

# FINTECH ADOPTION IN VARANASI DISTRICT: AN EMPIRICAL STUDY OF INFLUENCING FACTORS

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Abstract: This empirical study investigates the primary factors that affect the adoption of Financial Technology (FinTech) in the Varanasi district, which is a Tier-2 city in India. The study aims to fill a research gap by examining the adoption of FinTech in developing regions that have limited access to banking services. The analysis employed a mixed-methods approach, combining qualitative and quantitative methodologies. It involved 400 participants using structured questionnaires and analysing the results using SPSS. The objective of the study was to identify key factors that influence the adoption of FinTech and evaluate how they affect user sentiments. The results suggest that Effort Expectancy, Social Influence, Facilitating Conditions, and Government Support have a significant and beneficial impact on individuals' views on using FinTech services. More specifically, the way people perceived how easy it was to use, the impact of their peers and community, the availability of helpful resources, and the support from the government were all crucial factors in determining their intents to adopt. These findings emphasise the significance of easily accessible FinTech solutions, active involvement of the community, strong and reliable infrastructure, and favourable legislation in encouraging the adoption of FinTech. The study provides significant information to FinTech service providers, regulators, and stakeholders who aim to improve financial inclusion and stimulate regional economic growth. To promote a more inclusive and technologically sophisticated financial ecosystem in Varanasi and similar emerging contexts, it is crucial to comprehend and tackle these essential elements, which will enable the creation of specific solutions.

**Keyward:** Financial Technology (FinTech), Banking Services, Financial Inclusion, Fintech Adoption.

#### 1. Introduction

The advent of information technology innovation has facilitated daily commercial interactions. According to Salmony (2017), innovative financial technology fulfils consumer demands and enables the creation of various business models. Modern information technology has a significant impact on the banking sector, financial laws, and payment systems. "FinTech" is the term used to describe the implementation of new information technology in the financial services business. FinTech, short for financial technology, pertains to modern technology created to improve and simplify the delivery and use of financial services. Financial technology, commonly known as FinTech, is a convergence of technologies that have revolutionised the financial services sector. FinTech encompasses the modern methods and solutions in the financial services industry that are made possible by improvements in digital technology (Vijai, 2019). FinTech, as defined by the Financial Stability Board (FSB) of the Bureau of Indian Standard (BIS), refers to financial innovation that is facilitated by technology and has the potential to create new business models, applications, processes,

or products that significantly affect financial markets, institutions, and the provision of financial services. FinTech refers to a broad array of digital solutions that utilise technology to transform the provision and acquisition of financial services. FinTech developments such as blockchain technology, digital lending platforms, online insurance products, mobile wallets, and online insurance policies are causing significant disruption in the market. FinTech has the potential to expand its reach to individuals who were previously excluded by circumventing geographical limitations and streamlining processes, hence fostering greater financial inclusion (Sarma & Jain, 2019). While FinTech has gained significant popularity worldwide, the rates of its adoption differ significantly across different geographical regions. The adoption rates of FinTech are often greater in developed countries due to factors such as well-established regulatory frameworks, advanced digital literacy, and robust infrastructure. However, rising nations have significant growth opportunities for the FinTech industry, particularly in terms of promoting financial inclusion and empowering economies. In recent years, the worldwide FinTech market has experienced a significant surge in growth. Based on a report published by Statista in 2023, the worldwide FinTech market is expected to grow significantly and reach a remarkable value of USD 324.8 billion by 2026, demonstrating its obvious influence on the financial industry. This paper aims to work out a vacuum in research on the adoption of financial technology (FinTech) by studying Varanasi, a Tier-2 city in India. It provides valuable insights into the patterns of adoption in locations with limited access to banking services in developing countries. The analysis examines the socio-economic factors that affect adoption rates, taking into account differences between places with mostly male or female populations, as well as changes between different income levels and occupations. Focussing on particular demographic groups enables a more profound comprehension of distinct difficulties and requirements. Although the study is focused on a specific area, the inclusion of comparative analysis with other places in India expands the scope of the study. In summary, this study provides significant knowledge regarding the adoption of FinTech in developing countries.

The field of Financial Technology (FinTech) has undergone significant advancements over several decades, marked by pivotal moments of transformation. The emergence of credit cards in the 1950s catalysed technological progress in the field of finance. ATMs were introduced in the 1960s, causing considerable changes to banking services. Electronic stock trading and advanced data recording systems were implemented in banks during the 1970s and 1980s. The 1990s saw the rise of online broking and ecommerce, facilitated by the Internet revolution of the late 20th century. This innovation enabled global connectivity, Internet banking, and the emergence of online payment services like PayPal. The advent of smartphones and app-based operating systems in subsequent years revolutionised the provision of services. In 2009, Bitcoin was introduced, marking a significant milestone. The advent of artificial intelligence (AI) and big data in the past decade has enabled accurate predictions and personalised banking experiences, resulting in the phenomenon known as the "rise of the robots." The Global Financial Crisis led to the emergence of contemporary FinTech, which tackles concerns related to stricter regulations, conventional banking practices, and transparency by prioritising cost efficiency, ease, and transparency.

## 2. Review of Literature:

The existing body of literature on the adoption of Financial Technology (FinTech) emphasises the significant influence of technical advancements on the financial industry. It emphasises the difficulties and possibilities that arise in different situations. Gupta and Agrawal (2022) highlighted the profound change in India's financial sector brought by technical progress, with the COVID-19 pandemic acting as a catalyst. This has led to a substantial rise in the usage of technology and improved financial inclusion. Global data reflects this pattern, as Fu and Mishra (2022) demonstrated a significant increase in downloads of mobile banking apps during the pandemic, resulting in newer FinTech companies eventually outperforming established banks. User trust and security were essential criteria for the adoption of FinTech, as emphasised by Kim et al. (2015), who considered these aspects critical for user acceptance and adoption. Studies conducted in Malaysia (Alwi et al., 2019; Tun-Pin et al., 2019) and Germany (Jünger and Mietzner, 2020) had found that convenience, technological comfort, and financial literacy are important factors that influence the adoption of a certain behaviour or practice. These factors vary across different age groups and demographic profiles. In India, Das & Das (2020) and Tripathi (2022) had observed that younger generations had greater rates of

adoption. They highlighted trust, perceived simplicity of use, and safety as important considerations. The all-encompassing frameworks put out by Singh et al. (2020) and Xie et al. (2021) incorporated diverse theoretical models, demonstrating the interaction between perceived utility, social impact, and perceived risk. The review also highlights the necessity for enhanced communication between companies and consumers, as suggested by Utami et al. (2021), in order to promote market acceptance. Furthermore, the limitations experienced by users, as emphasised by Greeshmitha et al. (2023), emphasised the significance of cooperative endeavours in tackling service delivery obstacles. These studies demonstrate that the adoption of FinTech is influenced by a combination of technological, regulatory, and demographic factors. This reflects both regional differences and global patterns.

## 3. Adoption of FinTech in Varanasi

Varanasi holds paramount importance as a spiritual centre in Hinduism. The city attracts millions of people due to its plethora of events, sacred Ganges baths, and blessings. The city is host to a significant multitude of temples, including the renowned Kashi Vishwanath Temple, which serves as a Hindu pilgrimage site. The city is portrayed as deeply connected to Hindu's rituals, with its winding streets, bustling riverbank steps known as ghats, and lively aarti ceremonies involving the offering of light. The city's economy notably benefits from both pilgrims and visitors from throughout the world, thanks to its abundant cultural heritage (Singh, 2020). Varanasi faces significant challenges in achieving financial inclusion, through it has religious importance and attractiveness to tourists. According to a 2020 World Bank assessment, approximately 25% of the city's population is believed to be residing below the federal poverty threshold. A significant portion of the population has traditionally been marginalised from conventional financial services due to restricted entry to formal financial institutions and a low level of literacy. Smartphone usage and mobile internet penetration in Varanasi have been steadily increasing in recent years. The growing digital infrastructure presents an opportunity for FinTech to address the disparity in financial inclusion and empower individuals (Sharma, Shrivastava & Jain, 2019). Adoption intention refers to an individual's inclination to take action or make use of something depending on their motivational behaviour. Varanasi has a unique opportunity to lead in the adoption of FinTech due to its combination of cultural heritage and a quickly developing digital. An examination of the factors influencing the implementation of FinTech in this specific context could be advantageous for FinTech companies, financial institutions, and legislators. Specific measures should be developed to promote the ethical and inclusive adoption of FinTech in Varanasi, with the aim of enhancing financial empowerment and regional economic development. This can be achieved by acknowledging the distinct opportunities and obstacles that exist in the region. To promote financial inclusion and regional economic development, it is crucial to comprehend the various factors that influence the adoption of FinTech in the Varanasi area. This study examines a range of possible incentives and deterrents that can impact an individual's choice to utilise these financial technology.

#### 4. Research Objectives

- (i) To study the prominent factors affect FinTech adoption.
- (ii) To determine the Impact of factors on the adoption of FinTech services.

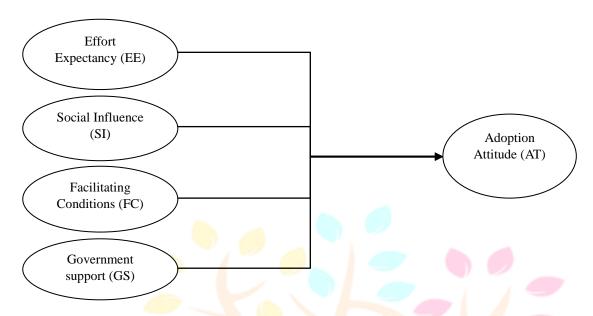
### 5. Hypothesis

 $\mathbf{H}_{00}$ : There is no association between various factors and the Adoption attitude of FinTech.

 $\mathbf{H}_{01}$ : There is association between various factors and the Adoption attitude of FinTech.

## 6. Conceptual framework

Figure 1: Conceptual Framework of the Study



Effort expectancy, Pertains to individuals' subjective perception of the level of ease associated with using Internet wealth management platforms Venkatesh et al. (2012) and Oliveira et al. (2016). The platform emphasises the user's exertion in utilising it, considering factors such as the usability of the user interface, operational limitations, and the size of the mobile screen. The anticipation of exertion is crucial, especially considering the widespread utilisation of FinTech platforms on mobile devices. In this context, it encompasses a range of non-monetary costs, such as the expenditure of time and effort in searching (Zeithaml, V. A., 1988). This design embodies the concept of the "given" element, symbolising the effort individuals invest in utilising a FinTech platform.

Social Influence pertains to individuals' opinions of significant others (such as friends, family, and coworkers) who hold the belief that they should utilise an internet-based wealth management platform Venkatesh et al. (2012) and Oliveira et al. (2016). Multiple research provide evidence of the positive impact of social influence on individuals' intentions to adopt, as shown by Venkatesh et al. (2012). Research on the implementation of mobile payment systems, online sports betting, and M-payments consistently demonstrates the favourable impact of social influence on individuals' attitudes towards adoption and their resulting behaviour. Overall, data indicates that the inclination to embrace online wealth management systems is greatly influenced by the opinions of others, which aligns with broader patterns observed in various consumer contexts.

Facilitating conditions, in the context of this study, pertain to users' perceptions of the necessary resources and supports required to adopt new technology, such as smartphone and FinTech applications for internet wealth management platforms (Venkatesh et al., 2012; Oliveira et al., 2016). The qualifications encompass a comprehension of technology and the provision of technical assistance from application vendors. In order to effectively utilise the online wealth management platform, individuals must meet certain conditions, such as having access to specific resources and possessing a fundamental knowledge of finance. Study, particularly conducted by Venkatesh, Thong, and Xu (2012), confirms a strong positive correlation between adoption intentions and enabling environments. The causal relationship is further demonstrated by many subsequent research that indicate that adoption intentions are positively influenced by facilitating factors in various contexts, such as online grievance redressal systems and mobile banking. Facilitating conditions are anticipated to exert a significant impact on individuals' intentions to adopt.

Various study suggest that **government support** plays a crucial role in the adoption of FinTech [Chong, A. Y. L., Ooi, K. B., Lin, B., & Tan, B. I. (2010)]. The government's strong legitimacy greatly enhances the reliability and trustworthiness of FinTech products and services. This is achieved by allocating funds

towards critical infrastructure, such as communication networks, and actively promoting the adoption of technology in financial advancements. These endeavours contribute to enhancing the acceptance and use of FinTech services among potential customers. The study conducted by Kiwanuka et al. (2015) provides evidence that government support positively influences the adoption of new technologies and the inclination to sustain their usage. These insights are valuable for developing policies. Marakarkandy et al. (2017) emphasise the significant role of government support in establishing trust, particularly in the realm of online banking products. They integrate these findings into the Technology Acceptance Model (TAM). From this research review, it is possible to establish and confirm theories regarding the influence of government assistance on several aspects of FinTech adoption.

Within the framework of the Technology Acceptance Model (TAM), **attitude** pertains to the subjective evaluations made by users, while behaviour intention represents the degree of determination to engage in a certain behaviour. Adoption intentions rely on possessing a positive attitude towards new technologies, as consistently shown by TAM research. According to the standard Technology Acceptance Model (TAM), there is a robust and positive correlation between consumers' perceptions and their willingness to adopt a certain technology Hsu, C. L., Wang, C. F., and Lin, J. C. C. (2011). This relationship has been extensively investigated in banking studies. Consequently, a theory arises that confirms the positive correlation between consumers' perceptions of a technology and their intentions to use it.

## 7. Research Methodology

This article provides a detailed analysis of the factors that influence the adoption of FinTech in Varanasi. It also examines the existing and upcoming trends in the industry. The methodology includes both qualitative and quantitative research methods, as well as thorough literature reviews. It provides an in-depth description by synthesizing information from reports, articles, news papers, case studies, scientific papers and other. The goal is to analyse the key factors that drive the adoption of FinTech and assess their impact on the acceptance of FinTech services.

### 7.1 Survey Instrument

An organised questionnaire was employed to examine the adoption of FinTech in Varanasi. Table 1 presents an exhaustive compilation of the metrics and sources utilised in the survey questionnaire. The survey utilises a 5-point Likert scale in order to enhance the dependability of the study and accurately capture the opinions of the participants (Joshi, Kale, Chandel, & Pal, 2015). Table 3 shows that all of the suggested constructs have Cronbach's Alpha values more than 0.7, indicating that the questions' reliability is regarded satisfactory. In order to assess the hypothesis of the study, various data analysis tests were conducted using SPSS. These tests included descriptive analysis, KMO and Bartlett's assess, Pearson correlation, and multilinear regression.

Table 1: Measurement items and sources

| Effort Expectancy(EE) | EE1: It would be easy for me to become skillful at using the FinTech wealth management platform.  EE2: I would find the platform easy to use.  EE3: Learning to operate the platform is easy for me | Venkatesh et al.(2012)<br>Oliveira et al.(2016) |
|-----------------------|---|---|
| Social                | SI1: People who are important to me think that I should use the   |   |
| Influence(SI)         | FinTech wealth management platform.   | XX 1 . 1 . 1 (2012)                             |
|                       |   | Venkatesh et al.(2012)                          |
|                       | SI2: People who influence my behavior think that I should use the   | Oliveira et al.(2016)                           |
|                       | FinTech wealth management platform.   | Olivella et al.(2010)                           |
|                       | SI3: People whose opinions I value prefer that I use the FinTech wealth management platform. (dropped)  |   |

| Facilitating<br>Conditions(FC) | FC1: I have the resources necessary to use the FinTech wealth management platform, such as smart phones, relative applications, and so on.  FC2: I know (financial, internet usage) necessary to use the FinTech wealth management platform.  FC3: I can get help from others when I have difficulties using the FinTech wealth management platform.                               | Venkatesh et al.(2012) Oliveira et al.(2016) |
|--------------------------------|--|--|
| Government<br>support (GS)     | GS1: I believe the government supports and improves the use of FinTech services.  GS2: I believe the government has introduced favorable legislation and regulations for FinTech services.  GS3: I believe the government is active in setting up all kinds of infrastructure such as the infrastructure telecom network, which has a positive role in promoting FinTech services. | Marakarkandy et al. (2017)                   |
| Adoption Attitude (AAT)        | AT1: I believe using FinTech services is a good idea.  AT2: Using FinTech services is a pleasant experience.  AT3: I am interested in FinTech services.  | Grabner et al. (2008)                        |

## 7.2 Research Design and Data Collection

This study investigates the utilisation of FinTech by clients in Varanasi for conducting financial transactions. The most efficient method for gathering information on the intentions of Varanasi customers to utilise FinTech is by using primary data. The survey focused on individuals who had accounts at any financial institution and owned a smartphone or gadget. The poll was conducted using convenience sampling because the identities of consumers of financial institutions were not available. The sample technique is frequently utilised in social science research since it is easily accessible, participants are cooperative, and responses are obtained promptly (Jager, Putnick, & Bornstein, 2017). Survey questionnaires were distributed to participants from Varanasi in tangible form for data collection.

The study's purpose was well communicated to the participants, who enthusiastically expressed their readiness to participate. A grand total of 450 questionnaires were collected from several respondents in the Varanasi region. Among these, 50 were eliminated because of the existence of outliers, incomplete responses, or missing data. To accomplish the goal of this study, the remaining 400 individuals, representing 88.8 percent of the overall data response rate, were utilised. The sample size refers to the number of individuals selected from the population to take part in the survey. As a result, researchers have developed many sampling methods and models to ascertain the appropriate sample size (Morse, 1991). The sample size was determined following the formula specified by Cochran in 1977.

#### 8. Data Analysis and Interpretation

This part primarily emphasises data analysis and interpretation. Data analysis is fundamental to the study's conclusions. It corroborates the outcomes of the research's goals. The initial aspect of the study is on the frequency distribution of the demographic profile of FinTech users in the Varanasi district. FinTech participants can be categorised based on their age, gender, monthly income, and occupation. The questions in this part assessed the individual's understanding and application of FinTech services. The first question consists of five segments of FinTech services: Mobile Payment Platform (a), Lending (b), Regtech (c), Wealthtech (d), and Neobanking (e). Respondents are required to indicate which of these services they are now utilising. The second issue pertains to the frequency of adoption of different FinTech services. The part 2 aspect is the categorisation of services based on their usage and subsequent rating. The last question consisted of fifteen questions and gathered comments from respondents using a five-point Likert scale ranging from strongly agree to disagree.

**Table 2: Demographic Characteristics** 

|                                | Table 2. Demogr     | raphic Characteristics |            |
|--------------------------------|---------------------|------------------------|------------|
| Demographic<br>Characteristics |                     | Frequency              | percentage |
| Gender                         | Male                | 223                    | 55.8       |
|                                | Female              | 177                    | 44.3       |
| Age                            | <18                 | 55                     | 13.8       |
|                                | 18-25               | 114                    | 28.5       |
|                                | 26-35               | 99                     | 24.8       |
|                                | 36-50               | 76                     | 19.0       |
|                                | >51                 | 56                     | 14.0       |
| Education                      | Primary education   | 32                     | 8.0        |
|                                | Secondary education | 73                     | 18.3       |
|                                | Graduation          | 145                    | 36.3       |
|                                | Post Graduation     | 106                    | 26.5       |
|                                | Other               | 44                     | 11.0       |
| Occupation                     | Student             | 152                    | 38.0       |
| -                              | Government employee | 64                     | 16.0       |
|                                | Private employee    | 79                     | 19.8       |
|                                | Businessman         | 71                     | 17.8       |
|                                | Other               | 34                     | 8.5        |
| Mincome                        | <20000              | 163                    | 40.8       |
|                                | 20000-50000         | 110                    | 27.5       |
|                                | 50000-80000         | 68                     | 17.0       |
|                                | 80000-100000        | 36                     | 9.0        |
|                                | >100000             | 23                     | 5.8        |

Source: Authors Compilation and Elaboration

After analysing the demographic data, Table 2 displays the demographic features of the surveyed community, offering significant insights into the composition of the sample of 400 FinTech users. Regarding gender, the data indicates a fairly equal distribution, with 55.8% males and 44.3% females. The age distribution illustrates the diverse phases of life present in the sample. 28.5% of the population belongs to the age group of 18-25, while 24.8% are in the age range of 26-35. The data suggests that there is a relatively youthful population, with persons under the age of 18 making up 13.8% and those over the age of 51 making up 14.0%. The educational backgrounds of individuals show a wide variety, with a significant majority having achieved either a bachelor's degree (36.3%) or a postgraduate degree (26.5%). The fact that this group of people is well-educated suggests that they possess a greater ability to analyse and think critically. This, in turn, influences the way they reply to the survey questions and ultimately affects the overall results of the survey. The distribution of participants in this study highlights the wide range of professional backgrounds they come from. This includes students (38%), as well as individuals working in the public sector (16%) and private sector (19.8%). As a result, the study provides a thorough representation of various occupations. With respect to the participants' monthly earnings, it is evident that 41% of them belong to the income bracket of up to ₹20000. Subsequently, around 28% of the participants receive a salary ranging from ₹20000 to ₹50000, while 17% earn between ₹50000 and ₹80000, 9% make between ₹80000 and ₹100000, and 6% earn beyond ₹100000.

Table 3: Reliability, Mean and Standard Deviation

| Construct Variable         | No. of Items | No. of Items Cronbach Alpha |        | Standard  |
|----------------------------|--------------|-----------------------------|--------|-----------|
|                            |              |                             |        | Deviation |
| Effort Expectancy(EE)      | 3            | .769                        | 3.7333 | .87986    |
| Social Influence(SI)       | 3            | .706                        | 3.6233 | .80226    |
| Facilitating Condition(FC) | 3            | . 714                       | 3.8500 | .77323    |
| Government Support(GS)     | 3            | .717                        | 3.8017 | .77779    |
| Attitude(AT)               | 3            | .750                        | 4.0042 | .81324    |
| TOTAL                      | 15           | .922                        |        |           |

Source: Authors Compilation and Elaboration

Table 3 presents the reliability and descriptive statistics for the constructs tested in the study. The Effort Expectancy (EE) demonstrates a Cronbach's Alpha of 0.769, which suggests satisfactory internal consistency. The average score for EE is 3.7333, with a standard deviation of 0.87986, indicating a considerable level of variability in the responses. The Social Influence (SI) measure demonstrates satisfactory reliability, as indicated by a Cronbach's Alpha coefficient of 0.706. The mean score for SI is 3.6233, with a standard deviation of 0.80226, showing a moderate amount of variability. The Facilitating Condition (FC) has a Cronbach's Alpha of 0.714, indicating satisfactory reliability. The mean score is 3.8500, and the standard deviation is 0.77323, indicating moderate response variability. The Government Support (GS) measure demonstrates reliable internal consistency and moderate variability, as indicated by a Cronbach's Alpha coefficient of 0.717, a mean of 3.8017, and a standard deviation of 0.77779. The construct of Attitude (AT) demonstrates the highest level of reliability, as seen by a Cronbach's Alpha coefficient of 0.750. Additionally, it has a mean score of 4.0042 and a standard deviation of 0.81324. These statistics indicate a greater level of consistency in the responses compared to the other constructs. Overall, the overall reliability of the combined items across all structures is quite strong, as indicated by a Cronbach's Alpha of 0.922, which demonstrates exceptional internal consistency.

Table 4: Correlations matrix of various factors

|    | EE   | SI   | FC                 | GS    | AT |
|----|------|------|--------------------|-------|----|
| EE | 1    |      |                    | _ / / |    |
| SI | .674 | 1    |                    |       |    |
| FC | .627 | .670 | 1                  |       |    |
| GS | .655 | .626 | .693               | 1     |    |
| AT | .715 | .641 | . <mark>677</mark> | .707  | 1  |

Source: Authors Compilation and Elaboration

Table 4 provides evidence of a statistically significant association at the 2-tailed 0.05 significance level. The correlation matrix among the FinTech service elements, Effort Expectancy (EE), Social Influence (SI), Facilitating Condition (FC), Government Support (GS), and Attitude (AT) demonstrates notable positive associations. The significant correlation between these ideas implies a potential interdependence. The link between effort expectation and attitude is high (r = 0.715), suggesting that clients who perceive FinTech services as requiring less work likely to have more positive thoughts about them. These findings highlight the significance of including several metrics in evaluating user perceptions and offering FinTech providers with recommendations on improving the overall user experience.

Table 5 KMO and Bartlett's Test

| Kaiser-Me <mark>yer-Olkin Me</mark> asure of Sampling Adequacy885 |                    |          |  |  |  |
|---|--------------------|----------|--|--|--|
| Bartlett's Test of Sphericity                                     | Approx. Chi-Square | 1265.705 |  |  |  |
|   | Df                 | 10       |  |  |  |
| Rezea   | Sig.               | .000     |  |  |  |

Source: Authors Compilation and Elaboration

Table 5 indicates that the Kaiser-Meyer-Olkin (KMO) measure of sample adequacy is 0.885, which supports a high level of suitability for factor analysis. This demonstrates that analysing the fundamental patterns or structures among variables is a valuable application for the data. In addition, Bartlett's Test of Sphericity yielded a statistically significant result ( $\chi^2 = 1265.705$ , df = 10, p < 0.001), indicating that the correlations between variables are significantly different from zero. This illustrates the utility of component analysis in uncovering meaningful relationships among the variables. The dataset's suitability for factor analysis is reinforced by the presence of a substantial Bartlett's Test and a high KMO value, indicating its robustness.

**Table 6: Multiple Regression** 

| В | Sig. | Collinearity Statistics | Result |  |
|---|------|-------------------------|--------|--|

| Model  |      |      | Tolerance | VIF   |                       |
|--|------|------|-----------|-------|-----------------------|
| (Constant)                                   | .529 | .000 |           |       |                       |
| EE   | .331 | .000 | .435      | 2.300 | Accept H <sub>1</sub> |
| SI   | .131 | .005 | .425      | 2.354 | Accept H <sub>2</sub> |
| FC   | .169 | .001 | .413      | 2.423 | Accept H <sub>3</sub> |
| GS   | .294 | .000 | .408      | 2.452 | Accept H <sub>4</sub> |
| R= 0.809; R <sup>2</sup> =0.654; Sig.= 0.000 |      |      |           |       |                       |

Source: Authors Compilation and Elaboration

The regression analysis findings indicate that the model has a strong fit, as evidenced by R value of 0.809 and an R<sup>2</sup> value of 0.654. This means that about 65.4% of the variation in the dependent variable can be explained by the independent variables included in the model. A significance level of 0.000 indicates that the total model is statistically significant. The collinearity statistics, such as Tolerance and Variance Inflation Factor (VIF), were evaluated to detect multicollinearity among the predictors. The Tolerance values vary between 0.408 and 0.435, whereas the associated VIF values range from 2.300 to 2.454. The above values suggest that there is no issue with multicollinearity, as all VIF values are below the usually accepted threshold of 10, and Tolerance values are far higher than the cutoff of 0.10.

The regression analysis shows that Effort Expectancy (EE) has a statistically significant and positive effect on the dependent variable. This is supported by a p-value of 0.000, a Tolerance value of 0.435, and a VIF of 2.300, confirming Hypothesis 1 (H1). The dependent variable is significantly affected by Social Influence (SI), as indicated by its p-value of 0.005, Tolerance value of 0.425, and VIF of 2.354, which confirms the validity of Hypothesis 2 (H2). The Facilitating Condition (FC) has a significant effect, as indicated by a p-value of 0.001, a Tolerance value of 0.413, and a VIF of 2.423, thereby verifying Hypothesis 3 (H3). The dependent variable is significantly influenced by Government Support (GS), as evidenced by a p-value of 0.000, a Tolerance value of 0.408, and a VIF of 2.452. This provides support for Hypothesis 4 (H4). In summary, the model shows that EE, SI, FC, and GS are strong predictors of the dependent variable, without any indication of serious multicollinearity.

#### 9. Conclusion

This empirical study provides a thorough investigation of the primary factors that impact the adoption of FinTech in the Varanasi district, which is an important case study in the wider Indian setting. The aim is to investigate and determine the importance of different aspects that contribute to Varanasi's embrace of FinTech. The research emphasises that Effort Expectancy, Social Influence, Facilitating Conditions, and Government Support are key aspects that influence attitudes towards FinTech services. The results indicate that Effort Expectancy, Social Influence, Facilitating Conditions, and Government Support have a major influence on the adoption attitude towards FinTech. Each of these variables contributes to a detailed understanding of adoption behaviours. The study highlights the significance of user attitudes and socioeconomic aspects in influencing the adoption of FinTech, especially in growing locations such as Varanasi. The high association between Effort Expectancy and Adoption Attitude suggests that improving the userfriendliness of FinTech services can increase acceptability. Moreover, the concept of Social Influence posits that the dynamics of community and peer relationships have a significant impact on shaping human choices to embrace FinTech solutions. The research emphasises the necessity of implementing focused interventions to overcome specific obstacles and capitalise on opportunities in Varanasi. This will promote enhanced financial inclusion and stimulate regional economic development. In summary, this study provides essential knowledge about the adoption of financial technology (FinTech) in places with limited access to banking services. It serves as a basis for future research and policy-making efforts to improve the accessibility of financial services in comparable situations.

Overall, the study's findings suggest a number of valuable insights that might help different parties enhance

consumer inclination towards adopting FinTech. Financial service providers and regulators might use these findings as a guide to encourage client involvement in FinTech for financial services applications. Financial service providers should develop and offer users a technologically advanced tool that is both user-friendly and highly efficient in performing tasks. Furthermore, it is recommended to combine technology with enhanced peer contact in order to promote greater engagement in the field of FinTech.

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