

Digital Payment Dynamics: An In-Depth Exploration of Adoption Trends across Generations X, Y, and Z in Kamrup Metro District, Assam

¹Rejeena Begum
²Dipankar Malaka

Abstract

This research investigates the variables that influence the acceptability of online payments by people of Kamrup Metro, Assam. In order to collect information from people living in the area, the quantitative research used cross-sectional questionnaires. This research investigated a wide range of issues about the reasons why consumers choose to use digital payment methods. It was found that digital literacy was important, that confidence in these approaches mediated, that smartphone ownership moderated, that perceived usefulness and convenience directly affected, and that smartphone ownership mediated. As the data demonstrate, the processing of payments online is not only feasible but also beneficial. Additionally, there was a correlation between digital literacy and approach to adoption. There is evidence from studies indicating the possession of smartphones makes the adoption of electronic currency more difficult, which may lead to an increase in the use of electronic money transfers. The perception of how simple and widespread digital payment methods are also has an effect on people's faith in digital payment systems. This demonstrates the significance of trust in the process of promoting adoption.

Keywords: *Digital payments, Financial Technology, Social networking, Business, Marketing Research.*

Introduction

Digital payments made possible by credit or debit cards, online banking, and mobile payment apps have become essential to 21st-century civilization (Patil et al., 2020). Mobile payment systems (MPS) have transformed worldwide transactions by making them convenient, rapid, safe, and cost-effective (Salloum et al., 2019). Recent years have seen significant rise in digital payments acceptance in India (*India Digital Payments: 2020 Country Adoption Report*, 2020).

The COVID-19 epidemic has changed economic activity and consumer behavior, especially digital payments. This trend offers businesses, especially banks, a unique chance to grow and attract more customers. Thus, understanding consumer adoption motivations and preferences requires studying this phenomenon's behavioral and psychological elements (Patil et al., 2020). Such research can help organizations create more successful advertising tactics, improving their market competitiveness (Rosário & Raimundo, 2021).

In 2018, India has 1 billion mobile phone users and 530 million smartphone users (de la Torre, I., Torralba, L., & Rivera, 2018). About half of India's 300 million internet users use mobile payment services like Gpay and Phonepe. This increase in usage highlights digital payment technologies' importance in India's economic transformation (Singh et al., 2020).

As customer behavior develops dynamically, studying these changes is crucial. People view and interact with financial transactions differently in the digital age. Understanding changing consumer preferences and habits, especially for digital payments, is crucial. This study examines how customer behavior changes over time, notably in digital payment uptake across age groups.

Thus, understanding Generation X, Y, and Z dynamics is vital since these cohorts have diverse behaviors determined by their socio-economic circumstances. Generation X, born between the mid-1960s and early 1980s, was independent and adaptable during extreme economic and social change. Millennials are tech-savvy and optimistic, growing up amid rapid technology development and globalization. Generation Z, born between the mid-1990s and the early 2010s, are digital natives who value inclusivity, diversity, and social conscience (Samler & Ciobanu, 2020).

¹ Research Scholar, Deptt. of Commerce, Krishna Kanta Handique State Open University (KKHSOU), Guwahati-781022, Assam, India; rezinabegum99@gmail.com

² Asst. Professor, Deptt. of Commerce, Krishna Kanta Handiqui State Open University (KKHSOU) Guwahati-781022, Assam, India; dpmalakar1984@gmail.com

Literature Review

According to (Ghosh, 2021), examined digital payment systems, their acceptance, use trends, and future prospects. The growth of digital transactions since Demonetization, enabling successful integration of digital wallets in India. The study aims to compile various writers' discussions on digital payment acceptance, advancing the government's Digital India initiative and transitioning the nation to a digital economy.

(Ranjith et al., 2021) Online shopping is gaining popularity in India, enhancing cash flow. This study aims to understand internet users' comfort with online financial transactions and their thoughts on alternatives to cashless payments. It reviews digital transactions, highlighting their advantages and disadvantages. The results highlight the rapid growth of e-commerce in India and provide insights for customers.

(Sarkar, 2019) explored the progress of digital payment systems and the factors influencing their perception. Both theoretical and practical studies, highlighting the need for immediate digitization in the paperless economy. India, like other industrialized and developing countries, is attempting to eliminate money through e-wallets, debit/credit cards, internet banking, and cellphones.

(Pradiatiningtyas et al., 2020) Go Pay and OVO are the most popular digital wallet apps in Indonesia, with millennials showing a strong preference for digital payments. The authors investigate millennials' happiness and loyalty to digital payments, focusing on Yogyakarta and Go-Pay. They find digital payment methods practical, hassle-free, and simplify tracking small transactions.

(Nur & Panggabean, 2021) explored the reasons Gen Zers and millennials use mobile phones for online purchases, focusing on trust, perceived delight, social influences, and performance expectations. It uses the enlarged UTAUT model to understand their intentions towards mobile payment systems.

(Kristensen & Solvoll, 2019) Digitalization has disrupted the media sector, altering consumer consumption of free and commercial media. Generation Z uses digital books and local newspapers for both paid and unpaid purposes. Norwegian polls show Facebook as their primary news source, while paper books remain preferred. The Norwegian book sector faces competition from Storytel and similar streaming services in the audiobook market, as audiobooks have a larger user base.

(Putri et al., 2017) suggests further research on digital payment habits among Indonesian youths in Bandung City. Junadi's model, incorporating the UTAUT, identifies factors like security and cultural standards influencing acceptance of electronic payment systems. The survey indicates that a significant portion of Generation Z in Bandung City uses electronic payment methods, suggesting the potential for widespread adoption.

(Leang et al., 2023) investigated the usage of digital payment methods by different age groups in Phnom Penh, Cambodia. It also explores the link between adoption rates, economic conditions, and mobile payment use. The research reveals that the elder generation is increasingly accepting digital payments, and the majority speaks English as a second language.

Research GAP

Studies tracking the rates of digital payment use by the X, Y, and Z generations provide a wealth of information on the changing nature of the financial transaction landscape. However, further studies are clearly required to determine the exact effects of cultural and technology variables on adoption rates across all age groups. The research sheds light on disparities according to age, but it falls short when it comes to dissecting how cultural norms, technical preferences, and digital literacy levels influence people's openness to accepting digital payment methods. If we want to improve adoption rates and make sure that people of all ages can easily integrate digital payment methods, we need to understand these complex aspects.

Aim of the Study

The aim of this study is to investigate in detail how Generations X, Z, and Y make digital payments. The primary goal of this research is to examine how impediments, preferences, and age disparities impact the rate of adoption of electronic payment systems.

Objectives

1. To determine the extent to which Convenience and Utility Perception directly influences the Adoption of Digital Payment among individuals in the Kamrup Metro District.
2. To investigate the impact of the Level of Digital Literacy on the Adoption of Digital Payment among individuals residing in the Kamrup Metro District, Assam.
3. To investigate whether Smartphone Ownership moderates the relationship between Convenience and Utility Perception and Adoption of Digital Payment.
4. To assess whether Trust in Digital Payment Systems acts as a mediator in the relationship between Convenience and Utility Perception and the Adoption of Digital Payment.

Hypothesis

1. Convenience and Utility Perception significantly influence the Adoption of Digital Payment among individuals in the Kamrup Metro District.
2. The Level of Digital Literacy significantly influences the Adoption of Digital Payment among individuals in the Kamrup Metro District
3. Smartphone Ownership moderates the relationship between Convenience and Utility Perception and Adoption of Digital Payment, indicating that the impact varies based on smartphone ownership.
4. Trust in Digital Payment Systems acts as a significant mediator in the relationship between Convenience and Utility Perception and the Adoption of Digital Payment, indicating that trust plays a crucial role in influencing adoption patterns.

Research Methodology

The study's design anticipates examining the variables influencing Kamrup, Assam residents' acceptance of digital payments. A quantitative method will be used to collect information regarding a representative sample of district citizens for the survey. The investigation's parameters will be measured using structured questionnaires. SEM examination with the Amos program.

Sampling Design:

Probability sampling methods, including random sampling, will ensure that the district is representative of all of its constituents. The necessary level of precision and certainty will determine the sample size, which will be 250.

Random Sampling Technique:

The word "random sampling" describes a way of gathering information where each possible respondent has an equal opportunity to be selected. Choosing a random subset of a community's members from a bigger pool of potential respondents is a common way to get results that are indicative of the overall. Many people think that using a random sample technique is the easiest way to get data from a population. One common recommendation when utilizing random sampling is to only choose samples once,

$$P = 1 - (N - 1/N)(N - 2/N) \dots (N - n/N) \quad P = 1 - (N-1/N)(N-2/N) \dots (N-n/N_{-(n-1)})$$

$$P = 1 - (N-1/N)(N-2/N) \dots (N-n/N_{-(n-1)})$$

'Here, P stands for probability, n for sample size, and N for population.

Now, $P = n/N$ will be the outcome if $1 - (N-n/N)$ is cancelled. Furthermore, it is crucial to provide for a variety of sample options: $P = 1 - (1 - (1/N)) n$

Data Collection Instrument:

A thorough questionnaire will be developed in accordance with the study objectives. Factors such as smartphone ownership, assessments of the device's usefulness and usability, degree of computer proficiency, confidence in electronic payment systems, and readiness to use such systems will be evaluated using a Likert scale.

Variables:

Independent Variables:

- Convenience and Utility Perception
- Level of Digital Literacy.

Dependent Variable:

- Adoption of Digital Payment.

Mediating Variable:

- Trust in Digital Payment Systems.

Moderating Variable:

- Smartphone Ownership.

Data Collection Procedure:

The Kamrup Metro District's public areas, residential neighborhoods, and markets are among the venues where participants will be contacted. Gathering data will include distributing the questionnaire to qualified individuals in person or virtually, depending upon practicality and accessibility.

Data Analysis:

The critical variables and demographic information will be compiled using descriptive statistics. The connections between dependent and independent variables will be examined using SEM analysis. The impact of smartphone ownership on the link between the sense of ease and utility and the acceptance of digital payments will be analyzed using moderation analysis. By using mediation analysis, we can determine whether the perception of digital payment systems' usefulness and convenience influences their adoption or if confidence in these systems mediates this connection.

Results

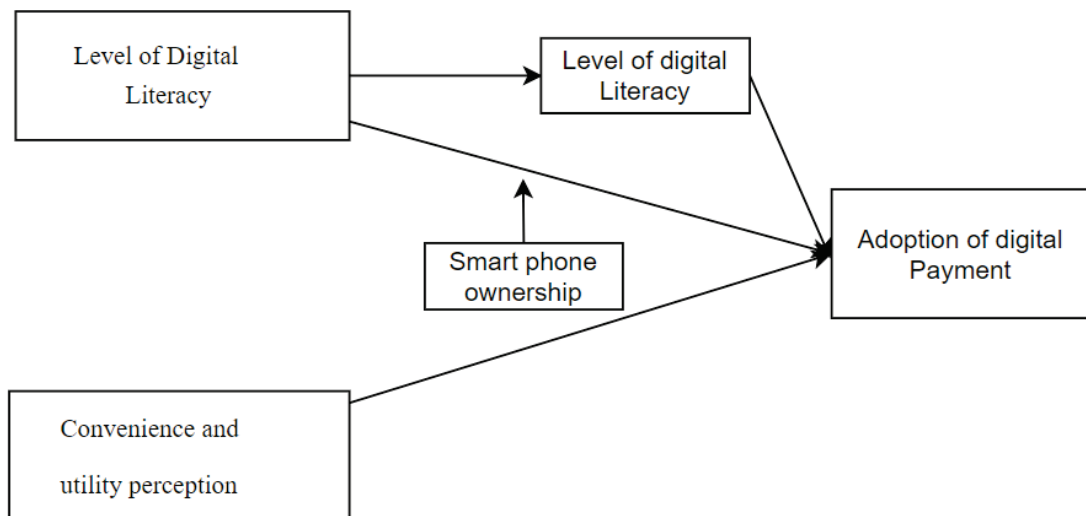


Figure 1 Conceptual Frame work

		Frequency	Percent
Age	18-34 years	115	46.0
	35-54 years	98	39.2
	55+ years	37	14.8
	Total	250	100.0
Location	Rural	164	65.6
	Urban	86	34.4
	Total	250	100.0
Income level	Low-income	110	44.0
	Middle-income	64	25.6
	High-income	76	30.4
	Total	250	100.0

Table 1 Demographic variables

The data shows the 250 sample group members based on their demographics. The age group of 18–34 comprises the bulk of the sample (46.0%). The age group that makes up the next most significant portion of the sample is 35–54, accounting for 39.2% of the total, followed by 55 and over, which makes up 14.8%. Sixty-five per cent of the sample is from rural regions, while just thirty-four per cent is from urban areas. With 30.4% of earnings classified as high income, 25.6% as middle income, and 44.0% as low income, there is an extensive range in the income distribution.

SEM (structural equation modelling):

Structural Equation Modelling (SEM) is a versatile statistical tool used in various disciplines like sociology, economics, and psychology to analyze complex relationships between factors. It combines factor and regression analysis, integrates latent components, tests multiple hypotheses, accounts for measurement error, and interprets complex causal pathways.

Measurement model and validity:

Research relies on validity along with measurement models to guarantee the capture of correct and relevant data. What this means is that researchers may use any observable variable that is either directly connected to the concepts being evaluated or the latent constructs that support them to evaluate abstract ideas.

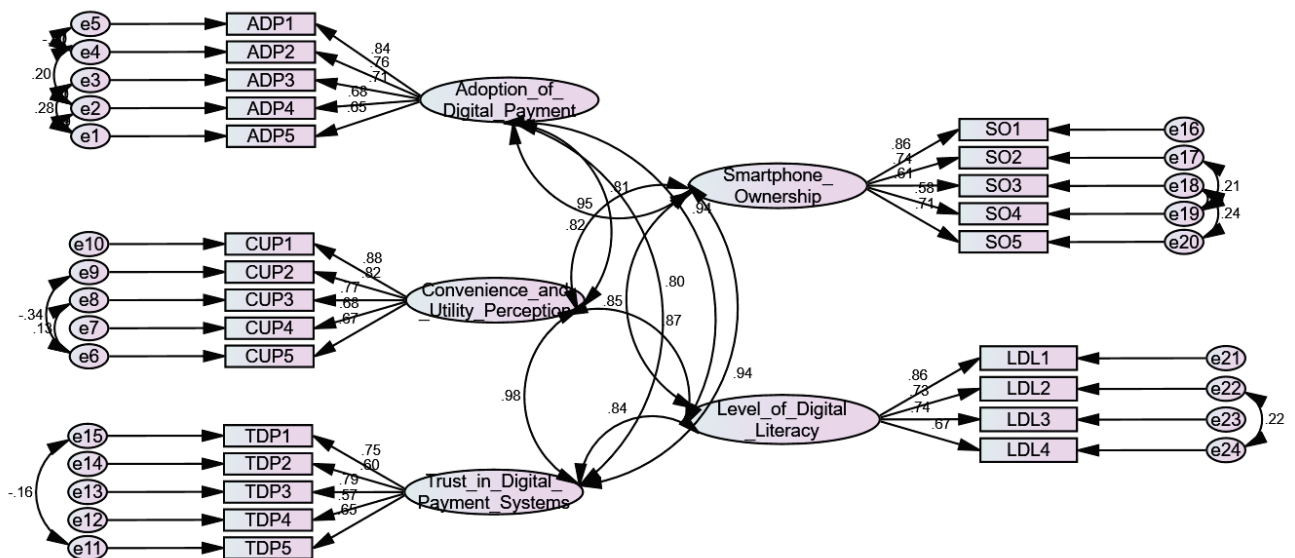


Figure 2 Measurement Model and Validity

	Path	Unstandardized Estimate	S.E.	Standardized Estimates	C.R.	P
ADP5 <---	Adoption of Digital Payment	.858	.075	.652	11.446	***
ADP4 <---	Adoption of Digital Payment	.893	.079	.683	11.281	***
ADP3 <---	Adoption of Digital Payment	1.000		.709		
ADP2 <---	Adoption of Digital Payment	1.073	.098	.760	10.962	***
ADP1 <---	Adoption of Digital Payment	1.145	.094	.840	12.134	***
CUP5 <---	Convenience and Utility Perception	1.000		.671		
CUP4 <---	Convenience and Utility Perception	1.035	.104	.684	9.919	***
CUP3 <---	Convenience and Utility Perception	1.161	.099	.770	11.773	***
CUP2 <---	Convenience and Utility Perception	1.122	.110	.822	10.206	***
CUP1 <---	Convenience and Utility Perception	1.678	.136	.883	12.355	***
TDP5 <---	Trust in Digital Payment Systems	1.000		.655		
TDP4 <---	Trust in Digital Payment Systems	.945	.116	.665	8.162	***
TDP3 <---	Trust in Digital Payment Systems	1.345	.123	.792	10.890	***
TDP2 <---	Trust in Digital Payment Systems	.824	.095	.604	8.655	***
TDP1 <---	Trust in Digital Payment Systems	1.186	.122	.751	9.714	***
SO1 <---	Smartphone Ownership	1.000		.862		
SO2 <---	Smartphone Ownership	.761	.055	.740	13.761	***
SO3 <---	Smartphone Ownership	.647	.061	.613	10.563	***
SO4 <---	Smartphone Ownership	.557	.057	.678	9.789	***
SO5 <---	Smartphone Ownership	.759	.059	.711	12.966	***
LDL1 <---	Level of Digital Literacy	1.000		.857		
LDL2 <---	Level of Digital Literacy	.747	.056	.728	13.277	***
LDL3 <---	Level of Digital Literacy	.765	.056	.742	13.681	***
LDL4 <---	Level of Digital Literacy	.631	.054	.666	11.709	***

Table 2 Regression Weights: (Group number 1 - Default model)'

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.960
Bartlett's Test of Sphericity	Approx. Chi-Square	3896.672
	df	276
	Sig.	.000

Table 3 KMO and Bartlett's Test'

The suitability test using KMO and Bartlett's factor analysis showed strong statistical significance, indicating a sufficient sample size. Confirmatory Factor Analysis (CFA) confirmed the device's accuracy, with factor loadings higher than the 0.5 criterion, indicating the instrument's validity.

Factors and items	Cronbach alpha values	Post CFA factor loadings	AVE	CR
Adoption of digital payment	0.869		0.7288	0.4631869
ADP1		0.840		
ADP2		0.760		
ADP3		0.709		
ADP4		0.683		
ADP5		0.652		
Convenience and Utility Perception	0.867		0.766	0.48801387
CUP1		0.883		
CUP2		0.822		
CUP3		0.77		
CUP4		0.684		
CUP5		0.671		
Trust in Digital Payment Systems	0.795		0.6934	0.43853644
TDP1		0.751		
TDP2		0.604		
TDP3		0.792		
TDP4		0.665		
TDP5		0.655		
Smart phone ownership	0.853		0.7208	0.45770267
SO1		.862		
SO2		.740		
SO3		.613		
SO4		.678		
SO5		.711		
Level of Digital Literacy	0.843		0.74825	0.36792456
LDL1		.857		
LDL2		.728		
LDL3		.742		
LDL4		.666		

Table 4 Post CFA, Cronbach alpha, factor loadings

Discriminant validity:

‘Discriminant validity is less often used to a single statistical test in SPSS or another platform and more frequently used to evaluate the validity of measuring devices and the degree of correlations between variables. Because it ensures that different ideas or variables are not assessing the same core notion, discriminant validity is essential for research.

	Adoption of digital Payment	Convenience and Utility Perception	Smartphone Ownership	Trust in Digital Payment System	Level Of Digital Literacy
Adoption of digital Payment	0.853229				
Convenience and Utility Perception	.683**	0.875214			
Smartphone Ownership	.685**	.790**	0.832466		
Trust in Digital Payment System	.668**	.840**	.789**	0.848528	
Level Of Digital Literacy	.773**	.738**	.682**	.717**	0.86487

Table 5 Discriminant Validity Test’

The measure of discriminant validity evaluates the extent to which different ideas vary with respect to digital literacy, smartphone ownership, perceptions of convenience and utility, confidence in the

digital payment system, and payment uptake. These structures have a strong association, as shown by the correlation matrix coefficients, which range from .668 to .875.

Utilizing the NFI (Normed Fit Index), RFI (Relative Fit Index), GFI (Goodness of Fit), along with CFI (Comparative Fit Index), findings were significantly greater than 0.90, indicating a well-represented quality of fit ($\chi^2 = 417.159$) for the sample data. The calculated values of RMSR (Root Mean Square Residuals) and RMSEA (Root Mean Square Error using Approximation) are less than the crucial limit of 0.080, measuring 0.047 and 0.057, respectively. With RMSEA for 0.057, RMR for 0.047, GFI for 0.972, along with CFI of 0.951, the findings demonstrated a very strong model fit.'

Proposed Hypothesis:

H1: Convenience and Utility Perception significantly influence the Adoption of Digital Payment among individuals in the Kamrup Metro District.

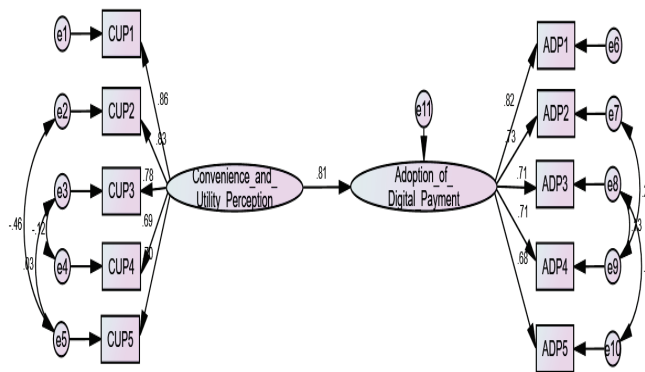


Figure 3 Hypothesis 1 relation

	Path		Unstandardized Estimate	S.E.	Standardized Estimates	C.R.	P
Adoption of Digital Payment	<---	Convenience and Utility Perception	.804	.080	.813	10.108	***
CUP1	<---	Convenience and Utility Perception	1.432	.089	.858	16.012	***
CUP2	<---	Convenience and Utility Perception	1.000		.833		
CUP3	<---	Convenience and Utility Perception	1.033	.075	.780	13.707	***
CUP4	<---	Convenience and Utility Perception	.920	.078	.692	11.867	***
CUP5	<---	Convenience and Utility Perception	.920	.091	.703	10.066	***
ADP1	<---	Adoption of Digital Payment	1.126	.098	.825	11.444	***
ADP2	<---	Adoption of Digital Payment	1.026	.100	.726	10.260	***
ADP3	<---	Adoption of Digital Payment	1.000		.709		
ADP4	<---	Adoption of Digital Payment	.936	.087	.714	10.819	***
ADP5	<---	Adoption of Digital Payment	.890	.080	.676	11.156	***

Table 6 Regression Weights: (Group number 1 - Default model)

The adoption of digital payments is shown in the table along with user opinions about their usability and ease of use as variables in a theoretical structural equation model. Here, practicality and convenience of use are the independent factors, while the adoption of digital payment systems is the dependent variable. The results show that there is a positive association ($\beta=.813$, $P<.05$) between the statistical significance and usability for digital payment processing.

With a standard value of 0.813, the line that connects convenience and utility to the adoption of digital payments demonstrates a positive association. The very high correlation coefficients and C.R. values demonstrate the statistical importance of the links that have been found.

Variable	Value	Variable	Value
Chi-square value(χ^2)	52.381	NFI	0.963
Degrees of freedom (df)	28	IFI	0.982
CMIN/DF	1.871	CFI	0.982
P value	0.073	RMR	0.043
GFI	0.957	RMSEA	0.059
RFI	0.940		

Table 7 Model fit summary

When the accuracy of fit was compared to the Comparative Fit Index ($\chi^2 = 52.381$), Goodness of Fit, Incremental Fit Index, Normed Fit Index, along with Relative Fit Index, the sample data was accurately recreated. The root mean square error (RMSE) and rational mean square residual (RMSR) approximation values are both less than the 0.080 threshold, at 0.059 and 0.043, respectively. Several measures, including RMSEA (0.059), RMR (0.043), GFI (0.957), along with CFI (.982), were used to assess the model's fit for the data.

H2: The Level of Digital Literacy significantly influences the Adoption of Digital Payment among individuals in the Kamrup Metro District.

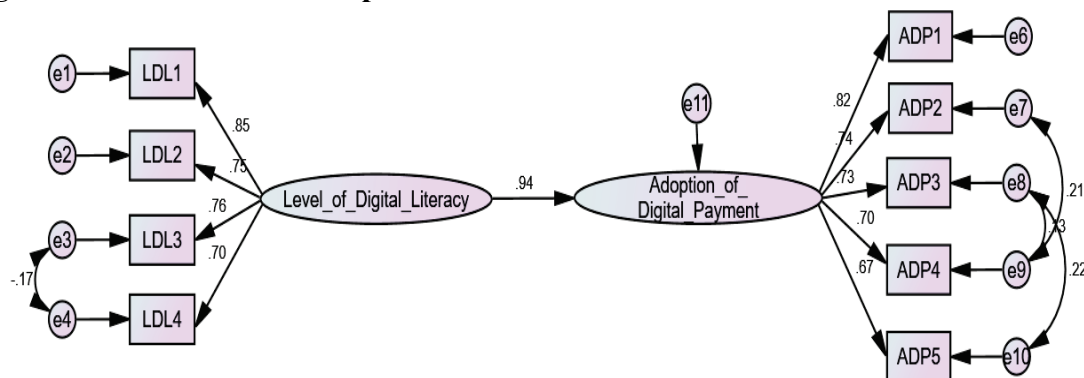


Figure 4 Hypothesis 2 relation

Path		Unstandardized Estimate	S.E.	Standardized Estimates	C.R.	P
Adoption of Digital Payment	← Level of Digital literacy	.897	.083	.937	10.758	***
LDL1	← Level of Digital literacy	1.281	.095	.846	13.435	***
LDL2	← Level of Digital literacy	1.000		.750		
LDL3	← Level of Digital literacy	1.017	.086	.759	11.838	***
LDL4	← Level of Digital literacy	.863	.080	.701	10.835	***
ADP1	← Adoption of Digital payment	1.083	.088	.817	12.262	***
ADP2	← Adoption of Digital Payment	1.011	.091	.736	11.054	***
ADP3	← Adoption of Digital Payment	1.000		.730		
ADP4	← Adoption of Digital Payment	.889	.079	.698	11.192	***
ADP5	← Adoption of Digital Payment	.860	.075	.672	11.480	***

Table 8 Regression Weights: (Group number 1 - Default model)

Using a hypothetical structural equation model, shown as a table, the degree of digital literacy and the acceptability of digital payments are represented as two interdependent variables. The current model considers digital payment acceptance as the dependent variable and digital literacy level being the independent variable. Considering a normalized coefficient of 0.937, the route linking the two variables demonstrates a positive correlation between the adoption of digital payments and level of digital literacy. Given the substantial magnitudes of the correlation coefficient values (C.R. values), it is plausible that the established associations have statistical significance. Consequently, seven different fit indices were used to assess the overall model fit, and the total of these indices showed a positive and statistically significant relationship between work satisfaction and digital literacy.

Variable	Value	Variable	Value
Chi-square value(χ^2)	53.676	NFI	0.957
Degrees of freedom (df)	22	IFI	0.974
CMIN/DF	2.440	CFI	0.974
P value	0.062	RMR	0.037
GFI	0.953	RMSEA	0.076
RFI	0.930		

Table 9 Model fit summary

The values of goodness of fit (GFI) = 0.953, normalized fit index (NFI) = 0.957, comparative fit index (CFI) = 0.974, incremental fit index (IFI) = 0.974, centeredness of fit ($\chi^2 = 53.676$), and relative fit index (RFI) = 0.930 were significantly higher than the average of 0.90. We get the Root Mean Square Error of Approximation (RMSEA) = 0.076 and the Rational Mean Square Residuals

(RMSR) = 0.037 below the 0.080 criterion. A model's ability to match the data was determined by looking at its RMSEA of 0.076, RMR of 0.037, GFI of 0.953, along with CFI of .974.

H3: To investigate whether Smartphone Ownership moderates the relationship between Convenience and Utility Perception and Adoption of Digital Payment.

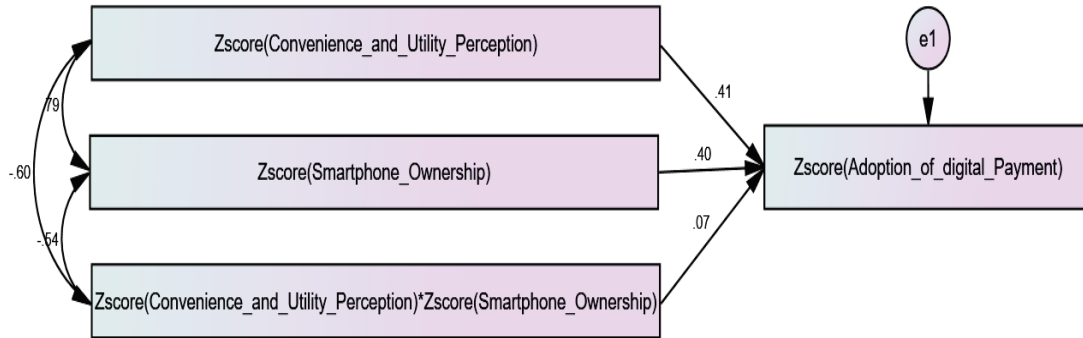


Figure 5 Hypothesis 3 relation

Path	Unstandardized Estimate	S.E.	Standardized Estimates	C.R	P
Zscore(Adoption of digital Payment) ← Zscore(Convenience and Utility Perception)	.408	.076	.408	5.402	***
Zscore(Adoption of digital Payment) ← Zscore(Smartphone Ownership)	.399	.072	.399	5.543	***
Zscore(Adoption of digital Payment) ← Interaction(Zscore(Convenience and Utility Perception)*Zscore(Smartphone Ownership))	.063	.051	.068	1.234	.217

Table 8 Regression Weights: (Group number 1 - Default model)

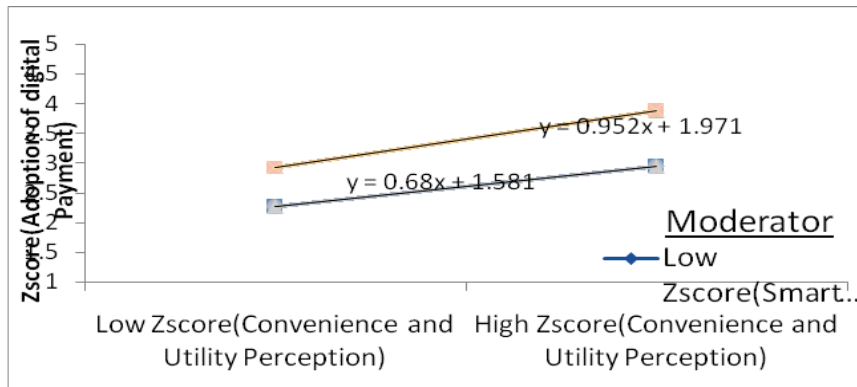
Zscore-Structural Equation Model (SEM) relationship analysis The Zscores for "Utility and Convenience Perception," "Digital Payment Adoption," and "Smartphone Ownership" function as moderators, as shown in Table 11. The path analysis hypothesis states that the Zscores for convenience, perceived usefulness, along with adoption of digital payments have a substantial and positive connection ($\beta=0.408$, $P>0.05$). There is a substantial positive correlation ($\beta = 0.399$, $P<0.05$) between the Zscores for smartphone ownership along with adoption of digital payments.

Moderation testing:

Convenience and a feeling of utility coupled Smartphone ownership constitutes a dependent variable, acceptance of digital payments was a dependent variable, along with Zscores constitute independent factors. Zscores are moderator variables in the moderation analysis. Based on the standardized scores of the variables, interaction terms are constructed using SPSS to ascertain the result.

Path	Unstandardized Estimate	S.E.	Standardized Estimates	C.R.	P
Zscore(Adoption of digital Payment) <--- Interaction(Zscore(Convenience and Utility Perception)*Zscore(Smartphone Ownership))	.063	.051	.068	1.234	.217

Table 11 Regression Weights



The study found that the Zscore (Smartphone Ownership) significantly influences the Zscore (Adoption of Digital Payment) when considering its moderating impact. This contradicts the predicted association, indicating a positive relationship between the two factors. The robust fit of the model was assessed using various global fit indices and 'r'.

Variable	Value	Variable	Value
Chi-square value(χ^2)	5.787	NFI	0.987
Degrees of freedom (df)	2	IFI	0.991
CMIN/DF	2.893	CFI	0.991
P value	0.055	RMR	0.038
GFI	0.995	RMSEA	0.056
RFI	0.960		

Table 12 Model fit summary

The quality of fit metrics show that the sample data is well-represented and all of them exceed the 0.90 restrictions. These measures include $\chi^2 = 5.787$, NFI = 0.987, IFI = 0.991, GFI = 0.995, RFI = 0.960, along with CFI = 0.991. Root Mean Square Residuals (RMSR) = 0.038 and Root Mean Square Error of Approximation (RMSEA) = 0.056 are higher than the necessary level of 0.080. The given mathematical model showed a respectable fit, with RMSEA of 0.056, RMR of 0.038, GFI of 0.995, along with CFI of 0.991.

H4: Trust in Digital Payment Systems acts as a significant mediator in the relationship between Convenience and Utility Perception and the Adoption of Digital Payment, indicating that trust plays a crucial role in influencing adoption patterns.

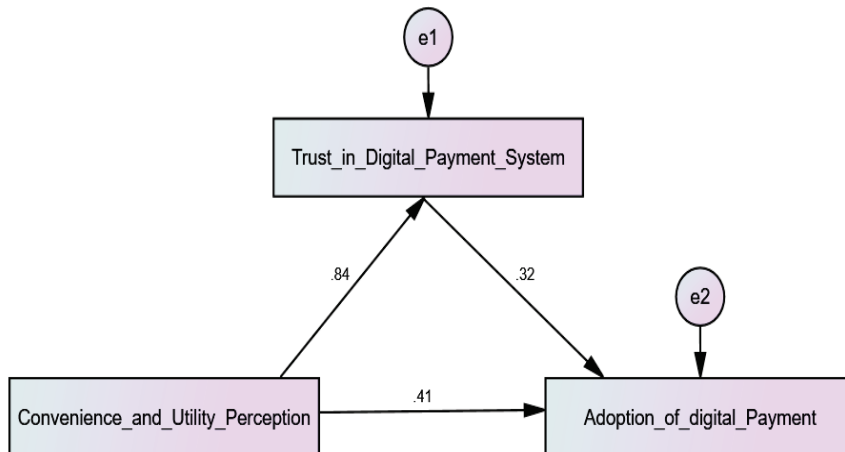


Figure 6 Hypothesis 4 Mediating relation

Path	Unstandardized Estimate	S.E.	Standardized Estimates	C.R.	P
Trust in Digital Payment System <--- Convenience and Utility Perception	.717	.029	.840	24.387	***
Adoption of digital Payment <--- Trust in Digital Payment System	.369	.095	.321	3.882	***
Adoption of digital Payment <--- Convenience and Utility Perception	.406	.081	.413	4.993	***

Table 13 Regression Weights: (Group number 1 - Default model)

The table displays the findings of a route analysis that looked at the connections between survey respondents' evaluations of the system's affordability, practicality, trustworthiness, and simplicity of use. The degree of confidence that an individual has regarding digital payment systems along with their perceived ease of use are shown to be strongly positively correlated ($\beta = 0.717$, $p < 0.05$). Greater usage rates of digital payment systems are linked to greater levels of confidence in these systems, as seen by the significant connection ($\beta = 0.369$, $p < 0.05$) found between the two. Clients utilize digital payment methods more often when they see them as easy to use and advantageous ($\beta = 0.406$, $p < 0.05$).

	Convenience and Utility Perception	Trust in Digital Payment System
Trust in Digital Payment System	.000	.000
Adoption of digital Payment	.270	.000

Table 14 Standardized Indirect Effects (Group number 1 - Default model)

The adoption of digital payments is significantly influenced by the perception of convenience and usefulness, with trust acting as a mediating element. The study highlights the importance of self-assurance in facilitating the adoption of digital payment systems.

Variable	Value	Variable	Value
Chi-square value(χ^2)	679.129	NFI	0.929
Degrees of freedom (df)	159	IFI	0.944
CMIN/DF	4.2712	CFI	0.944
P value	0.072	RMR	0.062
GFI	0.936	RMSEA	0.069
RFI	0.924		

Table 15 Model fit summary

The quality of fit ($\chi^2 = 679.129$) demonstrated that the sample data was well represented, with significantly higher values for the NFI (0.929), the Incremental Fit Index (0.944), the Normalized Fit Index (0.929), the Goodness of Fit (0.936), the Relative Fit Index (0.924), along with the Comparative Fit Index (0.944). Both the square root error of approximation (RMSEA) = 0.069 and the square root residuals (RMSR) = 0.062 have roots that are smaller than the threshold value of 0.080. Based on all the data, the given model was determined to be well-fitting, with RMSEA of 0.069, RMR of 0.062, GFI of 0.936, along with CFI of 0.944.

Conclusion

Cryptocurrency attitudes and behaviors among Kamrup Metro District people were investigated in this study. As the first impression of the ease and practicality of digital methods correlates positively and strongly with digital payment acceptance ($\beta=0.813$, $p<0.05$), Individuals are inclined to use

these tactics if they see them as simple and advantageous. The significant relationship between digital literacy and its adoption ($\beta=0.937$, $p<0.05$) suggests that those who are more adept with digital tools are more likely to employ digital payment methods. Individuals who see digital payment methods as user-friendly and convenient are more inclined to use them. Studies show that while utilizing a smartphone, this influence is lessened ($\beta=0.068$, $p<0.05$). The degree to which consumers trust digital payment methods over traditional ones is a significant factor in their choice for them. This illustrates the importance of IT proficiency, district-wide assurance in conveying the need of these adjustments, perspectives on the user-friendliness of technology-based transactions, and rates of technology-related literacy.

References:

- de la Torre, I., Torralba, L., & Rivera, J. (2018). *The Fintech Revolution*. October. Ghosh, G. (2021). Adoption of digital payment system by consumer: a review of literature. *International Journal of Creative Research Thoughts*, 9(2), 2320–2882.
- India Digital Payments: 2020 Country Adoption Report. (2020). Nasscom. Kristensen, L.-B. K., & Solvoll, M. (2019). Digital payments for a digital generation. *Nordic Journal of Media Studies*, 1(1), 125–136.
- Leang, P., Ramsamy, S. S., Phaphuangwittayakul, A., & Loahavilai, P. (2023). Consumer Perceptions and behaviors on Digital Payment Adoption Among Older Generation Z and Younger Millennials in Phnom Penh, Cambodia. *International Journal of Professional Business Review*, 8(8), e03647. <https://doi.org/10.26668/businessreview/2023.v8i8.3647>
- Nur, T., & Panggabean, R. R. (2021). Factors Influencing the Adoption of Mobile Payment Method among Generation Z: the Extended UTAUT Approach. *Journal of Accounting Research, Organization and Economics*, 4(1), 14–28. <https://doi.org/10.24815/jaroe.v4i1.19644>
- Patil, P., Tamilmani, K., Rana, N. P., & Raghavan, V. (2020). Understanding consumer adoption of mobile payment in India: Extending Meta-UTAUT model with personal innovativeness, anxiety, trust, and grievance redressal. *International Journal of Information Management*, 54, 102144. <https://doi.org/https://doi.org/10.1016/j.ijinfomgt.2020.102144>
- Pradiatiningtyas, D., Dewa, C. B., Safitri, L. A., & Kiswati, S. (2020). The Effect of Satisfaction and Loyalty towards Digital Payment System Users among Generation Z in Yogyakarta Special Region. *Journal of Physics: Conference Series*, 1641(1). <https://doi.org/10.1088/1742-6596/1641/1/012110>
- Putri, R., Rahadi, A., & Murtaqi, I. (2017). A Conceptual Study on the Use of Electronic Payment Instruments among Generation Z in Bandung City. *Journal of Global Business and Social Entrepreneurship (GBSE)*, 3(9), 32–40. <https://www.researchgate.net/publication/322356949>
- Ranjith, P. V, Kulkarni, S., & Varma, A. J. (2021). A literature study of consumer perception towards digital payment mode in India. *Psychology and Education*, 58(1), 3304–3319.
- Rosário, A., & Raimundo, R. (2021). Consumer marketing strategy and e-commerce in the last decade: A literature review. *Journal of Theoretical and Applied Electronic Commerce Research*, 16(7), 3003–3024. <https://doi.org/10.3390/jtaer16070164>
- Salloum, S. A., Al-Emran, M., Khalaf, R., Habes, M., & Shaalan, K. (2019). An Innovative Study of E-Payment Systems Adoption in Higher Education: Theoretical Constructs and Empirical Analysis. *Int. J. Interact. Mob. Technol.*, 13, 68–83.
- Samler, D., & Ciobanu, C. N. (2020). Waking Up Generation Z. *Peace Review*, 32(3), 332–341. <https://doi.org/10.1080/10402659.2020.1867350>
- Sarkar, M. P. (2019). Literature review on adoption of digital payment system. *Global Journal of Enterprise Information System*, 11(3), 62–67.
- Singh, N., Sinha, N., & Liébana-Cabanillas, F. J. (2020). Determining factors in the adoption and recommendation of mobile wallet services in India: Analysis of the effect of innovativeness, stress to use and social influence. *International Journal of Information Management*, 50, 191–205. <https://doi.org/https://doi.org/10.1016/j.ijinfomgt.2019.05.022>