Role of Financial Digitalization in Women's Financial Inclusion and the Emergence of AI-Driven Personal Finance in India

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ABSTRACT

Financial Digitalization has brought about a significant transformation in the Indian financial services sector which has important implications for the financial inclusion of women, and how they manage finances. This research will be examining AI-driven personal finance during the era of financial digitalization and its implications for women's financial inclusion in India. This research intends to analyze the growth of women's financial inclusion due to financial digitalization assess the present status of women's financial literacy determine the level of adoption of AI-driven personal finance tools by women and assess the role of AI-driven personal finance tools and their future potential to improve financial management practices of women who are financially included.

This study has employed analytical and descriptive approaches to its methodology in conjunction with both primary and secondary data. Secondary data came from Global Findex Data Base, the Financial Literacy and Inclusion Survey (FLIS), the National Strategy for Financial Education (NSFE) 2020 - 2025, and the NISM All-India Financial Literacy Survey. Primary data came from a survey questionnaire completed by 86 female participants. Descriptive statistics (percentages, mean scores and graphical analysis) were used.

The results show a major improvement in the financial inclusion of women in India (nearly all women have a bank account and increasingly use digital payment systems). Although there is evidence of progress in women's financial literacy over time (in terms of behaviour and attitude towards finance), gaps remain concerning financial knowledge and self-confidence when making financial decisions. Additionally, this study shows a very high degree of awareness and a strong desire to use AI-driven personal finance tools, with a generally positive perception of how these tools can assist in budgeting, financial planning and increasing self-confidence.

The study demonstrates that although financial digitalization has successfully increased access to banking services and financial products, it is necessary to include education programs focused on financial literacy with AI-driven personal finance solutions in order to sustainably empower women in India economically.

Keywords: (Financial Digitalization, Women's Financial Inclusion, AI-Driven Personal Finance, Financial Literacy, Digital Payments, Fintech Adoption, Financial Empowerment, India.)

INTRODUCTION

The Indian financial system has changed dramatically in the last few years due to fast growing digital financialisation and technological advancements to increase the amount of people in India who have access to and participate in formal financial systems. Financial inclusion, defined generally as the availability, affordability and continued use of formal financial services, is widely considered to be one of the most powerful drivers of both economic empowerment and social equity (Ozili, 2024). In India, the rise of digital financial platforms such as mobile wallets, unified payment systems and digital banking apps has significantly decreased the previous costs, geographic and documentation barriers preventing people from participating in formal financial systems (Mishra, 2024).

Although there have been significant increases in the inclusion metrics for the majority of Indians, there still exists a significant gender gap. Women are far less likely than men to utilize digital financial services and engage with formal financial products (World Bank, 2022). International and national evidence suggests that, although women's bank accounts now exist in greater numbers, they continue to lack the meaningful utilization of these financial instruments beyond simple transactional activities (Gallego-Losada, 2023). This gender inequality is not only caused by restrictions on access to digital financial services, but also by differing levels of digital financial literacy, socio cultural norms and confidence to navigate digital interfaces all of which affect the ability of women to derive benefits from the use of financial services (Mishra, 2024).

While financial digitalization has greatly increased the number of individuals who have access to formal financial services, the quality of financial engagement and empowerment of women remains uneven. Additionally, as digital inclusion expands, complementary mechanisms, such as financial education and easy to use technology, will become even more critical to enable

financially included women to better manage their financial lives (ORF, 2023). AI-based personal finance tools are emerging as an area of growing interest, which include digital budgeting assistants, automated savings platforms and personalized recommendation systems, which seek to help users to create budgets, save money and plan for their future financial objectives through customized insights and automation (Sharma, 2025).

This study examines the growth and adoption of women's financial inclusion in India as a result of financial digitalization, assesses the current state of financial literacy among women, explores key AI-driven personal finance tools and their applications, and evaluates the role and potential of these solutions in enhancing financial management and planning among financially included women.

REVIEW OF LITERATURE

Financial Digitalization and Women's Financial Inclusion in India

Digital Finance is considered an important driver of financial inclusion in emerging markets because it allows for the extension of access to formally recognized financial service providers through electronic platforms. The rapid expansion of mobile banking digital payment methods including Unified Payments Interface (UPI) and Fintech companies have significantly reduced barriers to accessing financial services that are traditionally high due to costs, distances, and requirements of documents (World Bank, 2022). According to data from the Global Findex Database there was a large increase in the number of female account owners over the last ten years, which can be largely attributed to government led efforts to develop digital payments and electronic payment systems as well as other policy led digital initiatives (World Bank, 2022). As noted in several other studies, although there has been a significant increase in the number of women who now have access to some level of financial services, their use of higher end financial products continues to be lower than that of males (Observer Research Foundation [ORF], 2023).

Determinants and Barriers to Women's Digital Financial Engagement

Existing research has identified numerous variables which have an influence on how women utilize digital financial products. Women's participation in financial markets continues to be restricted by socio cultural norms, limited access to digital tools and less confident women in using digital technology. Financial literacy in the form of digital financial literacy is also

important for determining whether women will use financial products effectively. A study by Mishra (2024) found that when compared to women with lower levels of digital financial literacy, women with higher levels of digital financial literacy are more likely to utilize fintech services for the purposes of saving money, making payments and creating a plan for their finances. Additionally, women who have limited knowledge of how to navigate digital interfaces and concerns about maintaining the safety of their online transactions limit their utilization of digital financial products. The existing urban and rural divide further limits the opportunity for women in rural areas to develop the necessary skills to effectively utilize digital financial products. As World Bank (2022) pointed out, there are fewer resources available to women in rural areas to learn about digital financial products and there is less of a digital financial product infrastructure in place to support them.

AI-Driven Personal Finance Tools and Financial Management

Recent research suggests that AI-based apps which assist with personal finance management are becoming increasingly important to how we manage our finances. Budgeting and tracking expenses using AI enabled tools as well as using a personal financial advisor app can help consumers monitor their spending, set financial objectives, plan their savings, and investments (OECD, 2021). The tools use analytics to offer each user unique information based on their specific data therefore, consumers who have little or no experience with managing money will find it easier to make decisions regarding their finances. Research has also suggested that AI-based personal finance tools will be able to increase financial responsibility and efficiency for individuals' financial planning by integrating them with other forms of digital financial services (Sharma, 2025).

AI, Financial Literacy, and Women Users

While there is a growing amount of interest in the use of AI-driven personal finance tools, there has been little research conducted about the use of these tools among women. Research suggests that AI-based personal finance tools could potentially support financial literacy through simple presentation of complex financial concepts and real time assistance (OECD, 2021). For financially included women, a tool like this can aid them with improving their spending habits, saving for the future, and developing their long term financial plans as long as it is user friendly and readily available (Mishra, 2024). There has been an emergence of a new area of study that explores the intersection of women's financial inclusion, their ability to

be digitally literate, and the ability to utilize AI-based tools for managing one's personal finances globally including in India.

OBJECTIVES

1. To analyse the growth and adoption of women's financial inclusion in India due to financial digitalization.
2. To assess the current state of financial literacy among women
3. To examine the key AI-driven personal finance tools and their applications in budgeting, saving, and investment.
4. To assess the role and potential of AI-based personal finance solutions in enhancing financial management and planning among financially included women.

RESEARCH METHODOLOGY

Research Design

The study adopts a descriptive and analytical research design to examine AI-driven personal finance in the context of financial digitalization and women's financial inclusion in India. The descriptive approach is used to understand existing patterns of financial inclusion, financial literacy, and adoption of AI-driven personal finance tools, while the analytical approach helps interpret relationships and trends observed in the data.

Sources of Data

The study is based on both secondary and primary data sources, ensuring a comprehensive analysis.

- Secondary data were collected from nationally recognized and authoritative sources, including:
    - Global Findex Database (World Bank)
    - Financial Literacy and Inclusion Survey (FLIS) 2019 by NCFE
    - National Strategy for Financial Education (NSFE) 2020 - 2025
    - NISM All India Financial Literacy Survey reports
- These sources provided gender disaggregated data on financial inclusion, financial literacy, and digital financial behaviour of women in India.

- Primary data were collected through a structured questionnaire administered to women respondents. The questionnaire captured information on demographic characteristics, financial inclusion status, financial literacy, awareness and usage of AI-driven personal finance tools, and perceptions regarding their impact on financial management.

Sample Design

The study employed a non-probability convenience sampling method. A total of 86 valid responses were collected from women respondents. The sample included respondents from different age groups, educational backgrounds, and employment statuses, enabling diverse perspectives on digital and AI-based financial services.

Research Instrument

The primary data collection instrument was a structured questionnaire consisting of 15 questions. The questionnaire included:

- Dichotomous questions (Yes/No)
- Multiple-choice questions
- Five-point Likert scale statements (ranging from “Strongly Disagree” to “Strongly Agree”).

The instrument was designed in line with the research objectives and was administered using an online survey platform.

Tools and Techniques of Analysis

The collected data were analyzed using descriptive statistical tools such as percentages, mean scores, and graphical representations (charts). Secondary data trends were analyzed using comparative and trend analysis. The results were interpreted objective-wise to ensure coherence with the study objectives.

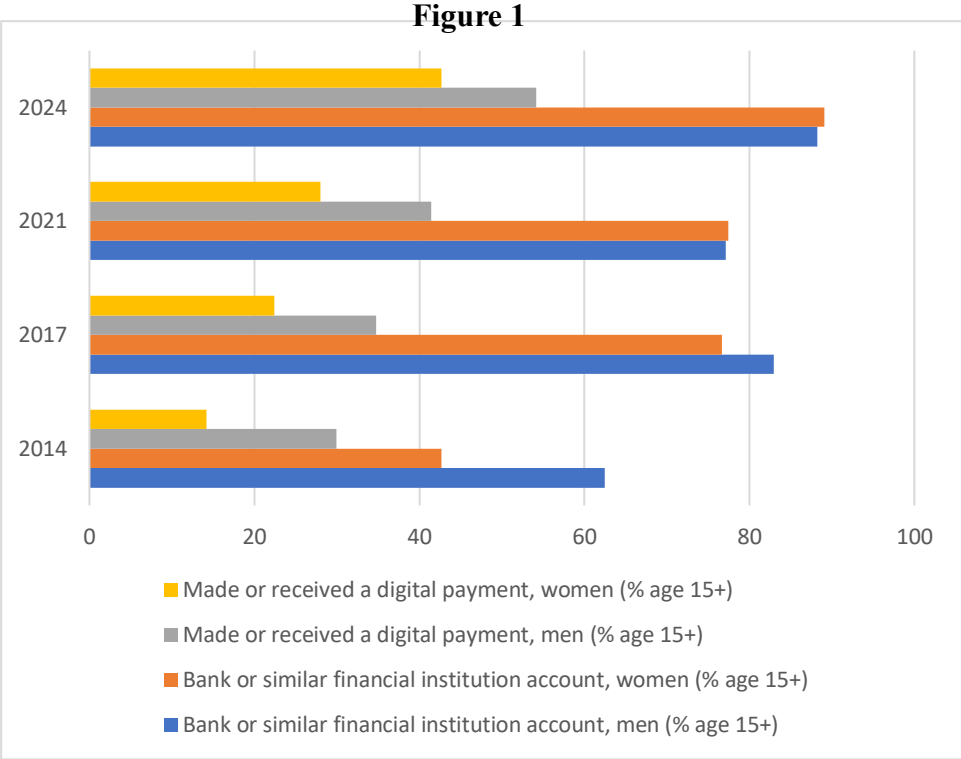
Limitations of the Study

The study is limited by its relatively small sample size and the use of convenience sampling, which may restrict generalization of findings. Additionally, primary data rely on self-reported responses, which may be subject to respondent bias.

FINDINGS AND ANALYSIS

Objective 1: To analyse the growth and adoption of women's financial inclusion in India due to financial digitalization

Figure 1



(Source: Global Findex Database of world bank)

Table 1

Series Name	2014	2017	2021	2024
Has an inactive account, men (% age 15+)	16.6	26.7	22.9	11.2
Has an inactive account, women (% age 15+)	18.2	34.7	32.3	17.5
Has an active account, men (% age 15+)	83.4	73.3	77.1	88.8
Has an active account, women (% age 15+)	81.8	65.3	67.7	82.5

(Source: Global Findex Database of world bank)

Analysis of secondary data from the Global Findex Database (2011 - 2024) reveals a significant improvement in women's financial inclusion in India, closely associated with the expansion of digital financial infrastructure and services. Over the last decade, India has witnessed a sharp

rise in bank account ownership, indicating successful integration of previously excluded populations into the formal financial system (World Bank, 2022).

Findings from the gender disaggregated data are as follows:

- Rapid growth in account ownership: Women's bank account ownership increased substantially between 2011 and 2021, reducing the gender gap that existed in earlier years. By 2021 - 2024, women's account ownership levels were nearly at par with men, reflecting the impact of digital banking, simplified KYC norms, and policy led digital inclusion initiatives (World Bank, 2022).
- Improvement in account usage: Data on account activity status show a steady rise in the proportion of women holding active bank accounts between 2017 and 2024, alongside a decline in inactive accounts. This indicates that financial inclusion has progressed beyond mere access to regular usage, supported by digital transaction facilities.
- Growth in digital payment adoption: The share of women making or receiving digital payments increased consistently from 2014 to 2024. Although men continue to record higher usage levels, the gender gap in digital payments has narrowed over time, highlighting the growing acceptance of digital financial services among women (World Bank, 2022).

Primary survey results further corroborate these trends. A majority of respondents reported owning a bank account in their own name and using digital financial services such as UPI, mobile banking applications, and digital wallets. This suggests that financial digitalization has translated into practical and functional inclusion for women.

Interpretation:

Women's Financial Inclusion and Financial Digitalization: The interpretation of findings shows that financial digitalization has substantially strengthened women's financial inclusion in India, both in terms of access and usage of formal financial services.

Interpretations based on the data are as follows:

- Women's bank account ownership increased sharply from 42.6% in 2014 to 89.1% in 2024, surpassing men's ownership level (88.2%) by 2024.

- The gender gap in account ownership, which stood at nearly 20% points in 2014, was virtually eliminated by 2021 and reversed by 2024.
- The proportion of women holding active bank accounts declined from 81.8% in 2014 to 65.3% in 2017, but recovered steadily to 82.5% by 2024, indicating improved regular usage over time.
- Correspondingly, women's inactive accounts peaked at 34.7% in 2017 and declined to 17.5% by 2024, reflecting increased engagement with banking services.
- Digital payment usage among women rose from 14.2% in 2014 to 42.7% in 2024, though it remained lower than men's usage (54.1%), indicating differences in transaction intensity rather than access.

the data suggest that while financial digitalization has been highly effective in expanding women's access to formal finance, depth and frequency of digital usage have improved gradually, highlighting the importance of sustained digital literacy and usage oriented support.

Objective 2: To assess the current state of financial literacy among women

Gender-wise Financial & Digital Financial Literacy Trend in India (Standardized % Basis)				
Year / Survey	**Type**	**Male (%)**	**Female (%)**	**Gender Gap (M–F)**
2013 (Financial Literacy & Inclusion Survey)	Financial Literacy	23%	16%	+7% (Male higher)
2013	Digital Financial Literacy	*Not Reported*	*Not Reported*	—
2019 (NCFE-FLIS 2019)	Financial Literacy	29%	21%	+8% (Male higher)
2019	Digital Financial Literacy	*Not Separately Reported*	*Not Separately Reported*	—
2020–2025 (NSFE Mid-Term Evaluation)	Financial Literacy	36.85%	40.58%	-3.73% (Female higher)
2020–2025	Digital Financial Literacy	15.69%	13.18%	+2.51% (Male higher)

Table 2

(Source: National centre of financial education NFLIS and NSFE report)

The current state of financial literacy among women in India was assessed using secondary data from the NCFE Financial Literacy and Inclusion Survey (FLIS) 2019, the National Strategy for Financial Education (NSFE) 2020 - 2025, and the NISM All India Financial Literacy Survey, supported by primary data collected through the questionnaire. Financial

literacy is evaluated across the dimensions of financial knowledge, financial behaviour, and financial attitude, following the OECD/INFE framework adopted by NCFE (NCFE, 2019).

Findings from the FLIS 2019 reveal that women's financial literacy was relatively lower than men's at the national level, with only about 21% of women qualifying as financially literate, compared to 29% of men. Women demonstrated limited understanding of key financial concepts such as interest calculation, inflation, and risk diversification, particularly in rural areas and lower-income groups (NCFE, 2019; NISM, 2019).

However, evidence from the NSFE 2020 - 2025 progress reports indicate a notable improvement in women's financial literacy outcomes over time. The strategy documents highlight that women have shown stronger financial attitudes and increasingly responsible financial behaviours, including disciplined saving practices and cautious spending patterns. In several behavioural and attitudinal indicators, women's scores were found to be equal to or higher than those of men, reflecting the impact of targeted financial education initiatives and community-based programs (NCFE, 2025).

Observations from the combined secondary data are as follows:

- Financial knowledge: While gaps in technical financial knowledge persist, women's awareness of basic financial products and digital financial services has improved, particularly in relation to savings and payment instruments.
- Financial behaviour and attitude: Women consistently demonstrate positive saving behaviour and long term financial orientation. NSFE findings suggest that women increasingly apply financial knowledge in day to day money management, indicating progress from awareness to action.

Primary survey findings from the present study align with these trends. Most respondents reported basic financial awareness, though confidence in independent financial decision making remains moderate. Overall, the findings suggest that women's financial literacy in India has improved over the 2020 - 2025 period, with notable gains in behaviour and attitude, even as knowledge gaps continue to require policy attention.

Interpretation:

Women's Financial Literacy in India: The interpretation of findings indicates a significant improvement in women's financial literacy in India over time, with a notable shift in gender dynamics between 2013 and the 2020 - 2025 period.

interpretations based on numerical evidence include:

- In 2013, women's financial literacy stood at 16%, compared to 23% for men, reflecting a 7% points gender gap.
- By 2019, women's financial literacy improved to 21%, though men continued to lead at 29%, widening the gap to 8% points.
- During the 2020 - 2025 NSFE period, women's financial literacy rose sharply to 40.58%, surpassing men's literacy level of 36.85%, reversing the gender gap by 3.73% points.
- Overall growth in women's financial literacy between 2013 and 2020 - 25 was 24.58% points, compared to 13.85% points for men, indicating faster progress among women.
- Digital financial literacy during 2020 - 25 remained lower for women (13.18%) than men (15.69%), suggesting uneven advancement across literacy dimensions.

These trends suggest that while women historically lagged behind men, targeted financial education initiatives have enabled women to catch up and outperform men in overall financial literacy. Primary survey responses further support this interpretation, showing improved awareness but moderate confidence, indicating continued scope for strengthening applied digital financial skills.

Objective 3: To assess the Awareness and Application of AI-Driven Personal Finance Tools

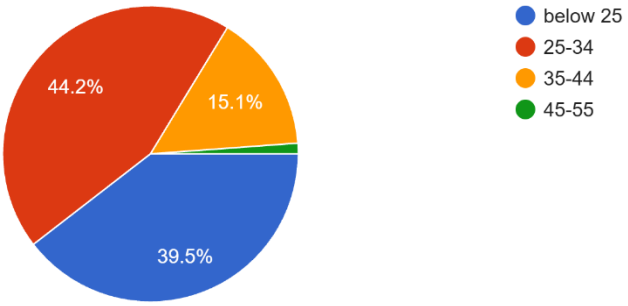
Objective 4: To assess the Impact and Future Potential of AI-Based Personal Finance Solutions

The findings for Objectives 3 and 4 are based on primary data collected through the structured questionnaire, focusing on women's awareness, usage, and perception of AI-driven personal finance tools. The analysis examines how financially included women engage with AI-based applications for budgeting, expense tracking, savings, and financial planning, and how these

tools influence their financial management practices. The responses provide insights into the current level of awareness, patterns of adoption, and perceived usefulness of AI-driven personal finance solutions. Together, these findings help assess both the existing role and the future potential of AI-based tools in enhancing financial decision-making, planning efficiency, and financial confidence among women.

Question 1: Age Group

Figure 2

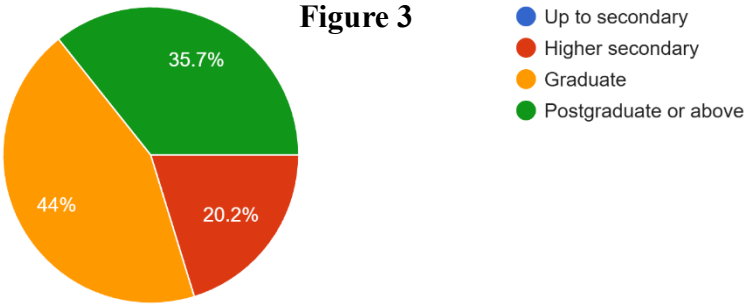


(Source: Survey)

Interpretation: The respondent profile is predominantly young, with 44.2% belonging to the 25 - 34 age group and 39.5% below 25 years. Only 15.1% fall within the 35 - 44 category, while older age groups are minimally represented. This indicates that the findings largely reflect the perspectives of younger women, who are more likely to engage with digital and AI-driven financial tools.

Question 2: Educational Qualification

Figure 3



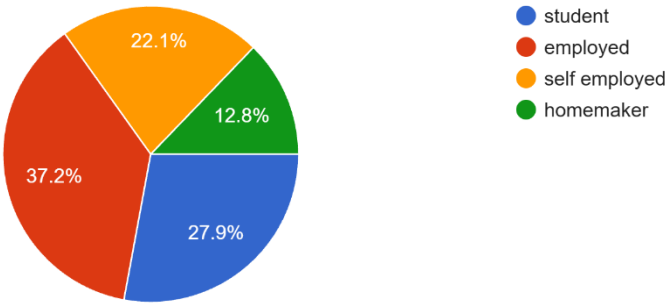
(Source: survey)

Interpretation: The sample is relatively well educated, with 44.0% graduates and 35.7% postgraduates, while 20.2% have completed higher secondary education. The high level of

educational attainment suggests greater exposure to digital platforms and financial concepts, which may positively influence awareness and adoption of AI-driven personal finance tools among respondents.

Question 3: Employment Status

Figure 4

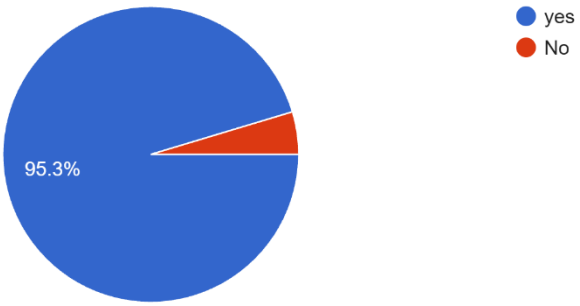


(source: survey)

Interpretation: Employment status data show that 37.2% of respondents are employed, followed by 27.9% students, 22.1% self-employed, and 12.8% homemakers. This diverse occupational composition indicates varying income stability and financial responsibilities, which can influence financial decision making patterns and the perceived usefulness of AI-based financial management solutions.

Question 4: Bank Account Ownership

Figure 5



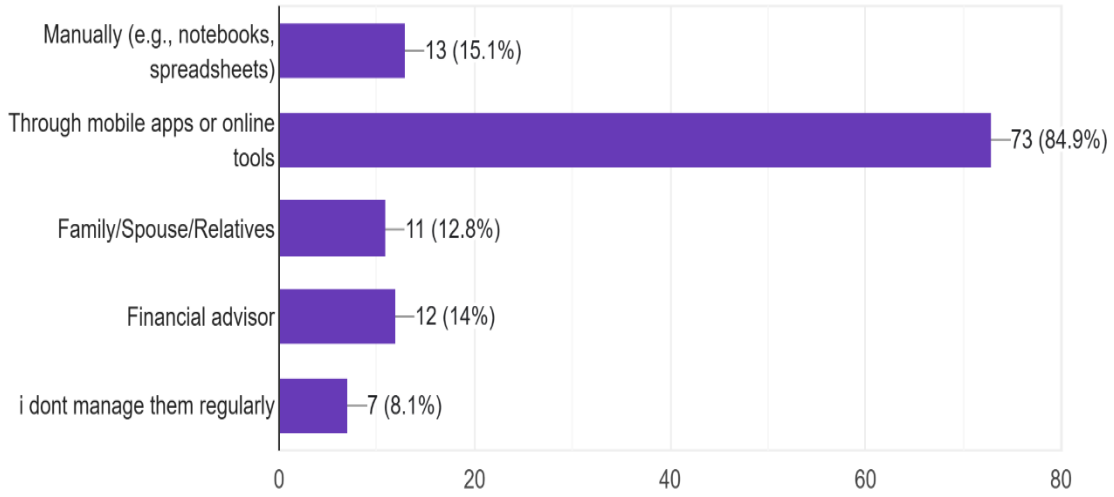
(Source: survey)

Interpretation: An overwhelming 95.3% of respondents reported having a bank account in their own name, reflecting a high level of financial inclusion within the sample. This confirms that the respondents are already integrated into the formal financial system, making them

suitable for assessing the role and potential of AI-driven personal finance tools beyond basic access.

Question 5: Management of Personal Finances

Figure 6

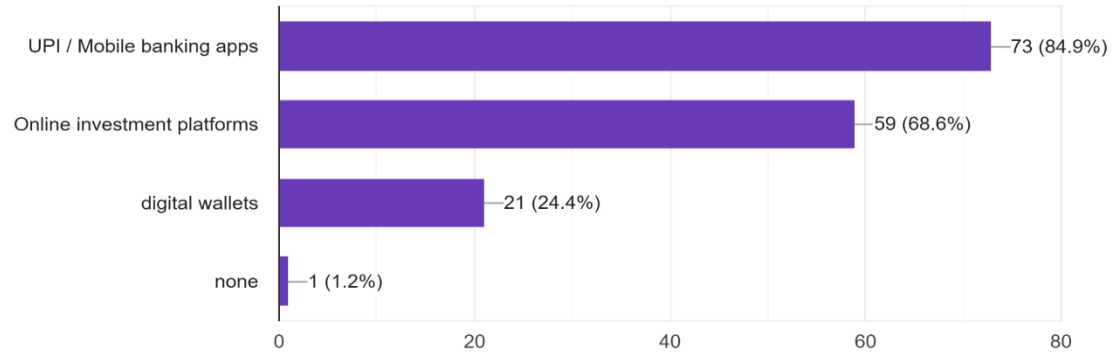


(Source: Survey)

Interpretation: A large majority (84.9%) manage their finances through mobile apps or online tools, while smaller proportions rely on manual methods (15.1%) or family support (12.8%). This highlights strong digital engagement among respondents and suggests a favourable environment for the adoption of AI-based personal finance applications for budgeting and financial planning.

Question 6: Which digital financial services do you use?

Figure 7

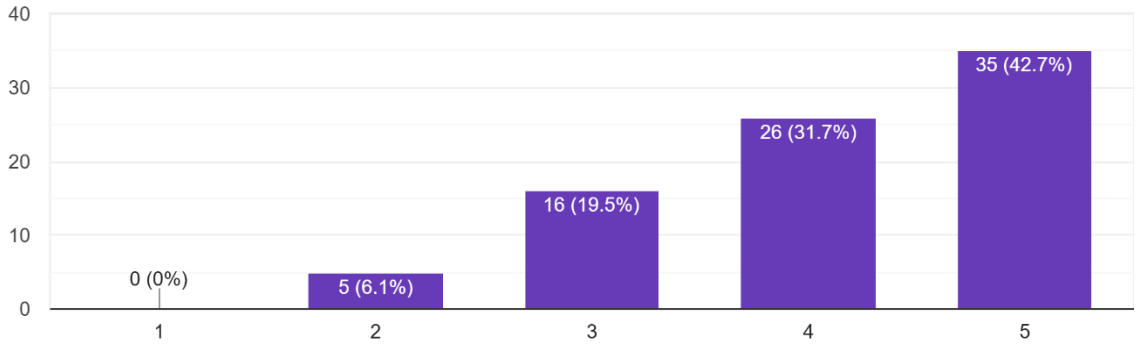


(Source: survey)

Interpretation: The data show that 47.4% of respondents use UPI or mobile banking apps, making them the most widely adopted digital financial service. This is followed by 38.3% using online investment platforms, while 13.6% rely on digital wallets. The dominance of UPI based services reflects ease of use and frequent applicability in daily transactions.

Question 7: Digital financial services have increased my independent control over my bank account.

Figure 8

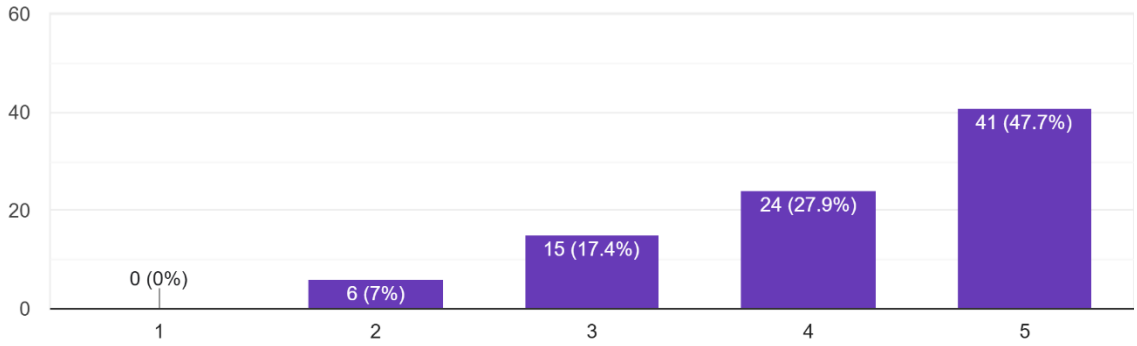


(Source: survey)

Interpretation: The mean score for this statement is 4.11 out of 5, indicating strong agreement among respondents. This suggests that digital financial services have significantly enhanced women's autonomy in managing their bank accounts. The high score reflects increased confidence, reduced dependency, and greater control over personal financial transactions enabled by digital platforms.

Question 8: I understand basic financial concepts such as saving, interest, and budgeting.

Figure 9

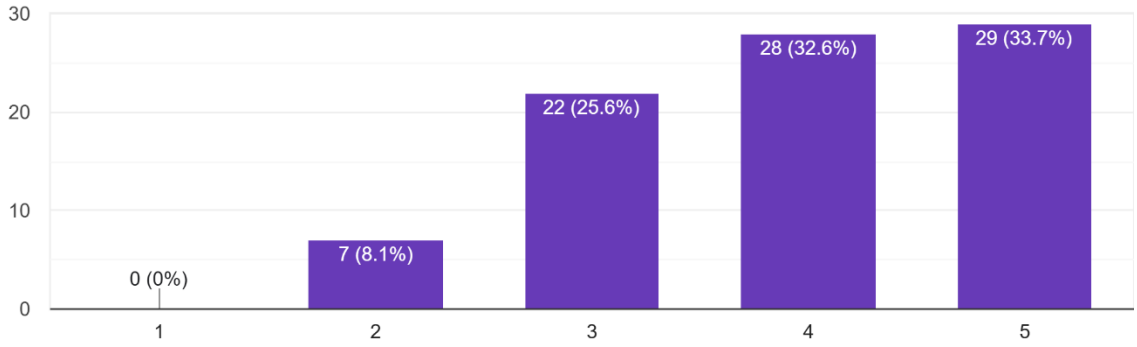


(Source: survey)

Interpretation: Respondents reported a high level of basic financial understanding, with a mean score of 4.16 out of 5. This indicates that most women possess foundational financial knowledge. Such awareness provides a strong base for engaging with digital and AI-driven financial tools, although deeper financial decision making may require more advanced literacy.

Question 9: I feel confident making financial decisions independently.

Figure 10

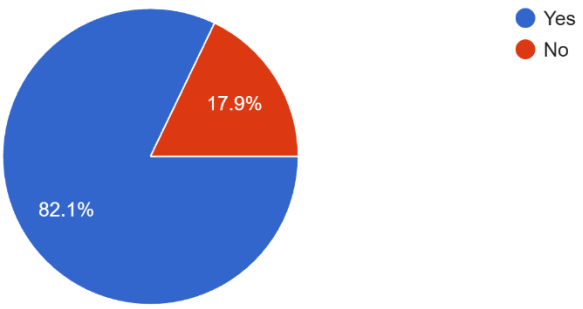


(Source: Survey)

Interpretation: The mean score for financial decision making confidence is 3.92 out of 5, suggesting moderate to high confidence among respondents. While many women feel capable of making independent decisions, the slightly lower score compared to financial knowledge indicates a gap between understanding financial concepts and confidently applying them in real life financial situations.

Question 10: Are you aware of AI-based personal finance tools?

Figure 11

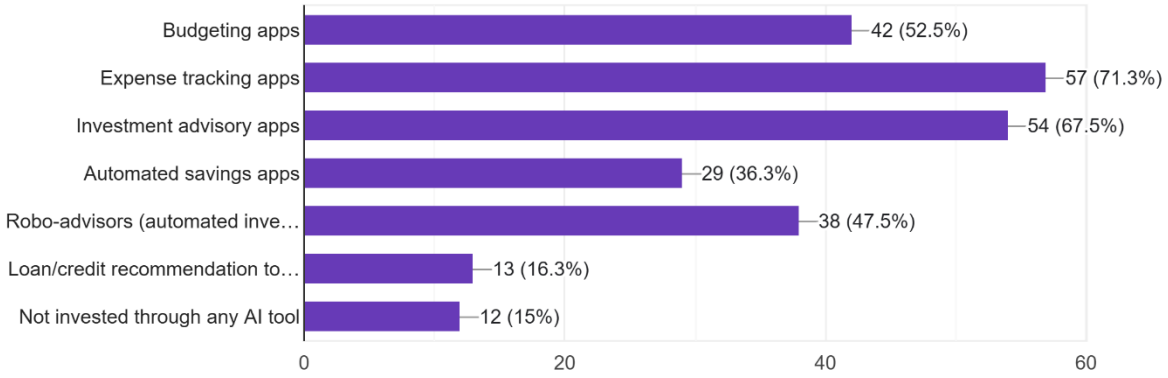


(Source: survey)

Interpretation: A substantial 82.1% of respondents reported being aware of AI-based personal finance tools, while 17.9% indicated no awareness. This high level of awareness suggests growing exposure to AI-enabled financial applications. However, the presence of an awareness gap indicates the need for broader outreach to ensure inclusive adoption of AI-based financial solutions.

Question 11: If yes, which AI-driven tools do you use?

Figure 12

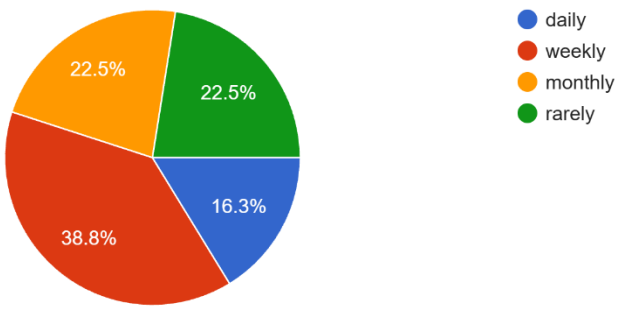


(Source: survey)

Interpretation: The data indicate that expense tracking apps (71.3%) and investment advisory apps (67.5%) are the most widely used AI-driven tools among respondents. This is followed by budgeting apps (52.5%) and robo advisors (47.5%). Adoption is comparatively lower for automated savings apps (36.3%) and loan/credit recommendation tools (16.3%), while 15% have not invested through any AI tool, suggesting strong preference for monitoring and advisory functions over credit based AI services. indicating stronger preference for short term financial management tools over complex credit based solutions.

Question 12: How frequently do you use AI-driven digital financial services?

Figure 13

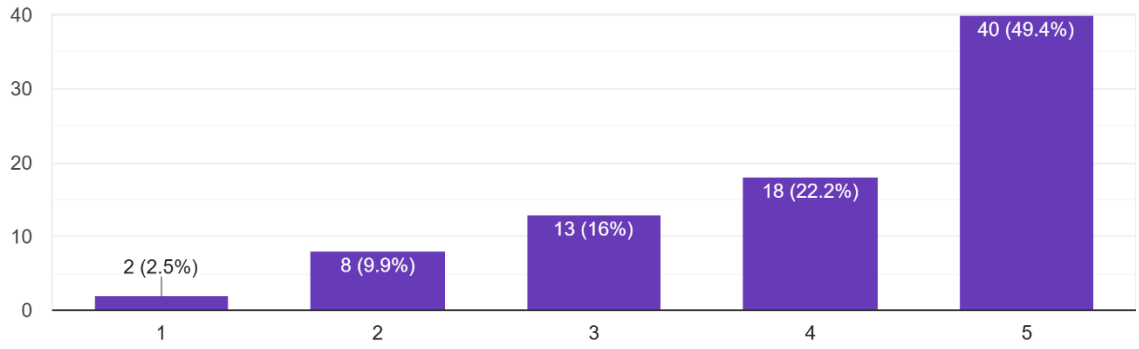


(Source: survey)

Interpretation: The usage frequency indicates moderate engagement with AI-driven financial services. About 38.8% of respondents use these tools weekly, while 22.5% use them monthly and another 22.5% rarely. Only 16.3% report daily usage, suggesting that AI tools are commonly used for periodic financial management rather than daily transactions.

Question 13: Using AI-driven personal financial planning tools has increased my investment amount and improved overall personal finances.

Figure 14

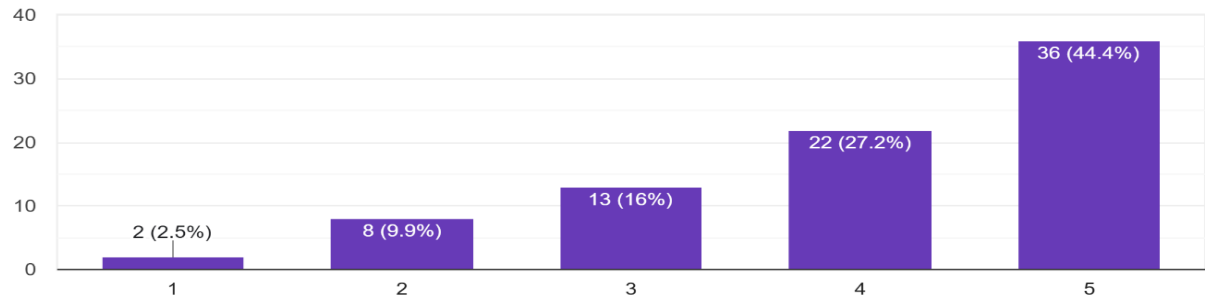


(Source: survey)

Interpretation: The mean score for this statement is 4.06 out of 5, indicating strong agreement among respondents. This suggests that AI-driven financial planning tools positively influence investment behaviour and overall financial outcomes. The high score reflects respondent's perception that AI tools contribute meaningfully to improved financial planning and wealth building efforts.

Question 14: Using AI-driven financial tools has improved my financial confidence and decision-making ability.

Figure 15

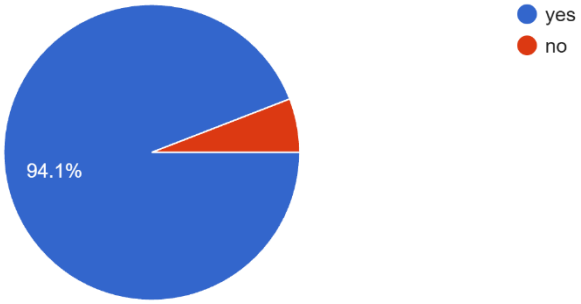


(Source: survey)

Interpretation: With a mean score of 4.01 out of 5, respondents largely agree that AI-driven tools enhance their financial confidence and decision-making capabilities. This indicates that AI applications play a supportive role in simplifying financial choices and empowering women to make informed decisions with greater assurance.

Question 15: I am willing to use AI-based personal finance tools more in the future.

Figure 16



(Source: survey)

Interpretation: An overwhelming 94.1% of respondents expressed willingness to use AI-based personal finance tools in the future, while only 5.9% were unwilling. This exceptionally high acceptance level highlights strong future potential for AI-driven financial solutions and suggests readiness among women to further integrate such tools into their financial routines.

SUGGESTIONS

The suggested recommendations for improving women's access to financial inclusion, their ability to understand how to effectively use their money (financial literacy), and their use of AI-driven personal financial tools are based upon information obtained from the secondary research sources (Global Findex, NCFE, NSFE, NISM) and the primary survey data collected.

- **Move beyond access to meaningful usage of financial services**

  While many women have opened a bank account, the data reveal large differences in the frequency of use of those accounts and the use of digital payments. Therefore, future policy initiatives will be targeted at increasing the amount and variety of use of financial services by women rather than only focusing on the number of accounts opened (World Bank, 2022).

- **Strengthen women focused financial literacy programs**

  Although there has been a growth in better financial behaviour and attitudes, there is still a gap in financial knowledge and the ability to make decisions independently. The expansion of targeted financial education programs focusing on budgeting, saving, investing and digital finance specifically targeting younger and rural women would help bridge this gap (NCFE, 2019; NCFE, 2025).

- **Integrate financial literacy with digital platforms**

  Primary data also show that many people use UPI and mobile banking apps frequently. This makes it an ideal opportunity to embed educational content, prompts and guidance into the app so that users can learn about financial matters by applying what they have learned (OECD, 2021)

- **Promote confidence building in financial decision making**

  Moderate confidence levels are reported by survey respondents, even though they report adequate knowledge regarding finance. Practical application of decision making, and hands on learning through real life financial planning, as well as use of scenarios should be emphasized within programs (NISM, 2019).

- **Encourage wider adoption of AI-driven personal finance tools**

Although there is a very high level of awareness with respect to AI-based financial tools, and an even higher willingness to use them in the future (>90%), the actual level of current use is moderate. Awareness campaigns, therefore, could utilize real life examples of how AI based financial tools can assist in budgeting, savings, and long term goals (OECD, 2021).

- **Design simple and inclusive AI-based financial applications**

  Evidence suggests that women primarily use AI tools for basic financial management rather than advanced investment planning. Developers should focus on simple interfaces, local language support, and step by step guidance to increase sustained usage (World Bank, 2022).

- **Build trust and transparency in AI-driven financial services**

  Concerns related to data privacy and reliability can limit adoption. Clear communication regarding data security, ethical use of AI, and transparency in recommendations is essential to build trust among women users (BIS, 2021).

- **Strengthen coordination between policy, financial institutions, and fintech firms**

  Collaboration between government initiatives, banks, and fintech companies can ensure that digital financial inclusion and AI-driven tools complement each other and reach women across different socio economic groups (NCFE, 2025).

Future Potential of AI-Driven Personal Finance

There is significant potential for the use of AI driven personal finance systems by women in India based on their growing use of digital financial products and their acceptance of AI related tools. As digital financial inclusion continues to grow and as the ability of women to utilize technology increases, AI will be able to advance from being an assistant (to some degree) to playing a major role in assisting women with both financial planning and decision making. There are many ways that AI integrated into personal finance platforms can improve the long term financial well being and financial confidence of women through better organization of their finances and improved efficiency.

The areas of future potential are outlined below.

- **AI-driven financial planning tools for women:**

  Personalized budgets, savings, and investment strategies based on income patterns, spending habits, and life goals will enable women to make informed financial decisions without need of a professional financial advisor.

- **Increased financial confidence & autonomy:**

  AI tools that provide real time insights, reminders, and decision support can increase women's confidence in their ability to independently manage finances especially those who have traditionally relied on family members to make financial decisions for them.

- **Improved long term savings and investment behaviour:**

  Improved long term savings and investments by women will occur as a result of AI that provides users with automated savings and goals tracking in order to promote consistent and disciplined savings and investments to support their long term financial security and wealth building.

- **Bridging financial literacy gaps:**

  Women's ability to understand how to manage finances can be improved as a result of AI that helps provide an easier way for women to understand complex financial issues through use of simple to follow dashboards and step by step guidance in order to help them develop a greater level of financial knowledge while they learn and apply financial concepts.

- **Support for life stage based financial needs:**

  The support of AI is to make recommendations, which may be changed by life events (for example, education, an employment change, a marriage, or retirement) to provide better relevance and impact of tools for the personal finance for women at all of the stages of their lives.

- **Increased accessibility through mobile platforms:**

As mobile based financial services grow, AI-powered financial tools can assist women in both urban and rural environments, they can also extend the financial assistance through advanced tools beyond the banking systems of the past.

- **Contribution to financial empowerment:**

  By combining personalization, automation, and ease of use, AI-driven personal finance solutions can play a transformative role in moving women from basic financial inclusion toward sustained financial empowerment

CONCLUSION

Financial digitalization has significantly contributed to increasing the number of women included in India's formal financial system. Women's use of banks and other financial institutions and women's utilization of mobile payments and e-wallets have increased significantly and the barriers associated with access have decreased dramatically. However, there are still large disparities in the amount of money women deposit into and withdraw from their accounts and the frequency at which they utilize mobile banking and other digital banking tools, indicating that digital financial inclusion has advanced more quickly in terms of access than in terms of usage.

The study also indicates that women's financial literacy continues to evolve. Recent surveys show that women's behaviour and attitudes toward money and finance are improving, but that differences exist in terms of knowledge of financial concepts and ability to make financial decisions independently.

Finally, the study finds that awareness of and interest in using ai-based personal finance tools is high and indicates significant potential for future growth. The study finds that AI-based tools provide financial planning assistance through budgeting, expense tracking, and financial planning, and builds confidence for making financial decisions. Therefore, AI-based tools may help fill gaps in financial education and digital inclusion by providing women with additional tools and resources to improve their financial decision making.

In summary, the study finds that while digital financialization has created new opportunities for women to be formally included in the Indian economy, achieving sustainable financial empowerment for women will require multiple approaches including building women's

financial education, promoting active use of formal financial services, and creating effective links between AI-driven personal finance tools and formal financial services.

REFERENCES

1. Bank for International Settlements. (2021). *Sound practices: Implications of fintech developments for banks and bank supervisors*. BIS Publications.
    a. https://www.bis.org/bcbs/publ/d431.htm
2. Gallego-Losada, R., Montero-Navarro, A., Rodríguez-Sánchez, J. L., & González-Torres, T. (2023). Financial literacy and digital financial inclusion: Evidence from developing economies. *Sustainability, 15*(2), 1124.
    a. https://doi.org/10.3390/su15021124
3. Mishra, D. (2024). Digital financial literacy and its impact on financial decision-making and fintech adoption among women in India. *Journal of Risk and Financial Management, 17*(10), 468.
    a. https://doi.org/10.3390/jrfm17100468
4. National Centre for Financial Education. (2019). *Financial literacy and inclusion survey (FLIS) 2019: Final report*. NCFE.
    a. https://ncfe.org.in/wp-content/uploads/2023/12/NCFE-2019_Final_Report.pdf
5. National Centre for Financial Education. (2025). *National strategy for financial education (NSFE) 2020–2025: Final report*. NCFE.
    a. https://ncfe.org.in/wp-content/uploads/2025/03/Final_Report_NSFE_18-03-25-1.pdf
6. National Institute of Securities Markets. (2019). *All-India financial literacy survey report*. NISM.
    a. https://ncfe.org.in/wp-content/uploads/2023/12/NISM_Final-Report-All-India.pdf
7. Observer Research Foundation. (2023). *Financial inclusion of women: Current evidence from India*.
    a. https://www.orfonline.org/research/financial-inclusion-of-women-current-evidence-from-india
8. Organisation for Economic Co-operation and Development. (2021). *AI in finance: Applications, benefits and challenges*. OECD Publishing.

a. https://www.oecd.org/finance/ai-in-finance.htm
9. Ozili, P. K. (2024). Natural rate of financial inclusion: A global database. *Economic Change and Restructuring, 57*(6), 1–63.
    a. https://doi.org/10.1007/s10644-024-09747-1
10. Sharma, A., Khurana, A., Goel, D., & Kshirsagar, B. (2025). Deep learning in finance: A scientometric analysis. In *2025 7th International Conference on Information Systems and Computer Networks (ISCON)* (pp. 1–5). IEEE.
    a. https://doi.org/10.1109/ISCON65210.2025.11340913
11. World Bank. (2022). *The Global Findex Database 2021: Financial inclusion, digital payments, and resilience in the age of COVID-19*. World Bank Publications. https://www.worldbank.org/en/publication/globalfindex