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Technology Acceptance Model to Evaluate Online Banking Adoption: Gujarat State Data

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***Abstract*-- New options for doing regular financial tasks have been made possible by advancements in electronic banking technology, particularly in the field of internet banking. Online banking services are becoming more and more popular worldwide fast speed, even in developing nations like Gujarat. This research looks at how consumers judge the acceptability of online banking using the Technology Acceptance Model (TAM). In particular, it looks at the relationship between consumers' behavioural desire to utilize online banking and perceived trust, perceived usability, perceived risk, and perceived usefulness. For the study, a sample of 181 respondents from the Gujarat region was chosen using a simple judgmental selection process. A methodical The data was gathered using questionnaires and in-person interviews. To examine the relationship between the variables and evaluate the hypothesis, factor analysis, regression analysis, and Pearson correlation were employed.**

The results demonstrated that perceived convenience and trust had a major influence on Gujarat consumers' willingness to utilize internet banking useful. Customers' inclinations to utilize online banking services were shown to be insignificantly influenced by perceived risk and utility.

Keywords: **Technology Acceptance Model (TAM), Perceived Trust, Perceived Ease of Use, behavioural intention, online banking**

I. INTRODUCTION

Our social and personal life are becoming more and more dependent on technology. New technology is easily embraced by people, and its use has recently increased dramatically on a worldwide scale. Online banking allows banks to offer a variety of services thanks to modern technology a wide variety of financial services to a sizable clientele. Delivering financial services and merchandise electronically is referred to as online banking (Chavan, 2013).

In this kind of banking, money is transferred between financial institutions by electronic signals rather than actual cash, cheques, or other negotiable objects. It makes banking possible at any time, place, or method, and offers quick, easy, reasonably priced, 24-hour banking services (Sadekin and Shaikh, 2015).

By facilitating quick information access, quick transactions, simple service reception, correctness, efficacy, security, and a range of services, online banking lowers risk and saves time (Barua and Akbar, 2021). Online banking, which is the way of the future, provides customers with substantial cost savings on transactions conducted over the phone, online, or through other electronic delivery channels. Conventional banking fails to meet customer demand and causes significant losses for the banking authority and dealers. Online banking is the solution to these problems. (2014) Islam et al. Money ownership and transfers between financial institutions are monitored by computer systems. Access codes, like passwords or Personal Identification Numbers (PINs), are used to identify consumers instead of their signature on a check or other physical document. UNCTAD (2002).

The importance of the Technology Acceptance Model (TAM) in comprehending customer acceptance of online banking is further highlighted by recent studies. Perceived utility and simplicity of use are important factors affecting the acceptability of online banking services, according to research by Vuković, Pivac, and Kundid (2019). In a similar vein, Uula and Avedta (2023) offer a bibliometric study of TAM in banking research, highlighting important topics including hazards, technical innovation, and relevant variables in technology adoption.

Additionally, the model's applicability in a variety of scenarios is reinforced by Lai and Li's (2005) demonstration of its validity across various demographic and technological competence groupings. Alnemer (2022) extends TAM by adding trust as another factor that influences the uptake of digital banking, demonstrating its important importance in addition to perceived utility and ease of use. According to Mousa et al. (2021), e-banking adoption rates may be increased by removing obstacles such network dependability and security issues. Furthermore, Shah et al. (2019) emphasize the importance of trust in mobile banking, showing that customers are more inclined to use online banking services when they believe them to be effective and safe.

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Together, these studies highlight the value of TAM as a framework for assessing the uptake of online banking and confirm the necessity of a thorough examination of consumer behavioral intentions with relation to new banking technology. Additionally, the importance of perceived risk, perceived security, and perceived trust in influencing user attitudes and actions around mobile banking and financial technology is highlighted by recent study. Almaiah and associates (2023) show that while perceived risk has a detrimental effect on user attitudes and trust, perceived security and trust are crucial in promoting the uptake of mobile banking. In a similar vein, Silanoi et al. (2023) discover that when Generation Z adopts mobile banking after COVID-19, they place a high emphasis on perceived utility and trust. According to Kelly and Palaniappan (2023), consumers' ongoing use of mobile money transactions in Ghana is influenced by perceived risk and social influence. Additionally, research on FinTech innovations (Dawood, Liew, & Lau, 2022) and mobile wallets (To & Trinh, 2021) shows that trust is a crucial mediator in determining adoption intentions. Together, these results show that in order to boost customer adoption and retention, financial service providers should give priority to improving security protocols and trust-building tactics while reducing risks.

The range of services provided by Gujarat's banking industry has greatly expanded, especially in the area of internet banking (Ali, 2010). As internet access in Gujarat becomes easier and faster, online banking services are growing faster. Additionally, a country's smooth integration into the global economy can be facilitated by having a strong banking system and internet technologies. Inadequate secure and dependable information infrastructure, poor network connectivity, high internet costs, low customer IT literacy, a weak legal and regulatory environment, the high cost of adopting new technology, etc. are some of the factors that limit online banking's potential and demand from both retail and business customers (Sadekin and Shaikh, 2016). The behavioral intention of bank clients to accept the technology determines the success of online banking (Gurau, 2002). A few studies have used a number of assumptions pertaining to perceived utility, ease of use, trust, and risk to examine the behavioral intention towards adopting new technologies in banking operations. The current study offers a conceptual model that takes into account the key factors impacting user behavior connected to adopting new technology in order to close this gap.

Through a number of characteristic linkages, including risk, utility, ease of use, trust, and readiness to accept the technology-based service, the study seeks to model customer behavioral intention on online banking. The Technology Acceptance Model (TAM) and its subsequent iterations serve as the study's framework.

II. Literature Review And Hypothesis Development

Banks and other service sectors look for new ways to engage clients in this quickly evolving global economic environment. The banking sector is now able to efficiently contact its clients because to the significant advancements in information and communication technology (ICT) over the past few decades. The availability of suitable technology and satisfying consumers' demands for round-the-clock financial services suggestively encouraged banks to adopt online banking (Bradley & Stewart, 2003). In order to obtain a competitive edge in the market, banks have also developed online banking services (Fuentes et al. 2007). It has always been important to research user acceptability of technology-based banking and related subjects. The results of user acceptability studies indicate that users' choices regarding when and how to utilize newly given software packages are influenced by a number of factors. A number of hypotheses that offer new insights on the adoption of information technology have emerged within the past 20 years. Of all these ideas, the technology acceptance model (TAM) has received the greatest attention. The TAM, created by Davis (1986), is one of the most widely used theoretical frameworks in the many attempts to understand and predict the process of consumers' acceptance or adoption of information systems. According to TAM, the influence of external factors on system usage is determined by behavioral intention, which is based on attitude. Perceived system utility and perceived system usability determine attitude (Venkatesh and Davis 2000).

Perceived Risk (PR)

Generally speaking, intentional interaction with uncertainty leads to risk. danger perception is the subjective evaluation people make of the degree of danger. The adoption of internet technology is hampered by the risk that customers assume while completing electronic transactions since there is no physical touch (Cheng et al., 2012). Consumer attitudes and actions regarding the adoption of internet banking are significantly influenced by perceived risk (PR).

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According to Almaiah et al. (2023), PR has a detrimental effect on attitudes and trust about mobile banking services, which lowers adoption rates. They point out that people are discouraged from using financial technology solutions due to worries about security, identity theft, and online fraud. In a similar vein, Kesharwani and Bisht (2012) discovered that PR dramatically lowers the behavioral intention to use online banking, especially when privacy and security concerns are strong. Wei et al. (2018) demonstrated that risk concerns have a detrimental impact on online purchase intentions by extending the Technology Acceptance Model (TAM) and Perceived Risk Theory (PRT) to e-commerce transactions. This is consistent with the findings of Silanoi et al. (2023), who discovered that Generation Z customers saw PR as a deterrent to using mobile banking after COVID-19, affecting their trust and confidence. Furthermore, Kelly and Palaniappan (2023) show that security-related worries can eclipse perceived utility and simplicity of use by identifying PR as a critical factor impacting the uptake of mobile money services in Ghana. By looking at the adoption of e-government, where PR operates as a disincentive even when technological usefulness is high, Nguyen (2023) provides more evidence in favour of this claim. Together, these results imply that PR is likely to impede the adoption of online banking in Gujarat, where financial crime, cybersecurity risks, and privacy concerns are common. Therefore, the following hypothesis is put out in this study:

H1: The acceptability of internet banking in Gujarat is greatly influenced by PR.

Perceived Trust (PT):

A popular definition of trust is the conviction that an organization is trustworthy, moral, honest, and effective. When it comes to online banking, trust is the degree to which users believe their personal data and privacy are protected when utilizing digital financial services (Chong et al., 2010). Customers must have faith in the bank's digital platform in order for online banking transactions to be effective, hence trust is essential (Alsajjan & Dennis, 2010).

In the absence of this trust, customers could have unfavorable opinions of the system and be reluctant to utilize online banking services (Pikkarainen et al., 2004). Research has repeatedly shown that the uptake of online and mobile banking is significantly influenced by perceived trust (PT). According to Abu Shahnab et al. (2010), PT has a favorable effect on behavioral intention and accounts for 2.3% of the variation in online banking usage.

This idea is further supported by Almaiah et al. (2023), who show how PT and perceived security directly encourage the use of mobile banking by reducing worries about fraud and security risks.

In a similar vein, Kesharwani and Bisht (2012) stress that PT reduces perceived risk, which increases consumers' propensity to utilize online banking services. Silanoi et al. (2023) investigated the uptake of mobile banking among Generation Z and discovered that, particularly in the wake of COVID-19, PT affects confidence and desire to participate in digital transactions. Additionally, Nguyen (2023) showed that PT is essential to the adoption of e-government services, indicating its wider applicability in digital financial services. These conclusions are supported by Kelly and Palaniappan's (2023) findings, which demonstrate that PT has a major influence on Ghanaian consumers' perceptions of mobile money services, highlighting its significance in the uptake of financial technology.

Furthermore, research on fintech services and e-commerce has highlighted PT's importance in promoting online financial activity. According to To and Trinh (2021), PT has a major impact on the behavioral intention to use mobile wallets, indicating its vital role in encouraging the use of digital payments. While Dawood et al. (2022) found that mobile perceived trust (MPT) is a critical mediator in financial technology acceptance, Shahzad et al. (2022) verified that trust has a beneficial influence on attitudes about fintech adoption.

These results imply that PT is likely to be a decisive factor in the adoption of online banking in Gujarat, where worries about cybersecurity, financial fraud, and data privacy are common. Therefore, the following hypothesis is put out in this study:

H2: PT significantly affects Gujarat's acceptance of internet banking.

Perceived ease of use (PEOU)

A key factor in the Technology Acceptance Model (TAM) that affects consumers' propensity to embrace digital financial services is perceived ease of use (PEOU) (Davis, 1989). The degree to which people think utilizing a technology will be simple is known as PEOU. If users They are more likely to use an online banking platform if they believe it to be straightforward and easy to use (Zacharis, 2012).PEOU has a significant impact on the adoption of technology, including digital payment methods, fintech apps, and mobile banking, according to a number of studies (Kasilingam, 2020; Kesharwani & Bisht, 2012; To & Trinh, 2021).

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According to Almaiah et al. (2023), Ease of use accounts for 44% of users' acceptance of mobile banking apps overall, highlighting the necessity of user interfaces that are simple to use in order to lower adoption barriers. In a similar vein, Silanoi et al. (2023) found that PEOU significantly influences perceived utility (β = 0.809), highlighting its influence on user views toward online banking. Research on mobile money services in Ghana (Kelly & Palaniappan, 2023) also showed that perceived utility, social influence, and simplicity of use all had a big impact on consumers' opinions about ongoing use. Additionally, Shahzad et al. (2022) looked at fintech adoption and discovered that PEOU increases consumer involvement and confidence, which raises financial portal adoption rates. Furthermore, Kesharwani & Bisht (2012) showed that well-designed banking websites lower perceived risk, increasing the appeal and accessibility of digital banking. In light of these observations, the following theory is put forth:

H3: The use of internet banking in Gujarat is significantly impacted by PEOU.

Perceived usefulness (PU)

According to Davis et al. (1989), perceived usefulness (PU) is "the degree to which a person believes that using a particular system would enhance his or her job performance." PU is an essential part of the Technology Acceptance Model (TAM) and has a significant impact on how users feel about embracing new technology. Because it represents the system's capacity to increase an individual's efficiency through time savings and improved job effectiveness, PU is directly associated with perceived utility and productivity and users' behavioural intentions in a variety of digital financial scenarios have been found to be strongly correlated by several research. According to Chong et al. (2010), PU has a substantial impact on users' intentions to use online banking services since they view these platforms as effective and time-saving solutions for financial transactions. In a similar vein, Venkatesh & Davis (2000) showed that PU has a direct effect on technology adoption, demonstrating that people are more inclined to utilize a system if they think it would improve their performance. Additionally, empirical data demonstrates that PU and the adoption of internet banking are positively correlated in many circumstances.

For example, Kesharwani & Bisht (2012) used TAM to examine internet banking in India and found that a greater intention to use online banking services is associated with a higher PU. Additionally, To & Trinh (2021) discovered that PU has a major impact on Vietnamese mobile wallet use, highlighting its significance in the adoption of financial technologies. In a similar vein, Wei et al. (2018) showed that PU has a significant impact on online purchase intentions, indicating that consumers are more likely to embrace a system when they believe it to be beneficial In Gujarat, where digital financial services are becoming more and more popular, it is realistic to assume that PU will have a major impact on the acceptability of online banking services. Online banking is more likely to be adopted by users who believe it offers advantages in terms of efficiency, convenience, and time savings.

H4: PU significantly affects Gujarat's adoption of internet banking.

III. METHODOLOGY

To learn more about consumers' plans to adopt internet banking, a cross-sectional survey was used. The survey questionnaire was distributed to 181 bank customers who made up the study's sample. The questionnaire was divided into two pieces. In the first section, demographic information about the respondents was gathered. In the second section, respondents were asked how they felt about each variable in the model using five-point Likert scales, with 1 denoting "strongly disagree" and 5 denoting "strongly agree."Because of its economic importance and the quick digitization of financial services in the area, Gujarat, Gujarat's second-largest city and commercial centre, was chosen as the sample location. The city is home to a varied population with a range of financial expertise, which makes it the perfect place to study the uptake of internet banking. Additionally, Gujarat's banking industry has seen a notable increase in digital banking customers, providing a pertinent and changing environment for examining client attitudes. An important demographic for the adoption of internet banking is the city's growing middle class and business-oriented community. By concentrating on Gujarat, this study aims to obtain insights that are both regionally relevant and perhaps applicable to other Gujarat cities experiencing comparable financial and technical developments.

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The gathered data was put into the Statistical Package for Social Sciences (SPSS) version 17.0. Regression analysis is used to test the study's hypothesis; factor analysis guarantees the validity of the measurements; Cronbach alpha is used for reliability to evaluate the internal consistency of the study's primary variables; Pearson correlation indicates the degree of correlation between the primary variables; and descriptive statistics are used to describe the characteristics of the respondents.

IV. Analysis And Findings

4.1 Demographic Information

The demographic data of the 181 survey participants was compiled in Table 1. Males made up 62.43% of the respondents, with the rest respondents being female. Of the participants, 49.73% were between the ages of 26 and 35. Of them, about 58.01% had a bachelor's degree. The service industry employed 50.83% of the participants, with the remaining respondents working in a variety of different fields. The remaining people had different marital situations, with 53% of them being single.

Table 1:
Demographic information of respondents

Variable	**Classification**	**Frequency**	**percentage**
Gender	Male	113	62.43
	Female	68	37.57
Age:	Below 26	56	30.94
	26–35	90	49.73
	36–45	22	12.15
	46orabove	13	7.18
Educational level	Higher Secondary or below	34	18.78
	Bachelor’s degree	105	58.01
	Master’s degree or above	42	23.21
Occupation	Business	32	17.68
	Service holder	92	50.83
	Student	47	25.97
	Others	11	6.08
Marital status	Single	96	53.04
	Married	76	41.99
	Divorced	6	3.31
	Widow	3	1.66

Source: Primary Data

4.2 Reliability and validity of the measures

Cronbach's alpha was used to evaluate the items' reliability and internal consistency. A variable is deemed dependable and internally consistent if its alpha coefficient is.70 or above (Hair et al. 2010). The results showed that all of the alpha scores were higher than.70.

Perceived risk had the greatest alpha value (.870). Behavioural intention (.837) comes in second, followed by perceived ease of use (.753) and perceived trust (.821). Perceived usefulness (.714) was the variable with the lowest alpha value.

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Validity of TAM constructs (independent variables)

Principal components analysis (PCA) and varimax rotation were used by the researchers to verify the reliability of the measurements. Before using PCA, the data was assessed for eligibility for analysis. The findings revealed that the correlation matrix had several coefficients of.3 and above. The Kaiser-Meyer-Olkin value was.821 and the Barlett's Test of Sphericity (Barlett 1954) attained statistical significance by exceeding the recommended value of.6 (Kaiser 1970, 1974). This increases the factorability of the correlation matrix.

There are twenty-one elements in the Technology Acceptance Model (independent variable). Table (2) shows that four components had eigen values larger than 1 when PCA was applied to all 21 items; these components accounted for 21.69%, 17.79%, 15.58%, and 14.40% of the variance, respectively.

PU6 and PEU5 were eliminated from the analysis since their loadings were less than.5. Six more items were eliminated due to their repetition in other factors (one perceived ease of use item in the perceived trust factor, two perceived usefulness items in the perceived ease of use factor, and two perceived trust items in the perceived risk and perceived ease of use factor).

Table 2:
Principal factor analysis-Independent variables

Factorname	Items	F1	F2	F3	F4
Factor 1: Perceived Risk (PR)	In my opinion, the existing online services are still lacking In many aspects.	**.889**	.049	.034	.036
	I contend that the present state of online banking lacks stability.	**.881**	-.004	.111	-.048
	I think, IT experts who handle Online banking system, do not have enough expertise	**.831**	.081	-.039	.067
	In my opinion, the present online technology is still in an Immature stage.	**.811**	-.091	.110	.101
Factor 2: Perceived Trust (PT)	I'm sure my transactions are safe when I use online banking;	.039	**.886**	.059	.149
	I feel safe using online banking because it protects my privacy	.035	**.859**	.174	.038
	I trust that my information is securely stored when using online banking	-.091	**.709**	.401	.062
Factor 3: Perceived Ease of Use (PEU)	Getting used to using the online banking are simple for me	.039	.139	**.789**	.069
	It's easy for me to send and receive money through online banking	.081	.125	**.778**	.233
	Using online banking to complete banking transactions is simple.	.119	.291	**.599**	.169
	Online banking can improve output quality while requiring the same amount of work;	.078	.095	-.055	**.816**

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Factor 4: Perceived Usefulness(PU)	Productivity can be greatly improved by using online banking;	.026	.105	.272	**.751**
	The efficiency of my efforts can be increased by using online banking	.037	.048	.427	**.722**
	Percentage variance explained	21.69	17.79	15.58	14.40
	Eigen values	3.53	3.02	1.63	1.21
	Reliability	.870	.821	.753	.714

Source:Primary Data

Validity of intention to use online banking (dependent variables)

Before using PCA, the data was assessed for eligibility for analysis, which showed that several coefficients with a value of.3 or higher were present in the correlation matrix. The Kaiser-Meyer-Olkin value of.883 exceeded the recommended value of.6 (Kaiser 1970, 1974).

It met Barlett's Test of Sphericity's criteria for statistical significance (Barlett 1954). This increases the factorability of the correlation matrix. Table 3 shows that principal component analysis (PCA) was performed on all five items of the dependent variable, the willingness to use online banking. The results showed the presence of a single component whose eigen value above 1, accounting for 61.96% of the variance.

Table 3:
Principal factor analysis-Dependent variables

Factor: Behavioral Intention (BI)	I intend to suggest positively about online banking to myfriend.	**.862**
	Iintendtosuggest positively about online banking to my family members.	**.808**
	I intend to go on with using and receiving online banking facilities.	**.801**
	I am inclined to utilize it.	**.749**
	I plan to utilize it on numerous occasions.	**.711**
	Percentage variance explained	61.961
	Eigen values	3.221
	Reliability	.837

Source: Primary Data

Because Principal Component Analysis (PCA) effectively reduces data dimensionality while maintaining the underlying structure of correlations between variables, it was selected for this investigation. PCA assists in ensuring that every build in the Technology the Acceptance Model (TAM) is precisely and clearly measured. Kaiser's criteria, which argues that components with eigen values larger than 1.0 should be kept since they explain more variation than a single observable variable, serves as the basis for the choice to keep factors (Kaiser, 1960). This approach guarantees that only the most significant constructs are included in subsequent statistical analysis and is commonly used in factor analysis.

Furthermore, the scree plot and the retrieved variables were verified by taking into account the proportion of variation explained minimize redundancy while accurately representing the dataset. The elimination of six more Two important factors were taken into account while creating the factor analysis items: cross-loadings and conceptual lucidity. Items that loaded onto many variables with comparable strength presented a construction risk. Validity, as they failed to measure a single theoretical attribute clearly. In particular, two Perceived Usefulness questions loaded into the Perceived Ease of Use factor, indicating that respondents could view ease of use as a direct advantage rather than a distinct concept.

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In a similar vein, there was conceptual overlap between two Perceived Trust measures and Perceived Risk and Perceived Ease of Use. Lastly, the results may be misinterpreted because one Perceived Ease of Use item loaded more heavily onto the Perceived Trust factor. By eliminating these items, the measuring model became more accurate and dependable while maintaining the theoretical uniqueness and empirical validity of each construct.

4.3 Correlation

Three independent variables—perceived trust (r=.433, p=.000), perceived ease of use (r=.412, p=.000), and perceived usefulness (r=.288, p=.000)—have a substantial and positive correlation with the dependent variable, the desire to utilize online banking (Table 4). Risk perception (r=.042, p=.552) has a favourable but negligible relationship with the behavioural desire to utilize internet banking.

Table 4:
Correlation

No.		Perceived Risk	Perceived Trust	Perceived Ease of Use	Perceived Usefulness	Behavioral Intention	Mean	Standard deviation
1	Perceived Risk	1					3.0198	1.09453
2	Perceived Trust	.058	1				3.9188	.75931
3	Perceived Ease Of Use	.208**	.462**	1			3.9490	.72184
4	Perceived Usefulness	.121	.306**	.468**	1		3.9687	.67632
5	Behavioral Intention to use	.042	.433**	.412**	.288**	1	3.9402	.74492

*Note: **p<0.01 Source: Primary Data*

4.4 Hypothesis test

Table 5 summarizes regression analysis using SPSS 17, which is commonly used to examine the associations between a set of independent variables and a single dependent variable (Hair et al., 2005). The findings show that in hypothesis H1, perceived risk considerably has an impact on internet banking acceptance—was rejected (t=1.326, p=.176).

Perceived trust affects the acceptance of online banking, which is in line with the second hypothesis, H2 (t=2.485, p=.015). Additionally, the third hypothesis—that perceived ease of use has a significant impact on online banking usage—was confirmed by t=3.431, p=.006. The fourth hypothesis (H4), which states that perceived utility has a significant influence on the uptake of online banking, was ultimately rejected (t = -.572, p =.565).

Table 5:
Coefficient analysis

Hypothesis	Beta	t	Sig.	Result
H1:	.127	1.326	.176	Rejected
H2	.241	2.485	.015	Supported
H3	.279	3.431	.006	Supported
H4	-.046	-.572	.565	Rejected
R square	.328			
Adjusted R	.308			

Source: Primary Data

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V. DISCUSSION

This study's main goal was to investigate how people's intentions to utilize online banking services in Gujarat were influenced by perceived utility, perceived ease of use, perceived risk, and perceived trust. Applying the Technology Acceptance Model (TAM) as the theoretical framework, the study aimed to evaluate how these elements affect user behaviour in relation to online financial services. The results, which show both predicted and unexpected outcomes, offer insightful information about the major factors influencing the adoption of online banking.

Perceived Risk and Online Banking Acceptance

The first hypothesis (H1), which suggested that perceived risk had a major influence on Gujarat consumers' adoption of internet banking, was disproved. The findings show that worries about fraud, system failures, security risks, and data privacy violations do not play a important part in influencing consumers' propensity to use online banking services. Since risk is frequently mentioned as a significant obstacle to online financial transactions, this study deviates from conventional predictions. Users' growing familiarity with and trust in digital banking systems over time might be one reason for this outcome. Users may feel more secure as financial institutions in Gujarat keep putting strong security measures in place, such biometric verification, two-factor authentication (2FA), and real-time fraud detection systems. on the security of internet banking. Furthermore, a lot of customers could believe that risk is an inevitable part of digital transactions, so instead of letting it stop them from using them, they might accept and manage it. The study's sample mostly comprises of users who have accepted a certain amount of risk in exchange for convenience since people who are extremely risk-averse may already have made the decision to completely shun internet banking.

Perceived Trust and Online Banking Acceptance

The second hypothesis (H2), which claimed that adoption of internet banking is greatly influenced by perceived trust, was validated. The findings demonstrate that consumers' inclination to interact with online banking services is significantly influenced by their level of trust. When people think that a bank is transparent, protects their financial data, and offers dependable services, they are more inclined to use digital banking systems. This result is consistent with earlier studies that highlight trust as a key element of online financial transactions.

Online banking depends on users' trust in the integrity and security of the system, in contrast to traditional banking, where clients may speak with bank employees immediately. To increase user trust, banks must thus keep funding security improvements, privacy regulations, and consumer education programs. By exhibiting a dedication to open communication and data protection, financial organizations may promote the use of Internet banking even further.

Perceived Ease of Use and Online Banking Acceptance

The third hypothesis (H3) investigated the connection between perceived usability and Acceptance of internet banking was well-supported. The findings show that usability is the most important element affecting Gujarat's adoption of internet banking. This implies that consumers who find digital banking services intuitive are more inclined to utilize them, easy to use and doesn't require a lot of technological expertise. This is consistent with the essence of TAM. idea that people are more likely to embrace systems that they find easy to use. In the setting of Gujarat, where consumers' levels of digital proficiency differ, a simple and accessible banking interface may have a crucial role in encouraging adoption. Banks should put a high priority on making their systems more user-friendly by providing multilingual assistance, simplifying transaction procedures, and streamlining navigation. Furthermore, offering concise training manuals, chatbots, and Customer service can improve usability even further and entice more clients to adopt online banking services.

Perceived Usefulness and Online Banking Acceptance

Surprisingly, the fourth hypothesis (H4) suggested that perceived utility considerably impacts the uptake of internet banking, was turned down. This result defies conventional TAM. forecasts that indicate a technology's perceived usefulness increases with development probability of adoption. This outcome might be explained by the fact that internet banking has already established itself as a basic service as opposed to an invention that needed explanation for its utility. Put differently, the majority of consumers may already believe that internet banking is advantageous. indicating that their decision to adopt is no longer based on perceived utility. Instead, when deciding whether to utilize online banking services, consumers could give more weight to other factors like simplicity of use and trust than to utility. Another reason might be because a lot of Despite having access to internet banking, consumers in Gujarat could still depend on conventional banking services for specific transactions.

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This could be brought on by a lack of trust in digital platforms, a preference for face-to-face communication, or worries about technological issues. Because of this, even if consumers understand the advantages of online banking, they might not completely switch to digital banking unless other issues—like usability and trust—are sufficiently resolved.

The study's conclusions have important ramifications for financial organizations and banks looking to increase the adoption rates of internet banking. Considering the significant impact of perceived usability and perceived trust, banks have to concentrate on enhancing platform security, accessibility, and openness. The user experience should be made simpler by using intuitive design and customer service while also bolstering security protocols to boost client trust. Although adoption was not significantly impacted by perceived risk or perceived utility, Banks shouldn't completely ignore these aspects. Enhanced cybersecurity and fraud prevention programs are examples of risk mitigation tactics that should remain a top concern. Banks might also concentrate on focused awareness initiatives to assist customers in comprehending the advantages of internet banking, thereby filling up perceived utility gaps. Overall, by offering actual data from Gujarat, this study adds to the body of knowledge already available on the use of online banking. The knowledge acquired can help financial institutions hone their tactics to enhance digital banking services, which will eventually increase adoption rates and promote a more smooth online banking experience.

Applications of This Study

There are several real-world uses for this study, especially in the banking and financial technology industries. First, the results offer useful information to banks and other financial organizations trying to increase Gujarat consumers' use of online banking services. Banks should concentrate on enhancing online banking adoption as perceived ease of use and trust have a big impact. the ease of use of their systems and putting in place more robust security measures to boost customer trust. While clear regulations and strong cybersecurity measures can boost confidence, improving website navigation, streamlining transaction procedures, and providing customer assistance can all contribute to increased usability. The study's conclusions can also be used by regulators and policymakers to create guidelines that support safe and easy-to-use digital banking services.

Adoption can be further accelerated by educating consumers about the advantages and safety of online banking through awareness campaigns. Fintech companies and developers can also use these insights to design banking applications that are in line with user preferences, making sure that features like easy-to-use interfaces, seamless transactions, and security guarantees are prioritized. Finally, academic researchers can expand on this study by investigating other elements that affect the adoption of online banking. A more thorough knowledge of consumer behaviour would result from extending studies beyond Gujarat to other parts of Gujarat. All things considered, this study adds to the expanding corpus of information on digital financial services and provides practical methods for increasing the use of internet banking in developing nations.

VI. Conclusion

It is scarcely unexpected that the Internet has emerged as the primary medium for doing business, given the constantly shifting business environment and the increased number of bank clients utilizing online services. It is a crucial component of the banking industry, particularly when considering internet banking in account. This study investigates consumers' acceptance of online banking using the Technology Acceptance Model (TAM), focusing on their behavioural intentions when using the new technology-based financial services. Our results show that perceived ease of use and trust have a major influence on customers' inclinations to use Internet banking in Gujarat. Perceived utility and perceived risk were shown to have no effect on customers' inclinations to utilize online banking services.

Limitations and Future Research Directions

This study has several limitations that should be noted, just like any other research. First, there were only 181 responders in the sample, which may have limited how broadly the results may be applied. Furthermore, the study was only carried out in Gujarat, hence the findings might not accurately reflect the opinions of consumers throughout Gujarat. To increase the findings' relevance, future studies should strive to include a broader and more varied sample from other areas. This study's primary reliance on the Technology Acceptance Model (TAM) variables—perceived utility, perceived ease of use, perceived trust, and perceived risk—to explain the uptake of online banking is another drawback.

Although these elements are important, additional possible factors, including cultural attitudes, internet accessibility, financial literacy, and Government rules were not taken into account. Future research ought to include more elements that might influence the uptake of internet banking, offering a more thorough comprehension of user behaviour. Additionally, a cross-sectional survey approach was used in this study, gathering consumer opinions at one particular moment. However, user perspectives and Technological developments change with time. longitudinal research that monitors shifts in Long-term customer behaviour and preferences would provide more in-depth understanding of developments in the use of internet banking.

Last but not least, this study used self-reported data, which might be skewed by individual misinterpretations of survey questions or social desirability bias. Future studies might use qualitative techniques like focus groups or interviews to supplement survey data. groups, in order to obtain deeper understanding of the issues and motivations of customers. Future studies can expand on the present findings and offer a more comprehensive picture of Internet banking uptake in Gujarat and other emerging economies by addressing these limitations.

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