# Exploring User Acceptance of Digital Payment: An Empirical Study among Middle-Aged People in Nagaon district of Assam

A dissertation submitted to the Department of Economics, Mahapurusha Srimanta Sankaradeva Viswavidyalaya for the partial fulfilment of the degree of Masters of Arts (M.A)



#### Under the Supervision of,

Dr. Dikshita Kakoti
Assistant Professor
Department of Economics
MSSV, NAGAON

#### **Submitted By**

Mousumi Saikia

Roll no- ECO-03/23

Registration no: MSSV-0023-011-001021

MA 4th Semester

Department of Economics

Nagaon, Assam

#### **DEPARTMENT OF ECONOMICS**



### মহাপুৰুষ শ্ৰীমন্ত শঙ্কৰদেৱ বিশ্ববিদ্যালয় MAHAPURUSHA SRIMANTA SANKARADEVA VISWAVIDYALAYA

[Recognised Under Section 2(f) of UGC Act, 1956] Srimanta Sankaradeva Sangha Complex, Haladhar Bhuyan Path, Kalongpar, Nagaon, P(N-782001, Assam, India

No: MSSV/ELD-17/09/432

Date: 04-07-2015

#### **CERTIFICATE**

This is to certify that the dissertation titled 'Exploring User Acceptance of Digital Payment: An Empirical Study among Middle-Aged People in Nagaon district of Assam' submitted by Ms. Mousumi Saikia (Roll No: ECO-03/23) in partial fulfillment of the requirements for the degree of Master of Arts (MA) in Economics, is a bonafide record of original research work carried out under my supervision. The contents of this dissertation have not been submitted for any other degree or diploma elsewhere.

Supervisor

(Dr. Dikshita Kakoti)
Assistant Professor
Department of Economics
Mahapurusha Srimanta Sankaradeva
Viswavidyalaya, Nagaon, Assam

Assistant Professor
Department of Economics
Mahapurusha Srimanta
Santaradeva Viswavidyalayr
Names Assam, Pin-78200

Head of the Department

(Dr. Ajit Debnath)
Assistant Professor
Department of Economics
Mahapurusha Srimanta Sankaradeva
Viswavidyalaya, Nagaon, Assam

Head
Department of Economics
MSSV, Nagaon

DECLARATION BY THE CANDIDATE

I hereby affirm that the work carried out in this M.A Dissertation is my original work

under the supervision of Dr. Dikshita Kakoti. The present research work has not been

submitted previously at any other university or institution of higher education for the

award of any other degree.

I declare that I have duly acknowledged the author of the research publication whenever

their works have cited or quoted in the dissertation. Further, I clarify that I have not

intentionally quoted or noted up the research work of other reported in the journals,

books, magazines, reports, dissertation, thesis, etc. or available at websites and

incorporated them in this Dissertation and cited as my research work.

Date: 11 - 07 - 20 35

Mousumi Saikia (Mousumi Saikia)

Department of Economics

Mahapurusha Srimanta Sankaradeva

Viswavidyalaya, Nagaon

ii

ACKNOWLEDGEMENT

First and foremost, Praises and thanks to God, the almighty, for his showers of blessings

throughout my research work to complete the research successfully.

I want to express my heartfelt appreciation and thanks to my research supervisor, Dr.

Dikshita Kakoti, Assistant Professor of the Department of Economics at Mahapurusha

Srimanta Sankaradeva Viswavidyalaya. Her guidance and supervision have been

instrumental in the successful completion of this work. Her dynamism, vision, sincerity

and motivation have deeply inspired me. She has been an exceptional mentor, and I am

thankful for his constant help and encouragement. I would also like to express my

thankful towards Dr. Ajit Debnath, Head of the Department of Economics, Dr. Biman

Kumar Nath, Assistant Professor and Binoy Ranjan Handique, teaching associate of

MSSV, Nagaon, for their hard work, love, support and friendly attitudes throughout my

master's journey. I could not have completed my studies without their guidance and

support.

Lastly, I would like to express my sincere thanks to all my family, my college teachers,

my friends, my classmates all my well-wishers. And also to all the teaching and non-

teaching staff of MSSV, Nagaon, for creating and maintaining such a safe and friendly

environment that helped me to focus on my studies with much less stress.

Date: 11/07/2025

Mousumi Saikia (Mousumi Saikia)

Roll No: ECO-03/23

M.A. Fourth Semester

Department of Economics

iii

### **CONTENTS**

	Page No
Certificate	i
Declaration	ii
Acknowledgement	iii
List of tables	iv-v
List of figures	vi
List of abbreviation	viii
Chapter 1: Introduction	1-11
1.1 Introductory statement	1-2
1.1.A: Reserve Bank of India and Digital payment system	2
1.2. Significance of the study	2-3
1.3 Review of related literature	4-6
1.4 Research gap	6-7
1.5 Objectives	7
1.6 Hypotheses	7
1.7 Conceptual framework	7-9
1.7.1 Digital Payment Modes in India	8-9
1.8 Data Source and Research Methodology	9-10
1.9 Justification of the study area	11
1.10 Tentative chapterization	11
Chapter 2: An overview of digital payment system in Assam and selected districts	12-18
2.1 Introductory Statement	12
2.2 Evolution of Digital Payments	12-13
2.3 Digital Payments in India	14
2.3.1 Government E-payments Adoption Ranking (GEAR)-India ranking- 2011 and 2020	15
2.3.2. National Payments Corporation of India (NPCI) – digital payments adoption in India 2020	16
2.4. Digital payments in Assam	16-17

	2.5. Conclusion	17-18
Chapter	3: Profile of the study area	19-41
	3.1 Introductory statement	19
	3.2 Demographic variables frequencies	19-22
	3.3 Socio economic profile of the respondents	23-26
	3.4 Online banking details and DPS (Digital Payment System)	27-35
	patronage	
	3.5 Factors affecting middle-aged people's perception towards digital payment systems	36-41
	3.6 Conclusion	41
-	4: Investigating user acceptance of digital payment among the middle- ople in Nagaon district of Assam	42-52
	4.1 Introductory statement	42
	4.2 Construct reliability and validity	42-43
	4.3 Association between the demographic factors, socio-economic and the usage of digital payment system	43-50
	4.4 The association between the motivating factors and the usage of digital payment system	50-51
	4.5 The association between the barrier's factors and the usage of digital payment system	51-52
	4.6 Conclusion	52
Chapter	5: Summary and conclusion	53-56
	5.1 Introductory statement	53
	5.2 Findings of the study	53-54
	5.3. Suggestions	55
	5.4. Conclusion	55-56

Bibliography

Appendix- I

### **List of Tables**

Name of Tables	Page no
Table 2.1: Category wise rank and score of India for 2011 and 2020	15
Table 3.1: Region of the respondents	20
Table 3.2 Region Wise Cross Tabulation of Gender Category	21
Table 3.3 Region Wise marital Status Wise Cross Tabulation of Marital Status	22
Table 3.4: Level of education with respect to region category	23
Table 3.5: Annual Income with Respect to Region Category	24
Table 3.6: Employment status with respect to region category	25
Table 3.7 Types of Banks	27
Table 3.8 Digital banking usage preference	28
Table 3.9 Preferred modes for digital payment transactions	30
Table 3.10: Years of Using Digital Payments by the Respondents	31
Table 3.11 Device preferred to perform Digital Payments	32
Table 3.12 Awareness about the availability of various types of Digital Payment Systems	33
Table 3.13 Frequencies analysis of transaction speed as a variable	37
Table 3.14 Frequencies analysis of perceived usefulness as a variable	38
Table 3.15: Frequencies analysis of trust as a variable	39
Table 3.16: Frequencies analysis of social influence as a variable	40
Table 3.17: Frequencies analysis of performance expectation as a variable	41
Table 4.1: Construct reliability and validity	42
Table 4.2: The association between gender and the usage of digital payment system	43

Table 4.2.1 Chi-Square Tests for gender and usage of digital payment system	43
Table 4.2.2 Symmetric Measures for gender and usage of digital payment system	44
Table 4.3: The association between the marital status and the usage of digital payment system	44
Table 4.3.1 Chi-Square Tests for the marital status and the usage of digital payment system	45
Table 4.3.2 Symmetric Measures for the marital status and the usage of digital payment system	46
Table 4.4: The association between the education level and the usage of digital payment system	46
Table 4.4.1 Chi-Square Tests for the education level and the usage of digital payment system	47
Table 4.4.2 Symmetric Measures for the education level and the usage of digital payment system	47
Table 4.5: The association between the employment level and the usage of digital payment system	48
Table 4.5.1 Chi-Square Tests for the employment level and the usage of digital payment system	48
Table 4.5.2 Symmetric Measures for the employment level and the usage of digital payment system	49
Table 4.6: Summary of findings of Chi-Square test	49
Table 4.7: Association between the motivating factors and the usage of digital payment system	50
Table 4.8: Association between the barrier's factors and the usage of digital payment system	51

## **List of Figures**

Name of Figures	Page no
Figure 3.1: Region of the respondents	20
Figure 3.2 Region wise cross tabulation of gender category	21
Figure 3.3: Region wise marital status of the respondents (cross tabulation	22
of marital status)	
Figure 3.4: Level of education with respect to region category	24
Figure 3.5: Annual Income with respect to region category	25
Figure 3.6: Employment status with respect to region category	26
Figure 3.7 Types of Banks	27
Figure 3.8 Digital banking usage preferences	29
Figure 3.9 Preferred modes for digital payment transactions	30
Figure 3.10: Years of using digital payments by the respondents	31
Figure 3. 11 Device preferred to perform digital payments	32
Figure 3.12: Awareness about the availability of various types of digital payment systems	33
Figure 3.13.1: Most preferred digital payment mode in rural area	34
Figure 3.13.2: Most preferred digital payment mode in rural area	35
Figure 4.1: Association between the marital status and the usage of digital	45
payment system	

#### List of Abbreviations

**UPI-** United Payment Interface

DPS- Digital Payment System

GEAR- Government E-Payments Adoption Ranking

POS-Point of Sale

AMTRON-Assam Electronics Development Corporation Limited

**CSC-** Common Service Centers

UMANG- Unified Mobile Application for New Age Governance

MGNREGA- Mahatma Gandhi National Rural Employment Guarantee Act

EDI- Electronic Data Interchange

EIU - Economist Intelligence Unit

#### Chapter-I

#### **INTRODUCION**

#### 1.1 Introductory Statement:

There has been a significant change in the "payment system" as a result of the new digitalization phase, which has opened up numerous prospects in ICT. ICT has advanced significantly during the digitization era, setting the stage for the revolution in payment systems. Digitalization has ushered in India's shift from traditional to simple payment methods.

A program called "Digital India" was created by the government to help the country's economy transition to digital technology. With digital empowerment as its primary goal, the Indian government started the "Digital India" initiative with the intention of transforming India into an advanced society.

When technology entails into financial sector or financial sector and technology together knows as Financial Technology or Fin Tech. Crypto currency or block-chain, Digital Payments like UPI, QR scanner, many UPI applications like Phone Pay, Google Pay etc., Mobile banking as many bank have their own mobile applications like SBI have YONO etc.

Indian peoples get to familiar with this in the year 2015. But demonetization and Modi Sarkar's constant publication of Digital India concept bring people closer to Fin Tech more specifically towards digital payments or mobile banking.

The digital revolution is the direction that India's economy is taking. The digitalization of the banking industry has been accelerated by the rise of core and electronic banks. On November 8, 2016, the Indian government formally declared demonetization in an effort to stop illicit activity in the nation. Prime Minister Shri Narendra Modi has called this initiative "Mahayagna," a "tussle against corruption, black money, counterfeit notes, and terrorism." This strategy has boosted digital payment transactions because of the economy's cash shortage. The enormous rise in digital penetration has been one of demonetization's most noteworthy successes.

This research focuses on middle-aged individuals in Nagaon (Assam) to understand their awareness, adoption trends, and challenges in using digital payment systems. While younger generations are generally more tech-savvy, middle-aged individuals may face barriers such as lack of digital literacy, trust issues, and concerns about cyber fraud. By studying their experiences, this research aims to identify key factors influencing their adoption of digital payments and suggest ways to enhance their participation in the digital financial ecosystem.

#### 1.1.A: Reserve Bank of India and Digital Payment System:

Digital transactions are defined by the Reserve Bank of India's (RBI) "ombudsman" scheme for digital transactions as a smooth payment mechanism that does not require the exchange of actual cash. Transactions are carried out in an electronic or digital mode (RBI, 2018). The electronic or digital medium is used by both the payer (originator/sender) and the payee (beneficiary/ receiver) to send and receive money. Installing a mobile banking application or third-party apps (including Google Pay, Phone Pay, Paytm, and others) where both the payer and the payee are required to connect their bank accounts with the application to perform transactions (such as deposits, withdrawals, or transfers) can be used to make digital payments. According to the RBI research, the digital payment index is used to determine the amount of payment digitalization from March 2018 to 2021 (RBI, 2021b). Payment enablers, payment infrastructure on the supply side, payment infrastructure on the demand side, customer-centricity, and payment performance were the five parameters used by RBI to create the digital payment index (Rathore, 2022).

#### 1.2. Significance of the Study

The financial services industry is changing quickly, upending established banking, insurance, and investing practices. This change fosters innovation, financial inclusion, and efficiency, all of which contribute to economic growth. Additionally, it produces jobs and opens up new business prospects.

Digital financial services are becoming more and more popular among consumers nowadays because of their accessibility, speed, and ease. Digital payments are the foundation of contemporary financial service systems. They facilitate additional digital products like digital insurance, investment platforms, and online loans. Reaching underprivileged populations, such as those living in rural areas and low-income communities, is made possible in large part by digital payments. They also increase transparency and lower transaction costs for businesses and customers by decreasing the need for cash.

However, younger, tech-savvy individuals are frequently the focus of research and conversations surrounding digital financial services. Middle-aged people's demands and actions in this area are still not well understood. This group usually has more financial obligations, such as managing savings, mortgages, and households, and their use of digital tools can have a big impact on usage patterns more broadly. Understanding their unique preferences and difficulties is crucial since their degrees of digital literacy and technological trust may differ from those of younger generations. Researching middle-aged individuals' use of digital payments in Nagaon, Assam, provides special insights. People's access to and usage of digital financial services are influenced by the unique socioeconomic circumstances, cultural norms, and infrastructure limitations of Nagaon. It can be easier to spot opportunities and challenges for increasing digital inclusion if these regional characteristics are understood.

Furthermore, middle-aged people frequently act as a link between younger generations that are heavily reliant on technology and older generations that might be less adaptable. Thus, their use of digital payments can be crucial in promoting broader community adoption.

In conclusion, it is critical to investigate the use of digital payments by Nagaon's middle-aged population. It closes a research gap, acknowledges the economic importance of a growing population, takes into account a particular local environment, and can direct initiatives to build inclusive financial policies, improve infrastructure, and raise digital literacy. These actions are essential for expanding access to contemporary financial services and promoting economic development.

#### 1.3 Review of Related Literature

Digital Payment is a widely known concept and so large numbers of study materials are available on this topic. To understand briefly about this topic review some selected research works done by researchers and academicians. Giving priority to three aspects while reviewing literature:

- Evaluation of Fin Tech and Digital Payment in India, its opportunities and challenges.
- Effect of demographic factors mainly focusing on age and adoption rate of digital payments at rural areas.
- ❖ Pre-Post COVI D-19 effect on adoption rate of digital payment.

The wave of Fin Tech hits globally all over the world. India also felt that wave and make a bigger Fin Tech market. Ernst Young, 2020, this report it's clear that India is one of the largest & fastest growing countries in the world. Despite this financial revolution may started later in India, but it has phenomenal growth in last few years. India stands second after Chine in terms of adoption of Fin Tech and the rate is 87 and this rate is higher than world's adoption rate i.e., 65 %. Ministry of Commerce and Industry said that based on 2020 data 40 % of the world's total digital transactions happened in India.

Vijai, C (2019) in his research paper talks about Fin Tech and its overall world growth history 1860 to 2017, but he mainly focuses on evaluation of Fin Tech in Indian market and its effects. According to him, India is very good and an attractive Fin Tech market all over world. Indian Fin Tech market primarily looks into payment sector. He stated that this financial wave is essential for modern Indian market and it has a bright future if it would overcome its draw backs like Lack of trust, acceptance, slow adopting rate etc.

Francis kaet.al (2017) in their paper mostly tried to give an over view about digital transaction especially in Indian plat form. They stated that digital transaction increases day by day in India. They studied about different type of digital payment modes and gave some recommendations towards easy and convenient payment. They also gave importance towards extending digital literacy among rural people.

Singhal, R (2021) explains that the government's initiative to create a cashless India is discussed here. She largely concentrated on the effects of digital payments, how they affected Indian citizens, whether they were advantageous to them, and how to make India more digital.

Shree et.al (2020) explained that India has quickly modernized its financial system over the past ten years. In total, digital payments had a 46.5% growth in 2017. The combination of technological innovation and government improvements fueled this growth of digitalization. Despite this development, India's use of cash appears to be increasing. Variables at the individual level that effect the consumer's choice of cash verses digital payment.

Kulkarni et.al (2021): In their research paper mainly focused on point of view of digital payment users. Due to absence of proper education, bad connectivity, poor infrastructure, demographic variables like age, privacy issues are main barriers towards digitalization in India. They said that creating more awareness particularly in rural areas can increase the adaptation rate of digital payments.

Gadge et.al (2019): They explained awareness of digital payment in Bramhapuri in Chandraor district in Maharastra in their research paper they found that still maximum 32 % respondents use cash as transaction, main reason is lack of digital knowledge, fear of hacking, cyber-crime, lack of infrastructure, hence they prefer tradition over modern transaction way. Youth is highly aware with digital payment i.e. 15 - 30 year's people rather than 40 - 60 and above 60 years.

Das & Das (2020) have selected Hojai-Assam for their research and they got to know from their research that new generations are more aware of fintech or digital payments as compared with Middle aged peoples. The younger generation perceive that the technology-based financial services are convenient and user friendly, provide fast and quick services, provide a spending analysis, reduce cost of financial services and reduce the burden of handling cash but middle aged peoples is more careful for adopting a new technology, they have many trust issues.

Nath et.al (2022) have collected data from 100 respondents from Silchar, Assam and quoted that younger generation is more familiar than older generation towards using digital payment or M-Banking. Income and education factors are related with this age

factor. They found that out of 90 many respondents are not using mobile banking facility and many of them also not willing to enroll with these facilities. The main reason is lack of knowledge about mobile banking facilities, feel complexity and also found it risky. Spreading more awareness and give training about M- Banking especially in rural areas will remove this barrier

Saray et.al (2021) explained that major people especially middle or old age people shift their transaction methods towards digital payments during COVID - 19 as social distance must be followed and they have no other option despite digital payment. 32 % new users are found during or post Covid period. Mobile wallet and UPI transaction got famous during this period. They stated that education, digital or technological knowledge must for adopting digital payment system.

Singhal, R and Gupta, A (2021) have discussed that COVID- 19 increases the users at town and villages as well. Villagers are trying to get user friendly with this payment. They sell or buy through mobile without any stressed to depositing money into bank. People felt easier to pay electricity bill, school or college fees, fuel payments etc.

#### 1.4. Research Gap

The middle-aged population, particularly in semi-urban and rural locations, receives little attention in the literature, which mostly concentrates on the development of digital financial services and user experiences. By investigating adoption rates, levels of digital literacy, and trust-related issues among middle-aged people in both rural and urban areas, this study seeks to close that gap.

Global financial transactions have changed as a result of the quick development of digital payment and banking platforms. However, middle-aged people in rural and semi-urban areas, like Nagaon, Assam, frequently face obstacles while attempting to use these technologies. This study examines the attitudes, perceived barriers, usage patterns, and understanding of digital payment systems among Nagaon residents between the ages of 40 and 60.

Data was gathered from 150 respondents using a mixed-method technique that combined surveys and interviews. The results show that despite a moderate level of knowledge, adoption is hampered by things like a persistent preference for cash-based

transactions, a lack of technical skills, and trust difficulties. The report suggests specific legislative actions and educational programs to improve the region's digital financial inclusion.

#### 1.5 Objectives

- > To compare the demographic and socio-economic factors influencing the rural and urban consumers' preferences towards digital payment.
- ➤ To examine middle-aged people's awareness and acceptance of digital payment.
- To identify the barriers abstaining the rural and urban people in Nagaon to use the digital payment system.

#### 1.6 Hypotheses:

 $H_{01}$ : Factor motivating the rural and urban consumers to make online payments are the same in the study area.

 $H_{02}$ : There is no significant association between the motivating factors and the usage of digital payment system in the study area

 $H_{03}$ : There is no significant association between the barriers and the usage of digital payment system in the study area

H<sub>04</sub>: There is no significant association between demographic factors and the usage of digital payment system in the study area

#### 1.7 Conceptual Framework

The term middle-age used in the research refers people in the age range between 40to 60. According to the statement of Longitudinal Ageing Study in India (LASI), "Though the age period that defines middle age is somewhat arbitrary, differing greatly from person to person, it is generally defined as being between the ages of 40 and 60."

As the saying goes, "every disruption creates opportunities." Prime Minister Mr. Narendra Modi's declaration of demonetization on November 8, 2016, was one such

disruption. Digital wallet firms seized the opportunity to expand their market share when demonetization opened up a huge development potential for digital payments in India. Demonetization gave Indian customers access to a unique platform for adopting digital payments as a substitute for cash.

As part of government changes after high-value currency denominations of Rs. 500 and Rs. 1,000 (86% of cash circulation) were demonetized, Prime Minister Mr. Narendra Modi has vigorously promoted the use of cashless transactions. Digital payments experienced remarkable development as a result of demonetization. Digital wallet businesses had expanded 271% by February of this year, reaching a total valuation of US\$2.8 billion (Rs. 191crores). A number of digital payment apps, including the Aadhaar Payment platform, the UPI app, and the NPCI created by the Bharat Interface for Money app, have been actively promoted by the Indian government and private sector businesses like Paytm and G-pay. App-based digital transfers have changed user behavior and facilitated the adoption of online payments. In rural locations that were previously unaffected by the electronic payment option, this has made money transfers easier. Since India has enormous growth potential, a lot of foreign investors are now interested in making investments in the digital payments sector, which is a new and appealing destination. The shift from a cash economy to a less cash economy and the expansion of digital payments are being facilitated by a number of factors. These enablers include the widespread use of cellphones for internet access, non-banking financial institutions that enable digital and one-touch payments, the growth of the financial technology industry, and government initiatives such as tax breaks or incentives. These all factors are creating a positive atmosphere for the growth of digital payment in India.

#### 1.7.1 Digital Payment Modes in India

In India, there are several methods of digital payment available. They are as follows –

**1.7.1.a** Wallets, online or mobile: They can be accessed via smart phone apps and the internet. Credit or debit cards or net banking can be used to load funds into the app. The consumer wallet limit is Rs. 20,000 per month following self-declaration, and the merchant wallet limit is Rs. 50,000 per month and Rs. 100,000 following KYC verification.

**1.7.1.b** Credit cards: The person's bank account is already loaded. It works similarly to a gift card in that users can use the card's cash to make purchases instead of taking out bank credit. can up to a certain point, be recharged similarly to how a cell phone is recharged.

**1.7.1.c Debit/RuPay cards:** A person's bank account is connected to their RuPay or debit card. It can be used to make purchases online as well as at stores, ATMs, online wallets, and micro-ATMs. Debit cards have overtaken credit cards in India. The quantity of debit cards issued rose from 22.75 million in 2014 to 630 million in December 2015.

**1.7.1.d UPI**: A technology called the United Payments Interface (UPI) seeks to link several bank accounts to a single mobile app platform (of any participating bank). It is crucial for integrating various banking functions to offer merchant payments and fund routing. It makes peer-to-peer money transactions possible.

India's online wallet market has been expanding at an exponential rate, and the nation is expected to witness a boom in the use of digital payments in the years to come due to rising internet and smart phone penetration. Ratan Watal, the finance secretary and principal advisor for Niti Aayog, claims that the volume and value of online wallets rose by 55% and 24.2%, respectively, in 2016–17. The rate of acceptance of electronic payments increased after demonetization a year ago, but it has subsequently decreased in 2017, according to data from the Indian Reserve Bank (RBI).

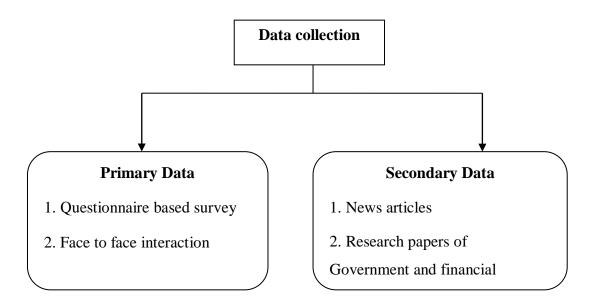
#### 1.8 Data Source and Research Methodology

**Data:** The study is based on both primary and secondary data. Primary data will be collected by face to face interaction with respondents of selected areas. This face to face interview will schedule through well prepared offline questionnaire. Secondary data will be collected from news, articles, research papers, official websites of governments and other financial institutions etc.

**Methodology:** In order to deal with the barriers users face while using digital payment options. The questionnaire designed for this research is given in the Appendix part. The design and development process of the present questionnaire is carried out using the following steps: at 1st the questionnaire drafts for the pilot study

are done to improve the face validity of the concepts. Then, the questionnaire is modified and improved based on the comments and suggestions provided by the respondents. Secondly, the existing research papers and thesis on motivating factors of digital payment systems, Digital Payments including Digital wallets, etc., are reviewed and studied.

For the present study, the data collected has been analyzed by using various statistical tools and techniques. Frequency analysis, t-test and chi-square have been used with the help of SPSS 21. Further for detailed analysis; proper classification, tabulation, analysis, interpretation, and presentation of data have been made.



Sample framework and techniques:

The targeted population group for collecting data is middle age group belonging from both rural and urban. Data will be collected from several rural area named Brahampur and Morongial of Nagaon district. These two places come under Brahampur block as well as from urban area named Amullapatti (ward no 28) and Morikolong (ward no 16). The respondent will lie on the age range of 40 to 60. Almost 100 individual will randomly be taken as sample from the total population of the mentioned areas for the research.

A multi-stage sampling followed with snowball sampling method was used for collecting the data from the respondents. It is the best method to save time and money, and cover the more geographical area (Taherdoost, 2018).

#### 1.9 Justification of the Study Area

Nagaon, a district in Assam, has been selected as the study area due to its diverse socio-economic composition, which includes both urban and rural populations. The district provides an ideal setting to analyze the adoption of digital payment systems among middle- aged individuals in different environments.

The district has a mix of traditional businesses, service sectors, and agricultural activities, providing insights into how digital payments are being integrated into daily transactions. Nagaon has also witnessed significant growth in internet penetration and smart phone usage, making it an important region to study the impact of digital payment initiatives.

Like many parts of India, Nagaon saw an increase in digital payment usage during the COVID-19 pandemic. This study will explore whether this shift is sustained or temporary, especially among middle-aged individuals.

By selecting Nagaon as the study area, this research aims to provide region-specific insights into the challenges and opportunities of digital financial inclusion among middle-aged individuals in Assam.

#### 1.10 Tentative Chapterization

Chapter-I Introduction: It includes introduction, significance of the study, literature review, research gap, objectives, hypotheses and justification of the study area.

Chapter-II: An overview of digital payment system in Assam and selected districts: It includes evolution of digital payments, digital payments in India and Assam

Chapter –III: Profile of the study area: It includes analysis of demographic variables frequencies

Chapter-IV: Investigating user acceptance of digital payment among the middle-aged people in Nagaon district of Assam: It discuss the association between various factors and usage of payments

Chapter-V: Suggestions and Conclusion: It includes findings, suggestions and conclusion

#### **CHAPTER-II**

## AN OVERVIEW OF DIGITAL PAYMENT SYSTEM IN ASSAM AND SELECTED DISTRICTS

#### 2.1 Introductory Statement:

One method of payment that is done online is digital payment. Both the payer and the payee send and receive money via digital channels when using digital payments. Another name for it is electronic payment. The following are examples of digital payment methods: Internet banking, prepaid cards, mobile banking, micro ATMs, e-wallets, prepaid cards, Unified Payment Interface (UPI), Unstructured Supplementary Service Data USSD) and Aadhaar Enabled Payment System (AEPS). Because digital payments save people's time and energy for other worthwhile endeavours, they have a stronger impact on human life. Digital payments began to provide intriguing and beneficial new services after demonetization in November 2016, which led to an increase in digital transactions from 2070crores in 2017–2018 to 5487.12crores in 2020–2021.

In 2020, 89% of all transactions in India were made in cash, compared to 100% in 2010. As a result, digital payments have been increasing over the past ten years. To achieve a completely cashless society, however, digital infrastructure in rural India must be improved. Digital payments could rise quickly if the nation's digital infrastructure is concentrated, thus it is imperative that it concentrate on this in order to become a "digital India" in the years to come.

#### 2.2 Evolution of Digital Payments

The Mesopotamians created the barter system 6,000 years ago. In exchange for valuables, people traded shells, grains, beans, cattle, and even lands for whatever they needed from another person. Priceless metals like gold, silver, and bronze were utilized as currency around 3,500 years ago. Coins made of copper, gold, silver, and bronze were later added for convenience. One thousand years ago, Chinese traders created the first type of paper money. By the 17th century, the first checks were handwritten and widely used.

In 1872, Western Union introduced the first popular wire transfer service. It transferred money via the telegraph network. In 1967, Barclays launched the first ATM (Automatic Teller Machine) card in London. Cards with magnetic strips began to appear in the 1970s. The first bank card with an information-encoded magnetic strip that was secured with a pin was released by Lloyds Bank.

Cashless payment systems emerged in the 1990s as a result of technological advancements. The user can send money anyplace they like with a single click on their smartphone or PC. With the introduction of electronic Point of Sale (POS) terminals in 1992, consumers could conduct transactions by swiping their cards through a "swiper." These days, payments are more convenient.

The introduction of e-Goverance in the 1970s, which aimed to employ information and communication technology to enhance the government's capacity to meet societal demands, marked the beginning of digital payments in India. It has expanded significantly over time, and the government's several efforts are listed below:

- ➤ The Department of Electronics was established in 1970, marking the first significant step towards e-governance.
- ➤ When the National Informatics Canter was founded in 1977, the District Information System was introduced, allowing all district offices to be computerized.
- ➤ The National e-Government Plan (NeGP) was developed in 2006. Digital India, Aadhaar, myGov.in, the Unified Mobile Application for New Age Governance (UMANG), Digital Locker, PayGov, Mobile Seva, and Common Service Centers (CSC) are just a few of the e-Government projects made possible by NeGP.
- ➤ Prime Minister Narendra Modi introduced the Digital India initiative in June 2015 with the goal of transforming India into a society empowered by technology.
- ➤ Demonetisation was completed in November 2016, which opened the door for the use of digital payments. Since then, the payment trend has included a digital option. 14 This was mirrored in the rise in digital payment options, ranging from micro ATMs to bank cards. As a result, the barter system has given way to a computerized payments system.

#### 2.3 Digital Payments in India

According to Prime Minister Shri Narendra Damodardas Modi, "let's make at least one person in every family digitally literate." In February 2017, he introduced the Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA) plan as part of the Digital India initiative to achieve this goal. This plan is only appropriate for the rural regions of the nation. Common Service Centre (CSC) e-governance services India Ltd, a Special Purpose Vehicle (SPV), is responsible for implementing the scheme formed in accordance with the Companies Act of 1956. The program provides digital literacy training to residents in State and Union Territory districts and gram panchayats. Up till June 2, 2021, there will be 14,900 training centers in Tamil Nadu and 3, 75,447 training centers throughout India. 19. Digital payments are gaining traction and are expected to expand at an exponential rate due to the Indian government's attempts to introduce digital payment systems in Indian industry and the expansion of ecommerce. Electronic commerce has replaced traditional trade through the use of the internet as a medium. E-commerce used Electronic Data Interchange (EDI), Electronic Mail (e-mail), and Electronic Fund Transfer (EFT) to help fulfill the stated goal of digital payments that are "faceless, paperless, and cashless." Companies such as IRCTC (Railways), Makemytrip, Yatra, Ibibo, Cleartrip (Airlines and hotels), Trivago (hotels), redBus (buses), and Bookmyshow (movie and event tickets) accept digital payments for online ticket, hotel, and event booking. The three main digital payments made by Indian users are for cinema tickets, online shopping, and utility bills (such as energy, mobile, and water bills).

According to a Google-Boston Consulting Group (BCG) analysis, micro transactions with values under \$100—will dominate India's digital payments market. In actuality, half of all transactions between individuals and merchants must be under \$100. It is anticipated that digital payment methods would expand quickly, doubling their share of the digital payments market to 30%. The growth of smart phones is helping the digital payments industry.

## 2.3.1 Government E-Payments Adoption Ranking (GEAR)-India Ranking- 2011 And 2020

Rankings for many aspects of e-payments adoption are provided in the Government E-Payments Adoption Ranking (GEAR) committee's Economist Intelligence Unit (EIU) report. The table below shows India's rating in terms of various digital payment parameters as well as its overall ranking in 2011 and 2020.

Table 2.1: Category wise Rank and Score of India for 2011 (pre-digitalisation) and 2020 (post-digitalisation)

Sl. No	Categories	2011(Pre-Digitalisation)		2020 (Post Digitalisation)	
110	Cutogories	Rank	Score for	Rank	Score for
			100		100
1	Citizen to	41	50	3	95.8
	Government				
2	Government to	29	62.5	25	81.3
	Citizen				
3	Business to	43	62.5	1	100
	government				
4	Government to	30	62.5	1	100
	Business				
5	Infrastructure	47	34.6	58	30.1
6	Social and economic	54	36.9	60	31.2
	context				
7	Policy Context	19	83.3	40	74.4
	Overall Score	36	56.1	28	73.3

Source: The 2020 and 2011 Government E-Payment Adoption Ranking (GEAR) report by The Economist Intelligence Unit (EIU)

The aforementioned table makes it evident that India ranks third in terms of citizen-to-government (C2G) transactions and among the top-performing nations in terms of business-to-government (B2G) and government-to-business (G2B) transactions. This is because the Indian government uses digital means to collect and refund business income tax, disburse loans, and pay company registration fees. However, according to a 2018 study, India ranks 58th in terms of infrastructure, which makes it evident that the country is far behind in the development of digital infrastructure, including the availability of Point of Sale (PoS) terminals, broadband, Wi-Fi, and contactless payment systems.

## 2.3.2. National Payments Corporation of India (NCPI) – Digital Payments Adoption in India 2020

The Reserve Bank of India (RBI) and the Indian Banks' Association (IBS) founded the National Payments Corporation of India (NPCI). It is the driving force behind India's various digital payment systems. 5314 families from 25 Indian states participated in a study by NPCI with the aim of determining the knowledge, adoption, and usage patterns of digital payments among homes. Twenty-five states' households are presegregated into bottom, middle, and high income states for the study's purposes.

The Findings of "Digital payments adoption in India 2020" report states the following as below:

- Digital payments are used by 24% of households in the lowest income bracket, demonstrating that they are no longer just for wealthy and highly educated individuals.
- 79 per cent of households use Paytm, Phonepay for digital payments.
- 36 per cent gap prevails between smart phone ownership and digital payments users. There is a need to bridge the gap between apps downloads and usage, which can be done through education.
- Direct Benefit Transfer (DBT) delivery system has worked well with 91 per cent of households

#### 2.4. Digital Payments in Assam

One of India's 28 states, Assam is well-known for its diverse ethnic population, stunning natural surroundings, and rich cultural heritage. Dispur is the capital of the state, which is made up of 35 districts. Assam has made consistent strides in the use of digital payments, according to a report released by the Ministry of Electronics and Information Technology (MeitY). Government initiatives are aggressively encouraging digital financial inclusion in both urban and rural areas, even though Assam may not yet be among the top states in terms of per capita digital transactions. The Worldline India Digital Payments Report 2019 highlights major Indian cities leading in digital transactions—such as Bengaluru, Chennai, Mumbai, and Delhi. Although no city from Assam appears in the top 10, Guwahati, being the largest city and economic hub of the state, is emerging as a key player in driving digital payments within the Northeast region.

According to Harshil Mathur, Co-founder and CEO of Razorpay, "States with consistent economic growth, strong infrastructure, and digital literacy tend to lead in digital transactions." Assam, with its developing digital infrastructure and growing smart phone usage, holds potential for rapid digital adoption in the coming years.

Recognizing the importance of digital transformation, the National e-Governance Plan (NeGP) has implemented Common Services Centres (CSCs) across the state. These CSCs serve as ICT-enabled access points for the delivery of various government, financial, social, and private sector services, especially in rural and remote areas.

Each CSC is managed by a Village Level Entrepreneur (VLE), overseen by a Service Centre Agency (SCA) and a State Designated Agency (SDA). In Assam, the Assam Electronics Development Corporation Limited (AMTRON) functions as the State Designated Agency. The objective of AMTRON is to promote e-Governance by transforming public service delivery through paperless, efficient, and transparent systems. AMTRON also monitors CSC operations and ensures alignment with digital inclusion goals across the state.

These initiatives indicate that Assam is on a progressive path toward digital empowerment, with increasing public acceptance of convenient and efficient digital payment systems, especially as part of their daily lives and transactions.

#### 2.5 Conclusion

India's payment landscape has seen a spectacular transition from barter to digital, driven by regulatory measures, technical advancements, and the country's growing need for efficiency and ease. E-wallets, AEPS, UPI, and other digital payment systems have completely changed how people and businesses do financial transactions. Cashbased transactions have been steadily declining as a result of this change, which has been further accelerated by the momentum gained after demonetization in 2016. According to the GEAR rankings, India's use of digital payments has advanced significantly overall, particularly in the Business-to-Government (B2G) and Government-to-Business (G2B) sectors. Nonetheless, there are also issues with digital literacy and infrastructural development, especially in rural areas. It is imperative to

bridge the digital divide through inclusive education and strong infrastructure in order to maintain this growth and realize the goal of a genuinely "Digital India."

Assam is making steady progress, even though it isn't yet among the states with the best per capita digital transaction rates. Digital adoption is being accelerated in both urban and rural areas by initiatives like CSCs, AMTRON's proactive role, and rising smartphone prevalence. Assam has a great chance to become a state with substantial digital power in the near future with sustained investment in digital literacy, awareness campaigns, and infrastructure.

All things considered, the development of digital payments in India and Assam emphasizes the vital roles that technology, citizen involvement, and government assistance play. To make digital payments a smooth and ubiquitous aspect of everyday life, the future requires constant innovation, focused legislation, and inclusive development.

#### **CHAPTER-III**

#### PROFILE OF THE STUDY AREA

#### 3.1 Introductory Statement

The study's design and methodology, research population and sample, data collection tools, and statistical analysis performed in the previous chapter were all closely examined by the researcher. The conclusion of the data analysis and the conclusions drawn from the interpretation of the data form the basis of any research activity that has been conducted. Only when table-based data are presented in a way that even a layperson can understand will they have any significance. Consequently, this chapter presents the research's primary findings. As explained in the last chapter, information was collected by questionnaires, tabulated, and examined using both descriptive and inferential statistics. A thorough analysis of the data acquired for the study was provided in the current chapter. It will only be easier to arrive at the proper research results, develop suggestions, and gather data if the data collected is adequately analysed using valuable tools. The researcher selected 100 respondents from the Nagaon district by multiple stages sampling from the non-probability sampling method. Frequency analysis, T-test, Chi-square, and other tools were used to combine and examine the gathered data. In this chapter, the researcher aims to meet the following goals.

- To research the demographics, Socio-Economic profile, and digital payment usage of consumers who use digital payment methods.
- To examine the factors that motivates the rural and urban people in Nagaon to use Digital Payment System.
- To ascertain the factors abstaining the rural and urban people in Nagaon from using Digital Payment System.

#### 3.2 Demographic Variables Frequencies

The socio demographic characteristics of a population, including age, sex, education, income, marital status, occupation, average family size, birth rate, religion, and mortality rate, are quantified by a demographic profile. Different groupings of people can be formed according on each group's demographics. This section focuses on the

respondents' demographic characteristics. 100 questionnaires have been distributed both online and offline. All of the survey's online and offline questions were gathered, and empirical analysis was done using them. As mentioned in the preceding chapter, 100 respondents from selected rural and urban areas of Nagaon were polled using questionnaires in order to collect data for the study. Both urban and rural Nagaon people from the selected town and villages made up an equal portion of the sample size.

Frequency analysis is used to investigate the demographic characteristics of the respondents.

Gender, age, marital status, educational attainment, work status, and respondents' yearly income are the demographic variables examined in this study. The researcher was able to comprehend the customers and determine their opinions regarding digital payment solutions by analyzing the demographic profile.

#### 3.2.1 Region of the Respondents

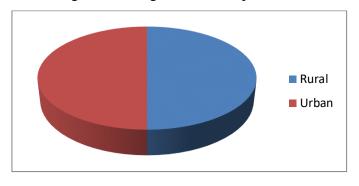
The population sample was primarily divided into two groups: Urban and rural regions.

Table 3.1: Region of the respondents

Region		Frequency	Percent
	Urban	50	50%
Region	Rural	50	50%
	Total	100	100%

Sources: Researcher's own construction

Figure 3.1: Region of the respondents



Source: Researcher's own construction

Table 3.1 depicts the Cross Tabulation of the region. 50% of the participants fell to urban areas, whereas another 50% of the participants fell to rural regions.

#### 3.2.2 Gender of the Respondents

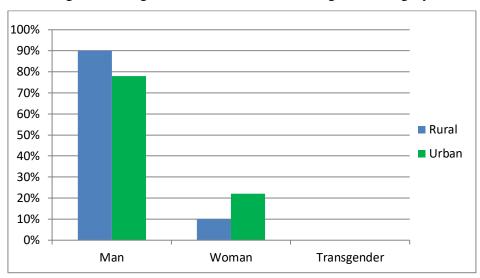
Male, female, and transgender were the three primary groups into which the population sample was divided. Gender has a significant impact on every aspect of life, including how modern digital technology is used. The table below displays the gender distribution of the sample surveyed.

Table 3.2 Region wise cross tabulation of gender category

Region						
	Rural Urban					
		Frequency Percentage Frequency Percentage			Percentage	
	Man	45	90%	39	78%	
Gender	Woman	5	10%	11	22%	
	Transgender	0	0%	0	0%	
	Total	50		50		

Sources: Researcher's own construction

Figure 3.2 Region wise cross tabulation of gender category



Source: Researcher's own construction

Table 3.2 depicts the cross-tabulation of the demographic variable, viz., gender category, with respect to the rural and urban respondents in Nagaon. For the gender category, 84% of the respondents are men, and 16 % of the respondents are women, and 0% of the respondents are transgender. 90% of man respondents from rural areas

engage in digital payment, while in urban areas, 78% of man respondents engage in digital payment. 10.7% of woman respondents from rural areas engage in digital payment, while in urban areas, 22% of woman respondents make digital payments. Both men and women from areas engage more in digital payment than their urban.

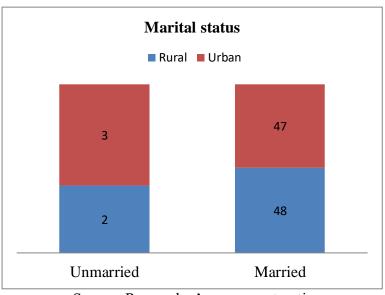
#### 3.2.3 Marital Status of the Respondents

Table 3.3 Region Wise marital status wise cross tabulation of marital status

Region					
Marital status	Rural		Rural Urban		ban
	Frequency Percentage		Frequency	Percentage	
Unmarried	2	4%	3	6%	
Married	48	96%	47	94%	
Total	50		50		

Source: Researcher's own constructions

Figure 3.3: Region wise marital status of the respondents



Source: Researcher's own construction

The demographic variable, namely the marital status category, is cross-tabulated for Nagaon's rural and urban respondents in Table 3.3. In the category of marital status, 5% of respondents are single and 95% of respondents are married. 96% of married respondents in rural areas and 94% of married respondents in urban areas make digital payments. However, only 4% of unmarried respondents in rural areas and 6% of respondents in urban areas, respectively, use digital payments.

#### 3.3 Socio Economic Profile of the Respondents

The preceding section discussed the demographic profile of digital payment consumers in Nagaon towns and rural areas. Regional comparisons of marital status and gender have been established. Numerous differences and parallels between the two groups of respondents were found by the comparison.

The socioeconomic characteristics of the respondents are covered in this section. A person's occupation, income, and educational attainment all contribute to their overall professional background and relative economic and social status in society, which is referred to as their "social, economic position." Socioeconomic analysis examines both of these factors in order to gain a better understanding of the interactions between social and economic dynamics. It facilitates the creation of suitable market strategies and consumer hypotheses. A nation's economy is influenced by the socioeconomic traits of its citizens. The geography and population of a nation directly influence these traits. The sample's respondents' income, occupation, and educational attainment are the main topics of this section. Cross tabulation was used to create the data so that comparisons would be easy.

#### 3.3.1 Cross Tabulation of Level of Education with Respect to Region Category

Table 3.4: Level of education with respect to region category

Region					
Education	Rural		Urban		
	Frequency	Percentage	Frequency	Percentage	
Illiterate	0	0%	0	0	
Literate but below primary	3	6%	0	0%	
Primary	5	10%	0	0%	
Secondary	10	20%	0	0%	
Higher secondary	13	26%	4	8%	
Technical	2	4%	3	6%	
Graduate	8	16%	30	60%	
Non- formal	3	6%	0	0%	
P.G (Post Graduate)	6	12%	13	26%	
Total	50	100	50	100	

Source: Researcher's own estimation

70%
60%
50%
40%
30%
20%
10%
Printary
Pr

Figure 3.4: Level of education with respect to region category

Source: Researcher's own construction

The table and the figure 3.4 show the educational distribution of respondents from rural and urban locations. A large majority of rural participants had upper secondary (26%) and graduate (16%) qualifications, with 12% holding postgraduate degrees. In contrast, urban responses are more concentrated in higher education levels, with 60% graduates and 26% postgraduates, indicating that urban areas have better educational attainment. Notably, none of the urban respondents have less than a higher school degree. This implies a strong educational disparity between rural and urban areas, with urban individuals often having higher levels of education.

#### 3.3.2: Cross Tabulation of Annual Income with Respect to Region Category

Table 3.5: Annual Income with respect to region category

Region					
Annual income of	Rural		Urban		
the family (in Rs.)	Frequency Percentage		Frequency	Percentage	
NIL	2	4%	0	0%	
Below 2Lakhs	27	54%	0	0%	
2Lakhs-4Lakhs	12	24%	6	12%	
4Lakhs-8Lakhs	8	16%	24	48%	
Above 8Lakhs	1	2%	20	40%	

Source: Researcher's own estimation

60% 54% 48% 50% 40% 40% 24% 30% 16% 20% 12% 4% 2% 10% 0 0% ■ Urban

Figure 3.5: Annual Income with respect to region category

Source: Researcher's own construction

The above table and the figure reveals that the annual income distribution for families in rural and urban areas. It is clear that a large proportion of rural families (54%) have an annual income of less than 2lakhs, with only a small number (2%) earning more than 8lakhs. In contrast, urban families have a higher income profile, with 48% earning between 4 and 8lakhs and 40% earning more than 8lakhs per year. No urban family falls under the below 2lakhs or NIL income group. This clearly shows a significant economic discrepancy between rural and urban households, with urban families earning a substantially greater income.

#### 3.3.3: Cross tabulation of employment status with respect to region category

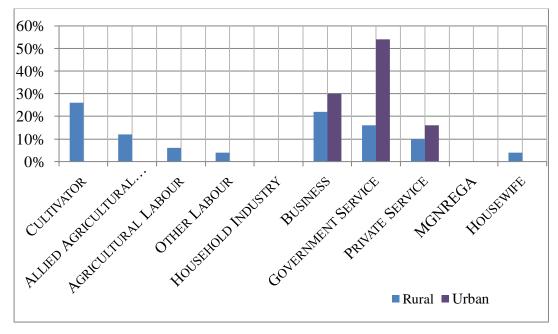
Table 3.6: Employment status with respect to region category

Region				
Employment Status	Rural		Urban	
	Frequency	Percentage	Frequency	Percentage
Cultivator	13	26%	0	0%
Allied Agricultural Activities	6	12%	0%	0%
Agricultural Labour	3	6%	0	0%
Other Labour	2	4%	0	0%
Household Industry	0	0%	0	0%
Trade or Business	11	22%	15	30%
Government Service	8	16%	27	54%

Private Service	5	10%	8	16%
MNREGA	0	0%	0	0%
Housewife	2	4%	0	0%

Source: Researcher's own estimation

Figure 3.6: Employment status with respect to region category



Source: Researcher's own estimation

The table 3.6 depicts the job status of individuals in rural and urban locations. In rural areas, agriculture-related occupations employ a sizable proportion of the population, with 26% working as cultivators and 12% in associated agricultural industries. In contrast, none of the urban respondents work in agriculture. Trade or commerce is a significant source of employment in both locations, accounting for 22% in rural and 30% in urban areas. Government services account for 54% of employment in metropolitan regions, compared to only 16% in rural areas. Similarly, the private sector employs 16% of the urban population and 10% of the rural population. Notably, jobs such as MNREGA, household industry, and housewife duties are not represented in urban regions. Overall, the data indicates that rural employment is primarily agriculture-based, while urban employment is dominated by formal sectors like government and private services.

### 3.4 Online Banking Details and DPS (Digital Payment System) Patronage 3.4.1 Types of Banks

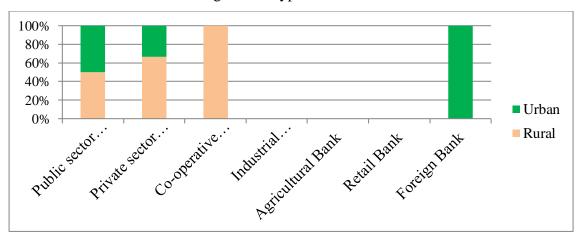
Customers maintain accounts with several distinct types of banks. The several types of banks used in this study include public, private, commercial, cooperative, industrial development, retail, agricultural, and international banks. To ascertain which bank the customers keep their accounts with, this statement was categorized as a multiple-choice question. The following cross-tabulation chart shows how bank customers maintain their accounts current.

Table 3.7 Types of banks

Which type of Bank	Region				
you prefer the most	F	Rural	Urban		
	Frequency	Percentage	Frequency	Percentage	
Public sector Bank	47	94%	47	94%	
Private sector Bank	2	4%	1	2%	
Co-operative bank	1	2%	0	0	
Industrial  Development Bank	0	0	0	0	
Agricultural Bank	0	0	0	0	
Retail Bank	0	0	0	0	
Foreign Bank	0	0	2	4%	

Source: Researcher's own estimation

Figure 3.7 Types of Banks



Source: Researcher's own estimation

The table compares rural and urban respondents' preferences for various types of banks. Both rural and urban residents clearly prefer public sector banks, with 94% in each region supporting them. Rural respondents favor private sector banks (4%) and co-operative banks (2%), whereas urban respondents choose private sector banks (2%) and foreign banks (4%). In either location, industrial development banks, agricultural banks, or retail banks are all equally valued. This demonstrates a considerable reliance and faith in public sector banks among both rural and urban populations.

### 3.4.2 Digital banking usage preference

To find out if customers preferred using digital banking over visiting a branch, analyses were conducted. Digital transactions were preferred constantly, frequently, occasionally, and infrequently. The cross-tabulation frequency chart below displays the respondents' favourite digital banking options.

Table 3.8 Digital banking usage preference

Would you prefer using net	Region			
banking instead of visiting	Rı	ıral	Urban	
your bank?	Frequency	Percentage	Frequency	Percentage
Always	16	32%	28	56%
Often	6	12%	1	2%
Sometimes	19	38%	16	32%
Rare	9	18%	5	10%
Never	0	0%	0	0%
Total	50	100%	50	100%

60%
50%
40%
30%
20%
Always Often Sometimes Rare Never

Figure 3.8 Digital banking usage preferences

Source: Researcher's own construction

The table and the figure 3.8 above indicate rural and urban respondents' preferences for using digital banking rather than visiting a bank. It is clear that a bigger proportion of urban respondents (56%) always choose to use digital banking than rural respondents (32%). While 38% of rural users occasionally utilize digital banking, only 32% of urban users do the same. Surprisingly, 12% of rural respondents frequently use digital banking, while this ratio lowers to only 2% in urban areas. Both rural (18%) and urban (10%) regions have a modest share of people who rarely use digital banking. Notably, none of the respondents in either region said they had never used internet banking. This suggests that although digital banking is more consistently preferred among urban users, a significant portion of rural respondents are also adopting digital modes of banking.

#### 3.4.3 Preferred Mode for Digital Payment Transactions

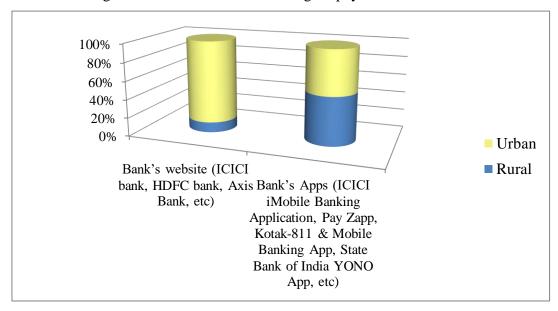
The approach that customers like to employ for digital banking transactions was investigated. Through a variety of platforms, including as online and mobile banking, the banks offer their customers digital banking services. The two favoured digital banking platform types in this study were roughly classified as bank websites and bank apps. The respondents' favourite method for conducting digital banking transactions is displayed in the cross-tabulation table below.

Table 3.9 Preferred modes for digital payment transactions

Which mode you prefer the	Region			
most to do online banking?	Ru	Rural		ban
	Frequency	Percentage	Frequency	Percentage
Bank's website (ICICI bank,	2	4%	6	32%
HDFC bank, Axis Bank, etc)				
Bank's Apps (ICICI iMobile	48	96%	44%	88%
Banking Application, Pay Zapp,				
Kotak-811 & Mobile Banking				
App, State Bank of India				
YONO App, etc)				

Source: Researcher's own construction

Figure 3.9 Preferred modes for digital payment transactions



Source: Researcher's own construction

The table and the figure 3.9 show the preferred mode of online banking for rural and urban respondents. The vast majority of both rural (96%) and urban (88%) consumers choose to conduct their online banking through bank apps, demonstrating a significant preference for mobile banking solutions. In contrast, a tiny number of respondents prefer to use the bank's website—4% in rural areas and 12% in urban ones. This clearly demonstrates that mobile banking apps remain the dominating and most

popular platform for online banking, particularly in rural areas where convenience and mobile accessibility are critical.

### 3.4.4 Years of Using Digital Payments by the Respondents

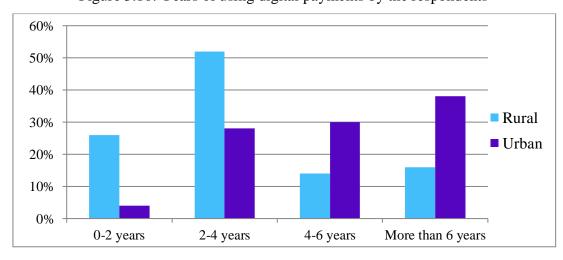
Following the COVID-19 pandemic and the demonetization in November 2016, digital payments have been more widely accepted in India. India has seen the success of numerous mobile wallet firms, including Paytm, Mobikwik, Tez, PayU, Ola Wallet/Money, and Amazon Pay. The years that the respondents have used digital payments are shown in the cross-tabulation table that follows.

Table 3.10: Years of Using Digital Payments by the Respondents

How many years you	Region			
have been using digital	Rural		Uı	ban
modes for payments?	Frequency	Percentage	Frequency	Percentage
0-2 years	13	26%	2	4%
2-4 years	26	52%	14	28%
4-6 years	7	14%	15	30%
More than 6 years	4	16%	19	38%
Total	50	100%	50	

Source: Researcher's own estimation

Figure 3.10: Years of using digital payments by the respondents



Source: Researcher's own construction

The table 3.10 depicts the duration of digital payment usage for rural and urban respondents. The bulk of rural users (52%) have been utilizing digital payments for 2-4 years, whereas urban users (38%) have been doing so for more than 6 years. Only 4% of urban respondents are aged 0–2 years, compared to 26% in rural areas, indicating that digital payment use began sooner in metropolitan locations.

Furthermore, 30% of urban customers have used digital payments for 4-6 years vs only 14% in rural areas. This suggests that urban respondents have had longer exposure and experience with digital payments, while rural respondents are relatively newer to the system.

### 3.4.5 Device Preferred to Perform Digital Payments

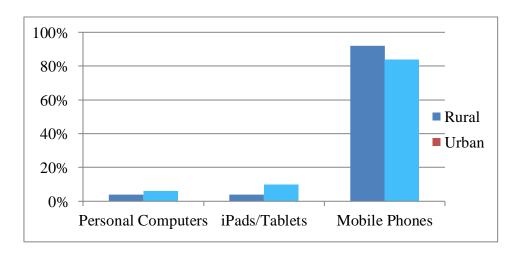
Digital payments can now be made via many devices, thanks to advancements in technology. Customers' favorite digital payment devices were studied. This survey employed three categories of devices: desktop and laptop computers, iPads/tablets, and mobile phones. The cross tabulation table shows respondents' preferred devices for digital payments.

Table 3.11 Device preferred to perform digital payments

Which device you	Region			
prefer the most to do	Rural		Urban	
your digital payment?	Frequency	Percentage	Frequency	Percentage
Personal Computers	2	4%	3	6%
iPads/Tablets	2	4%	5	10%
Mobile Phones	46	92%	42	84%
Total	50	100%	50	100%

Source: Researcher's own construction

Figure 3. 11 Device preferred to perform digital payments



The table3.11 clearly illustrates that mobile phones are the most popular instrument for making digital payments among both rural and urban respondents. In rural areas, 92% of people use mobile phones, whereas in cities, 84% use them for digital transactions. Both regions have a small number of respondents who use personal computers/laptops (4% in rural and 6% in urban) and iPads/tablets (4% in rural and 10% in urban). This shows that mobile phones are the most popular medium for digital payments due to their accessibility, convenience, and ease of use.

## 3.4.6 Awareness about the Availability of Various Types of Digital Payment Systems

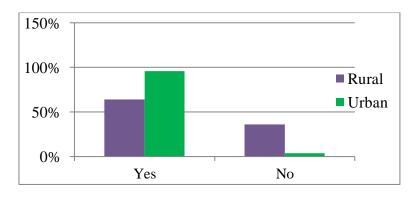
A decade ago, digital payment alternatives became available. However, it has gained popularity during the last five years. A dichotomous Yes/No analysis were conducted to assess respondents' awareness of accessible digital payment solutions.

Table 3.12 Awareness about the availability of various types of Digital Payment Systems

Are you aware of the	Region			
availability of various	Rural		Urb	oan
digital payment modes?	Frequency	Percentage	Frequency	Percentage
Yes	44	64%	48	96%
No	6	36%	2	4%
Total	50	100%	50	100%

Source: Researcher's own estimation

Figure 3.12: Awareness about the availability of various types of digital payment systems



Source: Researcher's own estimation

The table above shows that urban respondents are substantially more aware of the availability of various digital payment channels than rural respondents. In metropolitan areas, 96% of respondents are aware of various digital payment options, compared to only 64% of rural respondents. In contrast, 36% of rural residents are still uninformed of the many available digital payment alternatives, compared to only 4% in metropolitan areas. This demonstrates a digital awareness gap between rural and urban locations, emphasizing the need for further outreach and education in rural areas to encourage digital payment acceptance.

### 3.4.7 Most Preferred Digital Payment Mode

There are numerous digital payment systems available for fund transfers and payment activities. These payment methods are suitable for both online and offline transactions. This comment was analyzed as a multiple answer to identify the preferred digital payment method among clients.

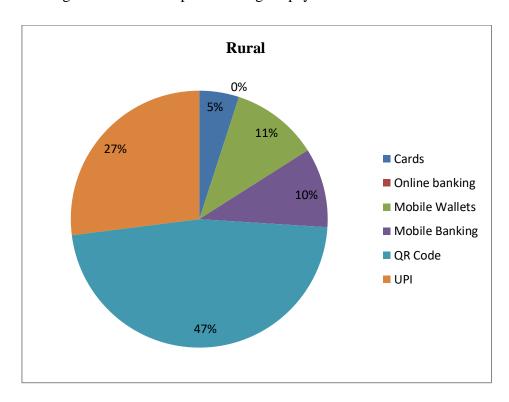


Figure 3.13.1: Most preferred digital payment mode in rural area

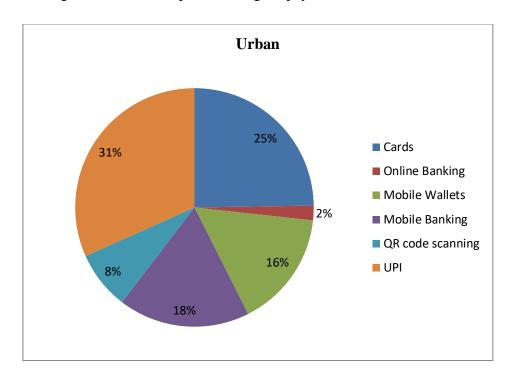


Figure 3.13.2: Most preferred digital payment mode in urban area

Source: Researcher's own construction

The findings (Figure 3.13.1) reflect that QR Code scanning is the most often preferred method, accounting for 47%, followed by UPI (27%) in rural region. Mobile wallets and mobile banking are used by 11% and 10%, respectively. Only 5% use cards and 0% utilize online banking. This suggests that in rural regions, quick and simple payment options such as QR code scanning and UPI are more popular, most likely due to their ease of use and fewer technological requirements when compared to other digital payment methods.

The data in the figure figure 3.13.2 depicts the distribution of different digital payment methods among urban respondents. The most popular mode is UPI (Unified Payments Interface), which is utilized by 32%, followed by cards at 25%. Mobile Banking accounts for 18%, while Mobile Wallets make up 16%. QR code scanning is utilized by 8%, whereas online banking is the least popular, with only 2% of consumers choosing it. This implies a significant change in urban regions toward mobile-based, rapid, and user-friendly payment options such as UPI.

### 3.5 Factors Affecting Middle-Aged People's Perception towards Digital Payment Systems

Consumers' perception towards Digital Payment Systems (DPS) is shaped by a variety of interrelated factors.

Objective: To determine the driving forces behind Nagaon's rural and urban residents' adoption of the digital payment system.

 $H_{01}$ : Factor motivating the rural and urban consumers to make online payments is the same.

H<sub>a1</sub>: Factor motivating the rural and urban consumers to make digital payments is not the same.

### 3.5.1. Factor-1 "Transaction Speed"

+H<sub>01a</sub>: TS is a significant driver of digital payment.

Transaction speed may be explained by consumers' impressions of how digital payment systems have improved financial transaction speed. The pace at which the technology delivers the service determines the transaction speed. More consumers will use digital banking services to make payments online as perceived transaction speeds rise (A. S. Yang, 2009). Some studies suggest that if transaction speeds are accelerated, consumers are more likely to adopt technology (Chiang et al., 2017; Dabholkar, 1996; Seetharaman et al., 2017). This is due to the fact that transaction speed or service delivery time has a positive impact on the intention to utilize technology. According to a recent study on users in Cambodia, transaction speed is an important aspect of digital payments that positively influences users' behavioural intentions (Doa et al., 2019).

Table 3.13 Frequencies analysis of transaction speed as a variable

Statement	Mean	Interpretation
DPS transfer are completed quickly	4.95	Strongly Agree
when compared to traditional methods		
DPS saves travel time and energy as		
we need not to stand in queue in banks	4.94	Strongly Agree
or to pay utility bills		
Within few minutes even the high	4.84	Strongly Agree
value transfer can be made in DPS		
DPS saves time as it is available 24x7	4.79	Strongly Agree
DPS improves the speed of transaction	4.76	Strongly Agree

Source: Researcher's own construction

The frequency analysis of transaction speed as a variable reveals that respondents highly agree with all assertions about the efficiency of Digital Payment Systems (DPS). The highest mean score of 4.95 reflects a significant consensus that DPS transactions are processed faster than traditional methods. Similarly, respondents strongly agree that DPS saves travel time and energy by eliminating the need to stand in lines (mean: 4.94), and that high-value transfers can be completed in minutes (4.84). Furthermore, DPS's 24x7 availability (mean: 4.79) and overall contribution to improving transaction speed (4.76) confirm the view that DPS is a very efficient method of completing financial transactions.

### 3.5.2 Factor-2 "Perceived Usefulness"

+H<sub>01b</sub>: PU is a significant driver of digital payment.

Perceived usefulness, according to Davis (1989), illustrates how using the suggested technology may enhance job performance. Stated differently, it describes the user's perception of the effectiveness and convenience of digital payment systems in simplifying ordinary transactions. The e-payment system is beneficial since it allows customers to save time and money. According to a Hungarian study by Daragmeh et al. (2021), Gen X's behavioural intentions are positively impacted by perceived utility since digital services are more useful, time-saving, and require less work to use. In a

similar vein, numerous studies have demonstrated that a user's behaviour and desire to use digital payments are directly and favourably influenced by perceived utility.

Table 3.14 Frequencies analysis of perceived usefulness as a variable

Statements	Mean	Interpretation
DPS helps to improve my performance in making	4.13	Agree
payments		
DPS enables me to accomplish my task more quickly.	4.03	Agree
DPS plays a vital role in my payment activities	4.07	Agree
DPS aids in enhancing my effectiveness in making	4.16	Agree
payments.		

\*Strongly disagree=1; Disagree=2; Neutral=3; Agree=4; strongly agree=5

Source: Researcher's own estimation

The frequency analysis of perceived usefulness as a variable shows that most respondents agree that Digital Payment Systems (DPS) have a favorable impact on their payment operations. The mean scores range between 4.03 and 4.16, indicating a consistent assessment of usefulness. Respondents agree that DPS improves payment performance (mean: 4.13) and effectiveness (mean: 4.16). Furthermore, they acknowledge that DPS speeds up task completion (mean: 4.03) and plays an important role in their everyday payment operations (mean: 4.07). Overall, these replies demonstrate a significant appreciation for the benefits of DPS in expediting financial transactions.

#### **3.5.3 Factor – 3 "Trust"**

 $+H_{01c}$ : TR is a significant driver of digital payment.

For any firm to prosper, trust is essential. Trust, or customer trust, refers to a consumer's conviction that their money will not be stolen, personal information will not be exploited, and all parties involved will behave in their best interests, even if the system is defective (Hidayanto et al., 2015). Users are more likely to trust electronic payment systems when they are confident in the system's dependability and the security of their personal information. Research (Featherman & Pavlou, 2003; Pal et al., 2020) suggests that digital payment systems require an acceptable level of confidence. The perceived level of trust influences consumers' intention to use the digital payment system.

Table 3.15: Frequencies analysis of trust as a variable

Statements	Mean	Interpretation
I trust DPS as it will not lead	3.26	Neutral
to transaction fraud.		
I trust each participant	3.18	Neutral
involved in DPS		
I trust on the ability of DPS	3.92	Agree
to protect my privacy		

Source: Researcher's own construction

The frequency analysis of trust as a variable demonstrates respondents' varied attitudes toward Digital Payment Systems (DPS). The mean score of 3.92 for the statement "I trust DPS' ability to protect my privacy" suggests that respondents believe DPS can protect their personal information. The statements "I trust DPS as it will not lead to transaction fraud" and "I trust each participant involved in DPS" obtained mean scores of 3.26 and 3.18, respectively, indicating a neutral position. This implies that, while consumers have some faith in the system's privacy protection, they are still unsure or concerned about the overall security and trustworthiness of the parties involved in digital transactions.

### 3.5.4 Factor – 4 "Social Influence"

+H<sub>01d</sub>: SI is a significant driver of digital payment.

According to Diaz and Loraas (2010), social impact refers to how much a user feels compelled to utilize a particular technology. In this research, "social influences" allude to societal pressures on technology innovation and adoption (Hidayanto et al., 2015). Hidayanto et al. (2015) emphasize the importance of social influence in explaining adoption behavior in innovation dissemination research. According to studies conducted in the United States, social influence has a direct impact on users' adoption of information technology, while also partially influencing their behavioral intentions (Bozan et al., 2016). Hidayanto et al. (2015) discovered that social influence has a direct impact on individuals' intention to use innovative technologies.

Table 3.16: Frequencies analysis of social influence as a variable

Statements	Mean	Interpretation
After most of my friends use digital	3.93	Agree
payment, I will consider to use it.		
Use of DPS is valued in my circle of	4.22	Agree
family and friends		
The people around me encourage me	4.13	Agree
to use DPS		

Source: Researcher's own construction

The frequency analysis of social influence as a variable shows that social variables have a considerable impact on customers' sentiments regarding digital payment systems (DPS). The mean scores indicate that respondents believe their social groups influence them. The statement "Use of DPS is valued in my circle of family and friends" had the highest mean score of 4.22, followed by "The people around me encourage me to use DPS" (4.13) and "After most of my friends use digital payment, I will consider using it" (3.93). These studies demonstrate that peer influence, family values, and encouragement from others all have a favorable impact on users' adoption and perceptions of Digital Payment System (DPS).

### 3.5.5 Factor – 5 "Performance Expectation"

+H<sub>01e</sub>: PE is a significant driver of digital payment.

According to Venkatesh et al. (2003), PE refers to the user's perception of how employing a technique will improve job performance. According to Doa et al. (2019), the most reliable signal for determining behavioral intent to a technology is its perceived benefits for certain activities. E-payments offer ease, speed, and security during transactions, making them beneficial to customers. According to study by Alshehri and Drew (2012), government services improve communication, save time and money, and improve service quality. Performance expectancy has a direct positive impact on usage behavior.

Table 3.17: Frequencies analysis of performance expectation as a variable

Statements	Mean	Interpretation
I can make the financial	4.13	Agree
transactions quickly using DPS		
DPS saves my time and I find more	4.22	Agree
time for my productive work		
I will use digital payment more	3.21	Neutral
frequently in the future		

Source: Researcher's own construction

The frequency analysis of performance expectations as a variable reveals that respondents largely agree on the advantages of utilizing Digital Payment Systems (DPS) in terms of speed and time savings. The statement "DPS saves my time, and I find more time for productive work" obtained the highest mean score of 4.22, indicating significant agreement. Similarly, respondents believe that "I can make financial transactions quickly using DPS" (mean: 4.13). However, the statement "I will use digital payments more frequently in the future" had a mean score of 3.21, indicating a neutral response. This indicates that, while present performance expectations are positive, there is some reluctance or uncertainty regarding increased future usage, maybe owing to worries about trust, infrastructure, or habit.

#### 3.6 Conclusion

This chapter offered a detailed picture of the research area by examining the demographic and socioeconomic features of rural and urban respondents in Nagaon district, as well as their digital payment usage patterns. The study found significant variations in education, income, occupation, and digital awareness between rural and urban participants. Furthermore, the examination of major impacting factors—transaction speed, perceived usefulness, trust, social influence, and performance expectation—showed how important these variables are in determining customer perception of Digital Payment Systems. Overall, the findings show that, while digital payment use is increasing in both regions, more targeted efforts are needed to close the digital gap and increase trust and knowledge, particularly in rural areas.

### **CHAPTER-IV**

# INVESTIGATING USER ACCEPTANCE OF DIGITAL PAYMENT AMONG THE MIDDLE-AGED PEOPLE IN NAGAON DISTRICT OF ASSAM

### **4.1 Introductory Statement**

This study aims to explore the awareness, usage patterns, and acceptance levels of digital payments among middle-aged individuals in Nagaon, with a specific focus on both rural and urban populations. The research also seeks to identify key motivators and inhibitors to digital payment adoption, thereby offering insights that can support more targeted and effective strategies.

### 4.2 Construct Reliability and Validity

 $H_{01}$ : Factor motivating the rural and urban consumers to make online payments are the same.

H<sub>a1</sub>: Factor motivating the rural and urban consumers to make online payments are not the same.

Table 4.1: Construct reliability and validity

Constructs	Items	Cronbach's Alpha	Reliability Status
Transaction	TS1	0.822	Reliable
Speed	TS2		
	TS3		
	TS4		
	TS5		
Perceived	US1	0.732	Reliable
usefulness	US2		
	US3		
	US4		
Trust	TR1	0.843	Reliable
	TR2		
	TR3		
Social	<b>S</b> 1	0.652	Reliable
Influence	S2		
Performance	PE1	0.741	reliable
Expectancy	PE2		
	PE3		

Source: Researcher's own estimation

The above table shows that transaction speed, perceived usefulness, trust, performance expectancy and social influence are reliable.

## 4.3 The Association between the Demographic Factors, Socio-Economic and the Usage of Digital Payment System

H<sub>04</sub>: There is no significant association between demographic factors and the usage of digital payment system in the study area.

H<sub>a4</sub>: There is a significant association between demographic factors and the usage of digital payment system in the study area.

### 4.3.1 The Association between Gender and the Usage of Digital Payment System

Table 4.2: The association between gender and the usage of digital payment system

How many years	you have been		Gender	Total	
using digital modes	Man	Woman	Transgender		
How many years	0-2 years	14	1	0	15
you have been	2-4 years	36	4	0	40
using digital	4-6 years	20	2	0	22
modes for	More than 6	14	9	0	23
payments?	years				
Total		84	16	0	100

Source: Researcher's own construction

Table 4.2.1 Chi-Square Tests for gender and the usage of digital payment system

Chi- Square Tests						
	Value	Df	Asymp. Sig.(2-			
			sided)			
Pearson Chi-Square	11.981	3	.000			
Likelihood Ratio	12.386	3	.000			
Linear-by-Linear Association	8.079	1	.000			
N of Valid Cases	100					

(\*\*\* Level of significance at 1%)

Table 4.2.2 Symmetric Measures for gender and the usage of digital payment system

Symmetric Measures					
		Value	Approx. Sig		
Nominal by	Phi	.263	.000		
Nominal	Cramer's V	.230	.000		
N of Valid Cases		100			

Source: Researcher's own construction

According to the table, the chi-square test of independence revealed a correlation between gender and digital payment use with p=.000,  $\phi$ =.263 and  $\chi$ 2 (3, N=100) =11.981. The medium effect size was suggested by the phi-coefficient of.263 (<.50). The results demonstrated a strong significant between gender and the use of digital payment systems.

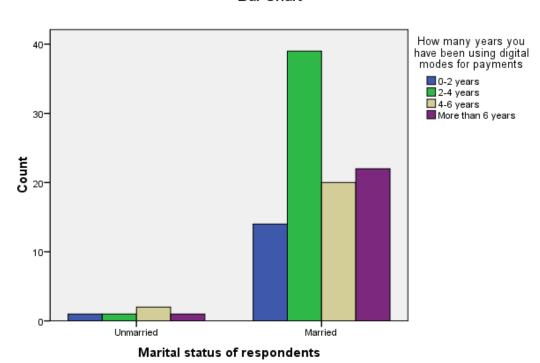
### 4.3.2 The Association between the Marital Status and the Usage of Digital Payment System

Table 4.3: Association between the marital status and the usage of digital payment system

How many years y using digital modes for		Marital Status			
		Unmarried	Married	Total	
How many years you have been using digital modes for payments?	0-2 years	1	14	15	
	2-4 years	1	39	40	
	4-6 years	2	20	22	
	More than 6 years	1	22	23	
Total		5	95	100	

Figure 4.1: Association between the marital status and the usage of digital payment system

### **Bar Chart**



Source: Researcher's own construction

Table 4.3.1 Chi-Square Tests for the marital status and the usage of digital payment system

Chi- Square Tests						
	Value	df	Asymp. Sig.(2-sided)			
Pearson Chi-Square	54.321	3	.005			
Likelihood Ratio	37.246	3	.000			
Linear-by-Linear Association	10.379	1	.000			
N of Valid Cases	100					

(\*\*\* Level of significance at 1%)

Table 4.3.2 Symmetric Measures for the marital status and the usage of digital payment system

Symmetric Measures					
Value Approx.					
Nominal by	Phi	.354	.000		
Nominal	Cramer's V	.342	.000		
N of Valid Cases		100			

Source: Researcher's own construction

Table reveals that chi-square test of independence showed association between the  $\chi$  marital and the usage of digital payment with  $\chi^2(3, N=100)=54.321$ , p=.000,  $\varphi$ =.354. The value of phi-coefficient was .354 which is less than .50 indicates the medium effect size. The findings showed that there is a significant relationship between the marital and the usage of digital payment.

### 4.3.3 The Association between the Education Level and the Usage of Digital Payment System

Table 4.4: Association between the education level and the usage of digital payment system

			Education status of respondents							
How mayou have using modes payments	digital for	Literate but below primary	Prim ary	Secon dary	Higher Secon dary	Tech nical	Gradu ation	Non form al	P. G	Total
How many years	0-2 years	0	1	4	4	1	4	0	1	15
you have been using	2-4 years	2	4	5	4	1	11	3	10	40
digital modes for	4-6 years	0	0	1	5	1	9	0	6	22
paymen ts?	More than 6 years	1	0	0	4	2	13	0	3	23
Total		3	5	10	17	5	37	3	20	100

Table 4.4.1 Chi-Square Tests for the education level and the usage of digital payment system

Chi- Square Tests						
	Value	Df	Asymp. Sig.(2-sided)			
Pearson Chi-Square	28.452	21	.000			
Likelihood Ratio	33.658	21	.000			
Linear-by-Linear Association	3.366	1	.000			
N of Valid Cases	100					

(\*\*\* Level of significance at 1%)
Source: Researcher's own construction

Table 4.4.2 Symmetric Measures for the education level and the usage of digital payment system

Symmetric Measures						
		Value	Approx. Sig			
Nominal by Nominal	Phi	.454	.000			
Nonmar	Cramer's V	.242	.000			
N of Valid Cases		100				

Source: Researcher's own construction

The above table reveals that chi-square test of independence showed association between the  $\chi$ marital and the usage of digital payment with  $\chi^2(21, N=100)=28.452$ , p=.000,  $\phi$ =.454. The value of phi-coefficient was .454 (< .50) indicates the medium effect size. The findings showed that there is a significant relationship between the education level and the usage of digital payment.

# 4.3.4 The Association between the Employment Level and the Usage of Digital Payment System

Table 4.5: Association between the employment level and the usage of digital payment system

Cross					Em	ployment	Status			
tabulation how years you been digital for payn	many ou have using modes	Cul tiva tor	Allied agricul tural activiti es	Agricu ltural labour	Other labour	Trade or busine ss	Service (Govt.)	Service (Private)	House wife	Tot al
How many years	0-2 years	5	1	0	0	2	3	3	1	15
you have	2-4 years	7	3	2	1	13	11	2	1	40
been using	4-6 years	1	1	0	1	6	10	3	0	22
digital modes for payme nts?	More than 6 years	0	1	1	0	5	11	5	0	23
Total		13	6	3	2	26	35	13	2	100

Source: Researcher's own estimation

Table 4.5.1 Chi-Square Tests for the employment level and the usage of digital payment system

Chi- Square Tests						
	Value	df	Asymp. Sig.(2-			
			sided)			
Pearson Chi-Square	24.843	21	.000			
Likelihood Ratio	29.092	21	.000			
Linear-by-Linear Association	7.689	1	.000			
N of Valid Cases	100					

(\*\*\* Level of significance at 1%)

Table 4.5.2 Symmetric Measures for the employment level and the usage of digital payment system

Symmetric Measures						
		Value	Approx. Sig			
Nominal by	Phi	.632	.000			
Nominal	Cramer's V	.421	.000			
N of Valid Cases		100				

Source: Researcher's own construction

Table demonstrated that chi-square test of independence showed association between the employment level and the usage of digital payment with  $\chi^2$  (21, N=100) =24.843, p=.000,  $\phi$ =.632. The value of phi-coefficient was .632(>.50) which indicated the large effect size. The findings showed that there is a substantial association between the employment level and the usage of digital payment system.

## 4.3.5 Study and Compare the Socio-Economic Characteristics of Rural and Urban Middle Age Consumers' Preferences towards Digital Payment.

Comparing the socioeconomic and demographic characteristics rural and urban respondents of Nagaon is the aim of this study. When two categorical variables are present in a single population, the chi-square test for independence has been employed. If there is a substantial correlation between the two variables, it can be ascertained using the test results. This test compares and determines whether there is a statistically significant correlation between Nagaon's rural and urban respondents with regard to socioeconomic and demographic parameters.

Table 4.6: Summary of findings of Chi-Square test

Demographic and Socio-	Chi-	p-value	Findings
Economic profile	square		
Gender	2.679	0.632	Rural and urban respondents have insignificant association with respect to the gender
Marital status	12.372	.001	Rural and urban respondents have significant association with respect to the marital status

Education	42.363	.000	Rural and urban respondents				
			have significant association with				
			respect to the education.				
Annual income	37.256	.000	Rural and urban respondents				
			have significant association with				
			respect to the annual income				
Employment Status	22.721	.000	Rural and urban respondents				
			have significant association with				
			respect to the employment status				

Source: Researcher's own construction

# 4.4 The Association between the Motivating Factors and the Usage of Digital Payment System

 $H_{02}$ : There is no significant association between the motivating factors and the usage of digital payment system.

H<sub>a2</sub>: There is a significant association between the motivating factors and the usage of digital payment system.

Table 4.7: Association between the motivating factors and the usage of digital payment system

Factors	How many years you have been using digital modes for payments							
	$df$ $\chi^2$ p-value							
Transaction speed	13	.23	.005					
Usefulness	42	.53	.000					
Trust	48	.62	.000					

Source: Researcher's own construction

The above table shows a significant association between the motivating factors—transaction speed, usefulness, and trust—and the duration of digital payment usage. The p-values for all three factors are less than 0.05, indicating that these associations are statistically significant. This means that individuals who perceive digital payments to be fast, useful, and trustworthy are more likely to use them for a longer period.

Among the factors, trust and usefulness show a stronger association, suggesting they play a more influential role in encouraging continued use of digital payment systems.

### 4.5 The Association between the Barriers's Factors and the Usage of Digital Payment System

 $H_{03}$ : There is no significant association between the barriers and the usage of digital payment system.

H<sub>a3</sub>: There is a significant association between the barriers and the usage of digital payment system.

Table 4.8: association between the barrier's factors and the usage of digital payment system

Factors	How many years you have been using digital modes for payments					
	df	$\chi^2$	p-value			
Trust	42	.462	.004			
Performance Expectancy	45	.262	.000			
Social Influence	30	.493	.000			

Source: Researcher's own construction

The above table demonstrated that chi-square test of independence disclosed significant association between the trust, performance expectancy and social influence and the usage of digital payment.

This section has covered the socioeconomic characteristics of Nagaon's rural and urban consumers. The majority of urban respondents, it was discovered, hold a postgraduate degree. The urban respondents' family income is higher than the rural respondents' family income for the same period of time. In metropolitan locations, the majority of responders are professionals and students who work for multinational corporations. On the other hand, the majority of responders in rural areas are students who work in both the public and commercial sectors. Therefore, it may be said that young people make up the majority of responders in Nagaon. On the other hand,

respondents from cities use digital payments more frequently than those from rural areas.

#### 4.6 Conclusion

This chapter thoroughly investigated the adoption and use of digital payment methods among middle-aged people in both rural and urban areas of Nagaon district, Assam. The study found considerable variations between rural and urban people in terms of demographic and socioeconomic parameters such as marital status, education, income, and employment, all of which influence digital payment acceptance. Chi-square tests revealed significant connections between these characteristics and years of digital payment usage. Furthermore, important motivators such as transaction speed, perceived utility, and trust had a statistically significant effect on usage behavior. Similarly, barrier-related characteristics (trust, performance anticipation, and social influence) showed significant relationships. The findings show that, while digital payments are gaining popularity in both regions, urban users adopt and utilize them more frequently, owing to higher education levels, higher income, and greater professional exposure. These findings highlight the need for more specialized initiatives to bridge the rural-urban digital divide and promote widespread use of digital financial services among the district's middle-aged population.

### **CHAPTER-V**

### SUMMARY AND CONCLUSION

### **5.1 Introductory statement**

This chapter summarizes the study's key findings, practical recommendations, and concluding remarks on digital payment uptake among middle-aged adults in Nagaon district, Assam. The study sought to better understand demographic and socioeconomic impacts, levels of awareness and usage, and the primary impediments to digital payment system adoption. The study provides a comparative perspective on how digital payment systems are seen, accepted, and used by rural and urban populations. This chapter summarizes the key findings from the objectives, converts them into practical recommendations for stakeholders such as banks, customers, and government agencies, and emphasizes the overall importance of digital payment systems in India's financial revolution.

### 5.2 Findings of the study

➤ Objective 1: To compare the demographic and socio-economic factors influencing the rural and urban consumers' preferences towards digital payment.

There has been discussion on the socioeconomic characteristics of Nagaon's rural and urban consumers. The majority of urban respondents, it was discovered, hold a postgraduate degree. The urban respondents' yearly family income is more than the rural respondents' annual income. In metropolitan locations, the majority of respondents are professionals and students who work for multinational corporations. On the other hand, the majority of responders in rural areas are students who work in both the public and commercial sectors. Therefore, it may be said that the majority of Nagaon's responses are young people. Conversely, respondents from cities engage in more digital payment compared to their peers in rural areas.

➤ Objective 2: To examine middle-aged people's awareness of and acceptance of digital payment.

Based on this objectives major findings are -

- 1. In the rural area most of the people are from 50-60 age group i.e., 36.66 % and in the urban area most of the people are from 40-50 age group.
- 2. 70 % of respondents in the rural areas claimed to be non-familiar with digital payments/UPI /mobile banking.
- 3. In the urban area, 86.67 % peoples claimed to be familiar with digital payment / UPI / mobile banking.
- 5. In rural area 40 % people never used digital payment and only 16.67 % people frequently used digital payment. 43.33 % respondents used digital payments sometimes.
- 6. In urban area, 23.333 % of people never used digital payments, while 40 % people use them frequently. 36.667 respondents said they sometimes used digital payments.
- 7. Although the awareness and adoption of digital payments are significantly better among middle-aged persons in both the areas, but urban peoples are more aware and more open to accepting digital payments.
- ➤ Objective3: To identify the barriers abstaining the rural and urban people in Nagaon to use the digital payment system.

According to the study's analysis transaction speed, perceived usefulness, trust and social influence are the key factors that influence users' intentions to adopt digital payments. It was shown that the two groups differed in the path from drivers such trust and transaction speed to intent to use. On the other hand social influence and perceived usefulness have all displayed the same route coefficient. It indicates that there is no statistically significant difference between rural and urban clients, suggesting that these factors have an equal impact on the customer categories with respect to digital payments. Whereas transaction speed and trust is more likely to accept digital payments in their daily lives in rural areas and social influence are more likely to do so in metropolitan areas.

### **5.3. Suggestions**

A few suggestions for enhancing the offerings and increasing the uptake and usage of electronic payment systems are included in the list below:

- Consumers should be educated about the laws and guidelines that control electronic payment systems.
- When making digital transfers or payments, consumers should exercise caution because a small mistake might result in a substantial loss of funds.
- The confidentiality and safety of their customers' personal and financial information must be guaranteed by banks.
- Banks should organize free workshops, seminars, and conferences to assist individuals who reside in remote regions in learning how to utilize digital transactions.
- The government should investigate the newest technological advancements to provide a low-cost, scalable solution for digital transactions.
- The government should ensure that electronic transactions are less costly than cash ones. There are several ways in which digital transactions are beneficial for users and the economy as a whole.

#### **5.4 Conclusion**

The development of digital payment systems has been greatly aided by ICT innovation and the modernization of the digital landscape. Modern digital payment technologies have significantly replaced traditional cash payment methods. There is now a clear path for the future of digital payments. Numerous financial technology companies have been established since the invention of technology in order to expand, improve, and facilitate dependable and speedy digital transactions. The size and scope of electronic transactions will significantly increase in the future decades. In the end, increasing the usage of online payment methods would improve transparency, foster financial cohesion, and help the nation's economic growth by reducing the flow of illicit money, the parallel economy, and unlawful activities.

The digital revolution is the direction that India's economy is taking. The digitalization of the banking industry has been accelerated by the rise of core and electronic banks.

On November 8, 2016, the Indian government formally declared demonetization in an effort to stop illicit activity in the nation.

The current research holds importance not only for the financial sector but also for business, government, and academia. The study's objective was to create a comprehensive and all-encompassing model for India that would take into consideration both urban and rural areas and have the ability to accelerate the nation's adoption of digital payment systems.

### **Bibliography**

Das, A., & Das, D. (2020). Perception, Adoption, and Pattern of Usage of Fin Tech Services by Bank Customers: Evidences from Hojai District of Assam, Emerging Economy Studies, 6(1).

Franciska, A., & Sahayaselvi, S. (2017). An Over view on Digital Payments, International Journal of Research, volume 04.

Gadge, A., & Rai, P. (2019). Awareness of Digital Payments in Rural Area, IJSRD – International Journal for Scientific Research & Development, vol. 7.

Nath, S, Choudhary, M., & Parashar, K. (2022). A Study On M-Banking System Amongst Consumers In Silchar – Assam (India), Journal of Positive School Psychology, Vo I. 6, No. 10, 3040-3046.

Ranjith, P. Kulkarni, S., & Varma, A. (2021). A Literature Study of Consumer Perception towards Digital Payment Mode in India, Psychology and Education, 58 (1): 33 04 - 331 9.

Saroy, R., Awasthy, S., Singh, N., Adki, S, & Dhal, S. (2022). The Impact of COVID - 19 on Digital Payment Habits of Indian Households, Bulletin of Monetary Economics and Banking, volume 25. https://doi.org/10. 2109 8/ be mp. v25i0. 18 2 3

Shree, S., Pratap, B., Saroy, R., & Dhal, S. (2021). Digital payments and consumer experience in India: a survey based empirical study, Journal of Banking and Financial Technology, 5: 1-20.

Singhal, R, & Gupta, A. (2021). Impact of COVID- 19 on Digital Payment Services at Towns and Villages, International Journal of Creative Research Thoughts (IJCRT), volume 9.www.

Vijai, C. (2019). Fin Tech in India - opportunities and Challenges, SAARJ Journal on Banking & Insurance Research (SJBIR), Vol. 8.

Amin, M. S. B. M., Said, M. F., Chong, C. W., & Yusuf, R. N. R. (2017). Factors that influence utilization of internet payment system in Malaysia from the individual users' perspective. International Journal of Economics and Management, 11(3 Special Issue), 813–829.

Arora, S., & Sandhu, S. (2018). Usage based upon reasons: the case of electronic banking services in India. International Journal of Bank Marketing, 36(4), 680–700. https://doi.org/10.1108/IJBM-03-2017-0060.

Bezhovski, Z. (2016). The Future of the Mobile Payment as Electronic Payment System. European Journal of Business and Management, 8(8), 127–132.

Bashir, I., & Madhavaiah, C. (2015). Consumer attitude and behavioural intention towards Internet banking adoption in India. In Journal of Indian Business Research (Vol. 7, Issue 1). https://doi.org/10.1108/JIBR-02-2014-0013

Chaddha, P., Agarwal, B., & Zareen, A. (2021). Investigating the effect of the credibility of celebrity endorsement on the intent of consumers to buy digital wallets in India. Indian Journal of Economics and Business, 20(1), 63–79.

Doa, N. H., Tham, J., Khatibi, A. A., & Azam, S. M. F. (2019). An empirical analysis of cambodian behaviour intention towards mobile payment. Management Science Letters, 9(12), 1941–1954. https://doi.org/10.5267/j.msl.2019.7.011

Winata, L. F. A., & Permana, D. (2020). The Effect of Electronic Coupon Value to Perceived Usefulness and Perceived Ease-of-Use and its Implication to Behavioural Intention to Use Server-Based Electronic Money. International Journal of Innovative Science and Research Technology, 5(1), 147–158.

#### **APPENDIX-I**

#### **Scheduled questionnaire**

### Exploring User Acceptance of Digital Payment: An Empirical Study among Middle- Aged People in Nagaon district of Assam

Respondents,

I am conducting a survey on "Digital Payment Systems". This questionnaire is for academic research designed to assess factors inducing customers to make their payments using digital modes. Your information will be kept confidential and the responses will be aggregated for further analysis of the study. I appreciate your participation. Kindly respond unbiased answers. Thank you.

### Section I IDENTIFICATION

#### 1. Basic Details of Household:

Area(Rural/	Age	Caste	Occupation(	Education	Marital	Annua
Urban)		(code	Code-2)	(Code-3)	Status	1
		1)			(code-4)	Incom
						e
						(Code-
						5)

Code 1, (Caste (SC/ST=1, OBC=2, GN=3, Others 4), Code 2: Cultivator=1, Allied Agricultural Activities=2, Agricultural Labour=3, Other Labour=4, Household Industry=5, Trade or Business=6, Service (Government)=7, Service (Private)=8, 9 = MNREGA 10 = Housewife, Other (Specify)=11. Code 3: (only for 6+years) Illiterate=1, Literate but below primary=2, Primary=3, Secondary (5 to 10 std) =4, Higher Secondary=5, Technical=6, Graduation =7, Non-formal=8. P.G = 9 Code-3 (Unmarried=1, married=2, widow=3, Divorced=4)) code 5: NIL=1, Below 2Lakhs=2, 2Lakh -4Lakhs=3, 4Lakhs -8Lakhs=4, Above 8lakhs=5

#### **SECTION-II**

### ONLINE BANKING DETAILS AND DPS (DIGITAL PAYMENT SYSTEM) PATRONAGE

- 1. Which type of Bank you prefer the most (multiple choice)
  - a) Public sector Bank
  - b) Private sector Bank
  - c) Co-Operative Bank
  - d) Industrial Development Bank
  - e) Agricultural Bank
  - f) Retail Bank
  - g) Foreign Bank
- 2. Would you prefer using net banking instead of visiting your bank?
  - a) Always
  - b) Often
  - c) Sometimes
  - d) Rare
  - e) Never
- 3. Which mode you prefer the most to do online banking?
  - a) Bank's Website(ICICI bank, HDFC bank, Axis bank, etc)
  - b) Bank's Apps (ICICI iMobile Application, Pay Zapp, Kotak- 811 & Mobile Banking App, State Bank of India YONO App, etc)
- 4. How many years you have been using digital modes for payments?
  - a) 0-2 years
  - b) 2-4 years
  - c) 4-6years
  - d) More than 6 years
- 5. Which device you prefer the most to do your digital payment?
  - a) Personal Computers/Laptops
  - b) iPads / Tablets
  - c) Mobile Phones
- 6. Are you aware of the availability of various digital payment modes?
  - a) Yes
  - b) No

### 7. Please tick your most preferred digital payment mode (multiple choices)

DIGITALPAYMENTMODES	Ticks
Credit Cards, Debit Cards	
Online Banking(NEFT,RTGS,IMPS,	
ECS)	
Mobile Wallets(Apps like Paytm, Mobikwik, Tez, PayU etc.,)	
Mobile Banking(Apps of various banks)	
QR Code Scanning Payment	
BBPS(Bharat Bill Payment System)	
UPI(Unified Payments Interface)	

### **SECTION-III**

## FACTORSAFFECTINGMIDDLE AGED PEOPLES PERCEPTIONTOWARDS DIGITAL PAYMENT SYSTEMS:

Please indicate the extent to which you agree or disagree with each of the following statements (where DPS=Digital Payment Systems; Strongly Agree=SA, Agree =A, Neutral=N, Disagree=DA, Strongly Disagree=SDA)

STATEMENT	SDA	D	N	A	SA
1.DPS transfers are completed quickly when					
compared to traditional methods					
2.DPS saves travel time and energy as we need not to					
stand in queue in banks or to pay utility Bills					
3. Within few minutes even the high value					
transfers can be made in DPS					
5.DPS saves time as it is available 24x7					
6. DPS improves the speed of transaction.					
7.DPS helps to improve my performance in					
making payments.					
8.DPS enables me to accomplish my task more					
quickly.					
9.DPS plays a vital role in my payment					
activities.					
10.DPS aids in enhancing my effectiveness in					
making payments.					
11. I trust each participant involved in DPS					
12. I trust on the ability of DPS to protect my privacy					

13. I trust DPS as it will not lead to transaction fraud.			
14. After most of my friends use digital payment, I will consider to use it.			
15. Use of DPS is valued in my circle of family and friends			
16. The people around me encourage me to use DPS			
17. I can make the financial transactions quickly using DPS			
18. DPS saves my time and I find more time for my productive work			
19. I will use digital payment more frequently in the future		_	

### **SECTION-IV**

# OPINIONS, SUGGESTIONS AND COMMENTS ON DIGITAL PAYMENT SYSTEMS

1.	If you	disagree	with the	usage of	f DPS then	, what's `	your opinion?
----	--------	----------	----------	----------	------------	------------	---------------

2.	Your	suggestions	and	comments	to	improve	Digital	Payment	Systems
	Opera	ation							

\*\*\*\*\*\*\*THANKS FOR YOUR PARTICIPATION \*\*\*\*\*\*\*