A Study on Customer's Attitude and Perception to use Digital Rupee

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SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE

OF

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Submitted By

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DECLARATION

I, **VANSHIKA PRUHTI**, **2K21/DMBA/136**, student of Master of Business Administration. Hereby declare that the project dissertation titled **"A study on Customer's Attitude and Perception to use Digital Rupee"** which is submitted by me to the Delhi School of Management, Delhi Technological University, Delhi i partial fulfillment of the requirement for the award of the degree of Master of Business Administration, is original and not copied from any source without proper citation. This work has not previously formed the basis for the award of any Degree, Diploma Associateship, Fellowship or other similar title or recognition.

Place: Delhi   **VANSHIKA PRUTHI**

Date: **2K21/DMBA/136**

CERTIFICATE

This is to certify that the Project Dissertation titled **"A Study on Customer's Attitude and Perception to use Digital Rupee"** which is submitted by VANSHIKA PRUTHI, 2K21/DMBA/136, Delhi School of Management, Delhi Technological University, Delhi in partial fulfillment of the requirement for the award of the degree of Master of Business Administration, is a record of the project work carried out by the student under my supervision. To the best of my knowledge this work has not been submitted in part or full for any Degree or Diploma to this University or elsewhere.

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EXECUTIVE SUMMARY

Over the past ten years, the infrastructure for telecommunications technology has grown in emerging nations in an unprecedented and extraordinary way. The expansion of wireless communication connectivity, which has a huge influence on the lives of billions of people globally, is amazing. Access has changed not just how quickly and easily people can communicate, but it has also given marketers and policy makers the chance to reinvent the way they interact with potential clients. It has been shown that a country's economic development is favorably correlated with a robust telecommunications network such as the Internet.

For traditional payment systems, which are controlled by established banking and financial institutions, the fast uptake and increase in availability and use of mobile phones, especially smartphones in emerging countries also produced enormous potential for the digital payment industry. The amount of mobile payments processed globally has increased dramatically. Consequently, there has been a marked rise in the number of enterprises providing their clients in various markets with mobile-based payment options. The use of cash for payments is steadily declining in most regions of the world due to growing payment digitalization. which became the reason for emergence of digital e-rupee which is a legal tender issued in digital form by the central bank of the country. While the banks oversee the distribution, the RBI issues retail e-Rupee. This paper intends to study customer's attitude and perception to use digital rupee.

This research aims to investigate customer's attitude and perception towards using Digital Rupee in the Delhi National Capital Region (NCR) by identifying the elements that affect customers' attitude and intention towards adopting it. A cross-sectional survey was conducted with a sample group of 155 people in the Delhi NCR region, using closed-ended questions designed using the Likert scale. The independent variables for this study are Perceived usefulness, Perceived ease of use, Privacy and Security, Attitude and Behavioral Intentions, while the dependent variable is the customer's confidence in the success of Digital Rupee.

The data collected was analyzed using SPSS software, and various statistical techniques such as Descriptive Analysis, Multiple Linear Regression, and Two Way Anova were employed to identify patterns, trends, and relationships in the data. Ethical considerations were taken into account throughout the research process to ensure anonymity, confidentiality, and informed consent of the respondents. However, the research has certain limitations due to its limited sample size and geographical scope, which may not be applicable to other regions or populations. Finding shows that it could be achieved by ensuring that the digital currency is designed to meet the needs and expectations of the customers and by implementing robust security measures to protect customer's sensitive information.

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CHAPTER 01
INTRODUCTION

1.1 Background

A revolution in India's transition to digital payment systems began in 2016 when the Modi government decided to demonetize the 500 and 1000 rupee banknotes. By limiting the movement of cash in the nation, this was meant to address the problems of black money, corruption, and terrorism funding (Kumar, S., & Singh, A. 2017). Accessibility, time, and ease of use gained prominence and started to take precedence above the money itself, it was made possible by the growing usage of smartphones and user-friendly payment systems.

Although India was initially hesitant to adopt electronic payments systems, but later on when they realized about the ease of use and ubiquity associated with the digital payment methods, it introduced National Electronic Fund Transfer (NEFT) , Immediate Payment Service (IMPS), Bharat Interface for Money (BHIM), mobile wallets, and, most importantly, UPI (Unified Payments Interface) were introduced. These applications and services are currently available to make retail payments as well. Online transactions surged by 250% over the previous years as a result of demonetization. (Kumar, K. 2019)

1.2 Digital Rupee
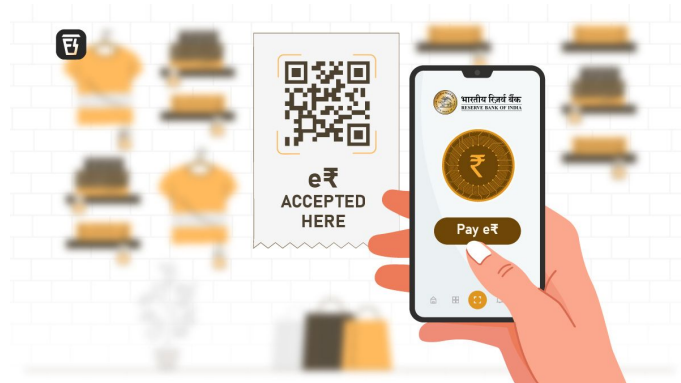
Figure 1.1: E-Rupee

The Reserve Bank of India (RBI) launched the Digital Rupee, which is the digital version of the Indian Rupee. It is a type of central bank digital currency (CBDC) that the RBI issues and which is recognised as legal tender by both private citizens and commercial entities.

The Digital Rupee intends to increase financial inclusion for the unbanked and underbanked population, decrease the usage of cash in the economy, and encourage the use of electronic payments.The RBI will be in charge of creating the policy and regulatory framework for the Digital Rupee and will issue and manage it. It will be supported by the Indian Rupee and issued on a blockchain. (Mihir Gandhi, Partner & Leader - Payments Transformation, PwC India)

Through digital wallets, the Digital Rupee will be accessible to people, companies, and other organisations. Additionally, shopkeepers and business owners will accept it as payment. In order to guarantee the security, privacy, and scalability of the Digital Rupee, the RBI is now investigating the usage of blockchain and DLT (distributed ledger technology). To guarantee that only authenticated users may utilise the Digital Rupee, it will also employ KYC (Know Your Customer) rules.

Although users must have a bank account linked to their wallet in order to load or withdraw money, the digital rupee is a recognised form of currency. A person can still receive money in their digital wallet even without a bank account. The user and the government are the only parties engaged in an e-Rupee transaction. This implies that a bank account is not necessary for the recipient of digital currency, which is a crucial feature that distinguishes the digital rupee from other electronic payment systems like UPI, RTGS, and NEFT. (Jaya Vaidhyanathan, CEO, BCT Digital, a RegTech company)

Figure 1.2- New Digital Currency

The RBI is additionally applying the finishing touches on a regulatory framework for the Digital Rupee to make sure it complies with all applicable rules and laws. The digital rupee is still in its nascent stage. Hence in order to check its feasibility, a pilot programme by Reserve Bank of India is initiated known as Digital Rupee.

This pilot programme will help in evaluating the viability of digital version of Indian rupee issued by a Central Bank and this viability can be determined in a few scenarios which include one on one transfer, retail payments and overseas transfer of funds. It is a part of RBI's strategy to create a complete digital payment landscape with a potential to facilitate payments and minimize the transaction cost while also assessing risks such as payment fraud, cyber security, security risks and money laundering. It is anticipated to completely modernize the way payments are made in India.

In the pilot programme, a two-tiered system will be established, with the commercial banks serving as the RBI's middlemen with the clients and the RBI providing the digital money. The digital rupee may be used by customers to make payments for retail purchases, peer-to-peer transfers, and overseas money transactions.

The goal of the DR pilot programme is to investigate the many facets of a digital currency, including scalability, security, privacy, and adherence to Reserve Bank of India (RBI) rules. The pilot is anticipated to offer insightful information on the possible benefits, downsides, and challenges associated with deploying digital currency. For participation in the pilot scheme, the Reserve Bank of India (RBI) has requested applications from interested parties. The chosen parties will collaborate with the RBI to develop and evaluate the application of digital rupees in particular contexts. The pilot programme is anticipated to operate for a year, following which the RBI will determine whether it would be feasible to introduce a full-fledged national digital currency.

The central concern revolves around the attitude and intentions of the people whose adoption of digital e-Rupee would be able to provide the necessary scale and profitability potential of this recently developed technology, despite the fact that it offers features similar to cash, such as trust, safety, and settlement. In order for regulatory authorities to provide the necessary strategic framework to increase the use of digital e-Rupee, this research aims to identify and pinpoint the elements that affect customer's attitude and intention toward adopting it.

1.3 Research Questions
- What factors affect the Perceived ease of use of digital rupee
- What factors affect the Perceived Usefulness of digital rupee
- What factors affect the Attitude of customers in using digital rupee
- What factors affect the Privacy and Security associated with digital rupee
- What factors affect the Behavioral Intentions of customers in using digital rupee

1.4 Research Objective
To understand the factors affecting adoption intention of Digital Rupee

1.5 Scope of Study
- A study on customer's attitude and perception to use digital rupee is to explore the factors affecting the attitude and perception to use digital rupee and their impact on the customer's overall confidence in the success of digital rupee in Delhi NCR.

● The study aims to identify the key factors that have a significant impact and contribute to the customer's confidence in the success of Digital Rupee

● The study also seeks to understand the differences in the level of customer's attitude and perception to use digital rupee based on their Gender, Age and Education Level.

● The findings of the study can be used to develop recommendations to help customers, government, policy makers, public sector and private sector undertakings to make effective decisions.

● The study also contributes to the existing literature on online payment infrastructure including digital rupee and its impact on the economy. The scope of the study is limited to the geographical location of Delhi NCR and the sample size of 155 respondents.

CHAPTER 02
REVIEW OF LITERATURE

2.1 Evolution of Digital Payments in India

According to Akturan, U., & Tezcan, N. (2012), The development of mobile communication technology has proven to be especially crucial in developing nations. Telecommunications companies have gone to great lengths to provide the public with access to better types of communication networks. Mobile ecosystems have seen tremendous success in recent years, credit goes to the ready option to top-up mobile credit, economical pricing plans, and a wide selection of cost-effective devices. Mobile devices have had a revolutionary impact on the lives of millions of people, driving global social and economic progress. By creating business models based on mobile technologies, enterprises have been actually presented with a variety of opportunities.

A smartphone has become a necessity over time. Worldwide, there are reportedly more people with smartphones than bank accounts. It has become inevitable for organisations to create mobile technology-based alternative business solutions due to the complexity of consumer expectations, the rising expense of engaging with clients via traditional channels, and the necessity for customer-centric creative business solutions. (Kuganathan, K.V.and Wikramanayake, G.N. 2014)

These service initiatives are referred to by a variety of names, including mobile wallets, mobile banking and mobile payments. Additionally, there is a lot of opportunity for this company strategy to provide new revenue streams.

Additionally, the amount of mobile payments worldwide has increased dramatically. In recent years, mobile payments have grown in popularity. Due to the popularity of smartphones, the prevalence of digital financial services, and the ease of making payments with a few clicks on a mobile device, this has become a trend. The Global mobile payment users are forecasted to increase from 2.14 billion in 2019 to 4.77 billion in 2025, as per Statista. This equals almost a 16.2% compound annual growth rate. By 2023, the market

for mobile payments is projected to be worth $6.8 trillion, expanding at a compound annual growth rate (CAGR) of 27.3% from 2019 until 2023.

The key drivers behind this are the :-

1. Rising demand for digital payments and the

2. Widespread usage of mobile devices.

The Indian government is aware of its potential to support the economy's transition to a more digital one. The primary elements promoting the growth of the mobile payments industry are the convenience it provides for customers and the cost savings it provides for businesses. As more people get at ease using their mobile devices to make payments, the industry will grow over the next few years.
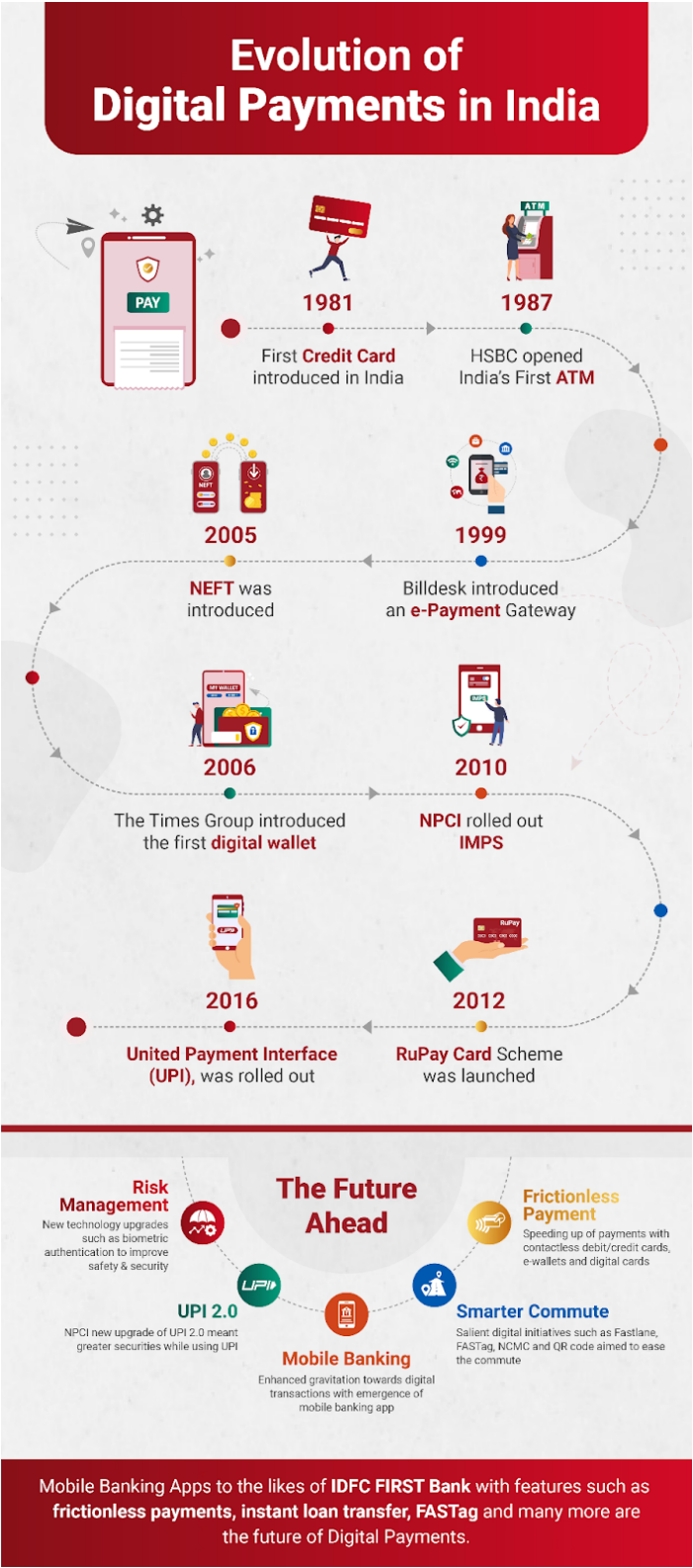
Figure 2.1 Evolution of Digital Payments in India

To help reduce the widespread usage of physical currency in India, the Indian government began a number of initiatives. These include implementing digital wallets, promoting cashless transactions using debit and credit cards, BHIM and utilizing the UPI. Apart from this, the government has also launched the Digital India campaign, launched on 1 July, 2015 to promote the use of digital payments.

The government has announced exemptions of convenience fees, surcharges, and service fees for digital payments made using the different digital payment methods like debit cards, BHIM, UPI, and the Aadhaar-enabled payments system (AEPS) in order to encourage the use of these methods of payment. The government has introduced a number of attractive programmes to further encourage people to pay with digital methods, such as 0.75% return for payments made at gas pumps using Rupay debit cards. (Borde, Ajit & Borgave, Sachin. 2020). The government has added two further tax incentives for the users of digital payments: the Goods and Services Tax (GST) and the Direct Benefits Transfer (DBT).

The Goods and Services Tax (GST) and the Direct Benefits Transfer (DBT) are two additional tax breaks that the government has implemented for users of digital payments.

Early in the new millennium, banks like ICICI Bank and HDFC Bank introduced mobile banking services, which marked the beginning of the digitization of payments in India. The Reserve Bank of India (RBI) launched many measures over the following several years to encourage digital payments, including the launch of the National Payments Corporation of India (NPCI) in 2009. In order to allow real-time financial transfers in India, the RBI introduced the Immediate Payment Service (IMPS) in 2010.

Customers can rapidly transfer money between two registered bank accounts of participating banks using the Immediate Payment Service (IMPS), an electronic payment service. One of the most used payment methods in India. Over 737 million transactions were made using IMPS in FY2020, according to the National Payments Corporation of

India (NPCI). A safe, practical, and economical method of transferring payments is offered by IMPS, which is accessible around-the-clock.

S. J. Kulkarni et al. said that IMPS is a safe, practical, and affordable means to move money from one bank account to another in their study paper titled "A Comprehensive Survey of Immediate Payment Service (IMPS)". It is a real-time payment service that is accessible 365 days a year, 24 hours a day. It aids in shortening the time required for financial transfers. There is no paperwork involved in the procedure, which is incredibly straightforward.

Therefore, IMPS is a safe, practical, effective, and affordable way to transfer money from one bank account to another. Being able to rapidly transfer money between two registered bank accounts at participating banks makes it one of the most widely used payment systems in India. The programme offers a safe, practical, and economical way to transfer cash and is accessible around-the-clock.

The Unified Payments Interface (UPI), which enabled immediate money transfers between bank accounts, came next in 2016. The National Payments Corporation of India (NPCI) introduced the Unified Payments Interface (UPI), a cutting-edge payment platform, in August 2016. It is a real-time, interoperable payment system that enables quick, secure, and practical payments using mobile devices. It is a system that enables users to pay bills, move money between accounts, and make payments to businesses using their mobile devices. (U. Sharma and S. Kishor, "Unified Payments Interface: An Innovative Payment System")

UPI has the ability to completely alter the digital payments environment in India. This efficient, secure, and useful payment mechanism is used to transfer funds between accounts and pay businesses. Users can also make payments using a number of payment options, such as credit cards, debit cards, and net banking. This low-cost payment system can be used on a mobile device to pay bills, transfer money between accounts, and pay

businesses. (P. Sharma and M. Srikanth, "A Comprehensive Review of Unified Payments Interface: An Innovative Payment System")

Paytm, India's first mobile wallet, debuted in 2014. In India, Paytm was the first payment app to attain 100 million downloads in 2017. It debuted in Paytm Gold in the same year, a unique service that allowed users to buy pure gold online for as little as one pound. Additionally announced were the "Paytm Payments Bank" and "Inbox," a messaging network that offers several services, including in-chat payments. By 2018, merchants started accepting card, Paytm, and UPI payments into their bank accounts with no fees.

Also, the "Paytm for Business" app was introduced, enabling businesses and corporations to easily monitor their everyday settlements and payments. Its merchant base was impacted by this in March 2018 to increase to over 7 million. As of 2020, Paytm had more than 300 million subscribers, making it the most widely used mobile wallet in the nation. The business has also made forays into several other industries, including banking, payments, and insurance. One97 Communications is the owner of the digital wallet and payment system Paytm in India. (Komirisetty, D., & Simha, M. B. S. 2018).

Paytm provides customers with a secure, convenient, and fast way to pay for goods and services online. The Boston Consulting Group claims that Paytm has transformed how individuals make payments in India. Millions of individuals who previously had no access to banks now have easy access to digital payments. (Mishra, 2017)

Paytm has significantly contributed to the financial inclusion of rural and underprivileged people, according to a recent Reserve Bank of India research. People in these places may now easily create bank accounts, transfer money, and make payments with the help of it. (RBI, 2016)

Finally, Paytm has simplified the payment process for users. Paytm has made it simpler for users to make payments without using cash or credit/debit cards and accelerated the number of digital payments which in turn fostered sales, claims a PwC research.

A smartphone application based on the Android operating system was created by the National Payments Corporation of India (NPCI) and given the name BHIM (Bharat Interface for Money) in honor of Dr. Bhimrao R. Ambedkar so that with the help of this application, consumers can make direct bank account e-payments. The central government supported the BHIM app, giving it a competitive advantage in the Indian market. The BHIM app saw exponential development as a result of the public seeing its necessity and significance after the demonetisation in November 2016 and the government's active marketing of the app and made it available in various languages in order to make it relatively easy for users to understand. (Borde, Ajit & Borgave, Sachin. 2020)

BHIM is one of the relevant inventions for the economy of India, according to the Reserve Bank of India, It is one of the crucial innovations for the economy of India, as it helps to decrease the cost of transfer of funds and boosts the use of digital payments.

The application is best known for its ease of use. According to the National Payments Corporation of India, BHIM has been designed to be easy to navigate and simple. Without previous technical or financial expertise, anyone can use it, and it is fairly simple to use.

Two of the most beneficial features of BHIM are the app's usefulness and low cost as a payment method, it is used extensively. Overall, BHIM has improved the Indian economy. It has raised awareness of the benefits of using electronic payments, reduced the price of money transfers, and increased the ease with which companies may accept payments. BHIM is an important development for the Indian economy and is fueling the country's shift to digital payments.

The government's 2018 introduction of the National Common Mobility Card (NCMC) made it quite simple to switch between different public transport providers. According to Konduri, S., & Patel, K. (2020), the National Common Mobility Card (NCMC), created by the Indian government, enables frictionless movement between multiple means of transportation. Based on the open-loop RuPay platform from the National Payments

Corporation of India (NPCI), this card incorporates contactless EMV chip technology. Buses, subways, and suburban trains are just a few of the many public transportation systems around the country where it is generally accepted. This technology allows users to make payments in a more secure and convenient manner.

India is transitioning away from paper money and towards electronic money. The country is embracing the arrival of digital currency even though it has always prized cash as a crucial part of its culture and ethos. Financial transactions will become easier, faster, and more secure with the introduction of digital money.

It would make it simpler for individuals and businesses to access global markets. As a result of the rise of digital money, India will be able to take use of cutting-edge technology as well as more secure and effective financial transactions. As it transforms to a cashless society and offers its citizens greater convenience and security, India is going through an exciting time. (Bhardwaj, A. 2018)

The main objective of this study is to develop a synthesized model that enhances parsimony, explanatory power and predictive ability in order to address the limitations of existing models related to customer's adoption intentions of digital rupee. This model will take into account the various characteristics of digital rupee in order to better understand customer's adoption intentions with the help of variables such as Perceived ease of use, perceived usefulness, customer attitude, security & privacy and Behavioral Intentions.

2.2 Perceived ease of use
"Perceived ease of use is defined as the degree to which a person believes that using a particular system or product will be free of effort (Davis, Bagozzi, & Warshaw, 1989). The construct has been widely studied in the context of technology acceptance, and has been found to be a significant predictor of user intentions to use a system or product (Venkatesh & Davis, 2000)." It simply refers to how much a person thinks utilizing a certain system would be effortless. It relies on the user's level of computer anxiety, system complexity, and past computer expertise.(Schermann and Dabholkar, 2002).

2.3 Perceived Usefulness

"Perceived usefulness has been identified as a key factor in the success of any technology adoption effort" (Davis, 1989). In accordance with prior studies, "perceived usefulness is the most critical factor in a technology's acceptance." (Venkatesh et al., 2003). In addition, it has been shown that perceived usefulness is a potent indicator of technological adoption. (Venkatesh & Davis, 2000). Perceived usefulness is a significant determinant of consumer satisfaction, according to multiple studies. (Lin & Lu, 2004; Venkatesh & Davis, 2000).

It has also been demonstrated that customers' choices to keep using a technology are greatly impacted by how useful they consider it to be. (Venkatesh et al., 2003). Studies showing the influence of perceived usefulness on individual performance have further supported the significance of perceived usefulness. (Liang et al., 2007; Venkatesh & Davis, 2000)

2.4 Customer Attitude

"Customer attitude" refers to the confluence of thoughts, feelings, and intentions that influence a customer's behavior and interactions with a product or service. (Fournier, S., 1998). It is a relatively stable set of beliefs, feelings, and intentions that are directed toward a particular object, situation, or behavior. (Grewal, D., Krishnan, R., and Baker, J., 2008). According to Ajzen (2002), "Attitudes are learned predispositions to respond in a consistently favorable or unfavorable manner with respect to a given object. They are acquired through experience and shaped by our beliefs, values, and past behavior."

2.5 Security and Privacy

As per Richard Clarke, Former US National Coordinator for Security and Counterterrorism "Security and privacy are key components of an effective digital infrastructure. We must ensure they are not only maintained, but also strengthened as technology advances."

"The protection of personal information from unauthorized access, use, and disclosure is fundamental to the maintenance of privacy and security in our digital lives." – Bruce Schneier, Fellow at the Berkman Center for Internet and Society, Harvard University.

According to Gibson et al. (2016), When creating their security and privacy policies, organizations must also take their customers' privacy demands into account. This entails taking into account the kinds of data being gathered and their intended uses, as well as creating suitable permission forms and policies for data sharing and disclosure.

2.6 Behavioral Intentions

"Behavioral intentions are the cognitive links between attitudes and behaviors. They are the conscious, internal representations of choices made during the decision-making process. Intention is the cognitive and volitional basis of behavior and can be studied as a mediator of attitude-behavior relationships." - Fazio, R.H., & Williams, C.J. (1986). According to Ajzen (2005), behaviour intentions are an important factor in determining behaviour. According to him, behaviour intentions are "the degree of a person's motivation to engage in a specific behaviour."

As per Ajzen (2005), a person's intentions for engaging in a conduct are influenced by their attitude towards that behaviour, their subjective norm (i.e., the social pressure to engage in that behaviour), and their perceived behavioural control (i.e., their belief in their capacity to engage in that action). He points out that when the attitude and subjective norm are both positive and when perceived behavioural control is strong, behavioural intentions are probably more potent.

Conceptual Framework

The data shown in Figure 2.2 is laid down in a way that illustrates the conceptual framework that was created in accordance with the thorough literature study carried out in the previous section. The model states that perceived usefulness (PU), perceived ease of use (PEU), privacy and security (PS), attitude (A), and behavioural intention (BI) are the factors that define a customer's confidence in the success of the digital rupee. The Rationale for variables and the proposed relationships between them is outlined below:-
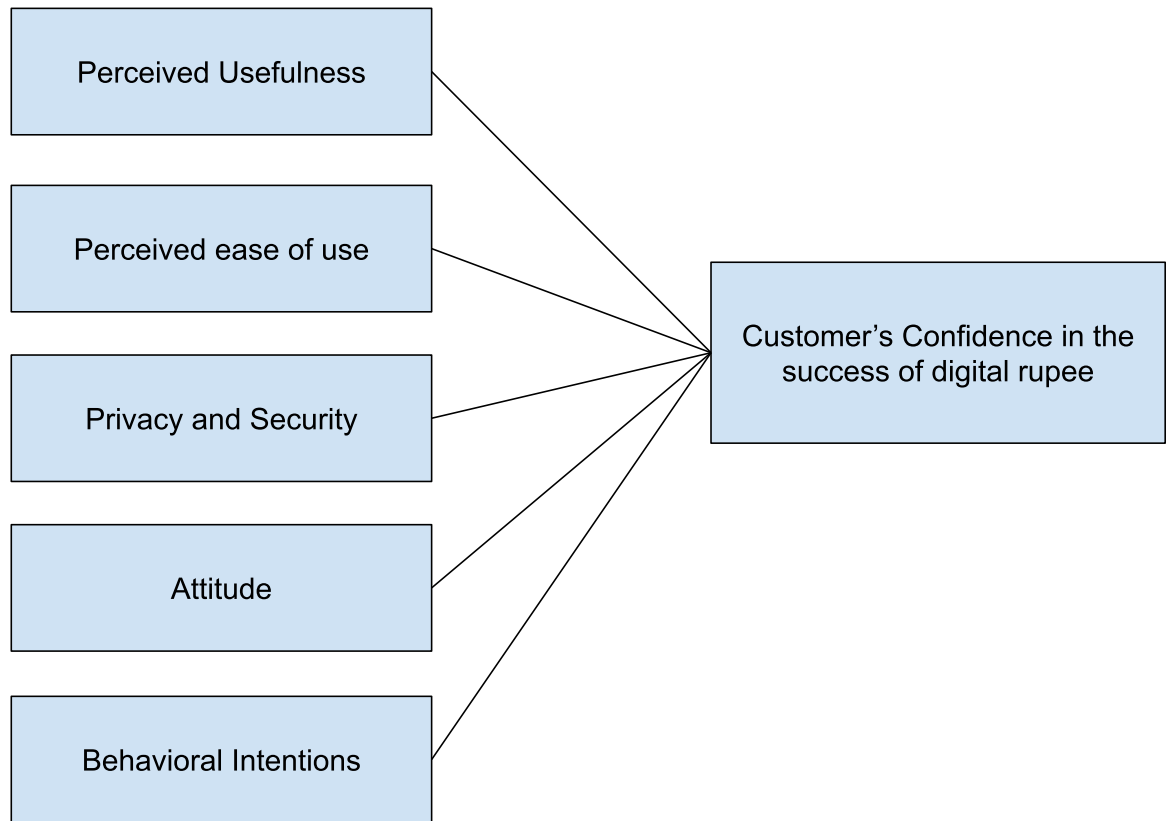

Figure - 2.2 Conceptual Framework

CHAPTER 03
RESEARCH METHODOLOGY

The purpose of this research is to investigate customer's attitude and perception about using Digital Rupee in Delhi NCR. The aim of the study is to identify the elements that influence customer's attitude and perception towards adopting it. The research methodology involves a systematic approach to obtain reliable and valid data that can be used to answer research questions. In order to achieve this, data collection was conducted through a survey form. This survey form provided the pivotal information needed to answer the research questions. The collected data is processed using the Statistical Package for the Social Sciences (SPSS) software. In order to gain a better understanding of the data, different statistical techniques are employed, such as Descriptive Analysis, Two Way Anova and Multiple Linear Regression. Through these techniques, patterns, trends, and relationships in the data can be identified and explored.

The Null and Alternate Hypothesis used in Two-way Anova are:-

1. When Education level and Age of respondents combinely are used to test the effect of both of these variables on how confident a respondent feels in the success of digital rupee.

H0: Age and Education level in combination has no significant impact on the confidence of customers in the success of digital rupee.

HA: Age and Education level in combination has a significant impact on the confidence of customers in the success of digital rupee.

2. When both age and gender in combination is taken to test the effect on confidence of customers in the success of digital rupee.

H0: Age and Gender in combination has no significant impact on the confidence of customers in the success of digital rupee

HA: Age and Gender in combination has a significant impact on the confidence of customers in the success of digital rupee

3. When both gender and education level in combination is taken to test the effect on confidence of customers in the success of digital rupee.

H0: Gender and Education level in combination has no significant impact on the confidence of customers in the success of digital rupee.

HA: Gender and Education level in combination has a significant impact on the confidence of customers in the success of digital rupee.

The Null and Alternate Hypothesis used in Hierarchical Multiple Regression Analysis are:-

1. Perceived Usefulness Mean (PUM)

H0: There is no significant impact of Perceived Usefulness on customer's confidence in the success of Digital Rupee.

H1: There is a significant impact of Perceived Usefulness on customer's confidence in the success of Digital Rupee

2. Perceived Ease of Use Mean (PEUM)

H0: There is no significant impact of Perceived Ease of use on customer's confidence in the success of Digital Rupee.

H2: There is a significant impact of Perceived ease of use on customer's confidence in the success of Digital Rupee.

3. Privacy and Security Mean (PSM)

H0: There is no significant impact of Privacy and Security on customer's confidence in the success of Digital Rupee

H3: There is no significant impact of Privacy and Security on customer's confidence in the success of Digital Rupee

4. Attitude (AM)

HO: There is no significant impact of Attitude on customer's confidence in the success of Digital Rupee.

H4: There is significant impact of Attitude on customer's confidence in the success of Digital Rupee

5. Behavioral Intention (IM)

H0: There is no significant impact of intention on customer's confidence in the success of Digital Rupee.

H5: There is a significant impact of intention on customer's confidence in the success of Digital Rupee

3.1 Research Design

The research design consists of a cross-sectional survey for a study on customer's attitude and perception to use Digital Rupee. The survey form consists of closed-ended questions which are designed using the Likert scale. The Likert scale uses a range of numbers from 1-5 for independent variable items and 1-10 for the dependent variable. The independent variables for this study are Perceived usefulness, Perceived ease of use, Privacy and Security, Attitude and Behavioral Intentions. These elements are used to measure the success of Digital Rupee and user satisfaction associated with it. Hence, the dependent variable is the confidence of customers in Digital Rupee's success.

3.2 Sampling

The sampling method used for the study is a type of non-probability sampling method that is convenience sampling which involves selecting individuals from a population who are conveniently accessible and reachable. This method is frequently employed in circumstances where it is not feasible or viable to choose a representative sample from a group of individuals. This study involved 155 respondents from the Delhi National Capital Region (NCR) as a sample.

3.3 Data Collection

A survey was conducted to collect data from people residing in the Delhi NCR region. The survey form was created and circulated using the Google Form platform. The survey form consisted of only closed-ended questions and was designed to take approximately 15 minutes to complete. The survey was distributed to the relevant people in the Delhi NCR region, and the collected data was then analysed.

3.4 Data Analysis

Data analysis is conducted using the SPSS software. To analyze the data collected through closed-ended questions, descriptive analysis is employed. Two Way Anova analysis is conducted to determine the differences in the confidence of customers in the success of digital rupee, based on the customer's gender, age and level of education. Initially age and education level in combination is taken to test the impact on customer's confidence in the success of digital rupee followed by age and gender & gender and education level. By assessing the impact of two distinct factors on a single continuous variable, the impact can be analyzed and Multiple Linear Regression analysis is used to identify the factors that have a significant impact on customers' attitude and perception towards using digital rupee.

3.5 Ethical Considerations

Throughout the research process, ethical considerations are taken into account to ensure that the survey is conducted in an ethical manner. The design of the survey form ensures that the anonymity and confidentiality of the respondents is preserved. Before the respondents participate in the survey, informed consent is obtained from them to make sure that they understand the aims of the survey and their rights as participants. To ensure that the research is conducted ethically, all procedures are conducted in compliance with the ethical standards set by the relevant authorities.

3.6 Limitations

The research has certain restrictions that should be taken into account. The sample size is limited and thus the results cannot be extrapolated to the entire population. Additionally, the research was conducted in a particular geographical area and the outcomes may not be applicable to other regions. This implies that the results are specific to the region in which the research was conducted and cannot be generalized to the broader population. Consequently, caution should be taken when attempting to apply the findings to a larger population.

CHAPTER 04

ANALYSIS, DISCUSSION AND RECOMMENDATION

4.1 Demographic Analysis

Table 4.1 below summarizes the demographic profile of respondents. It is observed that almost half of the respondents are male and half of the respondents are female. Nearly 35% of the respondents lie between age 21-23 and only 5% of the respondents are of Age 30 and above. More than half of the respondents are postgraduates.

Sample Characteristics	Frequency (n=155)	Percent (%)
Age:		
Below 18	14	9.03
18-21	28	18.06
21-23	55	35.49
24-26	37	23.87
27-30	13	8.39
30 and Above	8	5.16
Gender:		
Male	76	49.03
Female	78	50.32
Prefer not to say	1	0.65
Education:		
Undergraduate	47	30.32
Graduate	10	6.46
Postgraduate	82	52.90
Ph.D	2	1.29
Others (Class 10, Class 12)	14	9.03

Table - 4.1 Demographic Analysis

4.2 Univariate Analysis of Variance (Two-way ANOVA)

Anova is a statistical technique employed to assess the impact of two distinct factors on a single continuous variable.

Here Education level and Age of respondents combinely are used to test the effect of both of these variables on how confident a respondent feels in the success of digital rupee.

Between-Subjects Factors

		N
Age	18-21	28
	21-23	55
	24-26	37
	27-30	13
	Above 30	8
	Below 18	14
Education Level	Class 10	1
	Class 12	12
	Class12	1
	Graduate	10
	Ph.D	2
	Postgraduate	82
	Undergraduate	47

Table 4.1.1 Distribution of Factors

The Null Hypothesis would be:-

H0: Age and Education level in combination has no significant impact on the confidence of customers in the success of digital rupee.

The Alternate Hypothesis would be:-

HA: Age and Education level in combination has a significant impact on the confidence of customers in the success of digital rupee

Tests of Between-Subjects Effects

Dependent Variable: How confident you are in the success of digital rupee?

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	45.892ᵃ	19	2.415	.903	.580
Intercept	1569.539	1	1569.539	586.781	<.001
Age	12.364	5	2.473	.924	.467
EducationLevel	14.555	6	2.426	.907	.492
Age * EducationLevel	29.575	8	3.697	1.382	.210
Error	361.102	135	2.675		
Total	10343.000	155			
Corrected Total	406.994	154			

a. R Squared = .113 (Adjusted R Squared = -.012)

Table 4.1.2 Effects of Age and Education Level on customer's confidence in the success of Digital Rupee- Two Way Anova

The above table can find the optimal combination of Age and Education level to test the impact on confidence of customers in the success of Digital Rupee. As we can see that the p value is 0.210 which is greater than 0.05 i.e. p > 0.05, we will accept Null Hypothesis and there is no significant impact on the confidence of customers in the success of digital rupee for the interaction between Age and Education level.

Here both age and gender in combination is taken to test the effect on confidence of customers in the success of digital rupee.

Between-Subjects Factors

		N
Age	18-21	28
	21-23	55
	24-26	37
	27-30	13
	Above 30	8
	Below 18	14
Gender	Female	78
	Male	76
	Prefer not to say/others	1

Table 4.2.1 Distribution of Factors

H0: Age and Gender in combination has no significant impact on the confidence of customers in the success of digital rupee.

HA: Age and Gender in combination has a significant impact on the confidence of customers in the success of digital rupee.

Tests of Between-Subjects Effects

Dependent Variable: How confident you are in the success of digital rupee?

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	48.113[a]	12	4.009	1.586	.102
Intercept	928.756	1	928.756	367.486	<.001
Age	1.255	5	.251	.099	.992
Gender	34.694	2	17.347	6.864	.001
Age * Gender	8.334	5	1.667	.660	.655
Error	358.880	142	2.527		
Total	10343.000	155			
Corrected Total	406.994	154			

a. R Squared = .118 (Adjusted R Squared = .044)

Table 4.2.2 Effects of Age and Gender on customer's confidence in the success of Digital Rupee- Two Way Anova

The above table can find the optimal combination of Age and Gender to test the impact on confidence of customers in the success of Digital Rupee. As we can see that the p value is 0.655 which is greater than 0.05 i.e. $p > 0.05$, we will accept Null Hypothesis and there is no significant impact on the confidence of customers in the success of digital rupee for the interaction between Age and Gender.

Here both gender and education level in combination is taken to test the effect on confidence of customers in the success of digital rupee.

Between-Subjects Factors

		N
Gender	Female	78
	Male	76
	Prefer not to say/others	1
Education Level	Class 10	1
	Class 12	12
	Class12	1
	Graduate	10
	Ph.D	2
	Postgraduate	82
	Undergraduate	47

Table 4.3.1 Distribution of Factors

H0: Gender and Education level in combination has no significant impact on the confidence of customers in the success of digital rupee.

HA: Gender and Education level in combination has a significant impact on the confidence of customers in the success of digital rupee.

Tests of Between-Subjects Effects

Dependent Variable: How confident you are in the success of digital rupee?

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	68.407[a]	12	5.701	2.391	.008
Intercept	622.453	1	622.453	261.051	<.001
Gender	40.775	2	20.388	8.550	<.001
EducationLevel	10.921	6	1.820	.763	.600
Gender * EducationLevel	17.305	4	4.326	1.814	.129
Error	338.587	142	2.384		
Total	10343.000	155			
Corrected Total	406.994	154			

a. R Squared = .168 (Adjusted R Squared = .098)

Table 4.3.2 Effects of Age and Gender on customer's confidence in the success of Digital Rupee - Two Way Anova

The above table can find the optimal combination of Gender and Education level to test the impact on confidence of customers in the success of Digital Rupee. As we can see that the p value is 0.129 which is greater than 0.05 i.e. $p > 0.05$, we will accept Null Hypothesis and there is no significant impact on the confidence of customers in the success of digital rupee for the interaction between Gender and Education level..

4.3 Hierarchical Multiple Regression Analysis

Model Summary

Model	R	R Square[b]	Adjusted R Square	Std. Error of the Estimate
1	.989[a]	.978	.978	1.219

a. Predictors: IM, PSM, PEUM, PUM, AM

b. For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

Table 4.4.1 Model Summary

The R value here is 0.989 which means that the model we developed is robust as association is significant. The greater the R value, better the association which means that there is a strong correlation between the dependent and independent variable. Here Intention, Perceived ease of use, Perceived usefulness, Privacy and Security, Attitude and Behavioral Intention are predictors and confidence of customers in the success of Digital Rupee is taken as a dependent variable.

Coefficients[a,b]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	PUM	.790	.285	.420	2.770	.006
	PEUM	.086	.207	.044	.416	.678
	PSM	.578	.160	.275	3.621	<.001
	AM	-.004	.295	-.002	-.014	.988
	IM	.488	.257	.257	1.900	.059

a. Dependent Variable: How confident you are in the success of digital rupee?
b. Linear Regression through the Origin

Table 4.4.2 Coefficients

The results of the present study observed perceived usefulness (p value - 0.006, beta = 0.420) to have the strongest influence on customer's confidence in the success of digital rupee, followed by privacy and security (p value < 0.001, beta = 0.275), which is the second strongest factor.

Perceived Usefulness Mean (PUM)

H0: There is no significant impact of Perceived Usefulness on customer's confidence in the success of Digital Rupee.

H1: There is a significant impact of Perceived Usefulness on customer's confidence in the success of Digital Rupee

Since the p value comes out to be 0.006 which is less than 0.05 i.e. p < 0.05, we will reject the null hypothesis and accept the alternate hypothesis that there is significant impact of Perceived usefulness on customer's confidence in the success of Digital Rupee.

Perceived Ease of Use Mean (PEUM)

H0: There is no significant impact of Perceived Ease of use on customer's confidence in the success of Digital Rupee.

H2: There is a significant impact of Perceived ease of use on customer's confidence in the success of Digital Rupee.

The p value comes out to be 0.678 which is greater than 0.05 i.e. $p > 0.05$, we will accept Null hypothesis that is there is no significant impact of Perceived ease of use on confidence of customers in the success of Digital Rupee.

Privacy and Security Mean (PSM)

H0: There is no significant impact of Privacy and Security on customer's confidence in the success of Digital Rupee

H3: There is a significant impact of Privacy and Security on customer's confidence in the success of Digital Rupee

The p value comes out to be less than 0.01, $p < 0.05$, we will reject the null hypothesis and accept the alternate hypothesis that there is a significant impact of Privacy and Security on customer's confidence in the success of Digital Rupee.

Attitude (AM)

H0: There is no significant impact of Attitude on customer's confidence in the success of Digital Rupee.

H4: There is significant impact of Attitude on customer's confidence in the success of Digital Rupee

The p value comes out to be 0.988 which is greater than 0.05 i.e. $p > 0.05$, we will accept the null hypothesis that there is no significant impact of attitude on customer's confidence in the success of Digital Rupee.

Behavioral Intention (IM)

H0: There is no significant impact of intention on customer's confidence in the success of Digital Rupee.

H5: There is a significant impact of intention on customer's confidence in the success of Digital Rupee

The p value comes out to be 0.059 which is greater than 0.05 i.e. $p > 0.05$, we will accept the null hypothesis that there is no significant impact of Intention on customer's confidence in the success of Digital Rupee.

4.4 Limitations

The present study on customer's attitude and perception to use digital rupee in Delhi NCR has several limitations that should be taken into account when evaluating the findings. The research was conducted over a restricted period of time, which could have hindered the ability to gather a more varied sample or to employ more advanced measures. The research may have been more thorough and allowed for a closer evaluation of the relationship between consumer confidence in the performance of the digital rupee and its related aspects if the data collecting time had been prolonged.

155 participants participated in the current study, which was assessed to be a sufficient sample size for the investigation. The study's findings, however, could not accurately reflect the respondents' population in the Delhi NCR region because of the small number of participants. A more trustworthy and accurate investigation of the link between consumer confidence in the success of the digital rupee and its related parameters might have been undertaken with the use of a bigger sample size.

The study took place in Delhi NCR, so the results may not be applicable to other geographical locations. There are factors such as cultural differences, educational systems, and socioeconomic backgrounds that can vary between different regions, and these factors could have an effect on the responses given by the participants. Therefore, the results of this study may not be generalizable to other geographical locations.

In a nutshell the current study provides insightful information about the elements that influence customers' trust in the success of the digital rupee in Delhi NCR. However, certain limitations of the study should be taken into consideration while interpreting the results. These limitations include the small sample size and narrow study area, as well as the lack of data on customer satisfaction and usage rates. Future research should aim to

expand the scope of the study to include larger sample sizes and additional areas, as well as explore customer satisfaction and usage rates in detail. Doing so would provide a more comprehensive understanding of customer's attitude and perception towards the use of digital rupee.

CHAPTER 05
CONCLUSION

The aim of this study was to analyze customer's attitude and perception to use digital rupee. As per the model developed and discussed in the conceptual framework, customer's confidence in the success of digital rupee is determined by Perceived Usefulness (PU), Perceived ease of use (PEU), Privacy and Security (PS), Attitude (A) and Behavioral Intention (BI). After conducting data analysis using SPSS software, the study shows that using two-way Anova as a statistical test and taking p values into consideration, the interaction of age and education, age and gender & gender and education has no significant impact on confidence of customers in the success of digital rupee.

Results indicated that Perceived Usefulness (p value - 0.006), Privacy and Security (p value < 0.001) had a positive influence on customer's attitude and perception towards adoption of digital rupee whereas Behavioral Intention (p value - 0.059), Perceived ease of use (p value - 0.678) and Attitude (p value - 0.988) were observed to be insignificant in influencing customer's perception towards adoption of digital rupee.

The customer's view of the usefulness of the digital rupee is reflected in their belief that it will enhance their performance, efficiency, or productivity. Privacy and security are important because customers need to trust that their financial information is safe and secure when using digital rupee. Without trust, customers will not feel comfortable using digital rupee and may be hesitant to adopt it. Therefore, it is important for digital rupee providers to ensure that their systems are secure and that customers have full control over their financial information. Customers are more inclined to accept the digital rupee and contribute to its development if they feel comfortable and believe it to be valuable.

According to the findings of the report, the two key factors influencing consumer trust in the success of the digital rupee are perceived utility and privacy and security. Customers indicated the ease, quickness, and cost savings connected with digital rupee as the main

reasons for its perceived usefulness, which was determined to be the stronger component. Customers' concerns about the security of their personal information, the possibility of fraud, and the possibility of misuse of their digital rupee have been highlighted as the main reasons for their lack of trust in digital rupee. Security and privacy were also considered to be important considerations.

All in All, this report revealed that customers are mostly in favor of the digital rupee, but the study has shown that their confidence in the system is somewhat still shaky as the success of the new technology that is digital rupee depends on stakeholders addressing consumer privacy and security issues and making sure that customers are aware of the advantages that digital rupee may offer. Additionally, stakeholders should keep making investments in the creation of safe and dependable systems to actually safeguard consumer information and guarantee the security and dependability of digital rupee. With these measures in place, users will feel confident enough to embrace the digital rupee and its potential to completely transform how we use money.

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Annexure

	Below 18	18 - 20	21 - 23	24- 26	27- Above
Age					
Educational Level	UG	PG	Ph.D		
Gender	Male	Female	Prefer Not to say/Others		
Please rate the following statements in contributing to customer's attitude and perception to use Digital Rupee:- 1=Strongly Disagree to 5=Strongly Agree					
Perceived Usefulness — Using digital rupee will help in doing transactions more quickly.					
Using digital rupee will improve the way of doing transactions.					
Using digital rupee will help in easy payment.					
I find digital rupee useful					
Using digital rupee will enhance my effectiveness					
Using digital rupee will increase the scope of doing transactions.					
Using Digital Rupee has some advantages.					
Using Digital rupee will enhance efficiency					
Perceived — Learning to operate digital rupee is easy for me					

Ease of Use											
	My interaction with digital rupee is clear and understandable										
	I find it easy and to get the digital rupee to do what I want it to do.										
	I find digital rupee to be flexible to interact with.										
	It is easy to get for me to become skillful at using the Digital rupee.										
	I find the Digital rupee easy to use										
Privacy and Security	The privacy of my information in Digital rupee is trustworthy										
	It is financially safe to do transaction										
	I do not have concerns about the security of information in the process of Digital rupee.										
	I trust the technology of Digital rupee.										
	Using Digital Rupee does not involve any risk.										
	Using Digital rupee has an efficient and sound regulatory support framework.										
Attitude	I have no problem in using Digital rupee.										

	I think using digital rupee is a good idea.									
	I think concept of digital rupee is interesting.									
Behavioral Intentions										
	I will use digital rupee in future.									
	I will refer digital rupee to others in my group.									
	How likely are you interested to use digital rupee.									
Please rate the following statement on 1 to 10 scale. 1=Not Confident, 10=Highly Confident										
Rate yourself in terms of Academic Stress in you										

Plagarisim Report: