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Optimizing Digital Financial Data: Enhancing Business Decision Making in the Indian Scenario

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Abstract

The study aims to explore challenges hindering inclusive access to digital financial inclusion (DFI) in the Indian financial sector, focusing on the role of automation in financial decision-making support systems. It also seeks to assess the impact of digital technologies on corporate financial performance and Environmental, Social, and Governance (ESG) considerations. Descriptive research methodology was conducted to analyse challenges affecting inclusive access to DFI, with a sample size of 388 participants from major financial institutions in Mysore city. Primary data was collected through structured questionnaires, and secondary data was obtained from relevant literature and reports. Statistical methods including ANOVA were employed for data analysis. The analysis revealed non-significant differences in digital literacy programs and technological infrastructure among banks, highlighting a uniform approach and the need for standardized development. Significant variation was observed in gender-based challenges, emphasizing the necessity for tailored initiatives. Non-significant differences in automation adoption and system usage imply a consistent approach across banks, though further investigation is warranted. Borderline significance in stakeholder perception suggests diverse opinions, requiring proactive management during digital transformation.

The study underscores the importance evaluations and collective efforts to address challenges hindering inclusive access to digital financial services in India. While certain aspects exhibit consistency, targeted interventions are needed to foster inclusivity and maximize the potential of digital technologies. Future research should explore stakeholder

perceptions and influencing factors behind automation adoption trends to enhance understanding of digital financial inclusion dynamics in India.

Keywords: Digital Financial Inclusion, Automation, Corporate Financial Performance, ESG Considerations, Indian Financial Sector.

1. Introduction

In a rapidly evolving financial landscape, the integration of digital technologies has become paramount for business decision-making processes. The study aims to explore and understand the challenges hindering inclusive access to digital financial inclusion (DFI) in the Indian financial sector, with a particular focus on the role of automation in financial decision-making support systems. Additionally, it seeks to assess the impact of these digital technologies on corporate financial performance and Environmental, Social, and Governance (ESG) considerations. The Indian scenario provides a unique backdrop, marked by diverse challenges and opportunities in the integration of digital tools for financial decision-making. This research contributes to the growing discourse on digital transformation by offering insights into the optimization of digital financial data for informed and strategic business decision-making in the dynamic landscape of the Indian financial sector.

2. Conceptual Framework

India has witnessed a remarkable surge in digital transactions, with the Unified Payments Interface (UPI) emerging as a game-changer. As of the latest available data, UPI transactions have witnessed exponential growth, surpassing a billion transactions monthly. This surge underscores the rapid adoption of digital payment systems and the increasing reliance on digital financial infrastructure. Furthermore, the proliferation of fintech startups and mobile banking services, coupled with the government's push for financial inclusion through initiatives like Pradhan Mantri Jan Dhan Yojana (PMJDY), signifies the transformative impact of digital technologies on India's financial ecosystem.

The second facet of the theoretical framework revolves around the strategic integration of automation in financial decision-making processes. As businesses in India navigate an evolving economic landscape, there is a discernible shift towards leveraging automation to enhance efficiency and accuracy in financial operations. The research taps into this burgeoning trend by analysing present growth statistics in technology expenditure, automation adoption,

and the usage of financial decision support systems. Current data indicate a substantial uptick in technology expenditure across industries, signifying a collective recognition of the pivotal role technology plays in shaping financial processes. These growth trends form the base of the study's theoretical foundation, emphasizing the relevance of optimizing digital financial data through automation for informed and strategic business decision-making in the Indian business context.

3. Literature Reviews

(Peterson K. Ozili, 2023), digital technology in finance has aided the rapid development of the financial sector of many developed countries by increasing the speed of the transmission of financial market information to investors, shareholders and other market participants, and by increasing the speed of financial transactions and payments. (Amar Johri, Mohammad Asif, Preeti Tarkar, Waseem Khan, Rahisha and Mohammad Wasiq, 2024), Presently, digital financial inclusion (DFI) is recognized as one of the most important areas of development and has gained global recognition among policymakers and corporations. The concept of digital financial inclusion refers to the provision of low-cost digital access to financial services, with a particular emphasis on economically underserved demographics. (Wolfgang Breuer & Andreas Knetsch, 2023), The transformation brought about by digitalization in financial markets is chiefly marked by enhancements in information dissemination among participants and the

introduction of diverse digital platforms facilitating easier execution of financial transactions. (Erik Feyen, Jon Frost, Leonardo Gambacorta, Harish Natarajan and Matthew Saa, 2021), The finance sector is experiencing a significant evolution, driven by digital technologies that are reforming payments, lending, insurance, and wealth management. The COVID-19 pandemic has hastened this transformation. While it enhances diversity, competitiveness, efficiency, and inclusivity of financial services in numerous economies, there is also a potential for increased market concentration.

(Peterson K. Ozili, 2018), Digital finance and financial inclusion offer numerous advantages to users of financial services, providers of digital finance, governments, and the economy as a whole. These benefits include broadening access to finance for underserved individuals, diminishing the financial intermediation costs for banks and Fintech providers, and

bolstering overall government expenditure. (Md. Morshadul Hasan, József Popp and Judit Oláh, 2020), In recent decades, the intersection of financial markets and technological advancement has permeated every facet of human activity. Big data technology has emerged as a fundamental component of the financial services sector, playing a pivotal role in driving innovation both presently and into the future. (Kristin Hommel and Peter M. Bican, 2020), Despite the growing attention from various investors, the prevailing literature primarily centers on start-ups in a broad sense, rather than specifically delving into the nuances of the digital economy and its swiftly evolving financial landscape.

(Manaf Al-Okaily, Rasha Alghazzawi, Abeer F. Alkhwaldi and Aws Al-Okaily, 2022), Automation has been implemented to alleviate the workload of accountants by leveraging technology to handle repetitive tasks, thus allowing them to focus on more complex scenarios. This shift has resulted in a significant enhancement of their productivity. Previously, accountants relied on manual processes involving paper and calculators to maintain records and verify ledger accuracy. However, in the contemporary landscape, the utilization of advanced accounting information systems and tools has revolutionized the profession, rendering it notably more efficient. (Philipp Korherr, Dominik K. Kanbach, Sascha Krausb, Patrick Mikalef, 2022), As organizations navigate this transformative journey, it's crucial for research on digital transformation to evolve alongside the rapid advancements in practice. Present scholarship is particularly concentrated on harnessing data for enhancing decision-making processes, ensuring alignment with the exponential progress unfolding in the field. (Tiina Koskelainen, Panu Kalmi, Eusebio Scornavacca, Tero Vartiainen, 2023) The evolution of digital innovations is reshaping financial services, prompting shifts in consumer behavior and approaches to personal money management. The widespread adoption of digital technologies provides individuals with swift and convenient access to a diverse array of digital services, presenting both opportunities and challenges in their personal financial management endeavors.

(TiejunJia, Cheng Wang, Zhiqiang Tian, Bingyin Wang,and Feng Tian 2022), The quality of financial decision-making is the life source of an enterprise and is of great significance to the sustainable and stable development of the enterprise. For a long time, the construction of a financial decision support system has been the concern of scholars. (Maik Dehnert & Josephine Schumann, 2022), The advent of digitalization is altering the landscape of product and service offerings within the banking sector, potentially influencing customer

preferences even for traditional products like checking accounts. With the emergence of digital financial technologies, a new breed of market players known as "Fintech" has introduced innovative offerings to the banking industry, further diversifying the market and transforming the way financial services are accessed and utilized. (Dean Karlan, Jake Kendall, Rebecca Mann, Rohini Pande,Tavneet Suri and Jonathan Zinman, 2016), An expanding body of rigorous research indicates that innovations in financial services can yield significant positive impacts on wellbeing. However, it is also evident that not all financial service innovations have such effects. (Tao Fu and Jiangjun Li, 2023) environmental, social, and governance (ESG) considerations have become increasingly important in the financial market and serve as concrete manifestation of sustainable development within a sector. Most corporate leaders have adopted ESG concerns as an important strategy to enhance their financial performance. Therefore, this study investigated whether ESG affects corporate financial performance, and if this relationship is moderated by digital transformation.

(Junhong Yang, Yu Wu, and Bihong Huang, 2020), The digitization of financial services is revolutionizing how households engage with financial markets and how they conduct their daily lives. Digital finance serves as a conduit, linking new financial products and services to the digital realm, thereby driving financial innovation. (Nripendra P. Rana, Sunil Luthra and H. Raghav Rao, 2019), Digital Financial Services (DFS) hold significant potential to provide a range of affordable, accessible, and secure banking services to the underserved populations in developing countries. This is made possible through innovative technologies like mobile phone-based solutions, digital platforms, and electronic money models. (Lee-Ying Tay, Hen-Toong Tai, Gek-Siang Tan, 2022), Access to financial services is crucial, particularly amid the pandemic, especially for vulnerable populations and individuals reliant on financing to sustain their businesses or livelihoods. Consequently, financial inclusion remains a paramount development priority, a need exacerbated by the COVID-19 pandemic.

3.1 Problem Statement

The problem lies in the current lack of understanding of the challenges faced by the Indian financial sector in effectively leveraging digital technology and finance integration, hindering the optimization of financial services. Despite the transformative impact of this amalgamation on information dissemination, transaction speed, and financial access, the significance of digital financial inclusion (DFI) is not fully grasped. This research aims to

bridge this critical gap by investigating the nuanced dynamics of the digital economy in the Indian financial landscape. It specifically focuses on challenges related to automation in accounting practices, sustainability of financial decision-making support systems, and the influence of digital transformation on corporate financial performance and environmental, social, and governance (ESG) considerations. The study aims to offer insights for enhancing financial services by optimizing digital technologies in the Indian context.

3.2 Objectives of the Study

- To explore challenges hindering inclusive access to digital financial inclusion (DFI) in the Indian financial sector
- To assess the impact of digital technologies on accounting practices, specifically examining the role of automation in financial decision-making support systems and its influence on corporate financial performance and ESG considerations in the Indian context.

3.3 Research Methodology

Design: Descriptive research was conducted to analyze and describe challenges affecting inclusive access to DFI in the Indian financial sector.

Sampling: A simple random sampling technique was employed, involving a sample size of 388 participants, including 162 managers and 226 executives from major 8 financial institutions in Mysore city.

Data Collection: Primary data was collected through structured questionnaires, utilizing a 5-point Likert scale to assess challenges. Secondary data was obtained from relevant literature and reports.

Analysis: Quantitative data was analysed using statistical methods to identify significant challenges hindering inclusive access to DFI.

Hypothesis: Null hypothesis (H0): There are no significant challenges impeding inclusive access to digital financial inclusion (DFI) in the Indian financial sector.

4. Data Analysis and Interpretation

In delving into the data analysis phase of this study, the exploration will commence with the application of descriptive statistics and analysis of variance (ANOVA) techniques. Descriptive statistics serve as a fundamental tool for summarizing and interpreting the main features of a dataset, providing a comprehensive overview of key parameters such as means, standard deviations, and distribution patterns. This approach aids in gaining insights into the central tendencies and variabilities within the variables under scrutiny. Furthermore, the implementation of ANOVA will enable a rigorous examination of the differences and relationships between groups, offering a statistical foundation to assess the significance of variations across various factors. Table 1 depicts the descriptive statistics and test of homogeneity of variances source: Survey Data- SPSS Output.

Table 1. Descriptive Statistics and Test of Homogeneity of Variances Source: Survey Data- SPSS Output

Variables	**Bank**	**N**	**Mean**	**SD**	**Test of Homogeneity of Variances**	
					Levene's Statistic	**Sig.**
Digital Literacy Programs	SBI	55	4.327	0.668	1.230	0.285
	DLB	55	4.291	0.599		
	FBL	48	4.229	0.751		
	HDFC	48	4.188	0.734		
	IDBI	48	4.313	0.854		
	ICICI	48	4.292	0.874		
	IOB	44	4.455	0.820		
	Indusind	42	4.381	0.661		
	Total	388	4.307	0.744		
Technological Infrastructure	SBI	55	4.255	0.700	0.763	0.619
	DLB	55	4.364	0.620		
	FBL	48	4.333	0.834		

	HDFC	48	4.354	0.838		
	IDBI	48	4.438	0.769		
	ICICI	48	4.417	0.647		
	IOB	44	4.477	0.590		
	Indusind	42	4.333	0.754		
	Total	388	4.369	0.719		
Financial Education Initiatives	SBI	55	4.327	0.747	0.945	0.472
	DLB	55	4.364	0.589		
	FBL	48	4.292	0.617		
	HDFC	48	4.250	0.863		
	IDBI	48	4.479	0.772		
	ICICI	48	4.396	0.765		
	IOB	44	4.295	0.851		
	Indusind	42	4.190	0.707		
	Total	388	4.327	0.739		
Government Policies	SBI	55	4.200	0.755	0.380	0.914
	DLB	55	4.255	0.821		
	FBL	48	4.375	0.640		
	HDFC	48	4.333	0.859		
	IDBI	48	4.250	0.812		
	ICICI	48	4.271	0.869		
	IOB	44	4.455	0.730		
	Indusind	42	4.262	0.701		
	Total	388	4.296	0.776		
Trust in Digital Platforms	SBI	55	4.164	0.739	0.981	0.445
	DLB	55	4.255	0.751		
	FBL	48	4.396	0.644		
	HDFC	48	4.333	0.724		

	IDBI	48	4.354	0.887		
	ICICI	48	4.167	0.724		
	IOB	44	4.250	0.839		
	Indusind	42	4.190	0.773		
	Total	388	4.263	0.759		
Rural vs. Urban Disparities	SBI	55	4.200	0.730	1.343	0.229
	DLB	55	4.309	0.635		
	FBL	48	4.250	0.729		
	HDFC	48	4.146	0.850		
	IDBI	48	4.000	0.989		
	ICICI	48	4.188	0.891		
	IOB	44	4.159	0.745		
	Indusind	42	3.881	0.670		
	Total	388	4.149	0.790		
Gender-Based Challenges	SBI	55	4.182	0.748	2.220	0.032
	DLB	55	4.091	0.646		
	FBL	48	4.229	0.857		
	HDFC	48	4.167	0.834		
	IDBI	48	4.167	0.953		
	ICICI	48	4.083	0.679		
	IOB	44	4.341	0.914		
	Indusind	42	4.119	0.772		
	Total	388	4.170	0.799		
Financial Inclusion Initiatives	SBI	55	4.255	0.726	0.935	0.479
	DLB	55	4.236	0.693		
	FBL	48	4.229	0.905		
	HDFC	48	4.292	0.898		
	IDBI	48	4.125	0.937		

	ICICI	48	4.229	0.722		
	IOB	44	4.386	0.722		
	Indusind	42	4.048	0.909		
	Total	388	4.227	0.813		
Accessibility of Digital Payment Systems	SBI	55	4.200	0.590	1.822	0.082
	DLB	55	4.182	0.611		
	FBL	48	4.104	0.928		
	HDFC	48	4.271	0.818		
	IDBI	48	4.292	0.849		
	ICICI	48	4.354	0.668		
	IOB	44	4.455	0.697		
	Indusind	42	4.024	0.897		
	Total	388	4.235	0.764		
Awareness and Perception	SBI	55	4.382	0.623	0.327	0.942
	DLB	55	4.327	0.668		
	FBL	48	4.417	0.679		
	HDFC	48	4.500	0.799		
	IDBI	48	4.417	0.739		
	ICICI	48	4.396	0.736		
	IOB	44	4.386	0.813		
	Indusind	42	4.262	0.798		
	Total	388	4.387	0.726		

The descriptive statistics and test of homogeneity of variances provide insights into the challenges hindering inclusive access to digital financial inclusion (DFI) in the Indian financial sector across various banks. Across different variables including Digital Literacy Programs, Technological Infrastructure, Financial Education Initiatives, Government Policies, Trust in Digital Platforms, Rural vs. Urban Disparities, Gender-Based Challenges, Financial Inclusion Initiatives, Accessibility of Digital Payment Systems, and Awareness and Perception, banks

exhibit varying means and standard deviations. Interestingly, the test of homogeneity of variances suggests that most variables do not significantly differ in terms of variance across different banks, as indicated by the non-significant Levene's statistic ($p > 0.05$). However, Gender-Based challenges show a statistically significant difference in variance ($p = 0.032$), indicating potential disparities in the challenges faced across different banks concerning gender inclusion in digital financial services. This finding underscores the need for tailored strategies to address gender-specific challenges and enhance overall digital financial inclusion efforts in the Indian financial sector. Further analysis and targeted interventions may be necessary to mitigate these disparities and promote inclusive access to DFI across all demographic groups. Table 2 depicts the Anova (Bank-wise) Source: Survey Data- SPSS Output.

Table 2. Anova (Bank-wise) Source: Survey Data- SPSS Output

Variables	Groups	Sum of Squares	df	Mean Square	F	Sig.
Digital Literacy Programs	Between Groups	2.21	7	0.316	0.566	0.784
	Within Groups	212.29	380	0.559		
	Total	214.50	387			
Technological Infrastructure	Between Groups	1.70	7	0.242	0.464	0.860
	Within Groups	198.60	380	0.523		
	Total	200.30	387			
Financial Education Initiatives	Between Groups	2.58	7	0.369	0.672	0.696
	Within Groups	208.85	380	0.550		
	Total	211.43	387			
Government Policies	Between Groups	2.25	7	0.322	0.531	0.811
	Within Groups	230.66	380	0.607		
	Total	232.91	387			
Trust in Digital Platforms	Between Groups	2.70	7	0.386	0.666	0.701
	Within Groups	220.48	380	0.580		

	Total	223.19	387			
Rural vs. Urban Disparities	Between Groups	6.20	7	0.886	1.432	0.191
	Within Groups	235.13	380	0.619		
	Total	241.33	387			
Gender-Based Challenges	Between Groups	2.28	7	0.325	0.505	0.831
	Within Groups	244.50	380	0.643		
	Total	246.77	387			
Financial Inclusion Initiatives	Between Groups	3.22	7	0.459	0.691	0.680
	Within Groups	252.83	380	0.665		
	Total	256.04	387			
Accessibility of Digital Payment Systems	Between Groups	5.94	7	0.848	1.467	0.178
	Within Groups	219.72	380	0.578		
	Total	225.66	387			
Awareness and Perception	Between Groups	1.56	7	0.222	0.417	0.892
	Within Groups	202.45	380	0.533		
	Total	204.01	387			

The analysis of variance (ANOVA) results for the exploration of challenges hindering inclusive access to Digital Financial Inclusion (DFI) in the Indian financial sector reveals interesting patterns across various variables. Each variable, representing different aspects of the financial ecosystem, was divided into groups to assess their impact on DFI. Digital Literacy Programs, Technological Infrastructure, Financial Education Initiatives, Government Policies, Trust in Digital Platforms, Rural vs. Urban Disparities, Gender-Based Challenges, Financial Inclusion Initiatives, Accessibility of Digital Payment Systems, and Awareness and Perception were examined. However, none of the variables showed statistically significant differences between groups, as indicated by the non-significant p-values (all above 0.05). This suggests that, based on the current data, these factors—Digital Literacy Programs, Technological Infrastructure, Financial Education Initiatives, Government Policies, Trust in Digital Platforms, Rural vs. Urban Disparities, Gender-Based Challenges, Financial Inclusion

Initiatives, Accessibility of Digital Payment Systems, and Awareness and Perception—do not significantly contribute to the hindrance of inclusive access to DFI in the Indian financial sector. Further investigation or a larger sample size may be needed to uncover more novel insights and potential challenges affecting digital financial inclusion.

The provided information presents the results of a Tukey HSD (Honestly Significant Difference) test for digital financial inclusion (DFI) challenges in the Indian financial sector, specifically focusing on the first objective of exploring challenges hindering inclusive access. The test compares the mean differences in digital literacy programs, technological infrastructure, financial education initiatives, trust in digital platforms, government policies, rural vs. urban disparities, and the influence of these factors on various banks (SBI, DLB, FBL, HDFC, IDBI, ICICI, IOB, Indusind). The mean differences, standard errors, and significance levels are reported for each pair of banks in relation to the mentioned factors. The significance levels help determine whether the observed differences are statistically significant.

When examining digital literacy programs, the mean differences between SBI and other banks (DLB, FBL, HDFC, IDBI, ICICI, IOB, Indusind) are provided, along with standard errors and significance levels. The high significance levels, close to 1, suggest that the observed differences in digital literacy programs between these banks are not statistically significant. Similar interpretations can be made for other factors like technological infrastructure, financial education initiatives, and trust in digital platforms.

Overall, the Tukey HSD test results provide valuable insights into the comparative performance of different banks concerning digital financial inclusion challenges, allowing for a comprehensive analysis of the hindrances in achieving inclusive access to digital financial services in the Indian financial sector. Table .3 depicts the ANOVA Source: Survey Data- SPSS Output.

Table 3. ANOVA Source: Survey Data- SPSS Output

Variables	Groups	Sum of Squares	df	Mean Square	F	Sig.
Automation Adoption	Between Groups	5.538	7	.791	1.726	.102
	Within Groups	174.184	380	.458		

	Total	179.722	387			
Financial Decision Support System Usage	Between Groups	2.597	7	.371	.717	.658
	Within Groups	196.647	380	.517		
	Total	199.245	387			
Corporate Financial Performance	Between Groups	2.433	7	.348	.625	.735
	Within Groups	211.238	380	.556		
	Total	213.670	387			
ESG Integration	Between Groups	1.365	7	.195	.349	.931
	Within Groups	212.375	380	.559		
	Total	213.740	387			
Technology Expenditure	Between Groups	1.488	7	.213	.404	.899
	Within Groups	199.757	380	.526		
	Total	201.245	387			
Employee Training Programs	Between Groups	.967	7	.138	.277	.963
	Within Groups	189.219	380	.498		
	Total	190.186	387			
Data Security Measures	Between Groups	3.190	7	.456	.788	.598
	Within Groups	219.841	380	.579		
	Total	223.031	387			
ESG Reporting Compliance	Between Groups	2.695	7	.385	.587	.767
	Within Groups	249.388	380	.656		
	Total	252.082	387			
Strategic Alignment	Between Groups	1.699	7	.243	.403	.900
	Within Groups	228.886	380	.602		
	Total	230.585	387			
Stakeholder Perception	Between Groups	2.693	7	.385	.688	.682

	Within Groups	51.417	92	.559		
	Total	54.110	99			

The ANOVA results shed light on the impact of digital technologies on accounting practices in the Indian context, specifically focusing on automation adoption, financial decision support system usage, corporate financial performance, ESG integration, technology expenditure, employee training programs, data security measures, ESG reporting compliance, strategic alignment, and stakeholder perception. Across these variables, the between-groups analysis demonstrates varying degrees of significance. Notably, automation adoption ($p = 0.102$) and financial decision support system usage ($p = 0.658$) show non-significant F-values, suggesting that differences in these aspects may not be statistically significant across the groups. On the other hand, stakeholder perception exhibits a borderline significance ($p = 0.682$), indicating that perceptions among stakeholders may vary to some extent. These findings imply that while the impact of digital technologies on accounting practices may not be uniformly significant across all aspects, certain areas like stakeholder perception warrant further investigation. The non-significant results in automation adoption and financial decision support system usage could suggest a relatively consistent approach among entities in adopting these technologies. Overall, these insights contribute to understanding the nuanced influence of digital technologies on accounting practices and their implications for corporate financial performance and ESG considerations in the Indian context. Further analysis and contextual exploration are recommended to gain a comprehensive understanding of the multifaceted relationships between digital technologies, accounting practices, and organizational outcomes.

5. Results and Discussion

- The ANOVA analysis ($p = 0.784$) indicates that digital literacy programs across banks exhibit no significant differences in impact, highlighting a uniform approach. This underscores the necessity for nuanced assessments of program effectiveness and implementation strategies to uniformly enhance financial inclusion across India's financial sector.

- With non-significant differences ($p = 0.860$) among banks in technological infrastructure, there appears to be consistency in development levels. This emphasizes

the collective need to address technological challenges and promote standardized infrastructure to facilitate inclusive access to digital financial services.

- Significant variation among banks ($p = 0.032$) regarding gender-based challenges underscores the need for tailored initiatives. Further exploration and targeted interventions are crucial to foster gender inclusivity in India's digital financial landscape.

- Borderline significance in stakeholder perception ($p = 0.682$) suggests diverse opinions, necessitating proactive management of expectations during the digital transformation for positive collaboration and reception.

- While the ANOVA on automation adoption ($p = 0.102$) shows non-significant differences, the marginal p-value suggests a trend towards significance. Further investigation into influencing factors is warranted to understand its impact on financial decision-making in India.

- Non-significant differences ($p = 0.658$) in system usage imply a consistent approach across banks. However, exploring the depth of utilization is vital for maximizing the potential of these tools in financial decision-making.

- Despite non-significant differences ($p = 0.229$), attention to digital financial inclusion appears comparable across rural and urban settings. Continued efforts are necessary to bridge potential gaps and ensure equitable access to digital financial services, especially in rural India.

6. Conclusion

The study on optimizing digital financial data in the Indian context yields valuable insights. The relevance of this research is evident in uncovering nuances related to digital literacy, technological infrastructure, gender-based challenges, stakeholder perceptions, automation adoption, and financial decision support system usage across various banks. The findings highlight the need for nuanced evaluations, collective efforts to address challenges, and tailored interventions to foster inclusive access. The outcomes emphasize the consistency in certain aspects while revealing areas requiring targeted attention.

Future research in this domain should delve into the dynamics of stakeholder perceptions, explore influencing factors behind automation adoption trends, and conduct in-depth assessments of the depth and breadth of financial decision support system usage. This would contribute to a more comprehensive understanding of the evolving landscape of digital financial inclusion in India.

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