and programs to improve digital literacy and expand mobile and internet access. These efforts are expected to boost the use of digital payment systems and contribute to the success of the Digital Nepal mission.

Poudel et al. (2023) examined the adoption of digital payment methods in Pokhara Metropolitan City, Nepal. The study, which involved 400 youths using purposive sampling, utilized frequency distribution, exploratory factor analysis, and structural equation modeling. The findings identified six factors influencing adoption intention: effort expectancy, performance expectancy, security and privacy, social influence, facilitating conditions, and adoption intention. Security and privacy, performance expectancy, and facilitating conditions were found to positively impact adoption intention, while effort expectancy and social influence did not.

Poudel and Acharya (2023) explored the impact of security factors on usage intention and the mediating role of trust between fintech security and usage intention using partial least square structural equation modeling. They found a significant positive relationship between usage intention and security concerns, with trust partially mediating this relationship.

Dhungana et al. (2023) assessed customer perceptions of digital finance in Pokhara Valley, Nepal. This quantitative study used primary data from 211 respondents collected via a researcher-administered questionnaire. The analysis revealed that security, convenience, and adaptability positively influence digital finance, with security having the most substantial impact.

Tamang et al. (2021) investigated the reasons for the shift towards digital payments and the acceleration of adoption. The study used various statistical tools and the Technology Acceptance Model framework, which was validated through data analysis. The research also addressed the role of government and future prospects for digital payments post-pandemic.

Niraula and Adhikari (2019) analyzed data on digital technology, financial access, and services from secondary sources using multiple regression. The study found a significant positive relationship between mobile and internet access and the number of deposit accounts, suggesting that increasing mobile and internet usage can improve financial inclusion.

Tamrakar and Shah (2019) identified barriers to mobile payment systems in Nepal using qualitative research and Introspective Structural Modelling. The study, involving 10 experts and interviews with 4 users, categorized 12 barriers into dependent, independent, linkage, and autonomous types. The research highlights hardware and software capabilities and lack of knowledge as fundamental barriers, with payment preferences being a significant driver. The findings provide a framework for addressing these barriers and improving digital wallet adoption.

Sapkota et al. (2018) explored change management factors affecting ICT acceptance in the Nepalese banking sector. Using qualitative and empirical research methods, the study assessed the benefits and problems associated with ICT in banking. It offers insights into the pros and cons of ICT use and suggests corrective measures to enhance its application in Nepalese commercial banking.

2.3 Research Gap

Despite the substantial research conducted on digital currency adoption and financial technology in various regions, a significant gap exists in the exploration of the factors influencing the intention to use Central Bank Digital Currency (CBDC) in the Nepalese context. Previous studies have primarily focused on the broader landscape of digital currency adoption, such as Adeleye et al. (2024) who examined the socio-economic, technological, and regulatory factors in Africa, and Sun & Li (2024), who analyzed the relationship between central bank digital currency factors and user intention. Additionally, research such as Srivastava et al. (2024) and Firstian Aldhi et al. (2024) delved into digital payment services

and fintech adoption, but these studies were geographically concentrated in India and Indonesia, respectively, and did not address the specific context of CBDC in Nepal.

Moreover, while studies like Erwanti and Prasetyani (2023) investigated the intention to use CBDC using the Technology Acceptance Model in Indonesia, there is a lack of research that specifically addresses the unique socio-economic and cultural factors in Nepal that might influence CBDC adoption. The current literature does not sufficiently explore how factors such as awareness, perceived ease of use, perceived usefulness, social influence, and perceived trust impact the intention to use CBDC in Nepal, particularly from the perspective of its central bank. This gap highlights the need for focused research to better understand these determinants within the Nepalese context, which could provide valuable insights for policymakers, financial institutions, and stakeholders aiming to foster the adoption of CBDC in Nepal.

CHAPTER-III

RESEARCH METHODOLOGY

The research methodology encompasses the specific procedures and techniques used to identify, select, process, and analyze information related to a particular topic. This section of a research paper allows readers to evaluate the study's overall validity and reliability. In this chapter, the researcher presents a detailed plan of the steps followed throughout the research process.

3.1 Research Design

The research utilizes a descriptive and causal-comparative design to meet its objectives. Correlation and regression analyses are employed as comparative methods. By comparing the independent and dependent variables through these analyses, the research design is characterized as causal-comparative.

3.2 Population and Sample and Sampling Design

The population under consideration for this research comprises all the user of center bank digital currency and the sample is calculated by using the formula.

$$n_0 = Z^2 pq/e^2$$

Where,

n= Sample size

p = Population percentage having a particular trait

q = 1-p

z = Z value (95% confidence interval: 1.96, for example)

e= Error margin

The suggested value of p and q for the unidentified population is 50% for each. At a 95%

Level of confidence, the z value is 1.96, and the sampling error e = 5%.

$$n_0 = Z^2 pq/e^2$$

$$n_0 = 1.96^2 * 0.5 * 0.5 / 0.05^2 = 384$$

Using the formula, it is calculated that the minimum sample size required is 384. This means that a sample size of at least 384 is needed to achieve the desired level of precision and confidence in the study.

In this study the questionnaire is used a tools for the collection of data and the sample size is 384 respondent based on purposive sampling methods.

3.3 Instrument of Data Collection

The research collects primary data through various methods such as questionnaires, laboratory experiments, quasi-experiments, observations, interviews, and scales. In this study, primary data was specifically gathered using questionnaires.

3.4 Methods of Analysis

To achieve the study's objectives, a range of statistical tools are utilized, including descriptive statistics, correlation analysis, and multiple regression analysis. The data analysis is carried out based on the patterns found in the data.

3.4.1 Reliability Analysis

To assess reliability, the Cronbach's alpha measurement technique is used. This method evaluates the reliability of surveys that use multiple-question Likert scales. A general guideline for interpreting Cronbach's alpha in the context of Likert scale questions is:

Table 2

Cronbach's Alpha Table

Cronbach's Alpha	Internal Consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \leq 0.8$	Good
$0.8 > \alpha \leq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$A > 0.5$	Unacceptable

Source: *Adhikari & Pandey (2022)*

3.4.2 Statistical Analysis

Mean (\bar{X})

In statistical terms, the mean represents the average or central value of a set of numbers. It acts as a measure of central tendency, alongside the median and mode, offering an estimate of the expected value in a probability distribution.

$$\bar{X} = \frac{\sum X}{n}$$

Where,

\bar{X} =mean

$\sum X$ = Sum of Variables

n = Number of Variables

Standard Deviation (σ)

The standard deviation is a measure that evaluates the degree of variability or dispersion within a dataset. It is calculated as the square root of the variance and involves assessing how each data point deviates from the mean. It is represented by the symbol (σ).

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum(X - \bar{X})^2}{n}}$$

Where,

X=variables

\bar{X} = mean

n= No. of Period

Range

The range is the difference between the highest and lowest values in a dataset. It is a straightforward measure of dispersion that shows the extent of data spread. Calculated by subtracting the minimum value from the maximum value, the range provides a quick overview of variability but does not account for the distribution of data between these extremes.

Correlation Analysis

This method is used to determine both the direction and strength of the relationship between different pairs of variables. Correlation analysis is the statistical tool employed for this purpose, helping to reveal how variables move in relation to each other and the degree of their association. The Pearson correlation coefficient, which ranges from -1 to +1, is used to describe this relationship. A coefficient of -1 indicates a perfect negative correlation, meaning the variables move in exactly opposite directions, while a coefficient of +1 denotes a perfect positive correlation, where the variables move in the same direction. The Pearson coefficient,

symbolized as 'r,' is a straightforward way to assess the correlation between two variables and is not influenced by extreme values.

$$\text{Correlation Coefficient (r)} = \frac{n \sum XY - \sum X \sum Y}{\sqrt{[n \sum X^2 - (\sum X)^2] [n \sum Y^2 - (\sum Y)^2]}}$$

Where,

n = number of X and Y

$\sum XY$ = Sum of the product of the in series X and Y

$\sum X$ = Sum of the in series X

$\sum Y$ = Sum of the in series Y

$\sum X^2$ = Sum of the square of the in series X

$\sum Y^2$ = Sum of the square of the in series Y

Regression Analysis

Regression analysis is a statistical technique used to explore the relationship between one dependent (criterion) variable and several independent (predictor) variables. The purpose of multiple regression analysis is to predict changes in the dependent variable based on variations in the independent variables. This method assesses how well the multiple regressions serve as predictors. Additionally, the multiple determination coefficient represents the proportion of variance in the dependent variable that is explained by the regression equation. The multiple regression equation is generally formulated as follows:

Model

$$\text{IUCBDC} = \beta_0 + \beta_1 \times A + \beta_2 \times \text{PEU} + \beta_3 \times \text{PU} + \beta_4 \times \text{SI} + \beta_5 \times \text{PT} + e$$

Where,

IUCBDC= Intention to use center bank digital currency

A=Awareness

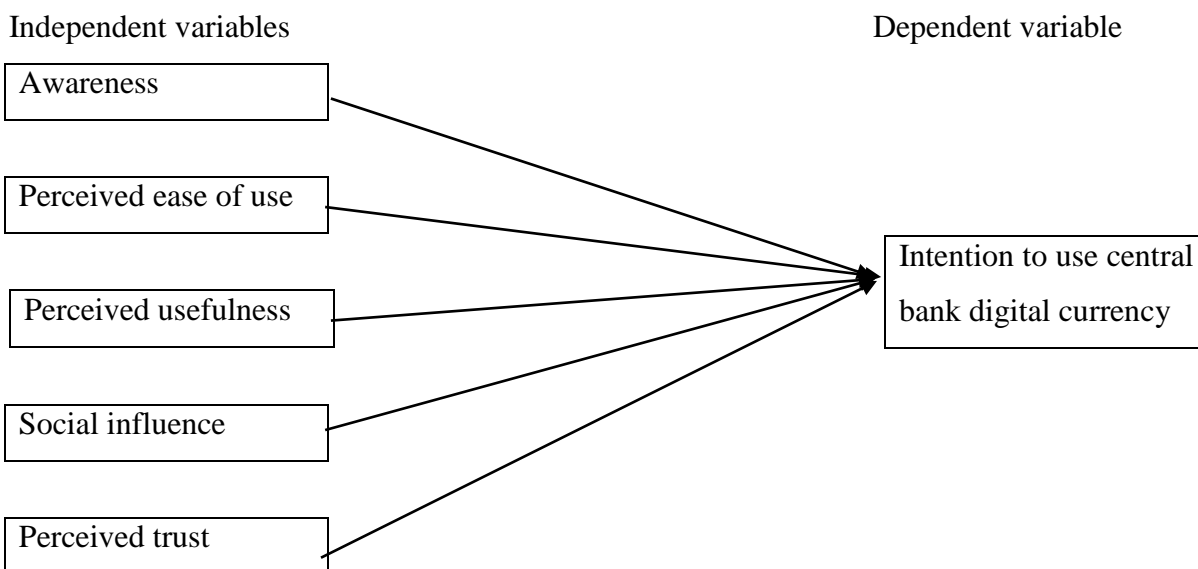
PEU=Perceived ease of use

PU=Perceived usefulness

SI=Social influence

PT=Perceived trust

3.5 Research Framework and Definition of Variables



Source: Saif Almuraqab (2020).

Figure 1: Research Framework

Definition of Variables

Dependent Variable

Intention to use Central bank digital currency

The decision to adopt Central Bank Digital Currency (CBDC) is influenced by various factors that reflect users' perceptions and trust in the technology. Important determinants include perceived ease of use, perceived usefulness, social influence, and trust, all of which affect individuals' readiness to embrace CBDC as an alternative to traditional financial systems. As digital currencies become more integrated into the global economy, understanding these factors is essential for policymakers and financial institutions. Additionally, the intention to use CBDC is influenced by the level of awareness and education about its benefits, as well as the regulatory framework supporting its adoption. By addressing these aspects, central banks can boost user confidence and encourage wider acceptance of CBDC, thereby fostering financial inclusion and advancing digital innovation in the monetary system (Saif Almuraqab, 2020).

Independent Variables

Awareness

Awareness is crucial for the adoption and utilization of Central Bank Digital Currency (CBDC). It refers to how well individuals understand the existence, functionality, and benefits of CBDCs. High awareness levels can significantly affect people's perceptions of CBDC, increasing their likelihood of exploring and adopting it as a payment method. Awareness goes beyond basic knowledge of CBDC operations; it also includes understanding its potential effects on financial security, privacy, and economic inclusion. For central banks, fostering awareness through targeted educational and communication efforts is vital to dispel misconceptions, build trust, and promote informed decisions among potential users. Without sufficient awareness, even the most advanced digital currency may struggle to gain widespread acceptance (Alber & Dabour, 2020).

Perceived trust

Perceived trust is a key factor influencing the adoption and use of Central Bank Digital Currency (CBDC). It represents the level of confidence individuals have in the CBDC's security, reliability, and integrity. For users to embrace CBDC, they need to be assured that it is supported by the central bank's authority and will serve as a secure and stable medium of exchange. Factors such as the central bank's reputation, transparency in communication, and the robustness of the underlying technology affect perceived trust. Users are more likely to trust and use CBDC if they believe it is protected against fraud, hacking, and other risks, and that their personal information is safeguarded. Establishing and maintaining this trust is crucial for the widespread acceptance and success of CBDC, as it underpins users' willingness to engage with the new digital currency (Lantang et al., 2021; Ferrari, 2022).

Perceived usefulness

Perceived usefulness is a critical factor in determining the intention to use Central Bank Digital Currency (CBDC). It represents the belief that using CBDC will improve financial transactions and offer benefits over current payment methods. When individuals view CBDC as advantageous, such as providing greater convenience, faster transactions, lower costs, and wider acceptance for various payments, they are more inclined to adopt it. This perception is influenced by how well CBDC addresses users' needs compared to traditional currencies and

other digital payment options. For example, if CBDC delivers superior features like enhanced security, simplified cross-border transactions, or integration with digital wallets, users are likely to see it as valuable, thereby increasing their intention to use it. Highlighting the practical benefits and demonstrating CBDC's added value are essential for encouraging its adoption (Erwanti & Prasetyani, 2023; Moro-Visconti et al., 2023).

Perceived ease of use

Perceived ease of use is a crucial factor in the adoption of Central Bank Digital Currency (CBDC). It denotes how effortless individuals believe it is to use CBDC. When users find the CBDC system to be intuitive, simple, and easy to operate, they are more likely to adopt and use it. Factors contributing to ease of use include user-friendly design, straightforward transaction procedures, and accessible support for new users. If individuals feel they can quickly learn to use CBDC without facing major difficulties or technical obstacles, they are more likely to incorporate it into their financial routines. Thus, designing CBDC platforms to be user-friendly and accessible is key to encouraging widespread adoption and building user trust in the digital currency.

Social influence

Social influence is a crucial factor in determining individuals' intention to use Central Bank Digital Currency (CBDC). It involves the effect of peers, social circles, and societal norms on a person's choice to adopt CBDC. When people see that influential individuals or groups—such as family, friends, colleagues, or respected community leaders—support or use CBDC, they are more likely to view it as a credible and attractive option. This influence is often reinforced by societal trends, media representations, and public endorsements that highlight the benefits of CBDC. Social influence can also be driven by peer pressure or a desire to align with group expectations, which can further encourage the adoption of CBDC. Thus, promoting positive social perceptions and utilizing influential networks can greatly facilitate the acceptance and uptake of CBDC within different communities.

CHAPTER-IV

RESULT AND DISCUSSION

In Chapter Four, titled "Results and Discussion," the emphasis is on presenting and analyzing the data gathered throughout the study. This chapter combines statistical results with a critical evaluation of these findings in relation to the research goals and hypotheses. It details the quantitative data obtained from survey responses, presenting key results using descriptive statistics, correlation coefficients, regression analysis, or other pertinent statistical methods. The discussion section interprets these results within the context of existing literature and theoretical frameworks, exploring how the findings align with or differ from previous research and explaining their practical implications.

4.1 Results

This section details the quantitative data obtained from the survey responses. It presents key findings using descriptive statistics, correlation coefficients, regression analysis, and other appropriate statistical tests.

4.1.1 Demographic Statistics

This section includes an analysis of various demographic statistics related to the respondents, such as their banking information, gender, age, marital status, and profession.

Bank name of the Respondent

The bank name of the respondent involve are Himalayan bank limited, Kumari bank limited and Agriculture bank limited respectively. The related information are provided below:

Table 3

Bank name of the respondent

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Himalayan bank limited	97	25.3	25.3	25.3
kumari bank limited	163	42.4	42.4	67.7
Agriculture bank limited	124	32.3	32.3	100.0
Total	384	100.0	100.0	

Source: *Questionnaire survey-2024*

Table 3 present the name of the bank which are related to the respondent received banking services. They are in numbers 97, 163 and 124 of Himalayan bank limited, Kumari bank

limited and Agriculture bank limited respectively. In percent they are 25.3, 42.4 and 32.3 Himalayan bank limited, Kumari bank limited and Agriculture bank limited respectively.

Marital status of the Respondent

The marital status of the respondent involve are married and unmarried respectively. The related information are provided below:

Table 4

Marital status of the respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	married	181	47.13	47.13	47.13
	unmarried	203	52.87	52.87	100
	Total	384	100.0	100.0	

Source: *Questionnaire survey-2024*

Table 4 present the marital status which are related to the respondent received banking services. They are in numbers 181 and 203 of married and unmarried respectively. In percent they are 47.13 and 52.87 married and unmarried respectively.

Age of the Respondent

The age of the respondent involve are below 20 years, 21-30 years, 30-45 years and 46 and above respectively. The related information are provided below:

Table 5

Age of the respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 20 years	132	34.4	34.4	34.4
	21-30 years	128	33.3	33.3	67.7
	30-45 years	54	14.1	14.1	81.8
	46 and above	70	18.2	18.2	100.0
	Total	384	100.0	100.0	

Source: *Questionnaire survey-2024*

Table 5 present the age of the respondent which are related to the respondent received banking services. They are in numbers 132, 128, 54 and 70 of below 20 years, 21-30 years, 30-45 years and 46 and above respectively. In percent they are 34.4, 33.3, 14.1 and 18.2 below 20 years, 21-30 years, 30-45 years and 46 and above respectively.

Gender of the Respondent

The gender of the respondent involve are male and female respectively. The related information are provided below:

Table 6

Gender of the respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	119	30.98	30.98	30.98
	female	265	69.02	69.02	99.02
	Total	384	100.0	100.0	

Source: *Questionnaire survey-2024*

Table 6 present the gender of the respondent which are related to the respondent received banking services. They are in numbers 119 and 265 male and female respectively. In percent they are 30.98 and 69.02 male and female respectively.

Profession of the Respondent

The profession of the respondent involve are Employee, Business person, farmer and student respectively. The related information are provided below:

Table 7

Profession of the respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Employee	59	15.4	15.4	15.4
	Business person	105	27.3	27.3	42.7
	farmer	105	27.3	27.3	70.0
	student	115	30	30	100.0
	Total	384	100	100.0	

Source: *Questionnaire survey-2024*

Table 7 present the Profession of the respondent which are related to the respondent received banking services. They are in numbers 59, 105, 105 and 115 Employee, Business person, farmer and student respectively. In percent they are 30.98 and 69.02 Employee, Business person, farmer and student respectively.

4.1.2 Reliability Analysis

Reliability analysis is a statistical technique used to evaluate the consistency and dependability of a measurement tool, often in survey research. It ensures that the tool yields stable and consistent results across multiple uses. A widely used method for measuring reliability is Cronbach's alpha, which assesses the internal consistency of the items within a scale.

Table 8

Reliability statistics

Variables	Items	Alpha value	Remarks
Intention to use center bank digital currency	5	0.917	Excellent
Awareness	5	0.862	Good
Perceived ease of use	4	0.963	Excellent
Perceived usefulness	4	0.629	Questionable
Social influence	4	0.779	Acceptable
Perceived trust	4	0.609	Questionable

Source: *Questionnaire survey-2024*

Table 8 shows all the variables level of alpha test is above the questionable level. So the all the question set by the researcher are included in the research.

4.1.3 Descriptive Analysis

Descriptive analysis is a basic statistical method used to summarize and convey the key characteristics of a dataset in an understandable way. It helps in providing a clear overview of the data by using measures such as mean, median, mode, variance, and standard deviation.

Table 9 displays the descriptive statistics for various variables, including the intention to use central bank digital currency, awareness, perceived ease of use, usefulness, social influence, and perceived trust. It includes calculations for range, mean, and standard deviation.

Table 9

Descriptive analysis

	N	Range	Mean	Std. Deviation
Intention to use center bank digital currency	384	1.00	4.96	.16
Awareness	384	.60	4.95	.11
Perceived ease of use	384	1.00	4.77	.39
Perceived usefulness	384	.75	4.94	.159
Social influence	384	.75	4.79	.308
Perceived trust	384	1.00	4.85	.23
Valid N (listwise)	384			

Source: Questionnaire survey- 2024

The range, mean and standard deviation of intention to use center bank digital currency is 1.00, 4.96 and .16 respectively. The range, mean and standard deviation of awareness is .60, 4.95 and .11 respectively. The range, mean and standard deviation of perceived ease of use is 1, 4.77 and .39 respectively. The range, mean and standard deviation of perceived usefulness is .75, 4.94 and .159 respectively. The range, mean and standard deviation of social influence is .75, 4.97 and .308 respectively. The range, mean and standard deviation of perceived trust is 1, 4.85 and .23 respectively.

The given result shows that the all the variables are in the nature of fluctuating, because the range and standard deviation have more variation found.

4.1.4 Correlations Analysis

Correlation analysis is a statistical technique used to evaluate and quantify the strength and direction of the relationship between two or more variables. It determines whether changes in one variable are associated with similar or opposite changes in another. The strength of this relationship is measured by the correlation coefficient, which ranges from -1 to 1. A positive coefficient indicates that the variables move in the same direction, while a negative coefficient suggests they move in opposite directions. A coefficient of zero means there is no linear relationship between the variables. Although correlation analysis is widely used to identify patterns and associations, it does not establish causality, meaning it cannot confirm that one variable directly influences the other. This method is commonly applied in fields such as finance, economics, and social sciences to explore potential connections between variables.

Table 10

Correlations analysis (N=384)

		IUCBDC	A	PEU	PU	SI	PT
IUCBDC	Pearson Correlation	1					
	Sig. (2-tailed)						
A	Pearson Correlation	.704**	1				
	Sig. (2-tailed)	.000					
PEU	Pearson Correlation	-.040	.031	1			
	Sig. (2-tailed)	.432	.542				
PU	Pearson Correlation	.680**	.776**	.072	1		
	Sig. (2-tailed)	.000	.000	.160			
SI	Pearson Correlation	.152**	.175**	.905**	.277**	1	
	Sig. (2-tailed)	.003	.001	.000	.000		
PT	Pearson Correlation	.413**	.159**	.752**	.240**	.761**	1
	Sig. (2-tailed)	.000	.002	.000	.000	.000	

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

Source: *Questionnaire survey – 2024*

The relationship of Awareness to the Intention to use center bank digital currency is positive and significant and the hypothesis is also true. The positive relationship is 0.704 shows the significant relationship because the significant value is 0.00 which is less than 0.01 so the relationship is significant.

The relationship of Perceived ease of use to the Intention to use center bank digital currency is negative and insignificant and the hypothesis is also not true. The negative relationship is 0.04 shows the insignificant relationship because the insignificant value is 0.432 which is more than 0.05 so the relationship is insignificant.

The relationship of Perceived usefulness to the Intention to use center bank digital currency is positive and significant and the hypothesis is also true. The positive relationship is 0.68 shows

the significant relationship because the significant value is 0.00 which is less than 0.01 so the relationship is significant.

The relationship of Social influence to the Intention to use center bank digital currency is positive and significant and the hypothesis is also true. The positive relationship is 0.152 shows the significant relationship because the significant value is 0.003 which is less than 0.01 so the relationship is significant.

The relationship of Perceived trust to the Intention to use center bank digital currency is positive and significant and the hypothesis is also true. The positive relationship is 0.413 shows the significant relationship because the significant value is 0.00 which is less than 0.01 so the relationship is significant.

4.1.5 Regression Analysis

Regression analysis is a statistical technique used to examine the relationship between a dependent variable and one or more independent variables. It measures how changes in the independent variables influence the dependent variable, making it useful for predictions and forecasting. By developing models of these relationships, regression analysis reveals the strength and direction of their effects. This method can be applied in various forms, such as simple linear regression with a single independent variable or multiple regression with several. Commonly used in fields like economics, finance, and social sciences, regression analysis helps identify patterns, test hypotheses, and facilitate data-driven decision-making. However, while it shows relationships between variables, it does not establish causality.

Table 11

Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.898 ^a	.806	.803	.07184

a. Predictors: (Constant), Perceived trust, Awareness, Perceived ease of use, Perceived usefulness, Social influence

Source: *Questionnaire survey -2024*

Table 11 shows the model summary of the respective regression analysis. The adjusted R square of the respective regression is .803 which represent the 80.3 % variation on dependent variables is explained by the independent variables. In other word Perceived trust, Awareness,

Perceived ease of use, Perceived usefulness and Social influence impacted to Intention to use center bank digital currency by 80.3 percent.

Table 12

ANOVA of the regression

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.099	5	1.620	313.853	.000 ^b
	Residual	1.951	378	.005		
	Total	10.050	383			

a. Dependent Variable: Intention to use center bank digital currency

b. Predictors: (Constant), Perceived trust, Awareness, Perceived ease of use, Perceived usefulness, Social influence

Source: Questionnaire survey -2024

Table 12 shows the ANOVA of the respondent of 384 center bank digital currency user. The independent variables are perceived trust, awareness, and perceived ease of use, perceived usefulness, and social influence. The dependent variable is Intention to use center bank digital currency. The regression significant value is 0.00 which is less than 0.05. The overall regression model is significant.

Table 13

Coefficient of regression

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.578	.175		-3.30	.001
	Awareness	.673	.052	.462	12.83	.000
	Perceived ease of use	-.324	.025	-.788	-12.71	.000
	Perceived usefulness	.151	.040	.149	3.78	.000
	Social influence	.076	.033	.145	2.30	.022
	Perceived trust	.544	.025	.786	21.59	.000

a. Dependent Variable: Intention to use center bank digital currency

Source: *Questionnaire survey -2024*

Table 13 shows the coefficient of regression the respondent of 384 center bank digital currency user. The independent variables are perceived trust, awareness, and perceived ease of use,

perceived usefulness, and social influence. The dependent variable is Intention to use center bank digital currency.

The effect of awareness on the intention to use central bank digital currency is both positive and significant, with a confirmed hypothesis. A positive beta coefficient of 0.673 indicates a strong impact, as the significance value is 0.00, which is below the 0.05 threshold, confirming the significance of this relationship.

The effect of perceived ease of use on the intention to use central bank digital currency is negative but significant, with a valid hypothesis. The negative beta coefficient of 0.324 suggests a substantial impact, as the significance value of 0.00 is less than 0.05, confirming its significance.

The effect of perceived usefulness on the intention to use central bank digital currency is positive and significant, and the hypothesis is supported. A positive beta coefficient of 0.151 indicates a meaningful impact, with a significance value of 0.00 is less than 0.05, confirming its relevance.

The effect of social influence on the intention to use central bank digital currency is also positive and significant, with a confirmed hypothesis. The positive beta coefficient of 0.076 shows a smaller yet significant effect, with a significance value of 0.022 is less than 0.05, which is less than 0.05.

Lastly, the effect of perceived trust on the intention to use central bank digital currency is positive and significant, supporting the hypothesis. A positive beta coefficient of 0.544 shows a strong effect, with a significance value of 0.00 is less than 0.05, confirming its importance.

4.2 Discussion

The first objective of the research is to assess the current status of awareness, Perceived ease of use, Perceived usefulness, Social influence, and Perceived trust to the Intention to use center bank digital currency. It is found that the given result shows that the all the variables are in the nature of fluctuating, became the range and standard deviation have more variation found. The result is consistent with the result of Sun & Li, (2024).

The second objective of the research is to analyze relationship of awareness, perceived ease of use, perceived usefulness, social influence, and perceived trust to the intention to use center

bank digital currency. It is found that the relationship of Awareness to the Intention to use center bank digital currency is positive and significant and the hypothesis is also true. The result is consistent with the result of Ma et al., (2022). The relationship of Perceived ease of use to the Intention to use center bank digital currency is negative and insignificant and the hypothesis is also not true. The result is consistent with the result of Ferrari, (2022). The relationship of Perceived usefulness to the Intention to use center bank digital currency is positive and significant and the hypothesis is also true. The result is consistent with the result of Khando et al., (2022). The relationship of Social influence to the Intention to use center bank digital currency is positive and significant and the hypothesis is also true. The result is consistent with the result of Pandey, (2022). The relationship of Perceived trust to the Intention to use center bank digital currency is positive and significant and the hypothesis is also true. The result is consistent with the result of Firstian Aldhi et al., (2024).

The third objective of the research is to examine the impact of perceived ease of use, perceived usefulness, social influence, and perceived trust to the intention to use center bank digital currency. It is found that the impact of Awareness to the Intention to use center bank digital currency is positive and significant and the hypothesis is also true. The result is consistent with the result of Rank, (2023). The impact of Perceived ease of use to the Intention to use center bank digital currency is negative and significant and the hypothesis is also true. The result is consistent with the result of Ma et al., (2022). The impact of Perceived usefulness to the Intention to use center bank digital currency is positive and significant and the hypothesis is also true. The result is consistent with the result of Pandey, (2022). The impact of Social influence to the Intention to use center bank digital currency is positive and significant and the hypothesis is also true. The result is consistent with the result of Khando et al., (2022). The impact of Perceived trust to the Intention to use center bank digital currency is positive and significant and the hypothesis is also true. The result is consistent with the result of Ma et al., (2022).

CHAPTER –V

SUMMARY AND CONCLUSION

The summary and conclusion chapter offers a brief overview of the key findings, analyses, and discussions from the research. It emphasizes the main objectives, methodologies, and significant results, providing a coherent summary of how the study addressed its research questions or hypotheses. This chapter interprets the findings, discussing their relevance and implications within the broader context of the field. It also synthesizes the study's contributions, acknowledges its limitations, and typically proposes directions for future research.

5.1 Summary

The swift evolution of digital technology has significantly transformed the global financial sector, altering how financial transactions are executed, overseen, and regulated. Among the major advancements in this digital era is the rise of digital currencies, which have introduced new paradigms in both personal and institutional finance. Central Bank Digital Currency (CBDC) aims to tackle various issues faced by traditional financial systems, such as the high cost of cross-border transactions, financial exclusion of unbanked populations, and inefficiencies associated with cash-based economies. The concept of CBDC is becoming increasingly important and relevant. The Nepal Rastra Bank (NRB), Nepal's central bank, is actively examining the potential benefits and challenges of adopting CBDC as part of its broader efforts to modernize the nation's payment systems and promote a cashless economy. The successful implementation and widespread adoption of CBDC in Nepal will hinge on a thorough understanding of the factors influencing public willingness to use this new financial tool. Key determinants include perceived ease of use, which reflects how straightforward and uncomplicated individuals believe CBDC will be, and perceived usefulness, which pertains to the perceived benefits that CBDC may offer in making financial transactions more efficient, secure, and convenient compared to traditional methods. Social influence also plays a significant role in the adoption of new technologies, especially in collectivist cultures like Nepal. This study explores these determinants to understand the factors affecting the intention to use Nepalese CBDC.

The problem of the research are What is the current status of awareness, Perceived ease of use, Perceived usefulness, Social influence, and Perceived trust to the Intention to use center bank digital currency? What are the relationship of awareness, Perceived ease of use, Perceived usefulness, Social influence, and Perceived trust to the Intention to use center bank digital currency? Do the awareness, Perceived ease of use, Perceived usefulness, Social influence, and Perceived trust impacted to the Intention to use center bank digital currency? The objectives are set on the basis of the problem they are; To assess the current status of awareness, Perceived ease of use, Perceived usefulness, Social influence, and Perceived trust to the Intention to use center bank digital currency. To analyze relationship of awareness, perceived ease of use, perceived usefulness, social influence, and perceived trust to the intention to use center bank digital currency. To examine the impact of perceived ease of use, perceived usefulness, social influence, and perceived trust to the intention to use center bank digital currency. The descriptive and casual comparative research design has been employed. The population under consideration for this research comprises all the user of center bank digital currency and the sample is calculated by using the formula. This study used the primary data and they are collected using the questionnaire. The descriptive statistics, correlation and regression are conducted. They found that the given result shows that the all the variables are in the nature of fluctuating, became the range and standard deviation have more variation found. The relationship of variables Perceived trust, Awareness, Perceived usefulness and Social influence and Intention to use center bank digital currency are positive and significant. The Perceived ease of use and intention to use center bank digital currency are negative and insignificant. The impact of Perceived trust, Awareness, Perceived usefulness, Social influence positive and significant to the Intention to use center bank digital currency. The impact of Perceived ease of use to the Intention to use center bank digital currency negative and significant.

5.2 Conclusion

The first objective of the research is to assess the current status of awareness, Perceived ease of use, Perceived usefulness, Social influence, and Perceived trust to the Intention to use center bank digital currency. It is found that the given result shows that the all the variables are in the nature of fluctuating, became the range and standard deviation have more variation found. In

conclusion the awareness, Perceived ease of use, Perceived usefulness, Social influence, and Perceived trust to the Intention to use center bank digital currency are fluctuating nature.

The second objective of the research is to analyze relationship of awareness, perceived ease of use, perceived usefulness, social influence, and perceived trust to the intention to use center bank digital currency. It is found that the relationship of variables Perceived trust, Awareness, Perceived usefulness and Social influence and Intention to use center bank digital currency are positive and significant. The Perceived ease of use and intention to use center bank digital currency are negative and insignificant. In conclusion the relationship of variables Perceived trust, Awareness, Perceived usefulness and Social influence and Intention to use center bank digital currency are positive and significant.

The third objective of the research is to examine the impact of perceived ease of use, perceived usefulness, social influence, and perceived trust to the intention to use center bank digital currency. It is found that the impact of Perceived trust, Awareness, Perceived usefulness, Social influence positive and significant to the Intention to use center bank digital currency. The impact of Perceived ease of use to the Intention to use center bank digital currency negative and significant. In conclusion the impact of Perceived trust, Awareness, Perceived usefulness, Social influence positive and significant to the Intention to use center bank digital currency.

5.3 Implication

The research on the "Determinants of the Intention to Use Nepalese Central Bank Digital Currency (CBDC)" holds several important implications. First, it can guide the Nepalese central bank and policymakers in understanding the factors that influence public acceptance and adoption of CBDC, such as awareness, perceived ease of use, perceived usefulness, social influence, and trust. Insights from the research can help shape effective communication strategies and educational campaigns to enhance awareness and trust, which are crucial for adoption.

Furthermore, the findings may provide valuable feedback for designing user-friendly digital currency systems, ensuring ease of access and convenience. This research could also help financial institutions develop appropriate infrastructure and security measures that address public concerns regarding privacy and digital security. In a broader sense, by identifying key drivers of CBDC adoption, the study contributes to promoting digital financial inclusion,

improving monetary policy implementation, and fostering technological innovation in Nepal's financial sector.

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APPENDIXES

Appendix 1:

Survey Questionnaires

August- 2024

Dear Respondent,

I am conducting this questionnaire survey for an academic research as required by the MBS program. The title of my research is “DETERMINANTS OF THE INTENTION TO USE NEPALESE CENTRAL BANK DIGITAL CURRENCY”. I would to like to state that this research is purely for an academic propose and I am simply interested in yourself and honest answer. I assure you that strict confidentiality will be maintained and the information furnished by you will be used only for academic purpose.

Thank You for Your Cooperation.

Himkala Bohora bhattarai

College Roll No: 153/077

Exam Symbol No: 35559/21

T. U Registration No: 7-2-311-49-2014

Shanker Dev Campus

Specializations: finance

Part I: demographics characteristics

Fill Your Answer in the appropriate box.

1. Fills in the box bank name from where you received the online payment platform.

- a) Himalayan Bank Limited []
- b) Kumari Bank Limited []
- c) Agriculture Development Bank Limited []

2. Gender

- a. Male [] b. Female []

3. Age

- a. Below 20 years [] b. 21 -30 years [] c. 30-45 years [] d. 46 and above

4. Marital status

- a. Married [] b. Unmarried []

5. Provide what is your profession

- a. Employee [] b. business person [] c. farmer [] d. Student []

Part II

Below are several statements about you with which you may agree or disagree. Using the response scale below, indicate your agreement or disagreement with each item by choosing the appropriate number. Please give your responses as follows

(1 = strongly Disagree, 2= Disagree, 3 = Neutral, 4 = Agree and 5 = Strongly Agree)

A) Intention to use Central bank digital currency

Questions	1	2	3	4	5
People are more likely to use central bank digital currency (CBDC) because it offers certain benefits that make it appealing					
Trust plays a key role in choosing to use CBDC					
Feeling confident about using digital payment systems is important for successful transactions.					
If using CBDC is easy, more people will be encouraged to use it.					
Finally, finding CBDC useful is important for keeping people interested in using it over the long term.					

B) Awareness

Questions	1	2	3	4	5
Using central bank digital currency could affect financial security.					
Using central bank digital currency can be promoted through focused education.					
Encouraging people to make informed choices is important for using central bank digital currency.					

Even though central bank digital currency is advanced, it might be hard for many people to start using it.					
Awareness is key to adopting and using central bank digital currency.					

C) Perceived trust

Questions	1	2	3	4	5
You trust using central bank digital currency because it reduces the risk of mistakes.					
People trust it because they believe the central bank supports it.					
You use central bank digital currency because you trust the central bank to protect your personal data.					
Trust is the foundation that makes people willing to use the new digital currency.					

D) Perceived usefulness

Questions	1	2	3	4	5
Finding it useful is a big reason why people decide to use Central Bank Digital Currency (CBDC)					
Many people use CBDC because it's widely accepted for different types of payments.					
The large number of people using CBDC shows that consumers trust their ability to use it.					
Educational resources and customer support help build confidence in using CBDC.					

E) Perceived ease of use

Questions	1	2	3	4	5
How easy it is to use Central Bank Digital Currency (CBDC) is a key factor in whether people will adopt it.					
The ability to connect different payment methods and receive real-time alerts makes CBDC more popular.					
Digital payment systems are designed to be user-friendly, making transactions easy.					
People use CBDC because it is simple and easy to access.					

F) Social influence

Questions	1	2	3	4	5
Social influence is key in shaping people's decision to use Central Bank Digital Currency (CBDC).					
Using influential networks can greatly boost the adoption and acceptance of CBDC in different communities.					
Social influence helps encourage people to use CBDC.					
Influential figures or groups, like family members, friends, and colleagues, play a big role in promoting CBDC.					

Thank you for your participation. Hope you have a great day!!!

Appendix 2:

SPSS calculation's

Correlations

		Intention to use center bank digital currency	Awareness	Perceived ease of use	Perceived usefulness	Social influence	Perceived trust
Intention to use center bank digital currency	Pearson Correlation Sig. (2-tailed) N	1 .704** 384	.704** .000 384	-.040 .432 384	.680** .000 384	.152** .003 384	.413** .000 384
Awareness	Pearson Correlation Sig. (2-tailed) N	.704** .000 384	1 .000 384	.031 .542 384	.776** .000 384	.175** .001 384	.159** .002 384
Perceived ease of use	Pearson Correlation Sig. (2-tailed) N	-.040 .432 384	.031 .542 384	1 .160 384	.072 .160 384	.905** .000 384	.752** .000 384
Perceived usefulness	Pearson Correlation Sig. (2-tailed) N	.680** .000 384	.776** .000 384	.072 .160 384	1 .000 384	.277** .000 384	.240** .000 384
Social influence	Pearson Correlation Sig. (2-tailed) N	.152** .003 384	.175** .001 384	.905** .000 384	.277** .000 384	1 .000 384	.761** .000 384
Perceived trust	Pearson Correlation	.413**	.159**	.752**	.240**	.761**	1

Sig. (2-tailed)	.000	.002	.000	.000	.000	
N	384	384	384	384	384	384

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

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.898 ^a	.806	.803	.07184

a. Predictors: (Constant), Perceived trust, Awareness, Perceived ease of use, Perceived usefulness, Social influence

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.099	5	1.620	313.853	.000 ^b
	Residual	1.951	378	.005		
	Total	10.050	383			

a. Dependent Variable: Intention to use center bank digital currency

b. Predictors: (Constant), Perceived trust, Awareness, Perceived ease of use, Perceived usefulness, Social influence

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.578	.175		-3.306	.001
	Awareness	.673	.052	.462	12.831	.000
	Perceived ease of use	-.324	.025	-.788	-12.717	.000
	Perceived usefulness	.151	.040	.149	3.785	.000
	Social influence	.076	.033	.145	2.305	.022
	Perceived trust	.544	.025	.786	21.593	.000

a. Dependent Variable: Intention to use center bank digital currency

Descriptive Statistics

	N	Range	Mean	Std. Deviation
Intention to use center bank digital currency	384	1.00	4.9635	.16198
Awareness	384	.60	4.9589	.11136
Perceived ease of use	384	1.00	4.7799	.39342
Perceived usefulness	384	.75	4.9421	.15974
Social influence	384	.75	4.7943	.30870
Perceived trust	384	1.00	4.8535	.23387
Valid N (listwise)	384			

bank name

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Himalayan bank limited	97	25.3	25.3	25.3
kumari bank limited	163	42.4	42.4	67.7
Agriculture bank limited	124	32.3	32.3	100.0
Total	384	100.0	100.0	

marital status

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid married	181	47.13	47.13	47.13
unmarried	203	52.87	52.87	100
Total	384	100.0	100.0	

Age

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Below 20 years	132	34.4	34.4	34.4
21-30 years	128	33.3	33.3	67.7
30-45 years	54	14.1	14.1	81.8
46 and above	70	18.2	18.2	100.0
Total	384	100.0	100.0	

Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid male	118	30.7	30.7	30.7
female	265	69.0	69.0	99.7
3.00	1	.3	.3	100.0
Total	384	100.0	100.0	

Profession

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Employee	59	15.4	15.4	15.4
Business person	105	27.3	27.3	42.7
farmer	105	27.3	27.3	70.0
student	115	30	30	100.0
Total	384	100	100.0	

Reliability Statistics

Cronbach's Alpha	N of Items
.917	5

Reliability Statistics

Cronbach's Alpha	N of Items
.862	5

Reliability Statistics

Cronbach's Alpha	N of Items
.963	4

Reliability Statistics

Cronbach's Alpha	N of Items
.629	4

Reliability Statistics

Cronbach's Alpha	N of Items
.779	4

Reliability Statistics

Cronbach's Alpha	N of Items
.609	4

DETERMINANTS OF THE INTENTION TO USE NEPALESE C...

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ABSTRACT

The problem of the research are What is the current status of

awareness,

Perceived ease of use, Perceived usefulness, Social influence, and Perceived trust to the Intention to use

center bank digital currency? What are the relationship of awareness,

Perceived ease of use, Perceived usefulness, Social influence, and Perceived trust to the Intention to use

center bank digital currency? Do the awareness,