

# THE USE OF NFC CREDIT AND DEBIT CARDS BY BANKING CUSTOMERS IN RAJASTHAN, INDIA (WITH SPECIAL REFERENCE TO NEAR-FIELD COMMUNICATION)

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## ABSTRACT

*Wi-Fi technology is one of the most recent services in the banking industry. It provides considerable benefits to banks and customers. This research adopted an enhanced technology acceptance model to authenticate variables affecting Wi-Fi acceptance among banking customers (NFC technology). An online poll received 103 legitimate responses from customers in Rajasthan, India. Acceptance of Wi-Fi technology services is largely influenced by perceived utility and ease of usage perceived understanding and security concerns have a huge impact on the acceptance of Wi-Fi technology services. The research has a wide range of theoretical and practical applications. It acknowledges various limitations and provides recommendations.*

**Keywords:** Usefulness, Knowledge, A Social Factor, Security Issues, NFC Contactless Cards.

## INTRODUCTION

Due to their convenience of use and ability to save customers time and effort, electronic payment systems have grown increasingly important as societies have developed technologically, particularly in recent decades. Financial technology and electronic payment mechanisms are now urgently needed. Any society that adopts new technical innovations must also face difficulties in putting them into practice because not all customers use them. adoption of electronic payments and financial technologies payments is influenced by many factors, including client confidence and trust as well as the level of safety associated with using these technologies. The study concentrates on the two most popular technologies that supports contactless cards including NFC and internet banking through a Wi-Fi connection even without a Passcode from the customer. — as well as the hazards associated with these technologies. Mobile contactless payments have become more widely used, and they are already a well-liked digital banking service. Retailers are attempting to reduce the use of actual cash. Customers can tap their debit/credit cards or smartphones against a POS terminal to make a purchase (or other contactless readers) Abdul Rais et al. (2022). It gives both customers and retailers a quick, easy, and secure payment alternative. The two most popular contactless payment methods are NFC and QR codes. Mobile devices have several security features that enable contactless payments, including a special usage of vouchers instead of card details, as well as biometric technology, all serve to authenticate the device's legitimacy. Bulk payment, an additional e-banking service tool is primarily used by corporate governance for Small and medium enterprises and enables them to simultaneously Transfer funds from one account to a number of people. These payments are perfect for business activities such as paying employees, paying suppliers and contractors, and paying dividends, as

well as for government operations Alkhaldi & Kharma (2019).

Peer-to-peer (P2P) is thriving in the current banking environment. It is a simple payment system that enables immediate money transfers from any device. High-level security and anti-fraud mechanisms, including biometric pins and OTPs, should be enabled by P2P transactions (OTP). The accessibility of digital technologies, such as P2P money transfer, QR codes and NFC has given banks all over the world, the opportunity to offer their customers alternative business methods. E-banking services are this kind of service, which combines the features of traditional banking, social computing, and the Internet into a single straightforward solution Al-Tarawneh (2017); Chaima et al. (2021). It should be highlighted that banks can efficiently engage with clients and stakeholders thanks to technological services. Such services are indicative of high quality and are also reasonably priced Chauhan et al. (2022); Dajani & Yaseen (2016); Dubey, et al. (2020); Eisingerich & Bell (2006); Ghali (2021). Due to these advantages, electronic banking emerged as a crucial delivery channel in the financial sector. However, some bank customers are still apprehensive about using this kind of service. Because their consumers are less engaged Interested in and driven by this innovative financial technology, Indian banks will continue to face difficulties implementing e-banking services without addressing the root causes of these reluctances. The reasons for that can primarily have to do with how well the person accepts technology. The Technology Acceptance Model (TAM)-based research could therefore provide some insight into this issue. The TAM has increased over time, and it should be emphasised. However, as most of the research using the TAM is done in industrialized nations, its applicability to other nations is invalidated.

As a result, it could be said that the biggest challenge to the adoption of People is being convinced by this innovation to use it as a complete substitute for currently used traditional methods. as e-banking is still being implemented in India, several scholars have studied the problems associated with this technology. Even though these studies improved our knowledge of the key determinants of e-banking adoption in India, additional research is still needed to fully understand other pertinent variables such as payment security and social influences on e-banking purposes. The requirement to offer a parsimonious structural model capable of correctly defining e-banking uptake from the perspective of Indian clients can therefore be summed up as the e-banking literature gap. This study seeks to close this gap by examining the influence of perceived utility, The willingness to utilize e-banking Indian banking services is driven by perceptions of the comfort of being used and thought knowledge. and other developing nations. As per the findings, an expanded model was suggested. The recent study proved that the expanded model that was proposed can be used to analyze the banking sectors in emerging nations. This is a valuable discovery because it can help policymakers, clients, and banks develop strategies to achieve and maintain growth.

The purpose of the numerous cutting-edge payment solutions is to make it possible for customers to pay conveniently and securely. We were inspired to create this study by an issue that many customers have when using their debit or credit cards. Money transfer platform that makes use of Wi-Fi (NFC) technology that doesn't require a password or pin code has recently been made available by many banks. However, clients can pay immediately by waving their cards in front of a reader in a variety of locations, including shops and malls, to pay for their goods. Because there is no need to contact the payment device when utilizing Consumers could save time and money by using this technique, as well as help reduce the spread of serious diseases such as COVID-19. The issue, however, is the great risk that comes with losing this card because anyone in possession of it can withdraw money right away once it is given to the

merchant, making it simple for him to process payments without a password. If the client's card is lost, this puts his account at risk. Even though the bankers set a daily withdrawal restriction of Fifty thousand rupees for this service, it was a very hazardous usage of (NFC) technology that caused many consumers, to quit being used. In addition to the previously mentioned restriction, habits (using cash), low trust in financial institutions, and a lack of knowledge about financial literacy are all significant factors that could affect the use of credit and debit cards in Rajasthan, India. According to Client Service Guidelines, India does not have any specific financial customer protection laws or regulations. Fairly and openly, just the customer's bank accounts were covered. The goal of the study is to utilize a specially constructed model to confirm the variables influencing the dominance of internet banking and to offer ideas and solutions to address the issues associated with using this cutting-edge financial technology. Even though there have been numerous studies on the topic This research focuses on internet services and finance innovations and is one of the most recent because it is the first to specifically address NFC technology service and its difficulties in India in this article, we will be using the TAM model since, as we all know, the Technology Acceptance Model was developed by experts so that they could evaluate how adaptive consumers are to developing technology (TAM). There are two basic elements and factors which affect a person's propensity to adopt cutting-edge tech: convenience and usefulness in people's minds. and these two variables are our main variables in this article to discuss the usage and usefulness of Wi-Fi debit or credit cards. It is possible to gauge the degree to which consumers will accept a new product by using the Technology Acceptance Model (TAM). As a group, we are all aware that Wi-Fi cards are the new payment era in the financial sector, and despite this, we found that this model was the only one that was suitable for our article to reach better conclusions.

The format of this article is as follows: The literature study is presented in the following part, and a summary of Rajasthani's digital banking tools is provided in section 3. In section 4, a conceptual foundation is examined. Sections 5 and 6 respectively describe the research methodology and data analysis. The conclusion and discussion are presented in Section 7 and finally, recommendations and suggestions are included in the final part.

## LITERATURE REVIEW

Bankers' use of internet systems in addition to the variables influencing consumers' use of the services is the subject of numerous studies. However, we could not locate any research that concentrated on NFC contactless and their difficulties. Most of the studies concentrate on either individual factor, customers' opinions about e-banking, or demographic influences. In this part, studies on the variables affecting consumers' acceptance of internet banking will be reviewed. the way that people view online banking could affect whether they plan to use the services. As indicated above, the word "trust" has appeared a couple of times in literature, and other literature too cited this justification. Among the previously identified factors that influence management students' tendency to use internet banking is their level of confidence Alkhaldi & Kharma (2019) This study was accompanied by a study of Iranian businesses Alkhaldi & Kharma (2019) that praised trust as being especially important for implementing Internet banking Alkhawaldeh et al. (2022) offered further assistance for their research in Mauritius. In the meantime, France's internet-only banks (IOBs) worked to earn their customers' trust by providing them with trustworthy websites, a solid reputation, a competitive benefit, bringing stability, and an understanding of Digital banking Al-Tarawneh (2017) additionally, the scholars in the Chaimma et al. (2021) research admitted that financial institutions' requirements regarding efficiency,

work, as well as behavioural intentions in e-banking affect individual motivation to adopt Online banking. This indicates that using Internet banking services may be influenced by other factors as well.

According to Chaimma et al. (2021) customers' use of mobile banking services in India was positively impacted by Bank's credibility, the relative advantage of being used, the impact of peers, considered knowledge, and perceived benefits Chauhan et al. (2022) evaluated the influence of the customer intention predictors for self-service technology adoption. Due to the moderating effect of channel type, they made several suggestions regarding the substantial influence of the evaluated predictors Dajani & Yaseen (2016) also examined the variables influencing Jordanian customers' use of internet banking. They suggested that while social influence does not significantly affect the behavioural intention of customers, perceived risk, effort anticipation, and hedonic motivation do, enjoying and using the internet Alkhawaldeh et al. (2022) and are considered a key factor Alkhaldi & Kharma (2009) a customer's decision to use e-banking. It is also important to keep in mind that demographic characteristics, as shown by Al-Tarawneh (2017), have an influence on online payment product adoption. Ahmad and others additionally investigated elements that can increase customers' desire to utilize Arabic e-commerce websites.

The e-trust, as well as consumer attention to internet banking, were both researched by Ghali (2021). He discovered a strong effect of website responsiveness and design on user happiness and e-trust Chauhan et al. (2022), According to Ramesh et al, there was a substantial correlation between e-loyalty and customer satisfaction and reactivity, usability, dependability, relaxation, safe procedure, and effectiveness Dajani & Yaseen (2016) Customers are influenced by anxiety, user satisfaction, and ease. according to Petit et al., all have a substantial impact on consumers' attitudes toward using contactless payments. Conversely, social influence, trust, and perceived usability have little bearing.

According to Dubey et al. (2020) contactless financial payments have been made possible by artificial intelligence and creative thinking, and these innovations also work to distance people from one another throughout the COVID-19 era. They believed that employing these technologies would allow individuals to conduct normal operations and obtain services from the convenience of their homes and that this would be the future of the global economy, particularly during covid-19 situations where there would be no human interaction.

According to Karjaluoto et al., the UTAUT2 model may account for 70 % of the total variance in customer preferences and intentions using contactless card payments in wealthy nations like Finland. In addition to the positive association between application and purpose, they discovered that consumers' general pleasure and habits have a substantial impact on usage intentions.

Chaimaa et al. assessed a service, stressing several aspects of the dangers and obstacles associated with e-banking services and outlining some potential solutions. They suggested that one of the major problems with using internet banking is the security of transactions. bank consumers are concerned that unauthorized parties could access their accounts or hack them. Additionally, there is concern that the transferred cash might not get to its intended receivers.

According to Eisingerich & Bell (2006) new elements for navigation and engagement have been identified. They discovered that customers prioritize these characteristics over functionality. Hu et al.'s introduction of Fintech services revealed a more thorough understanding of the factors affecting users. They discovered that users' views about adoption are greatly influenced by their trust in Fintech services.

Ghali (2021) found that when clients were given favourable perceptions and motivating factors, they adopted Internet banking in their research of bank clients in metropolitan areas of coastal Karnataka. In addition, they said that customers who had access to information, resources, and Issues of security and privacy were more accepting of innovation. In a similar line Chaimaa et al. (2021) who used the TAM to explore this issue in Gujarat, reaffirmed the critical role that customer perceptions play in encouraging the usage of e-banking. Their research showed that people's perceptions of the security, utility, usability, and social influence of Internet banking had a direct impact on their use of this service. Roy et al. s research conducted in India, which was focused on TAM and perception managing risk, came to a similar conclusion: facilitating conditions of access and associated risk influence consumers' acceptance of online banking.

In addition to the variables indicated in this sentence Al-Tarawneh (2017) claimed that Tunisians' use of Internet banking services was influenced by government support, technological assistance, perceived behavioural control, and mindsets. Similar arguments have been made by other researchers. The adoption of e-banking, for instance, was influenced by personal innovation and perceived risk, according to Hong Kong research on retail customers' Internet banking behaviour.

In contrast, Wang et al. showed that self-efficacy may play a part in affecting one's perception of the legitimacy, utility, and usability of mobile banking. Regarding the relationships between Indian customers' demographic, technology acceptance (TA), and use of online banking, a study by Al-Tarawneh (2017) offered some intriguing insights. This study showed considerable differences in opinions about digital money in three target markets. It's interesting how age affects TA use. External variables may also have an impact on how Internet banking is used, in addition to internal reasons.

P. Karthikeyan studied the conditions in the banks in the city of Coimbatore. According to the results of this study, employee job satisfaction has an impact on how well services are delivered; dissatisfied workers delivered poor services, which discouraged customers from choosing any kind of service.

Moreover, Chaimma et al. (2021) showed that young, large companies with a diversified management team were more inclined to use e-banking, particularly if they had to compete with many other companies' users. These are a few of the outside elements that affect how e-banking is adopted.

According to this review of the literature, it appears that there is a shortage of information regarding the use of electronic bank services in emerging countries, particularly information that focuses on Considering safety issues. The TAM was then expanded upon, as suggested by earlier researchers, to reinforce the model Al-Tarawneh (2017); Chaimaa et al. (2021).

In this study, two additional components—security concern and perceived awareness—were included in the model along with two TAM constructs. The ideas from earlier literature served as the foundation for the new creations Alkhawaldeh et al. (2022) By testing this framework's applicability in emerging nations like INDIA, will add to the amount of knowledge about e-banking services.

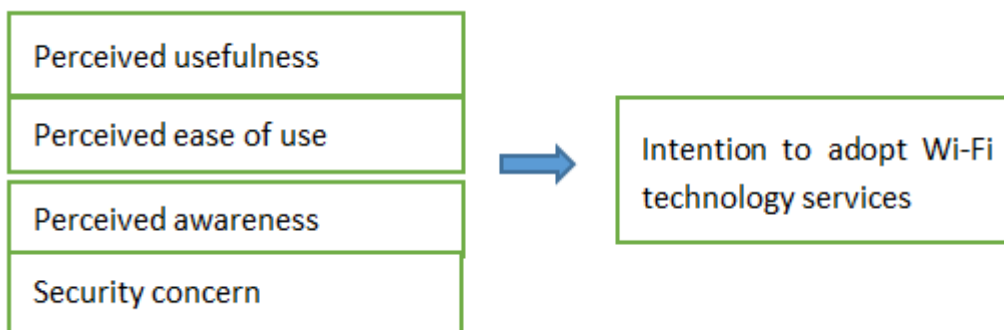
A study by Dubey et al. (2022) showed that NFC is a safe innovation for conducting transactions at the POS terminal for every buy we made, as well as every debit and credit card, contains a chip known as the EMV chip that encrypts card details, and these cards and chips are operated because of artificial intelligence technology. AI is being developed to protect the financial industry from fraud and criminal acts, and we will see in the next years that financial

institutions cannot function correctly without the use of AI. It will become a requirement for banks Dubey et al. (2022).

### A Summary of Indian Electronic Banking Services

Traditional banking methods had been slow and time-consuming. These frequently had an impact on how quickly customers could complete their transactions after waiting in lengthy lines. The banking industry recognized a huge opportunity to change conventional banking practices and offered e-banking services to its customers because of the advancement of new technologies. E-banking services, often known as electronic banking services, refer to financial transactions carried out utilizing electronic tools or equipment. The Internet is the most crucial and fundamental part of electronic banking, though. The numerous points of contact between banks and customers are identified, and a virtual system or process is mapped utilizing the tools at hand to complete a transaction online. Any interaction, even for non-financial transactions, between a bank and a customer, is referred to as a transaction. The use of electronic banking services that are available to them from the bank at a delivery window of 24\*365 throughout the year, without having to personally visit the bank branch, is the biggest transformative benefit to the consumers. The technical systems do, however, necessitate routine maintenance of technological assets, and some other unforeseen factors may also have an impact on the services provided by electronic means. However, the overall level of technological availability for the provision of such services is relatively high. The account holders are permitted by various Indian banks to undertake financial and non-financial transactions even after regular business hours and on weekends.

Based on prior research, the model Figures 1-4 used in this study was created to evaluate the following hypotheses.



**FIGURE 1**  
**THE THEORETICAL AND METHODOLOGICAL FOUNDATION OF THE STUDY,**  
**INCLUDING ALL OF THE VARIABLES AND HYPOTHESIS**

- H<sub>1</sub>: The acceptance of Wi-Fi services is positively influenced by the perceived utility.*
- H<sub>2</sub>: The acceptance of Wi-Fi Services is positively impacted by perceived simplicity of usage.*
- H<sub>3</sub>: The acceptance of Wi-Fi services is positively impacted by perceived awareness.*
- H<sub>4</sub>: The acceptance of Wi-Fi services is positively impacted by security concerns.*

For this study, data is collected from Rajasthan's 103 bank customers via an online questionnaire to learn about their perceptions of the use of NFC contactless card payment (Wi-Fi technology). In the questionnaire, respondents were asked about perceived usefulness, perceived ease of use, and the purpose to use wi-fi technology service, as well as security concerns, and the regression approach is utilized to analyze the data.

### Highlights of the Study

1. The study investigated the variables affecting banking sector clients' employing wi-fi technology services utilizing an expanded technology acceptance model.
2. The study used the linear regression method to evaluate the respondent's data.
3. According to the findings, security concerns and perceived awareness do not significantly influence the acceptance of Wi-Fi technologies and services.
4. The study has a number of impacts on theory and application. It also identifies several limits and offers several recommendations for additional research.

### Data Analysis

All social and economic characteristics of the individuals are shown in Table 1. In addition, the linear regression approach is employed for hypothesis testing Chauhan et al. (2022) argued significant element loadings needed to be 0.70 or higher to achieve convergent validity, however other researchers suggested that the components need be higher than 0.5.68 Furthermore, the average variance extracted (AVE) should be 0.50 or greater because it is the grand mean value of the squared loading of a collection of indicators Furthermore, Chauhan et al. (2022) composite reliability (CR) and Cronbach's Alpha values of 0.70 or higher. To evaluate discriminating validity, criterion was also used: "To evaluate criterion, the AVE of each item must be greater than the greatest coefficient of determination with every other concept". Because they exceeded the specified requirements, they attained convergent and discriminate validity, as demonstrated in tables 2 and 3. Furthermore, the findings revealed that the R<sup>2</sup> Level (R<sup>2</sup> = 0.571) met requirements Dajani & Yaseen (2016) Table 4 displays the scaling & pathway coefficient values for the correlations Table 1.

Factors	Description	Frequency	%
Gender	Male	72	69.9
	Female	31	30.1
Age	15-20	4	3.9
	21-25	35	34.0
	26-30	44	42.7
	30 & more	20	19.4
Occupation	Private job	14	13.6
	Government job	16	15.5

			5.5
	Bank employee	5	4.9
	Student	53	1.5
	Other	15	4.7

All the responders' profiles have been arranged into a table, which can be seen in table 1. And their frequencies and percentages are presented, as we can see that male respondent are greater than female respondents, which is 69.9%, and more respondents are falling in the age range of 26-30, and according to the table findings, students are more conscious of this technology Table 2.

Variables	Items	Loading	Average Variance Extracted	C. Alpha	Composite Reliability
Perceived usefulness	PU 1	0.891	0.726	0.812	0.887
	PU 2	0.809			
	PU 3	0.855			
Perceived ease of use	PEU 1	0.859	0.798	0.753	0.888
	PEU 2	0.927			
Perceived awareness	PA 1	0.873	0.712	0.796	0.881
	PA 2	0.777			
	PA 3	0.878			
Security concerns	SC1	0.700	0.510	0.807	0.861
	SC2	0.647			
	SC3	0.757			
Intention to adopt wi-fi technology services	IA1	0.905	0.826	0.789	0.905
	IA2	0.912			
13 items					

As shown in table 2, for data collecting There were a total of 13 questions asked, including three questions into perceived usefulness, two questions into perceived ease of use, three questions into perceived awareness, three inquiries into security concerns, and two inquiries into respondents' intentions regarding the adoption of wireless technology services. In addition, with the help of the SPSS software, each variable was segregated into its own section of Average Variance Extracted, C. Alpha, and Composite Reliability Table 3.

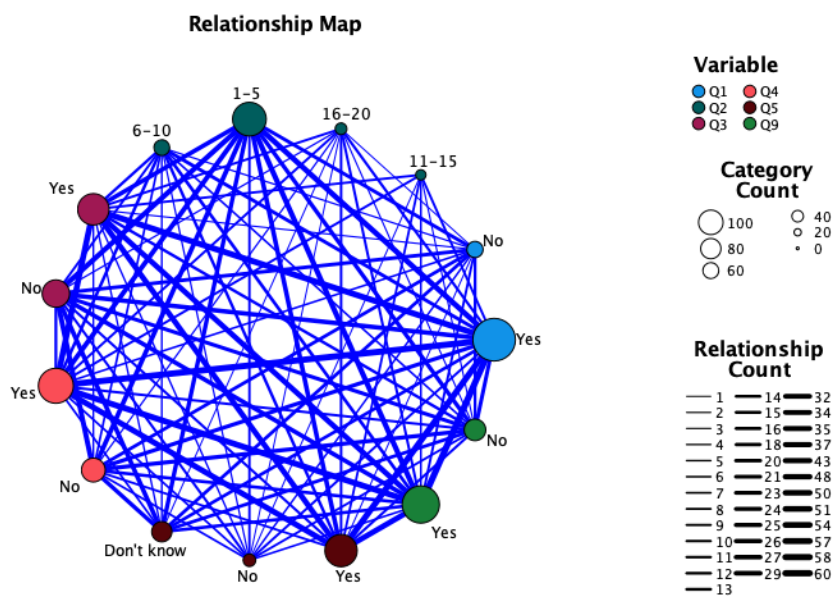
	PA	PEU	IA	SC	PU
PA	0.844				
PEU	0.648	0.893			
IA	0.576	0.658	0.909		
SC	0.653	0.700	0.616	0.714	
PU	0.509	0.509	0.598	0.638	0.852

As shown in table 3, the discriminant validity test is used to identify the link and combination between all these 5 variables to demonstrate. This test is carried out to show how well this design of data collection is assessed.



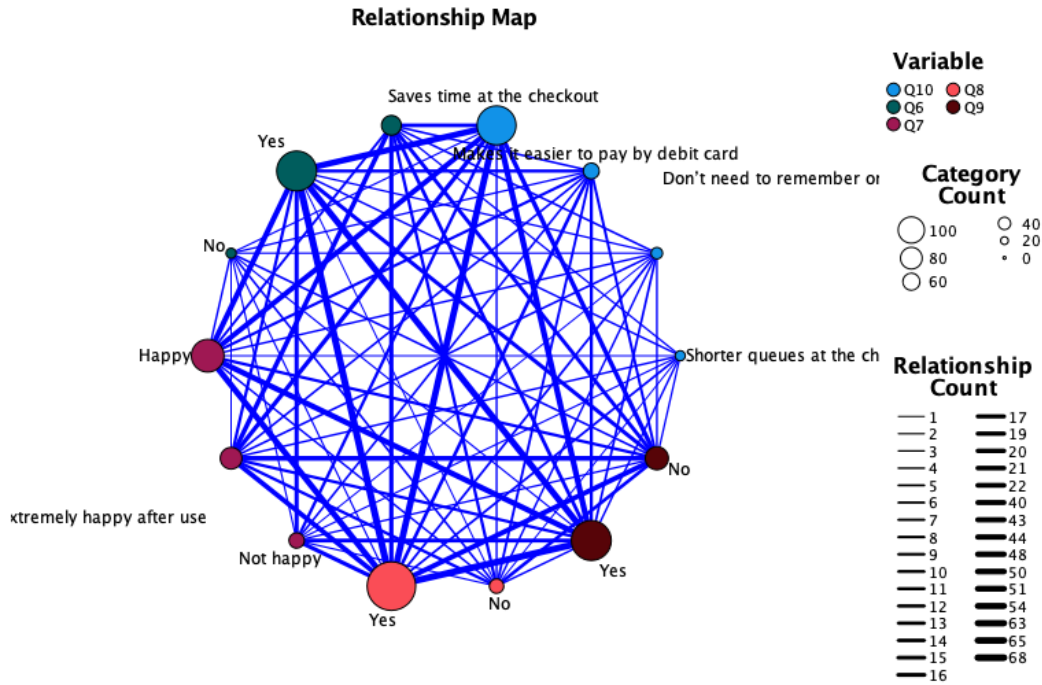
H	Relationship	Std.Beta	Standard Error	T-Value	Results	P-Value
H <sub>1</sub>	PU->IA	0.232	0.106	2.166	Accepted	0.015
H <sub>2</sub>	PEU->IA	0.335	0.115	2.935	Accepted	0.002
H <sub>3</sub>	PA->IA	0.124	0.096	1.271	Rejected	0.105
H <sub>4</sub>	SC->IA	-0.072	0.134	0.526	Rejected	0.300

When we utilize the path coefficient of the hypothesis, as shown in table 4, we finally have our real result, and we can easily draw the conclusion that security is a key major aspect that is affecting the adoption of wi-fi card payment acceptance.



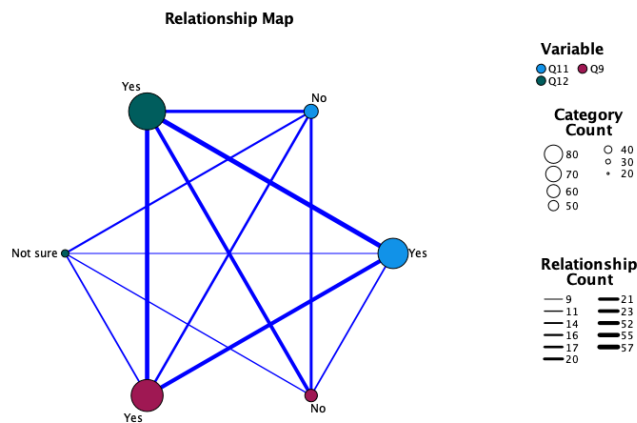
Source: <https://www.ibm.com/in-en/spss>

**FIGURE 1**  
**SPSS SOFTWARE AS VISIBLE IN FIGURE 1, IS USED TO CREATE A RELATIONSHIP GAP GRAPH FOR THE PURPOSE OF BETTER UNDERSTANDING THE CONNECTION BETWEEN ALL OF THE QUESTIONS ABOUT THE USEFULNESS AS WELL AS THE APPLICATION THAT ARE BEING PREPARED WITH THE PURPOSE OF ADOPTION**



Source: <https://www.ibm.com/in-en/spss>

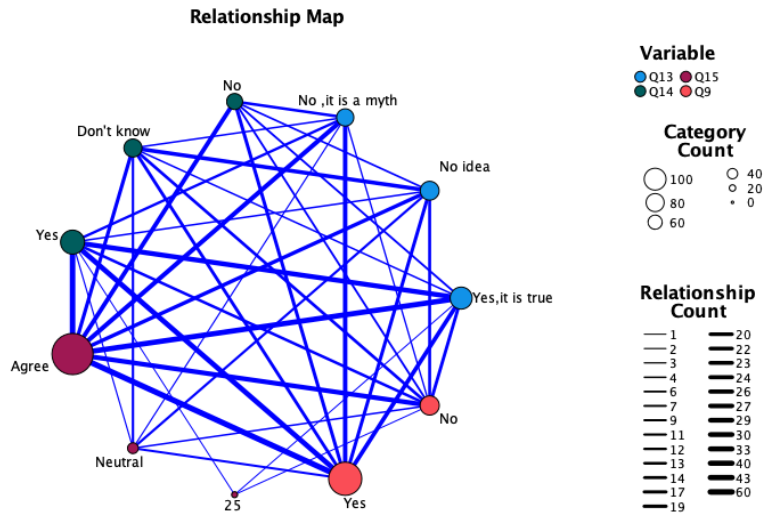
**FIGURE 2**  
**SPSS SOFTWARE AS VISIBLE IN FIGURE 2, IS USED TO CREATE A RELATIONSHIP GAP GRAPH FOR THE PURPOSE OF BETTER UNDERSTANDING THE CONNECTION BETWEEN ALL OF THE QUERIES ABOUT THE EASE OF USE AS WELL AS THE APPLICATION THAT ARE BEING PREPARED WITH THE PURPOSE OF ADOPTION**



Source: <https://www.ibm.com/in-en/spss>

**FIGURE 3**  
**SPSS SOFTWARE AS VISIBLE IN FIGURE 3, IS USED TO CREATE A RELATIONSHIP GAP GRAPH FOR THE PURPOSE OF BETTER UNDERSTANDING**

**THE CONNECTION BETWEEN ALL THE QUESTIONS ABOUT SECURITY AS WELL AS THE APPLICATION THAT ARE BEING PREPARED WITH THE PURPOSE OF ADOPTION**



Source: <https://www.ibm.com/in-en/spss>

**FIGURE 4**  
**SPSS SOFTWARE AS VISIBLE IN FIGURE 4, IS USED TO CREATE A RELATIONSHIP GAP GRAPH FOR THE PURPOSE OF BETTER UNDERSTANDING THE CONNECTION BETWEEN ALL THE QUESTIONS ABOUT THE MYTHS AND REALITY AS WELL AS THE APPLICATION THAT ARE BEING PREPARED WITH THE PURPOSE OF ADOPTION**

**Discussion and Implications**

The recent research sought to identify the variable that impacts Wi-Fi service acceptance in Rajasthan, India. Three variables influence users' willingness to use Wi-Fi services., according to the research data. H<sub>1</sub>, H<sub>2</sub> and H<sub>3</sub> highlighted various relationships between these factors and the use of Wi-Fi services. Wi-Fi (NFC) innovation is favourably and substantially related to perceived utility, perceived ease of use, and perceived understanding. The participants in this study, according to the findings, have a poor understanding of the utilization of Wi-Fi (NFC) technology due to a lack of knowledge about digital solutions. Financial institutions may fail to raise client understanding of their goods and services. As a result of the findings, the research advises that banking uses the media to raise client awareness.

H<sub>4</sub> was rejected, indicating that security concerns are negligible and negatively influence NFC contactless card uses. The findings challenge the previous study by Dajani & Yaseen (2016), he discovered that security is a primary concern while doing financial transactions over the internet medium. Individuals discovered confidentiality had a significant influence on smartphone banking adoption. Clients want banks to improve their security features, especially because They anticipate secrecy and data protection when something comes to Wi-Fi communication. This demonstrates that additional factors could play an important role while

employing Wi-Fi (NFC) advanced technologies. According to the assessment of the literature, there seems to be a lack of awareness in poor countries about the use of e-banking services, specifically in terms of cybersecurity.

Furthermore, a huge range of studies about the acceptance of online financial sectors and the variables impacting consumers are being conducted. There is no research that emphasized problems with NFC (Wi-Fi) technology services. The bulk of studies focused on individual or demographic characteristics, such as people's opinions toward e-banking.

In practice, the research will benefit users in explaining the current situation of Wi-Fi technology support in India and establishing strategies to increase the acceptance of Wi-Fi technology services in the financial sector. India's acceptance of Wi-Fi technologies is still in the development phase when compared to other industrialized countries.

According to the observations, the absence of a solitary law enacted by higher institutions was the primary factor that contributed to the non-acceptance. The absence of advertising as well as the use of this technology by well-known financial institutions are also significant elements that have contributed to the development of difficulties and barriers in India.

And to get rid of all of these roadblocks, financial institutions and other connected entities need to focus on the primary factors that are preventing the widespread acceptance of this technology.

According to our research report, I concluded that the primary reason for not choosing these technologies is because of security concerns; therefore, financial institutions such as banks need to work on addressing these concerns.

## Limitations and Suggestions

Our research is limited in terms of sampling and factors. The researcher faces difficulty to collect data since most individuals are not interested in responding to our questions because they do not utilize these Wi-Fi cards, citing security concerns as the reason. Some of the individuals did not understand the meaning of the items because the researchers did not evaluate each participant's understanding of each question. Therefore, a more representative survey technique will be needed to learn about clients' perceptions of Wi-Fi (NFC) technology adoption in the future. The proposed study framework should be tested in later studies using a bigger sample size and random sampling technique.

The report advises PSPs and banks to implement innovative technology to address customer security concerns. One example is the use of dash-cam Dubey et al. (2020); Gordon et al. (2008) he says that it may record spoken requests and capture facial photos, allowing product payment machines to recognize the client's face or voice. Virtual advisors such as Alexa and Siri can also be integrated with multimedia systems that provide voice-activated transactions. To encourage customers to use these services, the report further suggests that Indian banks stop deducting the commission from payment transactions using credit/debit cards and mobile services for e-banking. It is advised that the Indian central bank create new rules and laws to safeguard customers from any risk of fraud or hacking which is involved in e-banking services Karjaluo et al. (2020); Laukkanen et al. (2007); Matar & Alkhaldeh (2022); Ramesh et al. (2020).

The study suggested that perceived usefulness and perceived simplicity of use are associated with the adoption of Wi-Fi (NFC) technology services, the study's findings contrast with the authors' expectations and assumptions. Additionally, the study's findings showed no correlation between perceived Concerns about security & use of wi-fi service. The results are encouraging

for banks and policymakers because they show how capable and ready Indian consumers are to use fintech, contactless payments, e-wallets, and other digital payment and application technologies Sikdar & Makkad (2015).

## CONCLUSION

And most importantly the findings of our research clearly indicate that worries about security are baseless and have a serious impact on the deployment of NFC contactless card technology. The results put into question the notion that security should be a major priority when conducting financial transactions over the medium of the internet. People found that the expectation of privacy had a major role in their decision to use smartphone banking. Customers want their banks to strengthen their security features, particularly since they expect privacy and protection of data when it comes to Wi-Fi connectivity. This indicates that extra elements may play a crucial role when using sophisticated technologies such as Wi-Fi and NFC.

In the future, a comprehensive study may be done on this major security issue of Wi-Fi card payment systems; these difficulties need to be addressed, and a solution is required.

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