Customer Perception on E Payments

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Abstract

The purpose of this article is to provide an insight into the determinants of Customer Acceptance of ePayment Systems. This Paper presents a study on certain specific independent variables i.e., Funds Transfer, Customer Benefits, Transaction Safety, External Regulator, and Customer Awareness. that impact the Customer Perception on ePayments. A study of findings analysis from a literature survey of more than 300 articles (mostly from 2015–2022).Technology has become a part of all walks of life and across all commercial sectors, and even more so in banking. There has been massive use of technology across many areas of banking business in India, both from the asset and the liability side of a bank's balance sheet. Distribution channels have massively increased the choices offered to the customer to conduct transactions with ease and expediency. Many wholesale and retail payment and settlement systems have enabled faster means of moving the money to settle funds among banks and customers, facilitating improved turnover of commercial and financial transactions. Banks have been taking up new projects like data warehousing, customer relationship management, and financial inclusion initiatives to further innovate strategies for the future and to widen the reach of banking.

The dependence on technology is such that the banking business cannot be thought of in isolation without technology; such has been the spread of technology footprints across the Indian commercial banking landscape. The impact of these independent variables on adoption is measured in the form of research outcomes identified through the literature survey.Keeping in view the changing threat environment and the latest international standards, it was felt that there was a need to enhance Central Bank guidelines relating to the governance of Information Technology (IT), and information security measures to tackle cyber fraud apart from enhancing independent assurance about the effectiveness of IT controls.

Keywords: E-Funds Transfer System, Customer Benefits, Transaction Safety, External Regulator, Customer Awareness, E-Payment System, Customer Satisfaction, Card Services, Internet payments – Real Time Gross Settlements (RTGS), Immediate Payment System (IMPS), National Electronic Funds Transfer (NEFT), Technology Adoption Model (TAM), Customer Acceptance, E-commerce Security Trust.

1.0   INTRODUCTION

Digital payments transpire through internet based operational methods which need no physical exchange of money. The Internet based ePayment systems have increased major acceptance, leading to the emergence of numerous modes of financial transactions.The society is benefitted from the incremental increase in the development of information and communication technology (ICT). The ICT paved the way to access a huge amount of information the geographical boundaries have been made as history by the IT and IT-enabled services. A stage has been set that with the ICT use there is an enormous potential for business growth, creativity, and dynamic growth in any spectrum of commerce. The digital payment system is more important to enforce successful monetary policies with monetary transactions and across the world, the impact of digital payments influences economic and financial activities globally. (Feyen et al., 2021). Digital technology is promoted particularly on mass media and cyberspace (Chaveesuk, Singha& Khalid, Bilal &Chaiyasoonthorn, Wornchanok. 2021).

An enormous Increase in consumer usage of information communication technology gave growth in commerce, data processing, marketing, communication, purchase and sale processing, network of distribution, quick customer service, and all client-based services. Precisely, digital E-payments are the important pillars of the E-commerce business. The internet, internal and external electronic networks are widely used by Banks, non-banking finance companies, Insurance Companies, online retailers, and digital payment Systems on day-to-day routines specifically. Each country is growing fast in utilizing digital payment Systems.The digital payment system is more important to enforce successful monetary policies with monetary transactions and across the world, the impact of Digital Payments influences economic and financial activities globally. digital technology is promoted particularly on mass media and cyberspace (Chaveesuk, Singha& Khalid, Bilal &Chaiyasoonthorn, Wornchanok. 2021) (Feyen et al., 2021) (Rangaswamy et al., 2020; Solomon &Klyton, 2020).The Web Software Solutions play a neat-and-tidy role in performing one or more of the functions of Net-based solutions. The Banking industry and Insurance Industry was facing a huge challenge of payment and Receipt system. The Reconciliation of entries between inter and intra Banks was huge leading to fraud. Introduction of Effective Digital Payment System in the Economic driven Industries to a certain extent defunct the occurrence of fraud in the system.Each country is growing fast in utilizing digital payment systems. An enormous increase in consumer usage of information communication technology gave growth in commerce, data processing, marketing, communication, purchase and sale processing, network of distribution, quick customer service, and all client-based services. Precisely, digital e-payments are the important pillars of the e-commerce business. Digital banking includes many different banking tools and leanings, but one thing is certain that the digital banking is on the rise. The customer expectations on the banking industry officials are increasing day by day since the personal touch with bankers are reduced to minimum level that leads to this research.

Digitalization in Banking Sector: Digitization has enabled banks to leverage the power of data analytics and artificial intelligence (AI) to make better business decisions and offer personalized services to customers. By collecting and analysing customer data, banks can tailor their services to meet the specific needs of each customer. Major benefits of digital banking are, Business efficiency which is not only do digital platforms improve interaction with customers and deliver their needs more quickly, they also provide methods for making internal functions more efficient. (Bastari, A., Eliyana, A., Syabarrudin, A., Arief, Z., &Emur, A. P. 2020)**.**The factors driving the digital transformation in banking are numerous, including changing customer expectations, increased competition from new fintech entrants, regulatory requirements, and the need for increased efficiency and cost savings

Digital Payment System: Digital payments include any method of transferring money or digital currency between two parties using digital payment technologies. This commonly includes several types of digital payments: Online electronic payment systems: Electronic bank transfers, echecks, and wire transfers**.**There are various types of digital payment methods are cropped up and name a few, various banking cards, mobile smart phones, internet banking, point of sale, UPI.Digital payment is a web-based payment mechanism. The use of internet-based modern banking services takes banking money transfer transactions more accurate and less time-consuming. A number of transactions can be performed simultaneously, neat, tidy, accurate, and increased productivity. The Digital payment service emanates with an internet-based user interface that allows customers to access with a unique passcode to accomplish their bank accounts and business transactions wherever they are. Digital payments one of the best benefits is it is a paperless cashless payment process

Types of Digital Payment: There are various types and modes of digital payments. Importantly, the types of Digital Payment prevailing include Services under unified payments interface (UPI), and, unstructured supplementary service data (USSD). More Specifically they are plastic cards based on credit and debits, web-based Internet Banking, mobile wallets, digital payment apps, bank prepaid cards, mobile banking, etc. Some of the terminology used in the finance industries are real time gross settlements (RTGS), immediate payment system (IMPS), national electronic funds (NEFT), credit/debit cards to stimulate the growth of commerce and industries with a paperless and cashless economy.
The benefits include the convenience of end-users to operate anywhere and anytime irrespective of the geographical location. (Ghosh, G. 2021). Again, the end-users enjoy the contactless operations between the seller or service provider to

the end-user. It helped and was more so familiarised during the pandemic scenario. The digital payment system made geographical boundaries as History.

Customer Acceptance of Digital Payments: The factors that determine the acceptance of e-payment system. The large acceptance of e-payment systems was also influenced by five factors, namely, data security, trust, ease of use, usefulness and accessibility. A quantitative methodology was used in this study. Data was collected through a questionnaire survey. (Ghosh, G. 2021).

Security on Digital Payments: The security in digital banking transaction is important because protecting the user's assets is the primary goal of cybersecurity in banking. In the present Government regulations, more people become cashless, additional acts or transactions go online. People conduct transactions using digital payment methods like debit and credit cards, which must be protected by cybersecurity. The security issues in ebanking are that every consumer wants the privacy of their transactions. Threats of hacking and unauthorized access to the bank's systems are additional sources of e-banking security risk. These types of security risks are solved by Regulatory authority's time and again but it is an ongoing work of Regulators based on the newly erupting security risks and end user's requirement. (Sahi, A. M., Khalid, H., Abbas, A. F., Zedan, K., Khatib, S. F., & Al Amosh, H. 2022, April). The biggest risk on digital banking includes failure of IT system or cyber-attacks that result in data breaches or unauthorized transactions. Secondly, Human errors such as mishandling of customer data or incorrect data entry.Finally, fraud, corruption, or embezzlement by employees or external parties.

Research Problems: The Research problem of Digital Payment are Identity theft and compromised personal information are potential dangers in a cashless economy, but privacy might be compromised in other ways too. When we pay digitally, we always leave a digital footprint, and this footprint is easily monitored by financial institutions.The problems with digital payments and Challenges in digital payment systems in India are Weaning away from cash during the Funds Transfer. Though the Customer is benefitted out of digital payment they fear to accept because of lesser Digital Financial Awareness and lesser Digital Financial literacy. More so, the end users expect End-user protection bxy the Regulatory authorities' and proper Transaction safety system implemented and transparent to the end users. Daud, I., Nurjannahe, D., Mohyi, A., Ambarwati, T., Cahyono, Y., Haryoko, A. E., ...& Jihadi, M. (2022). The Research problems are introduced with five gaps, namely Funds Transfer, Customer Benefit, Transaction safety, Government and External Regulations, and Customer Awareness. We made a thorough study to fill these gaps from the literature review and supported findings are applied therefore. (Wang, D., & Li, G. 2022)

The following five independent variables and a dependent variable are explained in detail along with the literature supports and its importance:
Independent Variables
   1. Funds Transfer (FT)
   2. Customer Benefits (CB)
   3. Transaction Safety (TS)
   4. External Regulators (ER)
   5. Customer Awareness (CA)
      Dependent Variable
Customer Acceptance of Digital Payment System - Outcome measures (OM)
The Research framework, Research Questions, Research Objectives, and Hypothesis are clearly explained after thorough review of literature.

2.0   LITERATURE REVIEW

Introduction: It will outline the Literature review in specific, pointing out the various gaps in the present literature and recommending how the thesis can take this information into writing a new contribution to the further studies. There are five important variables developed from the study of literature namely funds transfer, customer benefits, transaction

safety, external regulator and customer Awareness. The dependent variable for the study was the customer acceptance of digital payments.

Figure1: **A snapshot exemplifying the summary of articles**

From the articles, a Literature Review was done as per the Format below.

Literature Review on Customer Acceptance Of Digital Payment System. By Manohar S Singh DBA 15					
Articl e	Authors (Year), Topic of the Article, Name of the Journal. Vol. No. Issue No.	Major findings	Variables	Research Model/Tool /Theory	Limitations or Scope for further research
1	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.	* It is found in the study that the Digital Payments India helped digitalisation to grow over years. * It is convenient, Cost Savings and ease of use. However, its safety, security, Privacy, ease of technology reach are disadvantages.	Dependent: Customer Acceptance on Digital Payment System Independent: Types of Digital Payment, Safety, Security, Privacy, and ese of Technology	Quantitative Model, Google Literature search cum study	* There is further scope since very less studies have been conducted in the role of digital payment among the retailers. Also, less studies are there in the role of technology in digital payment. There is need for more studies in these areas which future researchers can concentrate. There is scope for further studies by using primary data collection and analysis. If the security concerns are addressed and more awareness is created especially in villages, more people will adopt digital payment which will make the process easier and faster.

Factors Influencing the Adoption of Digitalisation for Payments: The factors influencing the adoption of digitalisation in payment system is that both perceived security and trust have positive impact on using e-payment systems. (Ghosh, G. 2021). The results insist on technical and transaction procedures, and access to security guidelines being the most influential factors on perceived trust of customers**.** The factors influence adoption of technology is shaped by several aspects, such as the perceived benefits and costs of adopting a new technology, the availability and affordability of complementary inputs and services, the social and cultural norms and preferences of users, and the awareness and information about the technology. The predictors of technology adoption are data on the adoption and use of technology such as computers have generally shown that a number of factors, such as education, socioeconomic status, attitudes toward the technology, the perceived benefits of technology, and access to technology, influence technology adoption.

These factors are treated as independent variables of the topic of the thesis.

Funds Transfer (FT): Several researches focus that the customers transfer funds or pay bills digitally. Difficulties in funds transfer are concerned are technical issues, security risks, limited consumer protection, and fees are some of the drawbacks of computer-generated payments. (Wang, D., & Li, G. 2022) pointed out that Computer generated payments are in need of internet access and may be inaccessible in areas where access to the internet is limited or unreliable. Studies on Funds transfer proved that efficient payment system will speed up the liquidity flow of an economy. The Funds Transfer involves educating the different digital transfer methods, training on funds transfer methods, creating awareness to customers on technology, conveying benefits of digital transfer and educating the end users the cost effective and time saving. The main disadvantages of digital systems are data security, privacy concerns, complexity, social disconnect, and crime. Through this study we have found various precedence literature reviews and found outcome measures.

The digital payment system is popularised mainly due to the benefits to end-users like cost effective and time saving.The detailed literature review has been conducted as per the above template for identifying the measures of funds transfer. Accordingly, the most important five measures are identified based on the frequency analysis namely Education of Customer, Training on fund transfer methods, Digital awareness, Benefits of digital Transfer, and Cost effective.

H1.1 – Fund transfer has a significant relationship with Customer Acceptance of Digital Payments Through methods of Education of Customer, Training on fund transfer methods, Digital awareness, Benefits of digital Transfer, and Cost effective.

Customer benefit (CB)

With a large number of organizations conducting business this way, it has become evident that the field of e-commerce has a promising future ahead and businesses are going to obtain maximum benefit from it (JaskiratKaur 2021). In real world we have two distinct types of payment systems:

     i.   internet-based payment system- there are four models of internet-based payment system, e-cash, credit card, debit card, smart card.

     ii.   Electronic transaction-based payment system- there are four models of internet-based payment system, secure electronic transaction, cyber cash, net bill, first virtual holdings digital payment is a web-based payment mechanism.

The use of internet-based modern banking services takes banking money transfer transactions more accurate and less time-consuming. A number of transactions can be performed simultaneously, neat, tidy, accurate, and increased productivity. The digital payment service emanates with an internet-based user interface that allows customers to access with a unique passcode to accomplish their bank accounts and business transactions wherever they are. Digital payments one of the best benefits is it is a paperless cashless payment process.

The detailed literature review has been conducted as per the above template for identifying the measures of customer benefits. Accordingly, the most important five measures are identified based on the frequency analysis namely time saving, self-controlled transactions, safe and secured, cost reduction, and data availability.

H1.2 Customer Benefit has a significant relationship with customer acceptance of digital payments through the method of time saving, self-controlled transactions, safe and secured, cost reduction, and data availability.

Transaction Safety (TS)

Alhammadi, AmeenaAbdulrahman, and Muhammad Usman Tariq (2020) found that a competitive environment has to be maintained by the banks and online transaction facility providers to continue innovation to foster new services and products to reduce costs of transactions for customers and businesses.SajuShaha, Kazi Md. Yusuff (2020) finds that customers who are ethically exposed view that company differently from others and feel secured to deal with again without any hesitations; most of the time these satisfied customers work as a free brand ambassador though word of mouth because customers believe customers more.

The detailed literature review has been conducted as per the above template for identifying the measures of transaction safety. Accordingly, the most important five measures are identified based on the frequency analysis namely safety of transaction, protection of password, away from hackers, secrecy of transaction, and security confirmation.

H1.3 Transaction Safety significantly impacts Customer Acceptance of Digital Payments through the method of safety of transaction, protection of password, away from hackers, secrecy of transaction, and security confirmation.

External Regulator (ER)

Pandey, S. K. (2022) found that most of the central banks around the world conduct payments log studies to assess useful variables at the individual level and observe their impact on payment behaviour. In the future, such studies may be continued with a larger sample and in a more structured manner.

In accordance with the fast-changing technology scenario, the department of information technology (DIT), in its immediate reply to extraordinary challenges due to the pandemic epidemic scenario, adopted a practical approach by leveraging technology. (RBI Annual Report 2020-2021). Though it has got such benefits, the end-users had several issues related to regulatory norms, network issues, secrecy, safety, security, trust, confidentiality, frauds. This led to non-popularise the digital payment system at the beginning of introductions. On the continual efforts of the government through a correction in implementation and regulatory authorities making the digital payment system rectifying the above issues coupled with the benefits emend-users enjoy, the system gets momentum with the end users in the developing countries

The detailed literature review has been conducted as per the above template for identifying the measures of external regulators. Accordingly, the most important five measures are identified based on the frequency analysis namely training to bankers, monetary literacy, awareness of digitalisation, perceived usefulness, regulation of digital transfer system

H1.4 External Regulators have a significant relationship with customer acceptance of digital payment through the method of training to bankers, monetary literacy, awareness of digitalisation, perceived usefulness, regulation of digital transfer system.

Customer Awareness (CA)

The outlay of funds gateway, which has the important delicate sensitive information, is protected with the proper guarantee by the transaction processors. The data are protected from hackers. The application has well protected the fraudulent and phishing activities which are most popular in internet usage. However, due to the lack of awareness and knowledge, these services have not been fully utilized by customers (Kaur, S. J., Ali, L., Hassan, M.K., & Al-Emran, M., (2021) & Fernando, M. H. M et al 2021, opines that it clearly shows that though there are online bill settlement opportunities are available in Sri Lankan, the targeted people are not much aware about it and also on the other hand, most of the respondents of this study is belonging to the age category of 35-55 and it shows that the older generation is very much unaware about the online bill payment services.

The findings of this study suggest that in order to strengthen the e-payment system consumer awareness, convenience, security, availability of e-payment tools, incentives and legal framework are the factors which can fillip the usage. It is clear that customer have to move farther to get more acquainted with this system. More we use the new technology more it will be friendlier with us. The detailed literature review has been conducted as per the above template for identifying the measures of Customer Awareness. Accordingly, the most important five measures are identified based on the frequency analysis namely clarity in regulatory norms, service quality of operations, availability of internet, operations of smart phones in rural areas, and machine learning.

H1.5 Customer Awareness has a significant relationship with customer acceptance of digital payments through the method of clarity in regulatory norms, service quality of operations, availability of internet, operations of smart phones in rural areas, and machine learning.

Similarly, a detailed literature review has been conducted as per the above template for identifying the measures of customer acceptance of digital payment systems. Accordingly, the most important five outcome measures are identified based on the frequency analysis namely, financial planning, increasing revenue, guaranteeing of trust security, compliances, and conscious knowledge on products.

By using above identified independent variables and its measures, dependent variable and its outcome measures the following frame work has been developed. Then, the research questions, objectives, and hypothesis are framed and shown below.

3.0 RESEARCH FRAME WORK

Figure -2.
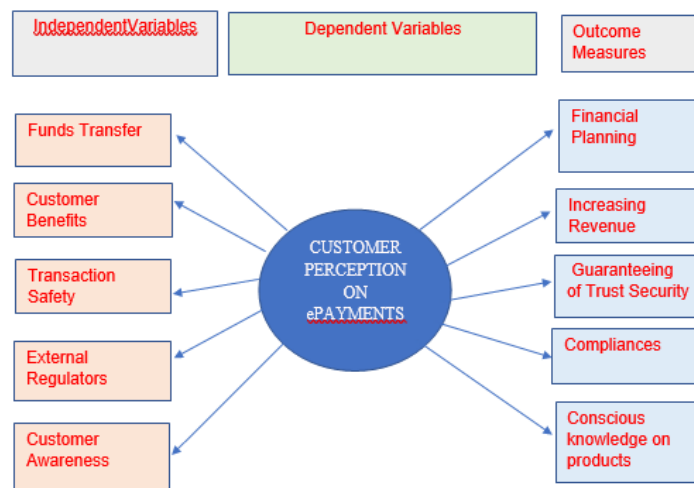
The outcome measures are identified as follows.

a. Financial planning (Sutrisno, S., Cakranegara, P. A., Asri, F., Yusuf, M., &Sahala, J. 2022)
b. Increasing revenue (Daud, I., Nurjannahe, D., Mohyi, A., Ambarwati, T., Cahyono, Y., Haryoko, A. E., ... & Jihadi, M. 2022)
c. Guaranteeing of trust and security (Sasongko, D. T., Handayani, P. W., &Satria, R. 2022)
d. Compliances (Nouri, A., Khadem, S., Mutule, A., Papadimitriou, C., Stanev, R., Cabiati, M., ... & Carroll, P. 2022).
e. Conscious knowledge on products (Sahi, A. M., Khalid, H., Abbas, A. F., Zedan, K., Khatib, S. F., & Al Amosh, H. 2022, April).
f. Methodological development of the hypotheses

Table 1: Research Questions, objectives and Hypothesis.

Research Questions	Research Objectives	Hypotheses
RQ 1. Does Fund Transfer impact the customer acceptance of Digital Payments?	RO 1 - To understand fund transfer relationship with customer acceptance of digital payment.	H1.1 – Fund transfer significantly impacts Customer Acceptance of Digital Payments
RQ 2. Does Customer Benefits impact the customer acceptance of Digital Payments?	RO 2 - To understand Customer Benefits relationship with customer acceptance of digital payment.	H1.2 Customer Benefit significantly impacts Customer Acceptance of Digital Payments
RQ 3. Does Transaction Safety impact the customer acceptance of Digital Payments?	RO 3 - To understand Transaction safety relationship with customer acceptance of digital payment	H1.3 Transaction safety significantly impacts Customer Acceptance of Digital Payments
RQ 4. Does External Regulator impact the customer acceptance of Digital Payments?	RO 4 - To understand External Regulator relationship with customer acceptance of digital payment	H1.4 External Regulator significantly impacts Customer Acceptance of Digital Payments
RQ 5: Does Customer Awareness impact the customer acceptance of Digital Payments?	RO 5 - To understand Customer Awareness relationship with customer acceptance of digital payment	H1.5 Customer Awareness significantly impacts Customer Acceptance of Digital Payments
Over and above five hypothesis ten indirect hypothesis were developed, tested and the detailed analysis and interpretations were shown in Chapter 4.		

Conclusion: The Literature Review section presents a synthesis of the available research on this topic through secondary sources of data published online, identifying research gaps, positioning the article and constructing a model based on the gaps found. Five independent variables and one dependent variable emerged from this study. The independent variables are funds transfer, customer benefit, transaction safety, external regulator, and customer awareness. The dependent variable is customer acceptance of digital payments, as measured by the research outcomes. By considering above gaps, the research framework, the research questions, research objectives, and hypothesis are framed as above.

The next section will define the research methodology in detail, justifying the specific research methods used in this thesis, the sources of data, how the survey instrument was constructed and used, details of the pilot and main studies, sample collection, the profile of the respondents, demographic factors, and further.

4.0   RESEARCH METHODOLOGY

In the Literature review methodology, the Scholarly research study plays a vital tool, spread over and, the literature review tool is the most popular, prevalent, and widespread. The quantitative methodology provides the junior and academic researchers a further scope and insights on the relevant topic of research to fill the gap for further studies.

In our research, we have searched Google Scholar, ProQuest, Ebsco and Academia for similar research articles from the latest years as a database collection with key hit words. In terms of the publication trend, the earliest research papers identified in the sample literature were dated from 2018 to 2023. We have jotted down the findings in an Excel Form with the Heads from the Author reference to Citation, major findings

Sources of Data: Data was assimilated from both primary and secondary sources, and at different stages of the research process. Collecting data ethically was of utmost importance at every stage.

Primary data: Primary data is data that is collected first-hand by the researcher. This was sought in the second stage of the study, when the survey instrument was ready for circulation. The questionnaire was uploaded to Google Forms. There were no interviews conducted by phone or at any physical location. Each of the 444 respondents were contacted personally through email, WhatsApp or LinkedIn.

Secondary Data: Data collected from previously done research, existing research is summarised and collated to enhance the overall effectiveness of the research. Secondary data is research data that has formerly been collected and can be retrieved by researchers. The term contrasts with primary data, which is data collected directly from its source. The first stage of the study elaborates a thorough literature review, from secondary sources, discovering methodically the +spare of articles published on leading international platforms including RBI office site. Around 900 articles have been read to understand the subject in depth from which we have selected around 250 for the use of this research study to give text citation and references in this research. The articles were collected and analysed from dependable sources like Google Scholar, ProQuest, Ebsco and Academia, in that order. These articles helped classify the key research gaps through their limitations and their scope for further research. The Articles are mainly from 2018 to 2023 were considered. The literature review is a combination presence of most of these articles.

Ethical Consideration: Categorically voluntary participation, informed consent, confidentiality, anonymity, in Contribution are the guide for research ethics consideration for this survey. A systematic scanning of each potential participant's profile was carried out to ensure the significance of the respondents. They were then briefed about the survey and the intent of the thesis. Care was taken to ensure that the individuals who filled out this survey were honest and knowledgeable (considering their qualified profiles) about the data that was being provided. All other ethical requirements are considered.

Population: The study catered to a broad population. Almost all stakeholders associated with business schools formed a part of the population.

Figure 3: Population for the survey
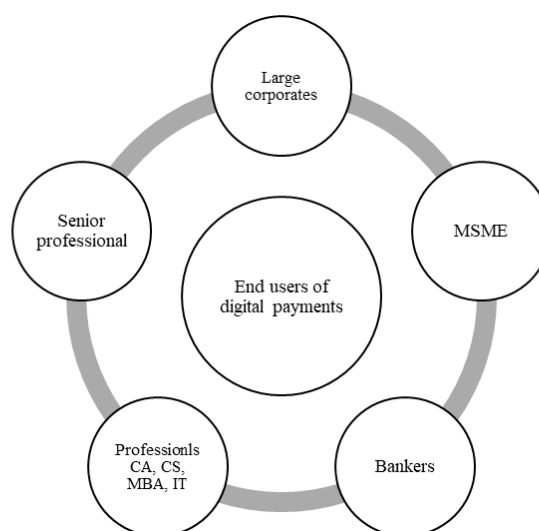
As depicted in Figure 3, the population for the study included large corporates, MSME entrepreneurs, Professionals line CAs, CSs, MBAs, IT professionals, Bankers, and Senior Professionals are all formed a generous part of the population. Corporate end users and entrepreneur stakeholders at global level participated, locational demography not being restricted. While taking samples from the population, author considered potential contributor carefully.

Design and Construction of the Survey Research Instrument: With the outline to get first-hand data for testing the conceptual model, a questionnaire was used as a research survey instrument. Research indicates that the questionnaire is a beneficial and methodical method of data collection for soliciting reliable data from the respondents. The questionnaire in this research served to collect data for both the pilot and the main study, with a common basis used in both iterations.

Pilot Study: Sample Design and Data Collection Procedure: The pilot study was the first opportunity, after the review of research literature, to conduct empirical research. It tested the basic theory proposed in the literature synthesis to ascertain the fitness of the base model and to examine if the positioning of the survey was appropriate in the designed format. Subsequently, the conclusions of the pilot study were used to update and validate the main study design.

Main Study: Sample Design, Assumptions, and Data Collection Procedure: From the broad population of the survey, which ensure all the stakeholders of digital payment system from all over the world, a sample size of 444 respondents was selected by simple random sampling. As elaborated and calculated, the sample size of 444 matched the requirement of adequacy for this research. Respondents were reached through LinkedIn or by their email addresses and profiles listed in the faculty directories published on the university websites. Having accomplished respondents has been a highpoint in this research journey. The questionnaire was circulated on Google Forms, and describes how ethical considerations were the underlying principle of data collection. After thorough cleaning, organising the data as above the author analysed by using ADANCO 2.3.1 software for measurement, structural models which are detailed in data analysis section.

5.0   DATA ANALYSIS

Introduction: The last chapter discussed the research methodology, which detailed the many techniques employed in this investigation. It detailed the research's ethics, the respondents' demographics and other details, and the survey's methodological underpinnings. It also presented the hypotheses as scientifically constructed from the research challenges and objectives and highlighted the technique and statistical tools for the pilot and major investigations.

Analysing and interpreting data are the main topics of this section. The measurement model and the structural model, which incorporates statistical testing of hypotheses, were tested to arrive at useful conclusions using ADANCO 2.3.1, a software package for variability structural equation modelling. Construct reliability, discriminant validity, convergent validity, indicator multicollinearity, validity using cross-loadings, tests and analyses of hypotheses, inter-construct correlations, and loading estimates and t-values for the determinants of all constructs are presented in tables and figures.

Measurement Model: Understanding the connection between concepts and their measures is the measurement model's task. Observables are known as indicators. ADANCO 2.3.1 supports a wide range of measurement model types (Dijkstra&Henseler, 2015).

Construct Reliability: it is the consistency with which a research instrument evaluates a construct over items (by measures like consistency reliability and split-half reliability) and over time (e.g. test–retest reliability). The lack of systematic errors defines reliability as the square of the correlation between the real, but typically unknown, concept and the scores on that construct. ADANCO 2.3.1 provides several indicators for each of the three build reliability quotients:

- Dijkstra–Henseler's rho (Dijkstra & Henseler, 2015)
- Composite reliability (Werts et al., 1978)
- Cronbach's alpha (Cronbach, 1951)

   Table 3 displays the reliability quotients for all constructs. According to Dijkstra and Henseler (2015), a construct's rho value must be larger than 0.7 to be considered internally consistent and reliable; values of 0.8 and 0.9 are regarded as good and excellent, respectively. Any score above 0.9 is excellent (Jöreskog & Sörbom, 2006).

Table 2: *Construct reliability*

Construct	Dijkstra-Henseler's rho (ρ_A)	Jöreskog's rho (ρ_c)	Cronbach's alpha(α)
FT	0.6925	0.8121	0.6934
CB	0.7021	0.8183	0.7026
TS	0.6939	0.8130	0.6917
ER	0.7129	0.8249	0.7136
CA	0.6929	0.8135	0.6940
OM	0.7243	0.8277	0.7205
Note: FT = funds transfer, CB = customer benefit, TS = Transaction safety, ER = External Regulator, CA = customer awareness, OM = Customer acceptance of digital payment system			

Considering the above norms for all three tests, i.e.Dijkstra–Henseler's rho (ρ_A), Jöreskog's rho (ρ_c), and Cronbach'salpha(α), it is confirmed that the reliability levels of this study are generally good or excellent. As per Table 2, all six constructs have a Dijkstra–Henseler's rho close to or above 0.8, which represents the reliability of the constructs is excellent. All constructs have aDijkstra–Henseler's rho (ρ_A) score above 0.7. All six constructs have a Jöreskog's rho (ρ_c) score above 0.8. The reliability of the constructs as per Jöreskog's rho (ρ_c) is good. All the Cronbach'salpha(α) values are close to or above 0.8 and above, indicating excellent reliability. The minimum acceptable value of Cronbach alpha is 0.6, and it is considered highly reliable above 0.70 (Taber, 2018).

Scale Validity: Validity measures how well a measurement tool measures a construct (Hair et al., 2011). A reliable measure is not automatically valid. However, a measure cannot be valid if it is not reliable. The abovementioned tests established the structures' reliability. The validity of the instrument is examined in this section. Validity can be evaluated in various ways. This section will consider three methods of validating the scale: convergent validity, discriminant validity, and cross-loadings.

Convergent Validity: As a parameter, convergent validity ascertains the degree to which two measures of constructs that should theoretically be related are in fact related (Campbell & Fiske, 1959). Average variance extracted (AVE) figures have been analysed to test the convergent validity of the model. AVE measures the amount of variance explained by an unobserved construct in relation to the variance due to random measurement error. The satisfactory threshold for this measurement is 0.5 (Hair et al., 2011). Therefore, a construct withan AVE value greater than 0.5 can be safely assumed to explain a substantial proportion of the variance in the model.

Table 3: *Construct Average Variance Extracted*

Construct	Average variance extracted (AVE)
FT	0.5200
CB	0.5309
TS	0.5222
ER	0.5435
CA	0.5229
OM	0.5474
Note: FT = funds transfer, CB = customer benefit, TS = Transaction safety, ER = External Regulator, CA = customer awareness, OM = Big data adoption.	

In Table 3,theAVE values for all model components are provided. The presence of convergent validity in the model is demonstrated by the results falling in the range of 0.5200–0.5472. It is also possible to observe convergent validity by determining whether the maximum likelihood loading of each indicator is meaningful to its underlying latent (Anderson &Gerbing, 1988; Peter, 1981). The convergent validity also proved with the help of adequacy of loadings on its respective constructs.

Discriminant Validity: Discriminant validity ascertains the degree to which constructs that should theoretically be unrelated are, in fact, unrelated (Campbell & Fiske, 1959). It means that two conceptually different constructs must also differ statistically. ADANCO 2.3.1 offers the Fornell–Larker criterion (Fornell& Larcker, 1981) as an approach to measure the discriminant validity of reflective measures. It suggests that a construct's AVE should be greater than its squared correlations with allotherconstructsinthemodel. Table6,asgeneratedby ADANCO2.3.1, showsthe AVE on its main diagonal and the squared inter-construct correlations in the lower triangle.

Table 4: *Fornelland Larcker's Discriminant Validity*

Construct	FT	CB	TS	ER	CA	OM	
FT	**0.5200**						
CB	0.3966	**0.5309**					
TS	0.3848	0.3823	**0.5222**				
ER	0.4049	0.4607	0.4239	**0.5435**			
CA	0.3339	0.3163	0.4323	0.3694	**0.5229**		
OM	0.4065	0.4114	0.4010	0.4876	0.4787	**0.5474**	
Squared correlations; AVE in the diagonal. Note: FT = funds transfer, CB = customer benefit, TS = Transaction safety, ER = External regulator, CA = customer awareness, OM = Customer acceptance of digital payment system							

If the maximum absolute value from each column and row is located in the central diagonal, then the discriminant validity of the data is said to have been established. This necessitates that the AVE of the diagonal is higher than the average value of the non-diagonal rows and columns (squared correlations). Thus, this model has discriminant validity. The discriminant validity also proved by verifying the cross loadings (No cross loadings were observed)

Indicator Multicollinearity: As the VIF values for all constructs are within the tolerance limit of 5, hence the test confirms that multicollinearity does not exist in the model.

Structural Equation model

The structural model includes exogenous and endogenous constructs and the connections between them. The values of the external constructions are considered to be provided from sources external to the model. Therefore, no arrows in the structural model point to the external constructs because they are not described by the other constructs in the model.

In contrast, the endogenous constructs can be explained by the model's other components. At least one directional arrow in the structural model must point to each endogenous component. Ovals stand for structures, and arrows stand for connections in the model graph. In most cases, a linear correlation is assumed between the various elements.

In scientific endeavours like empirical research, the extent and significance of path correlations are typically emphasised because all residuals are considered uncorrelated, and the structural model built follows ADANCO 2.3.1, which mandates recursion. Multiple autonomous parts with distinct construct names make up the structural models. Empirical research presented in Figure 4 displays the structural model derived from path coefficients using ADANCO 2.3.1.

Figure 4.Shows the structural model using path coefficients brought out by ADANCO 2.0.1 for this empirical research.

Figure4:*Structural Equation Model*
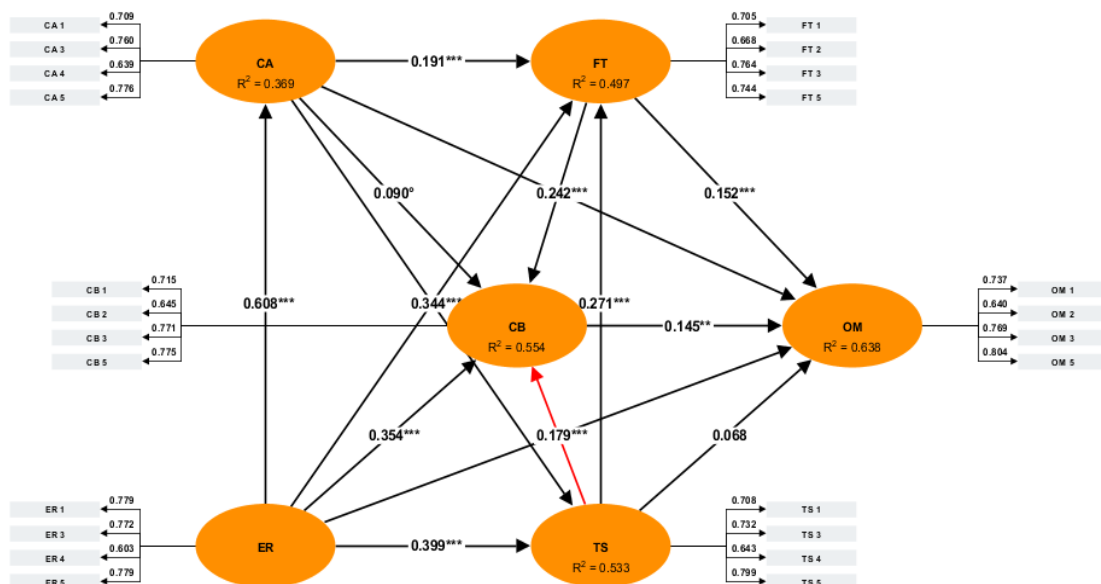
Note: FT = funds transfer, CB = customer benefit, TS = Transaction safety, ER = External regulator, CA = customer awareness, OM = Customer acceptance of digital payment system

Coefficient of determination

Figure 4 shows the structural model with path coefficients in action. Big data adoption in the chemical industry is the dependent variable. The coefficient of determination (R^2) value of 0.638 indicates that 63.8% of the variability in this latent variable is explained by the factors included in this model. This value is quite significant for a model based on PLS regression (Henseler&Fassott, 2010).

The following direct effect table has been used for testing the 15 hypotheses (5 direct relations and 10 indirect relations).

Summary of Hypothesis Testing

The structural equation model generated and analysed 15 cause-and-effect relationships, out of which five direct effects and ten indirect effects.

Table5: *- Direct Effects for testing five direct hypothesis*

1 Table for Testing Direct Hypothesis					
Effect	Original coefficient	Standard error	t-value	p-value (2-sided)	Status
FT -> OM	0.1517	0.0442	3.4291	0.0006	Significant
CB -> OM	0.1449	0.0559	2.5917	0.0096	Significant
TS -> OM	0.0679	0.0494	1.3757	0.1690	**Not Significant**
ER -> OM	0.2674	0.0533	5.0155	0.0000	Significant
CA -> OM	0.3156	0.0493	6.4003	0.0000	Significant

Note: FT = funds transfer, CB = customer benefit, TS = transaction safety, ER = External regulator, CA = customer awareness, OM = Customer acceptance of digital payment system

Based on the β-value, t-value, and p-valuein the above table indicate robust, positive, and strong relation of four independent variables:fundstransfer, customer benefits, external regulator, and customer awareness on customer acceptance of digital payment systems.At the same time based on the β-value, t-value, and p-value it is clear that the transaction safety is not impacting customer acceptance of digital payment system directly but TS is impacting customer acceptance of digital payment system through mediating factors details are shown in the next section.

Based on the findings presented in this thesis and gaps identified in the literature survey, these four areas require more focus to advance customer acceptance of digital payment systems. The literature survey indicates the advancements in these four variables are essential, with the support of policymakers and the government to improve customer acceptance of digital payment systems.

The other one identified variable, transaction safety indirectly effects the customer acceptance of digital payment systems through customer benefits as well as through funds transfer. Refer mediating effect tables and sections pertaining to transaction safety.

Table 6: Indirect/Mediating effects

Indirect/Mediating effects					
S.No	Indirect effects	Coefficient value	t-value	p-value (2-sided)	Status of mediating effect
1	FT ->OM through CB	0.0350	2.3254	0.0200	Significant
2	TS -> OM through FT	0.0411	2.7240	0.0064	Significant
3	TS -> OM through CB	0.1449	2.0651	0.0389	Significant
4	ER -> OM through CA	0.1918	4.7190	0.0000	Significant
5	ER -> OM through FT	0.0522	2.9010	0.0037	Significant
6	ER -> OMthrough CB	0.0513	2.3940	0.0166	Significant
7	ER -> OM through TS	0.0271	1.3440	0.1788	Not Significant
8	CA -> OM through FT	0.0289	2.4873	0.0128	Significant
9	CA -> OM through CB	0.0131	1.5530	0.1203	Not Significant
10	CA -> OM through TS	0.0282	1.3504	0.1769	Not Significant

The outcomes how a mediating effect between independent variables and customer acceptance of digital payments. Even though no significant effect was observed in direct relation between transaction safety and customer acceptance of digital payments, the results strengthened through mediating effect of customer benefits as well as funds transfer.

Details of mediating effects are asfollows:

1. Funds transfer is significantly mediated by customer benefits to impact customer acceptance of digital payment system. (FT ->OM through CB, β=0.0350, t=2.3254, p=0.0200).
2. Transaction safety is significantly mediated by funds transfers to impact customer acceptance of digital payment system. (TS -> OM through FT, β=0.0411, t=2.7240, p=0.0064).
3. Transaction safety is significantly mediated by customer benefits to impact customer acceptance of digital payment system. (TS -> OM through CB,   β=0.1449, t=2.0651, p=0.0389).
4. External regulator is significantly mediated by customer awareness to impact customer acceptance of digital payment system. (ER -> OM through CA, β=0.1918, t=4.7190, p=0.0000).
5. External regulator is significantly mediated by funds transfer to impact customer acceptance of digital payment system. (ER -> OM through FT, β=0.0522, t=2.9010, p=0.0037).
6. External regulator is significantly mediated by customer benefits to impact customer acceptance of digital payment system. (ER -> OM through CB, β= 0.0513, t=2.3940, p=0.0166).
7. External regulator is **mediatedinsignificantly** by transaction safety to impact customer acceptance of digital payment system (ER -> OM Through TS,β=0.0271, t=1.3440, p=0.1788).
8. Customer awarenessis significantly mediated by funds transfer to impact customer acceptance of digital payment system. (CA -> OM through FT, β=0.0289, t=2.4873, p=0.0128).
9. Customer awareness is **mediated insignificantly** by customer benefits to impact customer acceptance of digital payment system. (CA -> OM through CB, β=0.0131, t=1.5530, p=0.1203).
10. Customer awareness is **mediated insignificantly** by transaction safety to impact customer acceptance of digital payment system. (CA -> OM through TS, β=0.0282, t=1.3504, p=0.1769).

Conclusion

The Statistics offered in this chapter used the findings provided by ADANCO 2.3.1. The reliability of the constructs; their convergent and discriminant validity, multicollinearity, inter-construct correlations; and the structural equation model displaying path coefficients were verified to regulate whether the hypotheses remainedright. A total of fifteen hypotheses were tested for five direct effects & ten indirect effects and it's proved that every identified factors is significantly impacting the customer acceptance of digital payment system either directly or indirectly. All aspects of the validation study, including its findings, results, and submissions for customer digital payment systems, are thoroughly separated. The limitations of the study also listed below.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Conclusions on Research Questions and Objectives

The research questions that were raised at the beginning of the thesis were answered by testing and assessing 15 direct and indirect relationships in the form of hypotheses. These hypotheses were generated to provide statistical answers to the research problems raised, and they were tested and explained in earlier sections.

Funds Transfer: *To recognize fund transfer relationship with customer acceptance of digital payment*, sseveral researches focus that the customers transfer funds or pay bills digitally which impact customer acceptance of digital payment system. The main study bore testimony to this, reaffirming the significant influence of funds transfer on the customer acceptance of digital payment system.

Customers Benefit:*To comprehend customer benefits relationship with customer acceptance of digital payment*, a number of transactions can be performed simultaneously, neat, tidy, accurate, and increased productivity. This study moved a step ahead and empirically tested and concluded that the customer benefits impact on customer acceptance of digital payment system.

Transaction Safety:*To evaluate Transaction safety relationship with customer acceptance of digital payment*, Alhammadi, and et al (2020) found that a competitive environment has to be maintained by the banks and online

transaction facility providers to continue innovation to foster new services and products to reduce costs of transactions for customers and businesses.This study moved a step ahead and empirically tested and concluded that the transaction safety impact on customer acceptance of digital payment system.

External Regulator:*To measure External Regulator relationship with customer*
acceptance of digital payment, the earlier literature external regulator relationship with customer acceptance of digital payment system measures as follow: In accordance with the fast-changing technology scenario, the department of information technology (DIT), in its immediate reply to extraordinary challenges due to the pandemic epidemic scenario, adopted a practical approach by leveraging technology. (RBI Annual Report 2020-2021). Though it has got such benefits, the end-users had serval issues related to regulatory norms, network issues, secrecy, safety, security, trust, confidentiality, frauds. This study moved a step ahead and empirically tested and concluded that the external regulator impact on customer acceptance of digital payment system.

Customer Awareness: *To build Customer Awareness relationship with customer acceptance of digital payment,* it is clear that if customer is aware of the complete usefulness of the technology they may not accept easily. Due to the lack of awareness and knowledge, these services have not been fully utilized by customers (Kaur, S. J., Ali, L., Hassan, M.K., & Al-Emran, M., (2021) & (Shaikh et al. 2020).

The findings of this study suggest that in order to strengthen the e-payment system consumer awareness, convenience, security, availability of e-payment tools, incentives and legal framework are the factors which can fillip the usage. It is clear that customer have to move farther to get more acquainted with this system. More we use the new technology more it will be friendlier with us.Our study reaffirming the significant influence of customer awareness on the customer acceptance of digital payment system.

Measures and outcomes of customer acceptance of digital payment system: The literature review helped identified the five outcome measures as benefits of digital payment system namely, financial planning, increasing revenue, guaranteeing of trust security, compliances, and conscious knowledge on products. But the analysis clearly shows that all the outcome measures significantly measures customer acceptance of digital payment system except compliances.

Research Contributions: the research investigated the specific problem of customer acceptance of digital payment system and evaluated the validity of a proposed model. Thus, the research has made significant contributions to the banking sector. The contributions to practice have been made by the research findings and discussions, and from the perspective of research experience.

Contribution to Practice: After data analysis and interpretation, the following strong recommendations are provided to the various stockholders of digital payment system for successful implementation of digitisation of payments in banking industry.

Customer Acceptance of Digital Payment System is a multifaceted, elaborate and compound process. It needs synchronised efforts from several teams and stakeholders to attract users. Although people think a certain technology will benefit them, they may also think it could cause some challenges for them (Cebeci et al., 2019). Hence, a holistic approach is needed to aid users in implementing a new technology such as Customer Acceptance of Digital payment system.

This study is supported by literature reviews and statistics and this research is represented as a model which can assist the Customer acceptance of digital payment system in carefully assessing their current positioning and working on an effective and efficient plan to onboard users from the APAC region onto their platform.

Among all the variables considered for this study that affect the process of customer acceptance of digital payment system adoption customer benefits emerged as a dominant one followed by external regulator who played the next most significant role. This throws light on the importance of setting customer benefits and helping the users with various facilitators for the effective implementation of Customer acceptance of digital payment system in the APAC region.

Decision makers and the stakeholders from the banking industry have a numerous outcomes and suggestions to take home from the following findings:

a. Educating the various stakeholders of the banking operation on the different digital transfer systems like RTGS, IMPS, Google pay, Paytm, NEFT, Plastic cards etc., will ease the users to get acquainted and speed up the digital transaction system which leads to business growth.

b. Providing adequate training to all the stake holders based on the requirement on various applications of funds transfer methods will speed up the adoption of digital payment system which again ensures competitiveness.

c. Awareness to stakeholders on technologycan allow people to use technology more safely, as it can pose a risk to mental and psychological health. It helps stakeholders to understand technology better and self-interest to know the technology development is essential for personal growth and development which further enhance the business in which they work.

d. Digital payment methods have the advantage of cost effective and time saving and less expensive to the business. By incorporating electronic payment methods in every business, one can realize saving on every invoice. Digital payment platforms have increased speed of transactions with time saving and cost reduction in transactions.

e. Entrepreneurs adjust rapidly to their introduction, quickly saving time on fund transfers with competence and comfort while appropriately designed, convenient, and efficient systems. Bank to bank transfer times can vary across financial institutions depending on the type of transfer make.

f. The self-controlled transactions are various modes of digital payments, including UPI, NEFT, AEPS, mobile wallets, and PoS terminals. UPI is the most preferred mode, having crossed the milestone of $1 trillion in the value of transactions.

g. There are various modes of digital payments, including UPI, NEFT, AEPS, mobile wallets, and Point of Sales (PoS) terminals.

h. UPI is the most preferred mode, having crossed the milestone of $1 trillion in the value of transactions. Those who preferred to use the digital payment system enjoy the safe, secured and timely settlement of payments instantaneously.

i. The digital wallets help to eliminate need to carry the physical wallet. They are highly convenient. Also, a better managing is possible as there is management of data from several platforms like bank accounts, credit and debit cards, mobile accounts and billing portals.The different type of data pooled under one roof are all liability side of the end user as well as the asset side of the accounts of the end user.

j. Customers who are ethically exposed view that company is different from others and feel secured to deal with again without any hesitations; most of the time these satisfied customers work as a free brand ambassador though word of mouthbecause customers believe customers more.

k. The legitimization of crime is not limited to deviant subcultures of fulltime cybercriminals. The position on a controversial behaviour can articulate into different facets, as the characteristics of each specific case make applicable different premises. As digital payment systems become more prevalent, cybercriminals are devising new ways to exploit vulnerabilities and steal sensitive information. One of the biggest threats facing digital payment solutions is the risk of data breaches. Hackers may gain access to a system and steal information, bank account numbers, and other personally identifiable information.

l. Tampering the secrecy of transactions can take many forms, such as card scanning, bogus online shopping sites, and phishing scams. These fraudulent activities are designed to steal sensitive information, such as credit card numbers and login credentials, and use it for financial gain, where the end users to be cautious during their transactions.

m. The security requirements for electronic payment systems include authentication, confidentiality, non-repudiation, and integrity. To ensure security do not save bank card details, share passwords and conduct transactions on reliable windows.

n. The bank should run campaigns, promotions and adverts, which aim at educating their customers on the need to adopt electronic payment services. In addition, the campaign must aim at boosting customer confidence in the electronic payment services they provide and assure them of the security and privacy for the need to patronize

these services. This will encourage more customers to adopt the e-banking platform. Hence, more revenue will be generated as they patronize which will intend add up to the profit margins.

o.   Technical knowledge youths from colleges can be nominated to guide the peoples who need assistance in digital payment system.Further it is suggested that in order to support the E-payment system consumer awareness, convenience, security, availability of e-payment tools, incentives and legal framework are the factors which can boost the usage. It is clear that customer have to move farther to get more acquainted with this system. More the use the new technology more it will be approachable with the user

p.   An innovation is easy to understand or use could be considered as Perceived E-Ease of Use. That ease of use is referred to as the extent to which understanding of the technology leads to adaptation of the innovative service/product by customers. The degree to which an individual trusts that using a particular system would boost his or her job efficiency eases the use.

q.   Regulations are necessary to provide the legal tools for distant dealings, such as electronic document and signatures, balancing the security of such tools with enough plasticity and incentives to promote mainstream adoption.

r.   Officials will have to go an extra mile in order to keep cheats under control. Innovation is always a double-edged sword that may be used for both privileged and dreadful causes.

s.   One of the aspects of enlightening service quality for banking services for customers is to ensure safety and improve security when customers use operations. Further, to ensure the stable process of the technology system in order to rise the quality of services provided to customers and create favourable circumstances for the development of new products which creates a favourable working atmosphere to helpeach individual can promote all the ability.

t.   Monetary growth of all government development re-engineering, automated databases, whole workflow automation & IT-based civic complaint redressal in all government departments. Further finds that there are lots of problems/encounters in executing the Digital Village scheme like internet infrastructure, speed of internet, education of villagers.

u.   Lack of digital set-up facility, less financial literacy, low income and absence of formal employment opportunities are some of the major factors that restrict the rural consumers to use digital expertise for their monetary dealings.

v.   Machine learning by end users allows banks to proactively monitor end user behaviour, recognize differences in real time, reduce the chance of incorrect positives, and prevent fraud

7.0   LIMITATIONS AND SCOPE FOR FUTURE RESEARCH

Like any other research work, this thesis too had its own limitations. First, the scope of the study was not restricted by geography, and different countries and continents are at varied stages of access to digitisation and digital payment system acceptance.

Second, the secondary data for the literature review considered articles only with research gaps, i.e., research limitations and scope for future research. This could mean not incorporating a few relevant and recent articles, despite technology evolving and getting outmoded every day. Furthermore, there may have been a chance of exclusion of some relevant literature that was written in languages other than English. This could perhaps lead to involuntary exclusion of some variables.

Industry expectations were concluded to have an insignificant relationship with customer acceptance of digital payment system. Though literature has traces of the expectations industry has from digitalisation in banking sector, this research emerged with contradicting results. Research can help to bridge the gap and bring about a more complete digital transformation.

Digital integration is never an *all-or-none* philosophy; it is an *evolving target*, and thus there are changing levels of integration practices. Researchers from academia and business could emphasise collecting data to create a universal scale that correlates the application of technology integration and the subsequent levels of improved student learning.

8.0 CONCLUSION

This study concludes that it briefly explained the content flow through the first four chapters, proceeding on to details of the conclusions. The research had five objectives pertaining to the five independent variables: funds transfer (FT), customer benefits (CB), transaction safety (TS), external regulator (ER) and customer awareness (CA). The influence of each variable was tested on the adoption of customer acceptance on digital payment system, which was the dependent variable and the measure of research outcomes. The dependent variable was determined by the four benefits of customer acceptance of digital payment systemwhich were: financial planning, increased revenue, guaranteeing of trust and security and conscious of having knowledge about the various consumer product

REFERENCES:

(American Psychological Association (APA) (STYLE)

1. Ab Hamid, N. R., & Cheng, A. Y. (2020). *A risk perception analysis on the use of electronic payment systems by young adults. order*, *6*(8.4), 6-7.
2. Alhammadi, AmeenaAbdulrahman, and Muhammad Usman Tariq. *"The Impact of Quality E-paymentSystem on Customer Satisfaction." Journal of Critical Reviews 7, no. 15 (2020): 5438-5447. (7)*
3. Ali, M. A., Hussin, N., & Abed, I. A. (2019). *Electronic payment systems: Architecture, elements, challenges and security concepts: An overview. Journal of Computational and Theoretical Nanoscience, 16(11), 4826-4838.*
4. Ali, B. J., & Anwar, G. (2021). Factors Influencing the Citizens' Acceptance of Electronic Government. *International Journal of Engineering, Business, and Management (IJEBM), 5.*
5. AL-Maaitah, T., Osman, A., Suberi, M., AL-Maaitah, D., & AL-Dhmour, F. (2015). AL-Maaitah, T., Osman, A., Suberi, M., AL-Maaitah, D., & AL-Dhmour, F. (2015). *Review study on the security of electronic payment systems. International Journal of Economics, Commerce and Management, 3(9), 821-829.*
6. Alzoubi, H., Alshurideh, M., Kurdi, B. A., Alhyasat, K., & Ghazal, T. (2022). *The effect of e-payment and online shopping on sales growth: Evidence from banking industry. International Journal of Data and Network Science, 6(4), 1369-1380*
7. AMSALU, F. (2021). A Study of e-payment System Challenges and Benefits in Commercial Banks of Ethiopia (in case of selected district of addisababa) (*Doctoral Dissertation, St. Mary's University).*
8. Ardiansah, M., Chariri, A., Rahardja, S., &Udin, U. (2020). The effect of electronic payments security on e-commerce consumer perception*: An extended model of technology acceptance. Management Science Letters, 10(7), 1473-1480.*
9. Barik, R., & Sharma, P. (2019).*Analyzing the progress and prospects of financial inclusion in India. Journal of Public Affairs, 19(4), e1948.*
10. Bastari, A., Eliyana, A., Syabarrudin, A., Arief, Z., &Emur, A. P. (2020). *Digitalization in banking sector: the role of intrinsic motivation. Heliyon, 6(12).*
11. Berhe, T., Seifu, E., Ipsen, R., Kurtu, M. Y., & Hansen, E. B. (2017*). Processing challenges and opportunities of camel dairy products. International journal of food science, 2017.*
12. Bhatt, S. (2020*). Digitalization of rural india: Digital village. VISION: Journal of Indian Taxation, 7(1), 83-93.*
13. Charles, G. I. N. C. Y. (2020). A Study on benefits and challenges of Digital (cashless) India. *Person And The Challenges*, *11*(2).
14. Chaveesuk, Singha& Khalid, Bilal &Chaiyasoonthorn, Wornchanok. (2021). Digital payment system innovations: A marketing perspective on intention and actual use in the retail sector. Innovative Marketing. *17. 109-123. 10.21511/im.17(3).2021.09.*
15. Chugh, P. (2021). A Study of Customers' Awareness with Respect to Mobile Banking in Hisar. *International Journal of Information Movement*, *5*(10), 11-17.
16. Chugh, S., Vibhu, G., Kanojia, S., Kumar, V., & Pal, S. K. (2020). TO STUDY THE IMPACT OF ADVANCEMENT IN E-PAYMENT TECHNOLOGY USED IN INDIA. *PalArch's Journal of Archaeology of Egypt/Egyptology*, *17*(6), 1617-1635.

17. Daud, I., Nurjannahe, D., Mohyi, A., Ambarwati, T., Cahyono, Y., Haryoko, A. E., ...& Jihadi, M. (2022). *The effect of digital marketing, digital finance and digital payment on finance performance of indonesiansmes. International Journal of Data and Network Science, 6, 37-44.*

18. Darma, G. S., &Noviana, I. P. T. (2020). *Exploring Digital Marketing Strategies during the New Normal Era in Enhancing the Use of Digital Payment. JurnalMantik, 4(3), 2257-2262.*

19. Demirgüç-Kunt, A., Klapper, L., Singer, D., &Ansar, S. (2022). *The Global Findex Database 2021: Financial inclusion, digital payments, and resilience in the age of COVID-19. World Bank Publications.*

20. Elbasir, M., Elareshi, M., Habes, M., &Aissani, R. (2020). *The influence of trust, security, and reliability of multimedia payment on the adoption of EPS in Libya. Multicultural Education, 6(5).*

21. Fernando, M. H. M., Jayawickrama, *W. D. C., &Chathuranga, B. T. K. Factors Influencing Consumer Adoption of E-Payments: With Special Reference to Sri Lankan Electricity Bill Payers. Sustainable Management, 200.*

22. Fernando, M. H. M., Jayawickrama, W. D. C., &Chathuranga, B. T. K. (2021) *Factors Influencing Consumer Adoption of E-Payments: With Special Reference to Sri Lankan Electricity Bill Payers*.

23. Ferrari, M. V. (2022). *The platformisation of digital payments: The fabrication of consumer interest in the EU FinTech agenda. Computer Law & Security Review, 45, 105687.*

24. Feyen, E., Frost, J., Gambacorta, L., Natarajan, H., &Saal, M. (2021). *Fintech and the digital transformation of financial services: implications for market structure and public policy (BIS Papers, No 117).*

25. Ghosh, G. (2021). *Adoption of digital payment system by consumer: a review of literature. International Journal of Creative Research Thoughts, 9(2), 2320-2882*

26. Islam, M. A., &Aldaihani, F. M. F. (2022). Justification for adopting qualitative research method, research approaches, sampling strategy, sample size, interview method, saturation, and data analysis. *Journal of International Business and Management*, 5(1), 01-11.

27. Jacinta, N., Abuya, J. O. O., &Makokha, A. N. *Electronic Payment Practices and Service Delivery: A Case Study of Ng'arisha Savings and Credit Cooperative Societies in Bungoma Town, Kenya.*

28. Jarašūnienė, A., Čižiūnienė, K., &Petraška, A. (2022). *Sustainability Promotion by Digitalisation to Ensure the Quality of Less-Than-Truck Load Shipping. Sustainability, 14(19), 12878.*

29. Kaur, J., & Singh, S. *An Overview of E-Payment Systems. International Journal of Research in Engineering and Science (IJRES) ISSN (Online): 2320-9364, ISSN (Print): 2320-9356*

30. Kaur, S. J., Ali, L., Hassan, M. K., & Al-Emran, M. (2021). *Adoption of digital banking channels in an emerging economy: exploring the role of in-branch efforts. Journal of Financial Services Marketing, 26(2), 107-121.*

31. Klapper, L. (2023). *How digital payments can benefit entrepreneurs. IZA World of Labor.*

32. Khan, A. G., Zahid, A. H., Hussain, M., &Riaz, U. (2019, November). *Security of cryptocurrency using hardware wallet and qr code. In 2019 International Conference on Innovative Computing (ICIC) (pp. 1-10). IEEE*

33. Khan, M. S., &Savitvh, J. (2022*). Legal Perspective of E-Banking Fraud in India.*

34. Khoa, T. T., &Kha, N. T. (2019). Reasons for customers' reluctance to use electronic payments–A study in Ho Chi Minh City. *HO CHI MINH CITY OPEN UNIVERSITY JOURNAL OF SCIENCE-ECONOMICS AND BUSINESS ADMINISTRATION*, 9(2), 25-43.

35. Kilay, A. L., Simamora, B. H., & Putra, D. P. (2022). *The influence of e-payment and e-commerce services on supply chain performance: Implications of open innovation and solutions for the digitalization of micro, small, and medium enterprises (MSMEs) in Indonesia. Journal of Open Innovation: Technology, Market, and Complexity, 8(3), 119.*

36. Mahanta, D., &Kalita, G. J. (2021). *AWARENESS AND PERCEPTION OF MEDIUM AND SMALL RETAILERS TOWARDS CASHLESS TRANSACTIONS IN GUWAHATI. International Journal of Management, 12(2).*

37. Martínez-Navalón, J. G., Fernández-Fernández, M., & Alberto, F. P. (2023). *Does privacy and ease of use influence user trust in digital banking applications in Spain and Portugal?. International Entrepreneurship and Management Journal, 19(2), 781-803.*

38. Mohamad, A., Mazinun, M. M. M. M., &Idris, S. (2022). *The Influencing Factors on the Acceptance of Digital Payment Among Universiti Malaysia Kelantan Students. Journal of Entrepreneurship and Business (JEB), 10(1), 130-171.*

39. Milenkova, V., &Lendzhova, V. (2021*). Digital citizenship and digital literacy in the conditions of social crisis. Computers, 10(4), 40.*

40. Mohammed, Z., Ibrahim, U. A., &Muritala, T. A. (2022). *Effect of payments system innovations on the financial performance of commercial banks in Nigeria. Journal of Service Science and Management, 15(1), 35-53.*

41. Mousa, A. H., Mousa, S. H., Aljshamee, M., &Nasir, I. S. (2021). *Determinants of customer acceptance of e-banking in Iraq using technology acceptance model. Telkomnika, 19(2), 421-431.*

42. Muoghalu, A. I., Okonkwo, J. J., &Ananwude, A. (2018). *Effect of electronic banking-related fraud on deposit money banks financial performance in Nigeria. Discovery, 54(276), 496-503.*

43. Nouri, A., Khadem, S., Mutule, A., Papadimitriou, C., Stanev, R., Cabiati, M., ...& Carroll, P. (2022). *Identification of gaps and barriers in regulations, standards, and network codes to energy citizen participation in the energy transition. Energies, 15(3), 856.*

44. Nugraha, N. M., Johanes, S. R., &Hendiarto, R. S. (2021). The effect of institutional ownership, managerial ownership, and company size to dividend policy. *International Journal of Trends in Accounting Research*, 2(1), 87-96.

45. Pandey, S. K. (2022). *A Study on Digital Payments System & Consumer Perception: An Empirical Survey. Journal of Positive School Psychology, 6(3), 10121-10131*

46. 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.*

47. Patil, P. P., Rana, N. P., &Dwivedi, Y. K. (2018, October). *Digital payments adoption research: a review of factors influencing consumer's attitude, intention, and usage. In Conference on e-Business, e-Services and e-Society (pp. 45-52). Springer, Cham.*

48. Pearson, N., Naylor, P. J., Ashe, M. C., Fernandez, M., Yoong, S. L., &Wolfenden, L. (2020). *Guidance for conducting feasibility and pilot studies for implementation trials. Pilot and feasibility studies, 6, 1-12.*

49. Prete, A. L. (2022). *Digital and financial literacy as determinants of digital payments and personal finance. Economics Letters, 213, 110378*

50. Purwandari, B., Suriazdin, S. A., Hidayanto, A. N., Setiawan, S., Phusavat, K., &Maulida, M. (2022). Factors affecting switching intention from cash on delivery to e-payment services in C2C E-commerce transactions: COVID-19, transaction, and technology perspectives. *Emerging Science Journal*, 6(Special Issue), 136-150.

51. Rangaswamy, A., Moch, N., Felten, C., van Bruggen, G., Wieringa, J. E., &Wirtz, J. (2020). *The role of marketing in digital business platforms. Journal of Interactive Marketing, 51, 72-90.*

52. Rahayu, R., Ali, S., Aulia, A., &Hidayah, R. (2022). The current digital financial literacy and financial behavior in Indonesian millennial generation. *Journal of Accounting and Investment*, 23(1), 78-94.

53. Rahi, S., Alghizzawi, M., &Ngah, A. H. (2022). *Factors influence user's intention to continue use of e-banking during COVID-19 pandemic: the nexus between self-determination and expectation confirmation model. EuroMed Journal of Business*

54. Rajesh, G., Hajee Abdul, R. H., Anitha, S., &Kamaruniza, A. (2022). *A study on adoption of electronic payment system and its impact on customer satisfaction in Chennai City. Annals of Forest Research, 65(1), 1606-1616.*

55. Ramli, Y. (2020). Adopting Digital Payment based on the Features and Benefits provided by the Application. *European Journal of Business and Management Research*, 5(3).

56. 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.*

57. Reitz, C. (2023). A Natural Philosopher in Solidarity with the Oppressed: Savita Singh's Interview with Roy Bhaskar: A review discussion on Savita Singh, Roy Bhaskar, and MervynHartwig. Reality and Its Depths: A Conversation BetweenSavita Singh and Roy Bhaskar (Singapore: Springer, 2020)—ISBN 9789811542138, 244 pp. *Sophia*, 62(1), 201-206.

58. Reserve Bank of India, India – *Annual Report 2020-2021 Table IX.1.*

59. Rönkkö, M., Lee, N., Evermann, J., McIntosh, C., &Antonakis, J. (2023). Rejoinder: fractures in the edifice of PLS. *European Journal of Marketing*, 57(6), 1626-1640.

60. Sahin, I. (2006). Detailed review of Rogers' diffusion of innovations theory and educational technology-related studies based on Rogers' theory. *Turkish Online Journal of Educational Technology-TOJET*, *5*(2), 14-23.

61. Sahi, A. M., Khalid, H., & Abbas, A. F. (2021). DIGITAL PAYMENT ADOPTION: A REVIEW (2015-2020). *Journal of Management Information & Decision Sciences*, *24*(7).

62. Sahi, A. M., Khalid, H., Abbas, A. F., Zedan, K., Khatib, S. F., & Al Amosh, H. (2022, April). *The research trend of security and privacy in digital payment. In informatics (Vol. 9, No. 2, p. 32). MDPI.*

63. Sahi, A. M., Khalid, H., Abbas, A. F., &Khatib, S. F. (2021). *The Evolving Research of Customer Adoption of Digital Payment: Learning from Content and Statistical Analysis of the Literature. Journal of Open Innovation: Technology, Market, and Complexity, 7(4), 230*

64. SajuShaha, Kazi Md. Yusuf (2020), *Digital Ethics, A Pavement to Customer Acceptance: An Exploratory Study on E-commerce Industry of Bangladesh, The Jahangirnagar Journal of Marketing ISSN: 2308-6238 Vol 8, June 2020*

65. Saputera, D., Ichsani, S., Wijaya, J. H., &Hendiarto, R. S. (2021). *Development of Small and Medium Micro Business: A Geographical Outlook on West Java Province, Indonesia. Geogr. Educ, 11(1), 712-719.*

66. Sasongko, D. T., Handayani, P. W., &Satria, R. (2022). *Analysis of factors affecting continuance use intention of the electronic money application in Indonesia. Procedia Computer Science, 197, 42-50.*

67. Saxena, A., &Tripathi, D. S. N. (2021). Exploring the security risks and safety measures of mobile payments in the fintech environment in India. International Journal of Management, 12(2).

68. Schuberth, F., Rademaker, M. E., &Henseler, J. (2023). *Assessing the overall fit of composite models estimated by partial least squares path modeling. European Journal of Marketing, 57(6), 1678-1702.*Shah, M. (2012). The importance and benefits of teacher collegiality in schools–A literature review. Procedia-Social and Behavioral Sciences, 46, 1242-1246.

69. Siby, K. M. (2021). A study on consumer perception of digital payment methods in times of covid pandemic. International Journal of Scientific Research in Engineering and Management, 5(3), 1-12Sutrisno, S., Cakranegara, P. A., Asri, F., Yusuf, M., &Sahala, J. (2022). *STRATEGY FOR MSME DEVELOPMENT USING FINANCIAL TECHNOLOGY TO INCREASE CAPITAL AND CONSUMERS. JurnalDarmaAgung, 30(2), 677-686*

70. Singh, S., &Rana, R. (2017). *Study of consumer perception of digital payment mode. Journal of Internet Banking and Commerce, 22(3), 1-14.*

71. Snow, J. C., Gomez, M. A., & Compton, M. T. (2023). Human memory for real-world solid objects is not predicted by responses to image displays. *Journal of Experimental Psychology: General*.

72. Solomon, E. M., & van Klyton, A. (2020). *The impact of digital technology usage on economic growth in Africa. Utilities Policy, 67, 101104*

73. Spagnolli, A., Masotina, M., Scarcia, A., Zuffi, B., &Gamberini, L. (2022, April). How to get away with cyberattacks: An argumentative approach to cyberattacks' legitimization by common users. In Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems (pp. 1-12).

74. Sutikno, S., Nursaman, N., &Muliyat, M. (2022). *The role of digital banking in taking the opportunities and challenges of Sharia banks in the digital era. Journal of Management Science (JMAS), 5(1), 27-30.*

75. Tien, N. H., Anh, N., Dung, H., On, P., Anh, V., Dat, N., & Tam, B. (2021). Factors impacting customer satisfaction at Vietcombank in Vietnam. Himal. J. Econ. Bus. Manag, 2, 44-51.

76. Tilley, K. (2023). Digitisation VS Digitalisation.

77. Upadhayaya, A. (2012). *Electronic Commerce and E-wallet. International Journal of Recent Research and Review, 1(1), 37-41.*

78. Vally, K. S., &Divya, K. H. (2018). *A study on digital payments in India with the perspective of consumer adoption. International journal of pure and applied mathematics, 119(15), 1259-1267.*

79. Vinitha, K., &Vasantha, S. (2017). *Factors Influencing Consumer's Intention to Adopt Digital Payment-Conceptual Model. Indian Journal of Public Health Research & Development, 8(3).*

80. Vinitha, K., &Vasantha, S. (2020). *Determinants of Customer intention to use Digital payment system. J. Adv. Res. Dyn. Control Syst, 12, 168-174.*

81. Vishnoi, Y. C., &Bishla, K. (2021). *Critical Study of Unified Payment Interface (UPI): E-Payment Mode of Digital Revolution. Academic Social Research:(P) ISSN: 2456-2645, Impact Factor: 4.928 (UGC APPROVED 47715), 7(4).*

82. Wang, D., & Li, G. (2022). *The best decision for E-Commerce funds transfer based on cloud computing technique. Mathematical Problems in Engineering, 2022.*

83. Yomas, J., &Kiran, C. (2018). *Critical analysis of the evolution in the e-payment system, security risk, threats, and vulnerability. Communications on Applied Electronics, 7(23), 21-29.*

84. YUCHA, N., SETIAWAN, S., MUTTAQIIN, N., EKASARI, R., & MAULADI, K. F. (2020). *Digital payment system analysis of buying decision in Indonesia. The Journal of Asian Finance, Economics and Business (JAFEB), 7(10), 323-328.*

85. Zaman, S. I., Khan, S. A., Qabool, S., & Gupta, H. (2022). *How digitalization in banking improves service supply chain resilience of e-commerce sector? a technological adoption model approach. Operations Management Research, 1-27.*