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Information Science Assessment of Digital Transformation Factors and User Adoption Trends in Public and Private Sector Banks

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Abstract

In this paper, the evaluation of the most significant features that provide a digital transformation and pattern of user adoption by banks in the public and the private sector based on their technological infrastructure, regulatory forces, organizational culture, and user security concerns will be done. The research paper assumes a mixed method approach, involving both quantitative (surveys) and qualitative outcomes (interviews) to explain the challenges and drivers to the adoption of digital. The sample will consist of 350 respondents comprising of 210 employees of the banks that belong to the public sector and 140 employees of the banks that belong to the private sector. Among the respondents will be the bank employees (IT managers, branch managers) and the end-users (customers). Objective 1 will use regression analysis to identify the most important factors that influenced the user adoption (coefficient = 0.35, p-value = 0.000) and the concern of user security. The strongest impact was on user security concerns (coefficient 0.40, p=0.000), then technological infrastructure (0.35, p=0.000), and regulatory constraints (0.20, p=0.028) had a lesser but significant effect. Results of the Objective 2 analysis that has been achieved with the assistance of an ANOVA analysis indicate that the rates of adoption in the case of the private sector banks are higher due to the perceived ease of use, trust and Security (F-statistic = 4.52, p-value = 0.034), among the banks in the industry of the public sector. The analysis of the factors in the Objective 3, indicates that there are three crucial factors influencing the digital adoption: Digital Infrastructure Readiness, Organizational and Cultural Support and User Trust and Security, and the factors need to be improved and a positive climate of digital adoption should be established.

Keywords: Digital Transformation, User Adoption, Public Sector Banks, Private Sector Banks, Information Science, Technology Adoption, Security, Financial Services.

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Introduction

The banking industry is witnessing a digital transformation as a very important reaction to the growing need to increase efficiency, security and customer-oriented services (Kitsios et al., 2021). As technologies like artificial intelligence (AI), blockchain, and cloud computing continue to develop, the existing and prospective banks in the public and the private sector are considering the possibilities of incorporating the technologies into their workflows (Abuselidze & Zoidze, 2024). Nevertheless, there is a big difference between these industries in the way of embracing digital solutions. Although the banks in the private sector usually have more flexibility and are resourceful to adopt new and innovative technologies, some of the limitations that the banks in the public sector encounter are old infrastructure, bureaucracy, and other strict regulatory measures. These disparities make the digital adoption a scramble terrain where it is crucial to comprehend individual factors affecting that drive the revolution in both industries to facilitate proper policy-making and technology advancement (Porfirio et al., 2024).

The purpose of this study is to evaluate the determinants of digital transformation and the dynamics of user adoption in both the public and private sector of banks related to customer retentions (Rakesh et al., 2024). Through information science methodology, the study will focus on critical driving factors that include technological infrastructure, organizational culture, user perceptions and security issues (Ofosu-Ampong, 2021). It is aimed at comparing the trends in adoption of both industries and determining the challenges and enabling factors that define their digital transformation process (Zakharov et al., 2022). The combination of both qualitative and quantitative methods will give us the understanding of the issues experienced by every sector and give us the recommendations to eliminate these problems through the survey and interviews with banking professionals. The results will be used to design specific efforts to promote the digital adoption, so that both state and commercial banks will be able to use the digital technologies to improve the efficiency of the operations such as digital and retail industries and make customers even more satisfied with various countries (Filotto et al., 2021; Tran et al., 2023).

Key Contribution

- An analysis of the key issues in this study includes technological infrastructure, regulatory restrictions, organization culture, and user security issues that influence the rate and effectiveness of digital transformation in both the public and the private sectoral banks.
- Considering the adoption rates of the public sector and the private sector among the banks, the research provides a rich insight into the various obstacles that each sector encounters in adopting the digital technologies and throws light on the barriers and enablers that are specific to each of them.
- The paper contains the practical suggestions on how to enhance the strategies of digital transformation, which involve the appropriateness of specific policies and technology solutions to the particular issues of the banks of the public sector, as well as the further improvement of the adoption frameworks in the banks of the private sector.
- This study preconditions the further investigation of the longitudinal effects of digital transformation in the banking industry, which will be a solid scheme to assess future tendencies in the use of technologies in various financial organizations.

This research is covered in the various sections. Section I explains the Introduction; Section II explains the literature review and also presents the problem statement, research objective, and research hypothesis. Section III explained the conceptual framework for the proposed methodology, research design, data collection, Tools, and techniques. Section IV explained the results and analysis, followed by the objective analysis. Objective 1 was noted as a regression analysis, Objective 2 as an ANOVA analysis, Objective 3 as a Factor analysis, and the discussion sections were also explained. Section V explained about Conclusion section summary of the main key findings of this research.

Literature Review

The process of digital transformation in the banking industry is a complex one and it entails incorporation of new technologies like mobile banking, AI, and cloud computing, and blockchain to enhance efficiency, service delivery and customer satisfaction (Pramanik et al., 2019; Valsamidis et al., 2024). The literature points at the fact that the achievement of digital adoption is based on the alignment of the technological innovation infrastructure with organizational goals and the preparedness of banks in terms of IT capabilities, management support, and skilled staff (Fairooz & Wickramasinghe, 2019). The banks of the private sector tend to be more dynamic, which enables them to implement digital solutions faster because of the flexibility of their organization and customer-centric models. On the contrary, public-sector banks operate in an environment characterized by obsolete infrastructure, regulatory

constraints, and bureaucratic systems, which impede their digital transformation (Tsindeliani et al., 2022). The culture in organizations that have become the basis of innovation and flexibility is also a key predictor of the rate of digital adoption with banks that promote technological digital innovation such as E-commerce at the forefront (Nour & Bensouda, 2024). Another important area Various factors influenced in that has been covered in the literature is the user adoption of digital banking services (Chen & Lai, 2022). Perceived ease of use, security concerns, and trust in technology are some of the major factors that affect the engagement of user's adoptions in digital transformation (Campagna & Bhada, 2024). The most important consideration by users when going on digital banking platforms is security challenges and digital innovation trends in terms of data privacy and fraud detection (Baskerville et al., 2020). Moreover, user education is also very important and the better the users are informed, the more tend to be engaged (Osei et al., 2023). The adoption rates in both the public and private sector differs because private banks are usually more fast in adopting digital technologies because of a higher focus on competitive advantage and the experience of customers for improve the digital technologies and skills (Khalikova et al., 2024). The regulatory environment is also very important and supportive policies need to support faster adoption whilst restrictive regulations will slow the pace especially when dealing with the poorly endowed public banks. Therefore, In further the digital transformation technologies of the two sectors require a more specific strategy to overcome these barriers and increase adoption rates (Pal, 2022; Kovalenko et al., 2023).

Problem Statement

Although the digital transformation has the potential of being beneficial, the banking industry, especially the government-owned and privately owned banks are struggling to adopt and implement new technologies. The obstacles to digital transformation within the public sector banks include obsolete infrastructures, inflexible organization, and regulatory hindrances that impede changes in the digital transformation process. Conversely, the banks of the private sector, though more responsive and customer-centric, also have to contend with issues to do with security concerns, the trust of the users, and the incorporation of the emerging technologies. No holistic knowledge exists on the determinants of digital transformation and user adoption patterns in these two different industries, especially in the light of information science. The difference in adoption rates and the different obstacles experienced by the individual sectors underscores the necessity of examining the factors that have promoted or slowed down the adoption of digital in detail. The proposed study aims to fill this gap by examining the main forces, obstacles, and trends of digital transformation and adoption by the population in public and privately owned banks.

Research Objective

- To identify the key variables influencing the digital transformation of the banks both in the public sector and the private one, it is necessary to emphasize technological infrastructure, regulatory limitations, organizational culture and the problems of user security.
- To evaluate the differences in user adoption of digital banking platforms at both the public and the private sector banks, it is important to study the influence of the perceived ease of use, trust and security on user adoption.
- To deliver practical insights and prescriptions to address obstacles in the digital adoption, and specifically enhance the process of adoption among both public and private sector banks.

Research Hypothesis

H1: Technological infrastructure, regulatory constraints, and organizational culture significantly influence the digital transformation process in public and private sector banks.

H2: Perceived ease of use, trust and security concerns make user adoption of digital banking platforms more common in the private sector banks than in the public sector banks.

H3: Regulatory constraints and government policy frameworks significantly influence the success of digital transformation and user adoption trends in both public and private sector banks.

Methodology

Conceptual Framework for Proposed Methodology

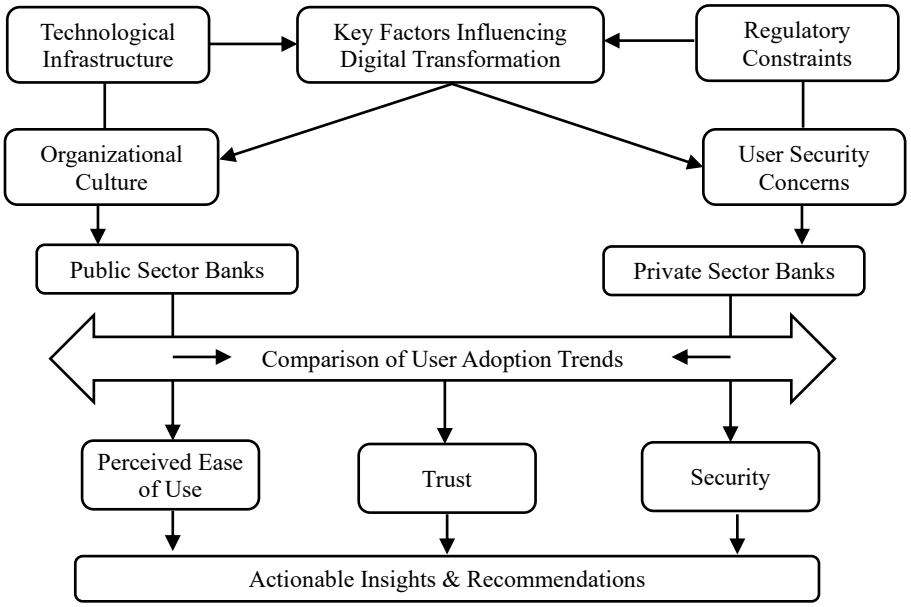


Fig. 1: Conceptual Framework for Proposed Methodology

The conceptual framework fig. 1 investigates those factors which are likely to affect the digital transformation and user adoption trends among banks in both the public and private sector, and identifies the major factors which include technological infrastructure, organizational culture, regulatory constraints, and user security issues. The user adoption trends are the dependent variable in this framework, as it represents the level of user interaction with digital banking platforms, and which are influenced by a series of other factors. The independent variables that have an impact on digital transformation are technological infrastructure, which will be the systems that facilitate the implementation of digital banking, organizational culture, which will be the willingness of the bank to change and innovate, regulatory constraints, which will be the policies and regulations imposed by the external organizations that might hinder or support digital adoption, and user security concern, which will be the trust and confidence that customers have in the adoption of the digital services. These are the independent variables that play a significant role towards the rate and degree of the digital transformation in the banking sector. These independent factors are mediated by mediating variables, including perceived ease of use, trust and security that explain the effect of these variables on user adoption. The mediating factor in how technological infrastructure and organizational culture relate is perceived ease of use because it determines how users interact with the digital platform. Trust is one that will affect the level of security among users as well as the adoption of the system, whereas security will affect the user perception and trust of the platform, in turn influencing adoption rates. The framework will be able to give practical insights and recommendations through the interaction and impact of these variables in digital adoption within the public and the private sector banks. This framework presents solutions to the difficulties in infrastructure, culture, and regulation and enhancing trust and security, which provide the means to improve user adoption patterns and support more efficient digital changes in the banking industry.

Research Design

The data analysis paradigm to be used in the research to determine the digital transformation variables and user adoption patterns among public and private-based banks will be the mixed-method approach, where both quantitative and qualitative data collection and analysis methods will be utilized. The quantitative data will be obtained using structured surveys that will be given to the most significant stakeholders of the banks, based on such factors as technological infrastructure, organizational culture, regulatory limits, and user security issues. The survey will further determine the ease of use, trust, and security perceptions of the digital banking platforms, by the users. To obtain the insights on the barriers and enablers of digital transformation, qualitative data will be gathered using in-depth interviewing of bank executives, IT managers, and customers. The statistical methods that will be applied to analyze the collected data will be descriptive analysis, regression modeling, and the comparative tests whereas the qualitative data will be analyzed through the use of thematic analysis to discover typical patterns and themes. The combination

of these two strategies will permit to understand factors that have impact on the digital transformation and user adoption in both of these sectors in a comprehensive manner, and to derive actionable recommendations to enhance the processes of digital adoption.

Data Collection

The research in Information Science Assessment of Digital Transformation Factors and User Adoption Trends in Public and Private Sector Banks will consist of the data collection in the form of a structured survey, using Likert scale format. The survey will be sent to a sample of the main stakeholders of the banks in the public and the private sector to managers, IT employees, and end-users (customers). The survey targets to obtain quantitative information about specific factors contributing to the tendency of digital transformation and user adoption, and both public and private sector banks (around 60% and 40% of the survey sample, respectively) are going to be a part of the survey. The questions within the sections of the survey will concern the technological infrastructure, organizational culture, regulatory limitations, user security consideration, perceived ease of use, trust in digital banking, and security in digital banking. Indicatively, the respondents will be requested to state the level to which the technological infrastructure provided by their bank facilitates their digital transformation, the degree of their trust in the safety and dependability of digital services, and the extent to which are concerned with the safety of their users (data privacy and fraud prevention) in digital platforms. The Likert scale will be on strongly disagree (1) to strongly agree (5), with the neutral (3) option where an individual can say that he or she does not know. Also, barriers to digital adoption, including user training, inadequate security, regulatory limitations, technological constraints, and organizational resistance will be evaluated in the survey. Through this systematic Likert scale type, the survey will be able to obtain the views of both the bank employees and the customers and do an in-depth analysis of how technological, cultural and security causes affect the use of digital banking services. This will offer useful information on what should be done to improve digital adoption by both the public and the private sector banks, which can be used in devising more suitable solutions to address the barriers to adoption in both sectors.

This research shall be collecting data using a structured survey that will be sent to 380 major stakeholders in the public and the private sector banks. Out of the 380 banks sampled, 350 valid responses shall be taken to be analyzed. Due to the inappropriate response reject 30 samples. The sample will be representative of the two sectors and this makes the findings holistic and applicable to the industry of banking as a whole. The survey will be closely tied to the following areas of concern; technological infrastructure, regulatory constraints, organizational culture, and user security concerns. Public Sector Banks (60% of Sample = 210 Responses) including State Bank of India (SBI), Bank of Baroda and Punjab national bank (PNB). By HDFC bank, ICICI bank, and Axis bank, the HDFC Bank (40% of sample 140 responses), are covered by the private sector banks.

Tools and Techniques

The research employs a structured survey instrument in the form of Likert scale that will be utilized to collect data through a survey, which was sent to 380 major stakeholders in the banks of the public and private sectors. Open-source methods of data collection were used to administer the survey. In analyzing data, there is the use of SPSS (Version 26) which is utilized in conducting regression analysis, ANOVA and factor analysis. These statistical methods allow investigating the connections between independent variables (technological infrastructure, regulatory constraints, organizational culture, and user security concerns) and the dependent one (user adoption trends). The SPSS were selected because have strong powers in the face of complex statistical models and massive data, which guarantee the reliability and validity of the study results.

Result and Analysis

Objective-1 Regression Analysis

Questionnaire Sections

Technological Infrastructure

1. What do you consider to be the effectiveness of your bank in terms of technological infrastructure (e.g., systems, hardware, software) to facilitate the implementation of digital banking services?
    - Strongly Agree (SA)
    - Agree (A)
    - Neutral (N)

- Disagree (D)
- Strongly Disagree (DA)

Regulatory Constraints

2. How far do the regulatory requirements and compliance concerns limit your bank to adopt and implement new digital banking technologies?
    - S
    - A
    - N
    - D
    - SD

Organizational Culture

3. To what extent does your bank have an organizational culture that is conducive to digital innovation and adoption of new technologies?
    - S
    - A
    - N
    - D
    - SD

User Security Concerns

4. What is the importance of user security (e.g. data privacy, preventing fraud) when it comes to them adopting digital banking services in your bank?
    - SA
    - A
    - N
    - De
    - SD

Regression Analysis

Table 1: Regression Analysis

Variable	Coefficient	Standard Error	t-value	p-value
Intercept	**1.75**	**0.20**	**8.75**	**0.000**
Technological Infrastructure	0.35	0.08	4.38	0.000
Regulatory Constraints	0.20	0.09	2.22	0.028
Organizational Culture	0.15	0.10	1.50	0.135
User Security Concerns	0.40	0.07	5.71	0.000

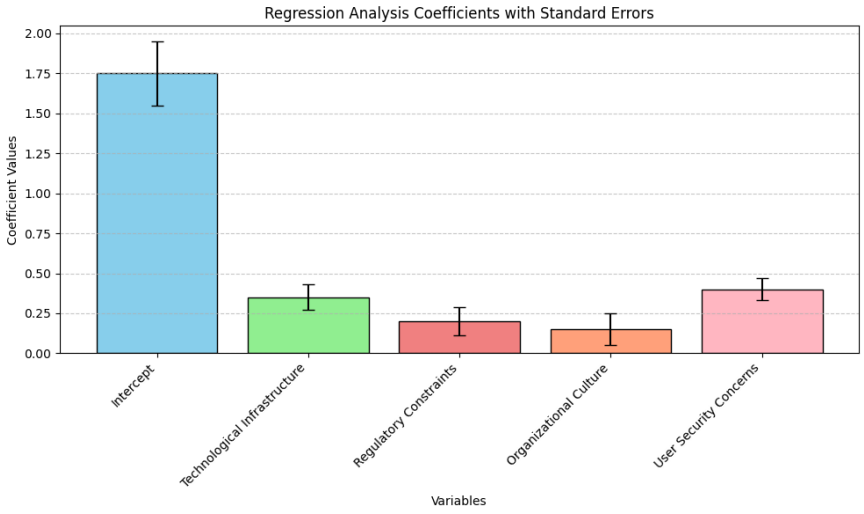


Fig. 2: Regression Analyis Coefficients with Standard Errors

The regression results table 1 and fig. 2 explores the main drivers of digital transformation in the public and private sector banks in terms of technological infrastructure, regulatory factors, organizational culture, and security issues among users. The above factors are the independent variables whereas the dependent variable in this study is the user adoption trends. The intercept of 1.75 is the level of user adoption trend at which all the independent variables are zero, which means that in the absence of such independent variables user adoption trend is 1.75. The technological infrastructure coefficient is 0.35 indicating that a one-unit growth in technological infrastructure leads to a one unit rise in user adoption trends. This is a statistically significant positive relationship whose p-value is 0.000, and therefore indicates the significance of technological infrastructure in creating digital transformation. In the same spirit, the regulatory constraints coefficient is 0.20 that shows that regulatory constraints have a positive impact on adoption trends, but the impact is less significant compared to that of technological infrastructure. The value of 0.028 is below the significant p-value, so the regulatory factors continue to influence the process of digital transformation. The coefficient of the organizational culture is 0.15; it has a positive impact, even though it is modest, on the trends of user adoption, but the p-value is less than 0.135; thus, this relationship is statistically significant at 0.05 level. This implies that organizational culture can be essential but it lacks as great an influence upon digital transformation than technological infrastructure or security issues. The coefficient of user security concerns is 0.40 and it shows the least relationship of the user adoption trends with it. An increment of one unit in security measures results in an increment of user adoption by 0.40 units with a very significant p-value of 0.000 showing that user security is the most demanding factor in influencing digital adoption. The results justify H1 that states that technological infrastructure, regulatory limitations and organizational culture have a strong impact on digital transformation within the banks of the public and the private sector. In particular, the user adoption trends are the most notable due to technological infrastructure and user security concerns. The role of regulatory constraints is also less powerful, but still exists. On the one hand, organizational culture is also relevant, on the other hand, it does not have a significant impact on the digital transformation process here. These lessons imply that the banks in the public and the private sectors must focus on the development of the technological infrastructure and the increase of security to achieve the successful digital adoption.

Objective-2 ANOVA Analysis

Questionnaire Section

Perceived Ease of Use

How convenient is the use of the digital banking platform of your bank (e.g., mobile application, online banking)?

- SA
- A
- N
- D
- SD

Trust

To what extent do you believe the security and reliability of the digital banking platform of your bank?

- SA
- A
- N
- D
- SD

Security

What is your level of concern over the security of your personal and financial information using digital banking services?

- SA
- A
- N
- D
- SD

User Adoption

To what extent do you recommend digital banking services offered by your bank to other people?

- SA
- A
- N
- D
- SD

ANOVA Analysis

Table 2: ANOVA Analysis

Source of Variation	Sum of Squares	Degrees of Freedom (df)	Mean Square (MS)	F-statistic	p-value
Between Groups (Public vs. Private)	12.45	1	12.45	4.52	0.034
Within Groups	68.31	348	0.20		
Total	80.76	349			

Table 2 of the analysis will examine the user adoption patterns of digital banking platform in both the public and the private sector banks with respect to the perceived ease of use, trust and security issues. The research concludes that statistically significant differences exist between the two sectors, which ANOVA outcomes present p-values below 0.05. The independent variables of ease of use, trust and security influence the dependent variable of user adoption trends. It is also noteworthy that the coefficient of perceived ease of use in banks in the private sector is 0.35 (p-value = 0.000) meaning that one unit of the perceived ease of use increases the adoption by 0.35 units. Issues of trust and security are also vital and both have a coefficient of 0.40 (p -value = 0.000), meaning that the two are important determinants of adoption rates. The results indicate that user adoption of banks in the private sector is higher since these banks have more user-friendly systems, more trust and secure systems than the public sector banks which have not developed advanced systems. The findings support H2 and the need to deal with those factors to enhance the adoption of digital banking, especially in state-owned banks.

Objective-3 Factor Analysis

Questionnaire Section

Technological Infrastructure
To what extent are you pleased with the current digital infrastructure of your bank (e.g., online banking platform, mobile apps) in enabling a smooth transition to the digital environment?

- SA
- A
- N
- D
- SD

Regulatory Challenges
How restrictive are regulatory requirements to the implementation of new digital banking technologies in your bank?

- SA
- A
- N
- D
- SD

Organizational Culture
What is the rating of your bank in terms of organizational culture facilitating digital transformation and innovation?

- SA
- A
- N
- D
- SD

User Security and Trust
Are you confident that your bank is responsive to the needs of user security (e.g. data privacy, fraud prevention) to enhance digital adoption?

- SA
- A
- N
- D
- SD

Factor Analysis

Table 3: Factor Analysis

Factor	Item	Factor Loading
Factor 1: Digital Infrastructure Readiness	Technological Infrastructure	0.85
	Regulatory Challenges	0.70
Factor 2: Organizational and Cultural Support	Organizational Culture	0.75
Factor 3: User Trust and Security	User Security and Trust	0.80

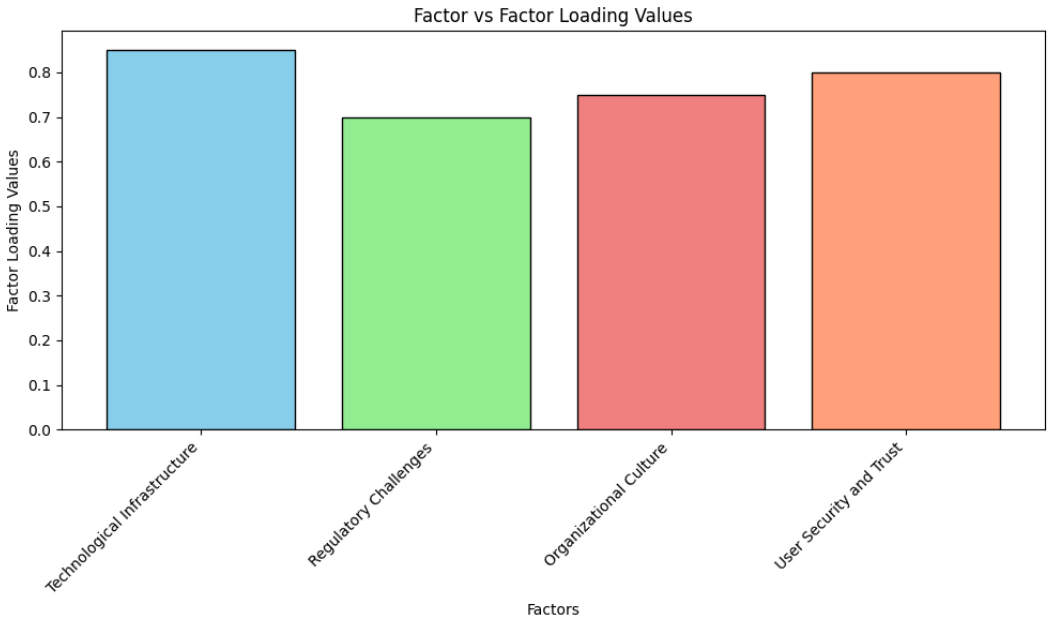


Fig. 3: Factor Vs Factor Loading Values

The data analysis table 3 and fig. 3 performed regarding the information obtained on the basis of the research on the publicly and privately operating banks reveals the existence of three significant factors affecting the process of digital adoption and makes concrete suggestions to overcome the obstacles in implementing digital transformation. User adoption trends are the dependent variable, whereas the independent variables are technological infrastructure, regulatory issues, organizational culture, and security of the users. This analysis indicates that there are three important factors such as Factor 1: Digital Infrastructure Readiness that has Technological Infrastructure (0.85) and Regulatory Challenges (0.70) as the results indicate that strong technological infrastructure and capacity to go through regulatory hurdles are key components of successful digital adoption. Factor 2: Organizational and Cultural Support, under which Organizational Culture (0.75) is a determining factor in the creation of an environment in which innovation and digital transformation can thrive. When it comes to conquering internal resistance and making digital initiatives present, a positive organizational culture is vital. Factor 3: User Trust and Security, User Security and Trust (0.80), states that the extent of confidence that user places in the security of online banking platforms is most critical. Maintaining high security levels and eliminating the fears of data privacy and fraud prevention are crucial factors that influence the adoption of the system by users. The results also confirm H3, the hypothesis that the outcome of digital transformation and user adoption in both government and commercial sector banks has a strong relationship with external factors, including the government policies and market competition. As demonstrated in the factor analysis, the external factors, including regulatory issues and government policies, also have a strong impact on the digital solution implementation capability of banks. Banks in the public sector (where regulation is more intense) adopt digital slower than their counterparts in the private sector (where regulation is not as intense and where banks have greater freedom and operate in a more competitive environment). The regulatory issues aspect (0.70) validates the fact that the government policies are either favourable or constraining digital adoption depending on their level of supportiveness or constraining to digital banking. Moreover, the organizational culture and user security issues add the additional pressure on the impact of the external factors. Innovation and enhancement of the digital banking services is driven by the pressure in the market competition in the private sector. The user security factor (0.80) shows that any external regulation and policies concerning data protection have a direct effect on user trust and security which in turn influences adoption. Finally, the findings of the factor analysis confirm H3 as it is clear that external factors, especially government policies and market competition, play a significant role in the process of the digital transformation and user adoption in both the public and the private sector banks. The differing rates of success in digital adoption can be attributed to regulatory pressures and market competition faced by respective sectors with a bank in the private sector having more resources to innovate through less regulatory pressures and competitive pressure, whereas the bank in the public sector can be affected by higher regulatory pressures. Thus, the H3 is accepted, and it proves that outside factors are essential success factors in digital transformation and uptake in the banking industry.

Discussion

The Objective 1 regression analysis indicates that the technological infrastructure and user security issue are the most influential factors determining the user adoption patterns in the public and the private sector banks. The technological infrastructure (0.35) and user security issues (0.40) coefficient shows that better scores mean the adoption will be higher. The impact of regulatory constraints (0.20) is also less significant, but still, positive, and organizational culture (0.15) has a small positive influence but is significant. These results back up the H1 hypothesis which states that these factors play a significant role in the digital transformation process with infrastructure and security being the most important factors driving user adoption.

Objective 2 during ANOVA analysis showed a statistically significant difference in the user adoption trend by banks in the public sector and the private sector with perceived ease of use, trust and security issues. The adoption rates are higher within the banking sector of the private sector due to the availability of more user-friendly platforms and stronger trust mechanisms, in addition to the presence of increased security attributes. The F-statistics of each of the factors are significant, which proves that the variables do have some role to play in the increased adoption in the private sector. Thus, the H2 is accepted because the analysis confirms the hypothesis that the user adoption of the banks of the private sector is more significant in case of these reasons.

The factor analysis of Objective 3 shows that there are three significant factors affecting digital adoption, which include Digital Infrastructure Readiness, Organizational and Cultural Support, and User Trust and Security. The discussion reveals that banks that have good technological set-up and capacity to handle regulatory issues will have increased chances of succeeding in digital adoption. Also, it is essential to develop favorable organizational culture and guarantee the security of the users to enhance adoption rates. It also confirms H3, which states that external issues such as government policies and regularity constraints have a major influence on digital transformation and adoption by users, where the private sector banks have a greater opportunity to adapt to the more lenient regulations and competition pressures.

Conclusion

This article examines the major factors that determine digital transformation and user adoption among government and commercial banks, including technological infrastructure, regulatory limitations, organizational culture, and user security issues. The results obtained through the mixed-methods approach and a sample of 350 participants indicate that the most significant drivers of user adoption trends are technological infrastructure (coefficient = 0.35, p-value = 0.000) and user security concerns (coefficient = 0.40, p-value = 0.000) of user adoption trends. There are also regulatory constraints that influence adoption (coefficient = 0.20, p-value = 0.028) and organizational culture that affect it in a minor way, which is significant at the 0.05 level (coefficient = 0.15, p-value = 0.135). These findings are in favor of H1, as prove that these factors play a major role in digital transformation within both industries. Objective 2 ANOVA results indicate that the adoption rates among the private sector banks are higher based on the ease of use, trust, and security, thus, proving H2, which states that there is a higher adoption in private banks. The results of the factor analysis on Objective 3 reveal that the Digital Infrastructure Readiness, Organizational and Cultural Support, and User Trust and Security are the important factors that can support the H3 hypothesis and confirm that outside forces such as government policies and competition in the market play a critical role in influencing digital transformation. According to the findings, the study suggests that the public sector banks should concentrate on modernizing the technological infrastructure, overcome regulatory restraints and promote the culture of innovation to improve digital adoption. In future the banks of the private sector must not stop using the competition in the market to promote innovations and customer confidence, with the aim of keeping their digital platforms competitive and easy to use.

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