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## **SOCIO-DEMOGRAPHIC INFLUENCES ON FINANCIAL TECHNOLOGY ADOPTION: EVIDENCE FROM KERALA**

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| <b>KEY WORDS</b>                                                                             | <b>ABSTRACT</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Financial<br>Technology<br>(Fintech),<br><br>Demographic<br>Factors,<br><br>Digital Payments | This study investigates the influence of demographic factors on the adoption of financial technology (fintech) services amid the rapid digital transformation of the financial sector driven by advances in information and communication technologies. Using primary data collected through a structured questionnaire, the study examines the effects of age, gender, education, income, occupation, and place of residence on fintech usage. Results indicate that these socio-demographic variables significantly affect fintech adoption patterns. The findings suggest that while fintech has strong potential to enhance financial inclusion and economic development, existing socio-demographic disparities pose challenges to equitable access. The study recommends targeted inclusive fintech solutions, improved digital infrastructure, and enhanced digital literacy initiatives to mitigate these disparities and promote broader financial inclusion. |

### **1. Introduction**

The financial service sector is undergoing a drastic shift due to the influence of the development of information technology. The technology driven financial technology, or fintech represents the use of technology

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and innovations in the efficient and effective delivery of financial services. This study focusses to examine the relationship between socio demographic influences on financial Technology, in fostering the inclusive financial systems. The Use of digital technology and allied innovations enhanced the accessibility of the financial system for low-income and marginalised group of the population. This accessibility helps in the development of inclusive and sustainable economy (Wanof, 2023). Financial inclusion relates to the accessibility and provision of financial services, to every individual, who are unheeded by the conventional financial system(C et al., 2025a).

The financial technology (FinTech) has become the revitalized force in the financial service sector. Fin-Tech creates an environment for delivering an efficient and convenient financial service through innovation. This equips the economies to compete with global financial markets. The introduction of digital technology in finance, eliminates many barriers and challenges in the financial service delivery in the economy (Sharma, 2024). The quality of economic growth can be knowingly becomes better-quality by intensifying the exposure and practice of financial inclusion using technology (Xi & Wang, 2023). Fintech is a series of different business models, latest technology applications, and innovative financial products and services that have an important impact on the financial service sector (Li & Xu, 2021). Financial technologies serve as a driving force for financial inclusion. It facilitates the sustainable development goals of the economy (Kesavan & Polisetty, 2025).

### **Review of Literature**

Financial services and its accessibility have been considered as an important aspect of social development (Claessens, 2006).The conventional and traditional financial model faces many challenges. These hurdles cannot be resolute through the existing systems and mechanisms (Kou & Lu, 2025). Financial Technology, significantly pays to reduce the

service charge for financial transactions. It enhances the financial literacy especially among the marginalized population (C et al., 2025b). The conventional financial model has several limitations especially on time, stress etc. but fin-Tech solutions have updated finance management techniques, enabling people to save their valuable time and reduce anxiety(Budihal & ., 2025).

Financial inclusion refers to a process that confirms the accessibility and usage of the different components of the financial system for all members of an economy (Ren et al., 2023). Banking through mobile applications has significant impact on traditional banking (Bhattacharjee et al., 2024). Fintech empowers the digitalisation of services in relation to finance to obtain a competitive edge in the financial market (Jafri et al., 2025). These is gaps exist in standardized frameworks for AI and its incorporation in the financial system (Vuković et al., 2025).The digital financial literacy is very essential in the contemporary economic scenario because all the financial products are presented in digital form (Al-Majali et al., 2024).

### **Objectives of the study**

1. To study the relationship between demographics and FinTech adoption in emerging markets
2. To identify the adoption of fintech services based on area of residence

### **Research Methodology**

A cross-sectional, quantitative research design will be used to examine how socio-demographic variables influence FinTech adoption. Data will be collected through a structured, questionnaire from 300 residents of Kerala using a multi-stage sampling approach. Target population for this study is people residing in Kerala who are the users of Financial Technology services like mobile banking, Internet banking, e-wallets, Unified Payments Interface application, digital lending platforms, etc. The

Sampling frame consists of local household lists at the ward level within selected localities. The first stage of the multi-stage sampling will be used to ensure geographic and socio-political diversity across Kerala's 14 districts which are first categorised by presence of Corporations. There are 6 districts comes under the category of districts with corporations and 8 districts under the category of districts without any corporation. In the second stage two districts Wayanad District and Kozhikode Districts are selected randomly. In the third stage, one panchayat representing rural areas, one municipality representing semi-urban areas and one corporation representing urban areas are selected randomly. In the last stage respondents from each of the selected grama panchayats, municipalities and corporations are selected. All selected 2 districts will be included in the study frame; allocation across each punchayat, municipalities and corporations may be proportional to population in rural, semi urban and urban population.

## Results and Discussions

### 1.Fin Tech Adoption and Age

Fintech, or financial technology, is rapidly transforming how people relate with financial service sector. The table 1 presents a detailed breakdown of fintech adoption on various age group of the respondents. This analysis is for identifying the relationship between age and the use of digital financial tools, like mobile payment apps, UPI apps, wallets, investment and lending services etc. for driving the digital shift.

Table 1 Fin-Tech Adoption and Age

| FinTech Services | Frequency & Percentage | Age      |       |       |       |          |       |
|------------------|------------------------|----------|-------|-------|-------|----------|-------|
|                  |                        | Below 20 | 21-30 | 31-40 | 41-50 | Above 50 | Total |
| UPI apps         | Count                  | 6        | 15    | 12    | 15    | 9        | 57    |
|                  | %                      | 12.5     | 26.3  | 19.0  | 20.0  | 15.8     | 19.0  |
| Mobile           | Count                  | 6        | 9     | 12    | 9     | 21       | 57    |

|                                        |              |           |                                                                 |           |           |           |            |
|----------------------------------------|--------------|-----------|-----------------------------------------------------------------|-----------|-----------|-----------|------------|
| banking apps                           | %            | 12.5      | 15.8                                                            | 19.0      | 12.0      | 36.8      | 19.0       |
| Digital wallets                        | Count        | 9         | 9                                                               | 6         | 18        | 6         | 48         |
|                                        | %            | 18.8      | 15.8                                                            | 9.5       | 24.0      | 10.5      | 16.0       |
| Online lending /Microfinance platforms | Count        | 9         | 12                                                              | 15        | 15        | 9         | 60         |
|                                        | %            | 18.8      | 21.1                                                            | 23.8      | 20.0      | 15.8      | 20.0       |
| Insurance/investment apps              | Count        | 18        | 12                                                              | 18        | 18        | 12        | 78         |
|                                        | %            | 37.5      | 21.1                                                            | 28.6      | 24.0      | 21.1      | 26.0       |
| <b>Total</b>                           | <b>Count</b> | <b>48</b> | <b>57</b>                                                       | <b>63</b> | <b>75</b> | <b>57</b> | <b>300</b> |
|                                        | %            | 100.0     | 100.0                                                           | 100.0     | 100.0     | 100.0     | 100.0      |
| Chi-Square Test Statistics             |              |           | Chi-Square Value –26.652<br>df-16 p value - 0.046 - Significant |           |           |           |            |

(Source: Primary data)

This analysis examines how different age groups use various FinTech services and can be interpreted from two key perspectives like the level of FinTech adoption and the service preferences across age groups.

#### 1.Usage patterns by service:

Insurance/investment apps are the most widely used across ages (26.0% of total users), with especially high representation in the Below-20 (37.5%) and 31–40 (28.6%) groups. Online lending/microfinance platforms (20.0%) and UPI apps (19.0%) show broad use across age groups, with the 31–40 and 41–50 groups notable users of lending and UPI respectively. Mobile banking apps account for 19.0% overall but are disproportionately used by the Above-50 group (36.8%), indicating older respondents favour traditional bank apps. Digital wallets are least represented (16.0%), with higher usage in the 41–50 (24.0%) and Below-20 (18.8%) groups.

#### 2.Age-related trends:

Younger respondents (Below 20 and 21–30) show strong uptake of insurance/investment apps and reasonable use of digital wallets and UPI,

suggesting early adoption of diverse fintech services. The 31–40 group displays balanced use across services, with relatively high shares in online lending and investment apps—consistent with active financial engagement in mid-career stages. The 41–50 group emphasizes digital wallets, UPI, and insurance/investment apps, indicating mixed adoption of convenience and investment products. The Above-50 group favors mobile banking apps markedly, while showing lower relative use of digital wallets and UPI, reflecting preference for established banking channels.

The chi-square test yields  $\chi^2 = 26.652$ ,  $df = 16$ ,  $p = 0.046$ . Since  $p < 0.05$ , there is a statistically significant association between age group and type of fintech service used. This means age is a significant factor influencing the adoption of fintech services.

## 2. Fin Tech Services Usage and Gender

Fintech in the financial system restructure the personal finance management. The table 2 provides an analysis of fintech adoption based on the gender. Understanding these gender-based fintech usage backgrounds is essential to develop financial products.

Table 2 Fin-Tech Adoption and Gender

| FinTech Services    | Frequency<br>&<br>Percentage | Gender |        | Total |
|---------------------|------------------------------|--------|--------|-------|
|                     |                              | Male   | Female |       |
| UPI apps            | Count                        | 20     | 37     | 57    |
|                     | %                            | 13.9   | 23.7   | 19.0  |
| Mobile banking apps | Count                        | 30     | 27     | 57    |
|                     | %                            | 20.8   | 17.3   | 19.0  |
| Digital wallets     | Count                        | 29     | 19     | 48    |
|                     | %                            | 20.1   | 12.2   | 16.0  |
| Online lending      | Count                        | 25     | 35     | 60    |

|                                                        |       |                 |        |        |
|--------------------------------------------------------|-------|-----------------|--------|--------|
| /Microfinance platforms                                | %     | 17.4            | 22.4   | 20.0   |
| Insurance/<br>investment apps                          | Count | 40              | 38     | 78     |
|                                                        | %     | 27.8            | 24.4   | 26.0   |
| Total                                                  | Count | 144             | 156    | 300    |
|                                                        | %     | 100.0%          | 100.0% | 100.0% |
| Pearson Chi-Square - 8.563,<br>df- 4    p Value - .073 |       | Not Significant |        |        |

(Source: Primary data)

This analysis explores how individuals identifying as male and female engage with different types of FinTech services. This can be analysed and interpreted based the two important perspectives.

#### 1.Usage patterns by service:

The analysis reveals distinct gender-based preferences in the use of digital financial services. Among male respondents, the highest usage is observed in Insurance/Investment Apps (27.8%), followed by Mobile Banking Apps (20.8%), Digital Wallets (20.1%), Online Lending Platforms (17.4%), and UPI Apps (13.9%). This indicates a balanced adoption of digital financial services, with a greater inclination toward structured financial management and investment tools. Among female respondents, Insurance/Investment Apps (24.4%) and UPI Apps (23.7%) are the most preferred services, followed by Online Lending Platforms (22.4%), Mobile Banking Apps (17.3%), and Digital Wallets (12.2%). This suggests a preference for convenient, mobile-based payment solutions while also reflecting increasing participation in financial planning and credit-related services. Overall, male users tend to favor banking and investment-oriented platforms, whereas female users show stronger engagement with UPI-based transactions and lending services, highlighting varying financial needs and digital usage patterns.

## 2. Gender related Trends:

The overall usage pattern indicates that Insurance/Investment Apps are the most preferred digital financial service (26%), reflecting their broad appeal across all genders. Online Lending Platforms (20%) rank second and are slightly more popular among female users. UPI Apps (19%) and Mobile Banking Apps (19%) show equal overall usage, though their adoption varies across gender groups. Digital Wallets (16%) are the least utilized service, with comparatively higher usage among male respondents. Overall, the findings highlight diverse preferences in digital financial service adoption based on gender and financial needs.

The chi-square test yields  $\chi^2 = 8.563$ ,  $df = 4$ ,  $p = 0.073$ . Since  $p < 0.05$ , there is no statistically significant association between gender and type of fintech service used. This means gender is not a significant factor influencing the adoption of fintech services.

## 3. Fin-Tech Usage and Education

Generally, education is considered as an important catalyst in Financial Technology adoption among the households. The table 3 depicts the Fin-Tech adoption and education of the respondents.

Table 3 Fin-Tech Adoption and Education

| FinTech Services    | Frequency & Percentage | Education         |                  |          |              | Total |
|---------------------|------------------------|-------------------|------------------|----------|--------------|-------|
|                     |                        | Below High School | Higher Secondary | Graduate | PG and above |       |
| UPI apps            | Count                  | 15                | 21               | 12       | 9            | 57    |
|                     | %                      | 19.2              | 23.3             | 20.0     | 12.5         | 19.0  |
| Mobile banking apps | Count                  | 15                | 15               | 15       | 12           | 57    |
|                     | %                      | 19.2              | 16.7             | 25.0     | 16.7         | 19.0  |
| Digital wallets     | Count                  | 15                | 15               | 0        | 18           | 48    |
|                     | %                      | 19.2              | 16.7             | 0.0      | 25.0         | 16.0  |
| Online              | Count                  | 21                | 18               | 12       | 9            | 60    |



|                                                       |       |      |             |      |      |      |
|-------------------------------------------------------|-------|------|-------------|------|------|------|
| lending /Microfinance platforms                       | %     | 26.9 | 20.0        | 20.0 | 12.5 | 20.0 |
| Insurance/investment apps                             | Count | 12   | 21          | 21   | 24   | 78   |
|                                                       | %     | 15.4 | 23.3        | 35.0 | 33.3 | 26.0 |
| Total                                                 | Count | 78   | 90          | 60   | 72   | 300  |
|                                                       | %     | 100  | 100         | 100  | 100  | 100  |
| Pearson Chi-Square -28.786, df - 12<br>p Value - .004 |       |      | Significant |      |      |      |

(Source: Primary data)

This analysis explores how individuals with varying educational backgrounds engage with different digital financial services. This can be analysed and interpreted based the two important perspectives.

#### 1. Usage patterns by service:

This analysis explores how individuals with varying educational backgrounds engage with different digital financial services. The sample includes 300 respondents, segmented into four education categories: Below High School, Higher Secondary, Graduate, and Postgraduate and above. Each education group demonstrates distinct preferences, reflecting differences in financial literacy, digital exposure, and economic priorities: Regarding the category of Below High School the most used service is online lending/microfinance platforms (26.9%).The use of UPI apps, mobile banking, and digital wallets, each at 19.2%.This group shows strong reliance on accessible credit tools, possibly due to limited formal financial access. Their balanced use of transactional services suggests growing digital adoption.

Under the educational category of Higher Secondary the most used services are UPI apps and insurance/investment apps (23.3% each). These users are actively engaging with both short-term and long-term financial tools, indicating a transitional phase in financial behavior. Regarding

Graduate the most used service is Insurance/investment apps (35%). The other services like Mobile banking apps and online lending are 25% and 35% respectively. Graduates shows a clear preference for structured financial planning and formal banking tools, reflecting higher financial literacy and stability.

The educational category Postgraduate and Above the most used service is Insurance/investment apps (33.3%) and the other service usage is Digital wallets (25%). This group favors long-term financial instruments and convenience tools, possibly due to higher income levels and diversified financial goals. Their lower usage of UPI and lending platforms may reflect reduced dependence on short-term or peer-to-peer tools.

## 2.Educational background Related Trends

The Overall Service Popularity based on different Education Levels are Insurance/investment apps are the most used overall (26%), with increasing preference as education level rises. Online lending/microfinance platforms follow at 20%, especially among less formally educated groups. UPI apps and mobile banking apps tie at 19%, with UPI peaking among Higher Secondary users and mobile banking among Graduates. Digital wallets are the least used overall (16%), but notably preferred by Postgraduates.

The chi-square test yields  $\chi^2 = 28.786$ ,  $df = 12$ ,  $p = 0.004$ . Since  $p < 0.05$ , there is no statistically significant association between education level and preferred financial service. This means gender is not a significant factor influencing the adoption of fintech services.

## 4. Fin-Tech Usage and Occupation

The impact of occupation in FinTech adoption requires important attention because it governs stability in income. This also influences the digital exposures, and access to technology based on the financial needs and wants. The table 4 depicts the opinion of the respondents regarding Fin-

## Tech Adoption and Occupation.

Table 4 Fin-Tech Adoption and Occupation

| FinTech Services                                    | Frequency & Percentage | Occupation  |               |           |            |        | Total |
|-----------------------------------------------------|------------------------|-------------|---------------|-----------|------------|--------|-------|
|                                                     |                        | Student     | Self-employed | Salari ed | Home maker | Others |       |
| UPI apps                                            | Count                  | 9           | 6             | 6         | 15         | 21     | 57    |
|                                                     | %                      | 15          | 11.8          | 10        | 25         | 30.4   | 19    |
| Mobile banking apps                                 | Count                  | 15          | 0             | 15        | 15         | 12     | 57    |
|                                                     | %                      | 25          | 0.0           | 25        | 25         | 17.4   | 19    |
| Digital wallets                                     | Count                  | 18          | 12            | 3         | 6          | 9      | 48    |
|                                                     | %                      | 30.0        | 23.5          | 5.0       | 10.0       | 13.0   | 16.0  |
| Online lending /Microfinance platforms              | Count                  | 12          | 18            | 18        | 6          | 6      | 60    |
|                                                     | %                      | 20          | 35.3          | 30        | 10         | 8.7    | 20    |
| Insurance /investment apps                          | Count                  | 6           | 15            | 18        | 18         | 21     | 78    |
|                                                     | %                      | 10          | 29.4          | 30.0      | 30.0       | 30.4   | 26.0  |
| Total                                               | Count                  | 60          | 51            | 60        | 60         | 69     | 300   |
|                                                     | %                      | 100         | 100           | 100       | 100        | 100    | 100   |
| Pearson Chi-Square 62.739<br>df-16 p Value - <0.001 |                        | Significant |               |           |            |        |       |

(Source: Primary data)

This analysis examines how different groups based on occupation use various FinTech services and can be interpreted from two key perspectives like the level of FinTech adoption and the service preferences across age groups.

### 1. Usage patterns by service:

The sample includes 300 respondents, segmented into five occupational

categories: Students, Self-employed, Salaried (Private/Government), Homemakers, and Others. Service Usage Patterns by Occupation shows that each occupational group demonstrates distinct preferences, shaped by their financial needs, digital exposure, and lifestyle demands. Regarding Student groups the most used service is Digital wallets (30%). The usage of Mobile banking apps is 25% and online lending is 20%. Students favor convenience tools like wallets and mobile banking, likely for managing allowances, small transactions, and educational expenses. Their moderate use of lending platforms may reflect early credit-seeking behavior. The Self-employed Individuals mostly used the service: Online lending/microfinance platforms is 35.3%. Regarding Other usages, Insurance/investment apps is 29.4% and digital wallets is 23.5%. This group shows strong reliance on credit access and financial planning tools, reflecting entrepreneurial needs and income variability. Notably, none reported using mobile banking apps, which may signal usability or trust barriers. Among the Salaried (Private/Government) the Most used services are Insurance/investment apps and online lending platforms 30% each. regarding the use of other services Mobile banking apps is 25%. Salaried individuals engage with structured financial tools for both long-term planning and short-term credit. Their lower use of wallets and UPI apps may reflect reliance on formal banking channels. The group Homemakers the most used services area are Insurance/investment apps, mobile banking apps, UPI apps are 30%, 25% and 25% respectively.

Homemakers show balanced engagement with investment, banking, and UPI tools, likely for household budgeting and family financial management. Their lower use of lending platforms may reflect limited credit-seeking behavior.

Regarding Other category under occupation (Retired, Freelancers, etc.) the most used services are Insurance/investment apps and UPI apps 30.4% each. The usage of Mobile banking apps is 17.4%. This diverse group

favors secure and accessible tools, with strong interest in investment and UPI platforms. Their lower use of lending and wallet services may reflect financial stability or alternative preferences.

## 2.Occupation Related Trends

Overall Service Popularity among all Occupations shows that Insurance/investment apps are the most used overall (26%), with strong appeal across all occupational groups. Online lending/microfinance platforms follow at 20%, especially among self-employed and salaried individuals. UPI apps and mobile banking apps tie at 19%, but serve different occupational segments. Digital wallets are the least used overall (16%), though they peak among students.

The chi-square test yields  $\chi^2 = 62.73$ ,  $df = 16$ ,  $p = <0.001$ . The p-value is well below 0.05, confirming a statistically significant relationship between occupation and preferred digital financial service. The differences in service usage across occupational groups are not random they reflect meaningful behavioral patterns tied to work roles and financial contexts.

## 5. Fin-Tech usage and Income

The level of Income of the households is an important determinant of FinTech usage. The transaction volume, its financial complexity, affordability etc. influences Fin-tech usage. The Table 5 demonstrate the respondents views on Fin-Tech Adoption and Income

Table 5 Fin-Tech Adoption and Income

| FinTech Services    | Frequency & Percentage | Income        |                 |                 |              | Total |
|---------------------|------------------------|---------------|-----------------|-----------------|--------------|-------|
|                     |                        | Below ₹10,000 | 10,001 - 25,000 | 25,001 - 50,000 | Above 50,000 |       |
| UPI apps            | Count                  | 21            | 6               | 18              | 12           | 57    |
|                     | %                      | 36.8%         | 8.7%            | 20.7%           | 13.8%        | 19.0% |
| Mobile banking apps | Count                  | 3             | 18              | 12              | 24           | 57    |
|                     | %                      | 5.3%          | 26.1%           | 13.8%           | 27.6%        | 19.0% |

|                                        |       |        |             |        |        |        |
|----------------------------------------|-------|--------|-------------|--------|--------|--------|
| Digital wallets                        | Count | 18     | 12          | 6      | 12     | 48     |
|                                        | %     | 31.6%  | 17.4%       | 6.9%   | 13.8%  | 16.0%  |
| Online lending /Microfinance platforms | Count | 15     | 15          | 15     | 15     | 60     |
|                                        | %     | 26.3%  | 21.7%       | 17.2%  | 17.2%  | 20.0%  |
| Insurance/investment apps              | Count | 0      | 18          | 36     | 24     | 78     |
|                                        | %     | 0.0%   | 26.1%       | 41.4%  | 27.6%  | 26.0%  |
| Total                                  | Count | 57     | 69          | 87     | 87     | 300    |
|                                        | %     | 100.0% | 100.0%      | 100.0% | 100.0% | 100.0% |
| Pearson Chi-Square 65.103 df-12 <0.001 |       |        | Significant |        |        |        |

(Source: Primary data)

This analysis examines how different income groups use various FinTech services and can be interpreted from two key perspectives like the level of FinTech adoption and the service preferences across age groups.

### 1.Usage Patterns by Service

The sample includes 300 respondents, segmented into four income categories. They are Below ₹10,000, ₹10,001–₹25,000, ₹25,001–₹50,000, and above ₹50,000. Each income group demonstrates distinct preferences, reflecting differences in financial access, digital literacy, and economic priorities. Regarding the income group Below ₹10,000 the most used services are UPI apps (36.8%), Digital wallets (31.6%) and Online lending platforms (26.3%). Individuals in this income bracket rely heavily on fast, low-cost transactional tools and accessible credit options. Their minimal use of mobile banking (5.3%) and investment apps (0%) suggests limited engagement with formal financial institutions. Regarding ₹10,001–₹25,000 the most used services are Mobile banking apps and insurance/investment apps (26.1% each) and Online lending platforms

(21.7%). This group shows a transitional financial behavior engaging with both structured banking and planning tools while still relying on lending platforms. Their lower use of UPI and wallets may reflect a shift toward formalized financial management. The income group ₹25,001–₹50,000 the most used service is Insurance/investment apps (41.4%). Their usage in UPI apps is 20.7% and online lending is 17.2%. Individuals in this bracket prioritize long-term financial planning, with strong engagement in investment platforms. Their moderate use of UPI and lending tools suggests balanced financial behavior.

Among the income group Above ₹50,000 the most used services are Mobile banking apps and insurance/investment apps (27.6% each) The usage of UPI apps and digital wallets are 13.8% each. Higher-income individuals favor secure, structured financial tools. Their lower reliance on lending and wallet services reflects financial stability and preference for formal banking.

## 2.Occupation Related Trends

The Overall Service Popularity among different Income Groups shows Insurance/investment apps are the most used overall (26%), with usage increasing alongside income. Online lending platforms follow at 20%, with consistent usage across all income groups. UPI apps and mobile banking apps tie at 19%, but serve different income segments. Digital wallets are the least used overall (16%), though they peak among the lowest income group.

The chi-square test yields  $\chi^2 = 65.103$ ,  $df = 12$ ,  $p = <0.001$ . The p-value is below 0.05, confirming a statistically significant relationship between monthly income and preferred financial service. The differences in service usage across income brackets are not random they reflect meaningful behavioral patterns tied to financial capacity and access.

## 6. Fin-Tech usage and Location

Fintech usage differs significantly by location or place of residence, because urban areas demonstrating better infrastructure especially on technology and internet accessibility, compared to rural areas. The Table 6 demonstrate the respondents views on Fin-Tech Adoption and locational factors.

Table 6 Fin-Tech Adoption and Location

| FinTech Services                                  | Frequency & Percentage | Location |                 |            | Total |
|---------------------------------------------------|------------------------|----------|-----------------|------------|-------|
|                                                   |                        | Rural    | Urban           | Semi-urban |       |
| UPI apps                                          | Count                  | 30       | 21              | 6          | 57    |
|                                                   | %                      | 24.4     | 20.6            | 8.0        | 19.0  |
| Mobile banking apps                               | Count                  | 21       | 18              | 18         | 57    |
|                                                   | %                      | 17.1     | 17.6            | 24.0       | 19.0  |
| Digital wallets                                   | Count                  | 15       | 18              | 15         | 48    |
|                                                   | %                      | 12.2     | 17.6            | 20.0       | 16.0  |
| Online lending /Microfinance platforms            | Count                  | 27       | 15              | 18         | 60    |
|                                                   | %                      | 22.0     | 14.7            | 24.0       | 20.0  |
| Insurance/investment apps                         | Count                  | 30       | 30              | 18         | 78    |
|                                                   | %                      | 24.4     | 29.4            | 24.0       | 26.0  |
| Total                                             | Count                  | 123      | 102             | 75         | 300   |
|                                                   | %                      | 100      | 100             | 100        | 100   |
| Pearson Chi-Square 13.112, df-8<br>p Value - .108 |                        |          | Not Significant |            |       |

(Source: Primary data)

This analysis examines how different groups based on location use various FinTech services and can be interpreted from two key perspectives like the level of FinTech adoption and the service preferences across age groups.

### 1.Usage Patterns by Service

The sample includes 300 respondents, distributed across these three



location categories. Each location group demonstrates distinct preferences, shaped by infrastructure access, digital literacy, and financial needs. Regarding the respondents from rural areas the most used services are UPI apps and insurance/investment apps (24.4% each). The usage of Online lending platforms is 22%. Rural users show strong engagement with mobile-based transaction tools and accessible credit services. Their interest in investment apps suggests growing financial awareness, possibly driven by outreach programs or mobile penetration. The respondents from urban areas used the service Insurance/investment apps (29.4%). Their usage in UPI apps is 20.6% and mobile banking and digital wallets is 17.6%.

Urban users favour structured financial planning tools, with balanced use of transactional platforms. Their diversified usage reflects higher digital literacy and access to formal financial institutions.

Regarding the Semi-Urban respondents, the Most used services are Mobile banking apps and online lending platforms (24% each). Their usage in Insurance/investment apps is 24%. Semi-urban users lean toward formal banking and credit tools, possibly due to transitional infrastructure and evolving financial needs. Their lower use of UPI apps (8%) may reflect limited peer-to-peer transaction culture or connectivity issues.

## 2.Geographic Location related trends

The Overall Service Popularity of different Fin-tech services among respondents of different locations shows that Insurance/investment apps are the most used service overall (26%) with consistent appeal across all locations. The usage of Online lending platforms follows at 20%, especially among rural and semi-urban users. Regarding UPI apps and mobile banking apps tie at 19%, with UPI peaking in rural areas and mobile banking in semi-urban zones. The usage of Digital wallets are the least used overall (16%), though they show moderate engagement in urban and semi-urban areas.

The chi-square test yields  $\chi^2 = 13.112$ ,  $df = 8$ ,  $p = .108$ . The p-value is above 0.05, indicating no statistically significant relationship between location and preferred financial service. While usage patterns vary descriptively, these differences are not strong enough to confirm a meaningful association from a statistical standpoint.

## **Findings**

This section breaks down how key demographic traits—age, gender, education, occupation, and location—influence how people actually use digital financial services.

Age turns out to be one of the biggest factors driving FinTech service choices. Younger adults naturally gravitate toward fast, mobile applications like UPI and investment apps. Middle-aged users take a more balanced approach in their transactions, pairing daily payment tools with credit access and long-term planning. Older adults, on the other hand, tend to stick with traditional mobile banking apps. When it comes to gender, it doesn't really dictate the types of services people choose, but it does show up in daily habits. Men tend to interact more with digital wallets and mobile banking, while women use UPI and lending platforms more frequently. That said, insurance and investment apps are equally popular with both, showing a widespread interest in financial planning regardless of gender.

Education also plays a major role in shaping financial habits. People with less formal education lean heavily on quick transactional tools and borrowing platforms, mainly out of necessity and ease of access. On the other hand, those with higher education feel more comfortable in navigating investment platforms, digital wallets, and core banking features. Looking at occupation, usage mirrors everyday needs: students stick to quick, small-scale payments; self-employed individuals depend on credit and investment tools to run their work; salaried workers split their time between basic banking and long-term planning; and homemakers use

banking apps to manage household budgets. Interestingly, location doesn't create as much of a gap as you might expect. Rural users are surprisingly active on UPI and lending apps to cover their credit needs, semi-urban users fall somewhere in the middle with banking and loan tools, and urban users make steady use of everything, with a slight tilt toward wealth management.

### **Suggestions**

To build on these insights, FinTech providers and regulators should focus on creating products that match real-world user habits. First, app designs should meet users where they are creating simple, reassuring interfaces for older or less tech-savvy users, while offering more detailed planning tools for younger, highly educated audiences. Second, because women and self-employed users show a strong need for credit, financial institutions should offer clear, low-friction micro-lending options tailored to them. Finally, since rural adoption of mobile tools like UPI is already high, policymakers should take advantage of this setup to deliver safer formal credit, savings options, and basic financial literacy straight to non-urban communities.

### **Conclusion**

The present study on Socio-Demographic Influences on Financial Technology Adoption in Emerging Markets highlights the significant role of demographic factors on financial technologies. The findings revealed that the different socio-demographic variables like age, education, income level, occupation, and location or place of residence have significant influence on awareness, accessibility, and usage patterns of fintech services. The Younger generations and educated groups tend to exhibit higher level of financial technology adoption due to the reasons like greater digital literacy. The adoption level of older and less digitally exposed groups revealed comparatively lower adoption levels.

The socio-economic factor, income and occupation influences the FinTech usage and its frequency of usage. The people with higher-income level

shows preference in latest financial services. The preference of the lower-income groups of the society is on different digital payment systems. Additionally, the factor location, people lived in urban areas shows greater FinTech adoption than semi urban or rural areas, due to the availability of digital infrastructure.

Overall, the research underscores the demographic gaps in fintech adoption. In order to reduce these gaps policymakers, institutions in the financial system, technology providers etc., should develop strategies focused on financial literacy, improving digital infrastructure, and introduction of innovative fintech solutions based on the needs of the diverse demographic segments. Financial inclusion has a significant impact on the Economic development and the financial technology can contribute more effectively to the financial inclusion.

## REFERENCES

- Al-Majali, A. A., Al-Oshaibat, S. D., Al-Sarayreh, A. A., & Al-Manaseer, S. R. (2024). The effect of digital financial literacy on financial development and governance: Using panel vector autoregressive model. *Journal of Governance and Regulation*, 13(2, special issue), 465–473. <https://doi.org/10.22495/jgrv13i2siart21>
- Bhattacharjee, Dr. I., Srivastava, D. N., Mishra, Prof. A., Adhav, Dr. S., & Singh, Mrs. N. (2024). The Rise Of Fintech: Disrupting Traditional Financial Services. *Educational Administration: Theory and Practice*, 89–97. <https://doi.org/10.53555/kuey.v30i4.1408>
- Budihal, Ms. P., & . Dr. S. (2025). Fintech Solutions: The Key to Transforming WorkLife Dynamics. *IOSR Journal of Business and Management*, 14th(15th), 24–29. <https://doi.org/10.9790/487X-conf2429>

- C, G., S, V., Madbouly, A., Radhakrishnan, P., & Ali, N. H. (2025a). Impact of FinTech on Sustainable Financial Inclusion—The Case of India. *SSRN Electronic Journal*.  
<https://doi.org/10.2139/ssrn.5066763>
- C, G., S, V., Madbouly, A., Radhakrishnan, P., & Ali, N. H. (2025b). Impact of FinTech on Sustainable Financial Inclusion—The Case of India. *SSRN Electronic Journal*.  
<https://doi.org/10.2139/ssrn.5066763>
- Claessens, S. (2006). Access to Financial Services: A Review of the Issues and Public Policy Objectives. *The World Bank Research Observer*, 21(2), 207–240. <https://doi.org/10.1093/wbro/lkl004>
- Jafri, J. A., Mohd Amin, S. I., & Abdul Rahman, A. (2025). Financial technology (Fintech) research trend: A bibliometric analysis. *Discover Sustainability*, 6(1), 513. <https://doi.org/10.1007/s43621-025-01225-6>
- Kesavan, V., & Polisetty, A. (2025). An extensive examination of the influence of financial technology (Fintech) on advancing financial inclusion: A bibliometric investigation. *Discover Sustainability*, 6(1), 72. <https://doi.org/10.1007/s43621-025-00823-8>
- Kou, G., & Lu, Y. (2025). FinTech: A literature review of emerging financial technologies and applications. *Financial Innovation*, 11(1), 1. <https://doi.org/10.1186/s40854-024-00668-6>
- Li, B., & Xu, Z. (2021). Insights into financial technology (FinTech): A bibliometric and visual study. *Financial Innovation*, 7(1), 69. <https://doi.org/10.1186/s40854-021-00285-7>
- Sharma, D. J. (2024). *Fintech Adoption in Banking Sector: An Empirical Study. I.*

- Vuković, D. B., Dekpo-Adza, S., & Matović, S. (2025). AI integration in financial services: A systematic review of trends and regulatory challenges. *Humanities and Social Sciences Communications*, 12(1), 562. <https://doi.org/10.1057/s41599-025-04850-8>
- Wanof, M. I. (2023). Digital Technology Innovation in Improving Financial Access for Low-Income Communities. *Technology and Society Perspectives (TACIT)*, 1(1), 26–34. <https://doi.org/10.61100/tacit.v1i1.35>
- Xi, W., & Wang, Y. (2023). Digital financial inclusion and quality of economic growth. *Heliyon*, 9(9), e19731. <https://doi.org/10.1016/j.heliyon.2023.e19731>