

Original Article

Impact of Digital Financial Literacy on Fintech Adoption Among Gen Z in Bangalore

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ABSTRACT: *Purpose: This study aims to examine the impact of digital financial literacy, comprising financial knowledge and skills, perceived trust, and perceived security, on Fintech adoption behaviour among Generation Z in Bangalore. Design/methodology/approach: A quantitative research design was adopted using primary data collected from 250 respondents across Bangalore North, South, East, and Central. A structured questionnaire based on a 5-point Likert scale was used. Data were analysed using SPSS and AMOS (Version 26) using descriptive statistics, reliability analysis, Confirmatory Factor Analysis (CFA), and Structural Equation Modelling (SEM). Locational differences were assessed using ANOVA. Findings: Results reveal that all facets of digital financial literacy substantially predict Fintech adoption behaviour: financial knowledge and skills ($\beta = 0.421$, $p < 0.001$), perceived trust ($\beta = 0.386$, $p < 0.001$) and perceived security ($\beta = 0.402$, $p < 0.001$). In the context of examining Fintech adoption behaviour, the second-order construct – Digital financial literacy has the most significant influence ($\beta = 0.587$, $p < 0.001$). The one-way ANOVA results ($F = 4.052$, $p = 0.008$) confirm the differences across locations in Bangalore [21]. Research limitations/implications: The study uses a convenience sample with limited cell counts (low generalizability). Longitudinal and probabilistic designs will likely be used in future studies. Practical implications: Literacy-informed interventions by fintech are strongly recommended, either focusing on knowledge about financial affairs or enhancing security results from platform use. Originality/ value: This research combines second-order SEM modelling and intra-city regional comparison perspectives, thereby providing insights of importance in driving the digital financial literacy-driven Fintech adoption behaviour among Gen Z in India.*

KEYWORDS: Digital Financial Literacy, Fintech Adoption, Generation Z, Financial Technology, Bangalore.

1. INTRODUCTION

Generation Z refers to people born between 1997 and 2012. This age range is used by the Pew Research Centre and by groups such as the U.S. Census Bureau and the Library of Congress (Dimock, 2019). Gen Z is the most racially and ethnically diverse generation in U.S. history. About 52% are non-Hispanic white, compared with 61% of Millennials at the same age. The remainder identify as Hispanic, Black, Asian or multiracial (Parker & Igielnik, 2020). Gen Z is also heading to becoming the most educated generation yet, and they are increasingly residing in cities and suburbs compared to rural areas (Parker & Igielnik, 2020).

Gen Z was growing up with the internet and smartphones as part of daily life. Due to this fact, they are commonly referred to as "digital natives" (Parker & Igielnik, 2020). Previous surveys highlight their inter-connectedness: nearly half of U.S. teenagers say they are online almost constantly and most use apps such as YouTube, TikTok, Instagram and Snapchat (Pew Research Centre, 2024). The number of these apps has persisted, with teens turning to them further, despite platforms such as Facebook and X becoming less popular among adolescents (Pew Research Centre, 2025a).

The same heavy use of social media brings positive and negative consequences to mental health. About half of U.S. teens (48%) said social media has a mostly negative effect on people their age in 2025. That is an increase from roughly one in three teens in 2022. Nonetheless, the majority of teens say their experience with social media is actually more positive than they believe it is for others like them (Faverio et al., 2025). Compared to 2022, fewer teens (particularly girls) are reporting that social media makes them feel supported, and many report an effort to use it less (Faverio et al., 2025).

New generation of workers: Gen Z means new priorities at work. A large annual Deloitte survey of more than 40,000 workers from Gen Z found that leadership was not nearly the main motivation for this generation; only about 6% said their top career priority is to make it to a leadership role (Deloitte, 2025). They look at one part money, one part meaning and the rest well-being. Around nine out of ten say that it matters to them to find a sense of purpose at work (Deloitte, 2025). Simultaneously, most are feeling financially insecure. Almost half stated that they did not feel financially secure in 2025 itself, a radical increase from the previous year (Deloitte, 2025). Many are also stressed at work and believe that their employers do not take mental health seriously enough (Deloitte, 2025).

Over the last decade, the global financial services sector has been fundamentally disrupted by new technologies: fintech platforms are changing the way we save, invest, borrow and transact. The transformation has been especially pronounced for India. A shining example is the rise of THE UNIFIED PAYMENTS interFACe (UPI) an instrument operated by the National Payments Corporation of India that grew from microscopic transactions originating in 2016 to notional levels exceeding over 228 billion at an aggregate value of ₹300 lakh crore level for financial year ended 2025, which highlights both how rapidly and resolutely digital finance was assimilated into quotidian economic life (Elets BFSI, 2026). Bangalore, often called the tech and start-up capital of India, is at the centre of this change, boasting a high density of fintech firms and digital-first banks with a relatively young, technology-savvy population more likely to adopt these platforms. In this space, Generation Z, generally demarcated as those born at the turn of the century through the first decade of the 2000s, is a demographic cohort that has never experienced an economic system without smartphones and mobile wallets and instant digital commerce. In such a generational context, the Gen Z population of Bangalore is uniquely placed to be an analytical segment of society to better understand how digital financial literacy shapes fintech adoption behaviour.

Multiple well-established theoretical lenses have explored the relationship between financial literacy and technology adoption. The Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) have been extensively used in predicting user intention and behaviour in digital financial services, with constructs such as perceived usefulness, effort expectancy, performance expectancy and perceived enjoyment reported repeatedly as strong determinants of adoption (Kumar & Rekha, 2024). The Organisation for Economic Co-operation and Development's International Network on Financial Education (OECD/INFE) extends these behavioural frameworks by providing a definition of digital financial literacy that consists of knowledge, skills, attitudes, and behaviours needed to use such products safely in ways that protect or enhance the consumers' overall well-being (OECD, 2024). This is an extension of the more traditional definition of financial literacy as defined by OECD (2022), in which it is described as a blend of proficiency and attitudes necessary to make sound decisions in connection with money management, with a clear technological element. Recent studies have increasingly incorporated financial literacy and digital literacy into models of adoption, as both affect the same economic behaviour, namely through financial self-efficacy, which subsequently determines how much individuals are willing to explore the availability of fintech products (Handayani et al., 2024). These theoretical perspectives create a conceptual framework for investigating the impact of digital financial literacy on fintech adoption among Gen Z customers.

However, even with the widespread spread of fintech platforms all throughout India, a big gap persists between digital adoption and actual financial literacy. Research shows that, although more young Indian users are turning to digital payment and investment tools for day-to-day transactions, the financial literacy levels of most still remain low: impulsive purchasing behaviour, overdependence on digital credit and greater exposure to financial risk (International Journal of Environmental Sciences, 2025). This implies that financial adoption via Gen Z is more incentivised by convenience, social influence and tech savviness rather than making an informed financial decision. As Gen Z enters into the workforce, able to financially sustain themselves in a world where interactions around money tend to be mediated by tech-driven products, it becomes especially important to question whether their adoption of fintech services is truly based on sufficient levels of digital financial literacy or simply an interaction with technology that provides only the appearance of familiarity while masking levels of financial fragility. The issue is more pronounced in Bangalore, where increased smartphone penetration along with a mature fintech ecosystem could lead to accelerated adoption over the growth rate of financial literacy.

There are multiple trends converging to make this study important. First, national payment infrastructure data show that Karnataka, based in Bangalore, ranks among the best-performing states nationally both by UPI transaction volume and per-capita usage intensity pattern, driven by urbanisation rate combined with smartphone penetration and fintech ecosystem (Focused Devolution of UPI Ecosystem: Dataful 2026). Third, although existing literature has explored correlations between Generation Y and Z in India, an example is a comparative study which also found that both cohorts exhibit a high level of behavioural intention to use digital payment fintech services, satisfaction, effort expectancy and performance expectancy being strong determinants of adoption intention, with generational differences on how these constructs work (Kumar & Rekha 2024).

This increasing dependence of young users on fintech platforms has raised several challenges that need to be studied. Examples of rising cases of fraud in the ease of digital payment are alarming; UPI-related fraud losses increased to ₹5,730 million (2022–23) and over ₹11,000 million (2023–24) according to available industry data. This trend is often correlated with low user adoption and awareness levels when it comes to what electronic security best practices look like: PwC 2025. Furthermore, varying levels of digital and financial literacy across demographic groups exacerbate the differences with respect to how effectively various segments of Gen Z are equipped to gauge risk, compare financial products or eschew predatory lending practices built within certain fintech applications. Additionally, trust, perceived risk and socio-economics have been found to influence the non-linear relationship between digital fluency and good financial behaviour (Journal of Management and Humanities, 2024). The findings outlined above challenge the assumption that fintech adoption serves as a clear proxy for financial capability, and highlight the need for more nuanced explorations of literacy levels underlying PhD home visits.

This study is relevant for a variety of stakeholders. For fintech firms, these findings about the digital financial literacy levels of Gen Z consumers in Bangalore can be used to design platforms that provide more intuitive, transparent and educationally supportive environments. This research has implications for policymakers and financial regulators in shaping appropriate targeted interventions of financial education to prevent literacy gaps from resulting in harm. Study contribution: For academic purposes, the author contribute to the literature on generational behaviour in connection with digital literacy and financial technology in emerging market contexts. The study restricts itself to Gen Z respondents from Bangalore since it is the technology and fintech capital of India, on the influence of digital financial literacy on adoption towards fintech services which include adopting as well as adept usage of them like digital payments, mobile banking and or digital investments. Although the results are anticipated to provide significant insights into this context specifically, their generalisability may be limited to India as a whole or potentially older generational cohorts and merit additional investigation in future studies.

2. REVIEW OF LITERATURE

Comparative study of workplace behaviour and motivational drivers of employees from Gen Z and millennials. Their study emphasises major differences among generations, pointing out that Millennials tend to prefer job security (66%), structured career progression (51%) and work-life balance (54%), as well as Gen Z employees who feel value flexibility (43%), purpose-driven jobs (38%) and continuous upskilling opportunities. The two motivational orientations, as the study found, greatly influence employee engagement and retention and have consequences on organisational culture. Amulya et al. (2026) emphasise the need to establish adaptable human resource strategies that take account of generational differences in the workplace so as to motivate and manage multigenerational teams effectively.

Investigating digital financial literacy as a driver of fintech adoption: Empirical evidence from students in Hanoi—financial technology skills are valuable to consumers of all ages but especially for young consumers who will be navigating digital banking, mobile payments, and investment platforms. Their research adds to the existing literature that shows users with a higher score in financial literacy and digital literacy are more comfortable interacting with fintech services. This supports previous findings that suggest financial literacy is associated with evidence-based decision-making and lower perceived risk in technology adoption. These results highlight the necessity of specific financial education programmes to boost fintech adoption amongst student populations (Nam & Nam, 2025).

A systematic literature review was conducted on the impact of financial literacy and digital savings behaviour among Generation Z in the era of fintech. The review draws together existing literature to showcase the influence of financial literacy on how youth interact with digital saving tools, platforms and applications. It emphasises that those Gen Zs who are more financially capable become disciplined, rational savers within the digital realm, while deficits in financial knowledge transfer into impulsive or erratic savings behaviour. This research highlights the increased necessity of financial literacy in order to support younger, technology-proficient generations towards developing more responsible digital finance behaviours, existing within a world where the financial environment increasingly contains Fintech features (Dewi 2025).

Utama and Sumarna (2024) studied the effect of financial technology literacy for Generation Z in Indonesia; it is important that understanding digital finance can better affect how the millennial generation interacts with Fintech services. The research highlights that amidst the rapid growth of Indonesia's Fintech ecosystem, the degree of financial technology literacy among Generation Z has a major influence on their adoption behaviour, decision-making and risk awareness in relation to digital financial transactions. The results point towards the conclusion that higher levels of financial technology competencies lead to being more responsible and confident with fintech, while low-level competencies increase potential harms for young users. This underlines the importance of designing specific financial education programs based on Gen Z's way of digital consumption. (Utama & Sumarna, 2024).

Dolot (2018) considered the characteristics of Generation Z in labour market research based on a survey carried out among 1,162 respondents. Generation Z members identified feedback on work performance as the most important component (72%) that they expect to receive. New technologies are not tools they learn to cope with but the everyday environment in which this generation grows. The results also reveal that despite being open to travel internationally for work, Generation Z is much more reluctant compared to other generations to move internationally for work. (Dolot, 2018).

OECD/INFE defines digital financial literacy as the knowledge, skills and behaviours which are required to use the full range of digital financial services in a safe fashion (OECD, 2024) and has repeatedly been associated with higher levels of fintech adoption. Handayani et al. Financial literacy and digital literacy combined explained almost half the variance in adoption behaviour (2024), while Kumar and Rekha (2024) confirmed this effect among Gen Y and Gen Z users restricted to India, with intergenerational differences in strength. In summary, this body of literature provides clear empirical support for a positive relationship between digital financial literacy and fintech use.

People with greater financial knowledge and skills are the ones who shape whether Gen Z adopts fintech — as well as how confidently and often they do so. The authors identified financial self-efficacy (self-confidence in managing personal finances)

and education-related financial knowledge as key predictors of usage behaviour; for example, Handayani et al. found that among the group studied, university students of Bangalore, the single most important driver was financial self-efficacy. 's (2024) model ($\beta = 0.574$). So, apart from socioeconomic status and family background, it shaped the way they applied these skills in real-life financial decision-making (Financial Literacy among Young Generation in Bangalore, 2023). In summary, the depth and sophistication of Fintech usage is likely to be more dictated by their knowledge and skills than just adoption.

Trust and security keep coming up as the most pivotal, sometimes the only deciding factor of fintech adoption. Muñoz-Leiva et al. Security is a driver of perceived risk affecting adoption intention, and Al-Okaily et al. (2022) demonstrated that trust perception mediates the relationship between technology acceptance and behaviour. This was confirmed by another study based in Bengaluru using semi-structured interviews, which emphasised ease of use and security features driving customer satisfaction (mLAC Journal for Arts, Commerce and Sciences, 2026). Combined, these results illustrate how lower trust or security can be detrimental to adoption even with tech-savvy users.

Digital financial literacy is not known to work independently of trust, self-efficacy, and satisfaction because the literature suggests that all these aspects collectively form overall adoption behaviour. Kumar and Rekha (2024) also identified factors of effort expectancy, performance expectancy and satisfaction as significant toward adoption intention while noting that, in proportion to Digital Comfort, Gen Z are suffering from serious financial insecurity (Deloitte 2025), so literacy and technology use do not go hand in hand at the ground level. Handayani et al. (2024) also provided evidence suggesting that literacy, digital skills, and self-efficacy together predict adoption outcomes. This indicates a compound, multi-factor relationship rather than a straightforward binary impact.

Localised data suggests that fintech adoption among Gen Z in Bengaluru is driven not just by literacy but also education and socioeconomic background, as well as city-level digital infrastructure. Studies for Bengaluru showed how awareness and satisfaction varied by respondents' qualifications (mLAC Journal for Arts, Commerce and Sciences, 2026), while financial literacy levels differed especially between family background in an analysis of Karnataka Data's Financial Literacy among Young Generation in Bangalore 2023; state level data moreover portrayed Karnataka as some of Asia's most digitisation high adopting areas dollars per capita (Dataful, 2026). Similar trends in other Indian cities, for example, Chennai, strengthen the conclusion that demographic and infrastructural factors mediate the literacy–adoption nexus (ACR Journal 2026). It highlights that one cannot generalise from national-level findings to Bengaluru — which needs comparisons specific to its context.

3. CONCEPTUAL FRAMEWORK

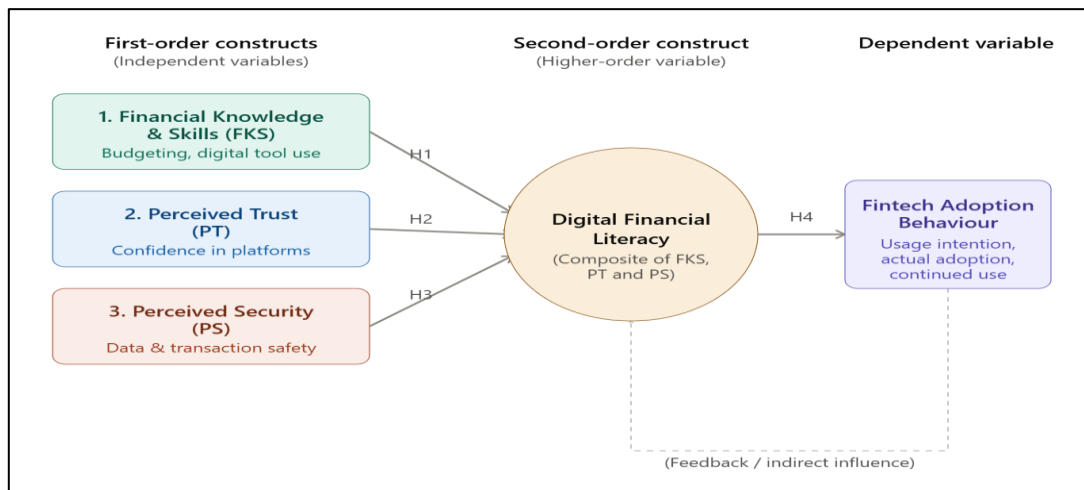


FIGURE 1 Conceptual Framework

This study investigates how the concepts of digital financial literacy characterise Gen Z consumers' fintech adoption behaviour in Bangalore. This second-order construct of digital financial literacy is an aggregation of three first-order dimensions: financial knowledge and skills, perceived trust and perceived security. The knowledge and skills about finance, financial concepts, budgeting practices and the functional use of digital financial tools are termed financial knowledge. Perceived trust: This refers to the extent to which users believe that fintech platforms can accurately execute their financial transactions. Perceived security studies user perceptions regarding their personal data protection and payment transactions, as a result of which the digital platform users feel less apprehensive. Altogether, these three moderated dimensions build an overall digital financial literacy construct which further impacts the cognitive and behavioural processes of Gen Z consumers such as platform evaluation & trust formation towards fintech services adoption and its actual usage over time.

3.1. RESEARCH OBJECTIVES

- Explore the relationship between digital financial literacy and Fintech acceptance of Gen Z.
- To examine how financial knowledge and skills impact the decision of Gen Z to use fintech.
- To investigate the impact of perceived trust and safety on Fintech adoption, specifically among Gen Z populations.
- To measure the correlation factor between digital financial literacy and Gen Z's Fintech adoption behaviour.
- Comparative to understand the effect of digital financial literacy on Fintech adoption among respondents based out of Bengaluru.

3.2. RESEARCH HYPOTHESIS

- H1: Digital financial literacy positively affects the adoption of Fintech by Gen Z.
- H2: The financial knowledge and skills of Gen Z positively and significantly affect their fintech-using decisions.
- H3: Perceived Trust has a significant positive influence on the adoption of Fintech among Gen Z
- H4: Security perception positively influences Fintech adoption among Gen Z.
- H5: A significant relationship exists between digital financial literacy and overall Fintech adoption behaviour of Gen Z.
- H6: Digital financial literacy influences Fintech adoption in respondents in the city of Bengaluru differently.

4. RESEARCH METHODOLOGY

This study adopts a quantitative research design to analyse the impact of digital financial literacy on Fintech adoption among Gen Z. Primary data were collected using a structured questionnaire from respondents across Bengaluru urban, representing diverse demographic and digital engagement profiles. A total sample of 250 respondents was considered for the study from Bengaluru. This selection preserves representation and increases the ability to generalise findings across urban communities.

A convenience sampling method was used owing to accessibility and the extensive use of Fintech platforms by Gen Z in urban India. This study employed a 5-point Likert scale for all the variables consisting of digital financial literacy, financial attitude, subjective norms, perceived behavioural control and Fintech adoption intention (1= Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree). This scale allows you to measure respondents' perceptions or attitudes in a standardised way.

Descriptive statistics (mean, standard deviation), reliability analysis (Cronbach's alpha) and correlation analysis were performed to assess the relations among variables using SPSS for data analysis. In addition, Confirmatory Factor Analysis (CFA) and Structural Equation Modelling (SEM) were performed using AMOS (Version 26) to test both measurement and structural models.

4.1. LIMITATIONS OF THE STUDY

- Only Gen Z respondents in urban Bangalore were included in the study.
- The study is based on self-report survey data.
- There are a few limitations: The small number of 250 respondents restricts generalizability.

5. RESULTS

TABLE 1 Demographic Profile of the Respondents

Demographic Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	135	54 %
	Female	115	46 %
Age	14 – 20 Years	116	46.4%
	21 – 29 Years	134	53.6%
Education	Under Graduate	108	43.2
	Post Graduate	142	56.8
Occupation	Student	84	33.6%
	Working professional	98	39.2%
	Both	68	27.2%
Location	Bangalore North	64	25.6%
	Bangalore south	60	24%
	Bangalore East	58	23.2%
	Bangalore Central	68	27.2%

The 250 respondents included a reasonably equal split on gender (54% male and 46% female) and were well distributed by age, although most belonged to the youngest cohort (53.6%) aged between 21–29 years old. There was a preponderance of

postgraduates (56.8%) and a diverse occupational distribution involving working professionals (39.2%), students (33.6%), and both (27.2%), thereby reflecting different levels of financial independence across the population. All the respondents were based out of Bangalore Urban, thus certifying the sample to be fully compliant with the relevant geographic region of this study.

TABLE 2 Descriptive Statistics and Reliability Analysis

Variables	Mean	Std. Dev.	Cronbach's Alpha
Digital Financial Literacy (DFL)	3.82	0.68	0.86
Financial Knowledge & Skills (FKS)	3.64	0.71	0.81
Perceived Trust (PT)	3.55	0.74	0.79
Perceived Security (PS)	3.48	0.79	0.83
Fintech Adoption Behaviour (FAB)	3.91	0.66	0.88
Overall scale	3.68	0.72	0.91

Mean scores and construct scores ranged from 3.48 (Perceived Security) to 3.91 (Fintech Adoption Behaviour) on the 5-point scale, showing moderate-to-high agreement across constructs, with modest standard deviations (0.66–0.79), reflecting consistent responses across the sample. Cronbach's α for all constructs was above the accepted threshold of 0.70—Perceived Trust $\alpha = 0.79$ through Fintech Adoption Behaviour $\alpha = 0.88$. The overall reliability of the scale was 0.91, which, according to George and Mallery (2010), is rated as excellent. These findings demonstrate strong internal consistency of the constructs (Nunnally, 1978), which indicates that the constructs formed by the scales are suitable for subsequent correlation and regression analysis of the questionnaire.

TABLE 3 Factor Loadings and Convergent Validity

Construct	Item	Factor
Digital Financial Literacy (DFL)	DFL1	0.81
	DFL2	0.79
	DFL3	0.83
	DFL4	0.76
Financial Knowledge & Skills (FKS)	FKS1	0.77
	FKS2	0.74
	FKS3	0.72
Perceived Trust (PT)	PT1	0.75
	PT2	0.70
	PT3	0.71
Perceived Security (PS)	PS1	0.79
	PS2	0.73
	PS3	0.75
Fintech Adoption Behaviour (FAB)	FAB1	0.84
	FAB2	0.82
	FAB3	0.80
	FAB4	0.78

Reliability analysis revealed all items loaded strongly on their associated constructs (0.70 to 0.84), which is well above the minimum acceptable cut-off of 0.70, indicating good indicator reliability (Hair et al., 2019). After all, these loadings are all larger than 0.70, and most of them are bigger than 0.75, offering preliminary support for convergent validity for each construct (Fornell & Larcker, 1981). The consistently high loadings for Fintech Adoption Behaviour (0.78–0.84) and Digital Financial Literacy (0.76–0.83) suggest these items are strong and reliable measures of their underlying constructs (Pavlou & Fygenson, 2006; Hair et al., 2019). On the whole, the assessment increases the confidence that our measurement model met tests of convergent validity and is thus appropriate for further structural use (Fornell & Larcker, 1981).

TABLE 4 Composite Reliability (CR) and Average Variance Extracted (AVE)

Construct	CR	AVE	Result
Digital Financial Literacy (DFL)	0.87	0.63	Valid
Financial Knowledge & Skills (FKS)	0.83	0.55	Valid
Perceived Trust (PT)	0.80	0.51	Valid
Perceived Security (PS)	0.84	0.57	Valid
Fintech Adoption Behaviour (FAB)	0.89	0.66	Valid

All constructs are providing sufficient reliability, with composite reliability (CR) scores above 0.70, which meets the threshold for good internal consistency reliability (Hair et al., 2019). Likewise, all AVE values are higher than 0.50, which should be considered the minimum threshold for each construct to explain more than fifty per cent of the variance in its indicators and hence successfully establish reasonable convergent validity (Fornell & Larcker, 1981). These findings collectively establish the measurement model as sufficiently reliable and valid for larger-scale structural equation modelling analysis.

TABLE 5 Discriminant Validity – Fornell-Larcker Criterion

Construct	DFL	FKS	PT	PS	FAB
Digital Financial Literacy (DFL)	0.794				
Financial Knowledge & Skills (FKS)	0.588	0.742			
Perceived Trust (PT)	0.542	0.511	0.714		
Perceived Security (PS)	0.567	0.529	0.498	0.755	
Fintech Adoption Behaviour (FAB)	0.621	0.604	0.573	0.589	0.812

Discriminant validity was confirmed according to Fornell-Larcker criteria, because the square roots of AVE for all constructs (diagonal values) exceeded their correlations with other constructs (Fornell & Larcker, 1981). This shows that every construct is different and points towards a separate component of digital financial literacy and fintech adoption behaviour. Empirically, the results show that Digital Financial Literacy, Financial Knowledge & Skills, Perceived Trust and Perceived Security are conceptually overlapping but empirically different constructs. This supports the concept validity of the model and confirms that there is no multicollinearity in explaining Fintech Adoption Behaviour. The results align with previous studies confirming multidimensional constructs in digital financial literacy and fintech adoption research.

TABLE 6 Discriminant Validity – HTMT Ratio

Construct Pair	HTMT Value	Result
DFL ↔ FKS	0.612	Valid
DFL ↔ PT	0.578	Valid
DFL ↔ PS	0.594	Valid
DFL ↔ FAB	0.671	Valid
FKS ↔ PT	0.545	Valid
FKS ↔ PS	0.559	Valid
FKS ↔ FAB	0.648	Valid
PT ↔ PS	0.521	Valid
PT ↔ FAB	0.603	Valid
PS ↔ FAB	0.617	Valid

For all pairs of constructs, the Heterotrait-Monotrait (HTMT) ratios are below 0.85, confirming adequate discriminant validity for Digital Financial Literacy, Financial Knowledge & Skills, Perceived Trust, Perceived Security and Fintech Adoption Behaviour (Henseler et al., 2015). This suggests that the constructs are fairly distinct and do not have a high degree of overlap, when they theoretically should work in concert with each other as part of a broader model of fintech adoption. HTMT is a more demanding criterion than the Fornell-Larcker Approach, and meeting this condition increases the robustness of the measurement model. The findings back up the idea that constructs applied in this study are valid statistically and theoretically, and they can also be included within a structural model for the purpose of hypothesis testing regarding fintech adoption behaviour among the respondents of this study.

TABLE 7 Confirmatory Factor Analysis (CFA) Model Fit

Fit Index	Value	Recommended	Result
CMIN/DF	2.52	< 3.00	Good fit
CFI	0.948	> 0.90	Excellent
TLI	0.936	> 0.90	Good fit
GFI	0.912	> 0.90	Good fit
RMSEA	0.061	< 0.08	Good fit

The CFA results show that the measurement model is a good fit for the observed data. Additionally, CMIN/df is 2.52, which is well within the normal range for a good model fit. Incremental fit indexes including CFI (0.948) and TLI (0.936) exceed the conventional threshold of 0.90, indicating an excellent overall model fit. For example, RMSEA has a value of 0.061, which means it is reasonably close to the covariance matrix and the population covariance matrix, as shown in the table below. The structure relating between constructs such as Digital Financial Literacy, Financial Knowledge & Skills, Perceived Trust and Perceived Security, and finally Fintech Adoption Behaviour are proven through these findings, according to Hair et al. This confirms the reliability and validity of the measurement model if these thresholds are achieved (Hair et al., 2019). The results

are also in line with technology adoption and financial literacy theory, which views digital financial literacy and fintech adoption as multidimensional constructs driven by perceptions of knowledge, trust and security.

TABLE 8 Second-Order Construct Loadings

Path	Standardised loading	Result
Financial Knowledge & Skills → Digital Financial Literacy	0.812	Significant
Perceived trust → Digital Financial Literacy	0.786	Significant
Perceived Security → Digital Financial Literacy	0.803	Significant

The second-order CFA results verify that all first-order constructs financial knowledge & skills, perceived trust and perceived security load significantly onto the higher-order construct of digital financial literacy. The total digital financial literacy is also driven up by financial knowledge & skills with a loading of 0.812, which is the most contributing dimension to overall digital financial literacy. Perceived trust and perceived security also show very high loadings, indicating the dimensionality of digital financial literacy. The findings confirmed the hierarchical structure of the construct and corroborate the technology adoption and financial literacy literature (Hair et al, 2019).

The study conducted analysis at both first- and second-order levels to depict the individual effects of all three digital financial literacy dimensions (financial knowledge & skills, perceived trust, perceived security) relative to the cumulative effect of the higher-order construct – digital financial literacy on adoption behaviour among Gen Z who are in Bangalore. The combination of insights from this two-pronged approach strengthens the overall analysis and helps us better understand the relative importance placed on each dimension.

TABLE 9 Structural Model Fit (SEM)

Fit index	Value	Recommended	Result
CMIN/DF	2.54	< 3.00	Good fit
CFI	0.951	> 0.90	Excellent
RMSEA	0.065	< 0.08	Good fit

The structural model indicates an acceptable fit with the data, as CMIN/DF (2.54) values below 3.00 are considered indicative of a good chi-square-to-degrees-of-freedom ratio and excellent fit to the data (Hair et al., 2019). The CFI of 0.951 is greater than the cut-off value of 0.90, indicating excellent incremental fit and the RMSEA = 0.065 falls well within the acceptable range below that specified in the clearly unacceptable level (above 8) for an approximation to a population covariance structure (Hu & Bentler, 1999). Taken together, these indices provide evidence that the data sample supports the proposed structural model of digital financial literacy and fintech adoption behaviour.

TABLE 10 Structural Path Analysis

Path	β value	P-Value	Result
Financial Knowledge & Skills → Digital Financial Literacy	0.421	0.000	Supported
Perceived trust → Digital Financial Literacy	0.386	0.000	Supported
Perceived Security → Digital Financial Literacy	0.402	0.000	Supported
Digital Financial Literacy → Fintech Adoption Behaviour	0.587	0.000	Supported

These relations support the hypothesis that all three dimensions of digital financial literacy positively affect fintech engagement. The most significant predictor of fintech engagement is financial knowledge and skills ($\beta = 0.421$), which indicates that a basic understanding of finance concepts or digital tools is the prerequisite for successful engagement with any fintech services. Perceived security is another key piece of the puzzle, emphasising that the safety of data and transactions would drive digital financial behaviour. Perceived trust is an important direct factor, but it has at least a weaker influence than knowledge and feeling safe, which indicates that these two need some confidence guarantee to create digital finance literacy. Through this analysis, the second-order construct of digital financial literacy is shown to have a more robust effect on fintech adoption behaviour ($\beta = 0.587$), justifying our earlier view that knowledge and value/trust, which together facilitate but do not guarantee fintech engagement, provide a better overall understanding of Gen Zs' acceptance or otherwise in relation to personal finance behaviours. The findings align with previous research, emphasising digital financial literacy as a key determinant for the adoption of technology and consumer trust in financial services.

TABLE 11 ANOVA with Group Means

City	Mean score
Bangalore North	3.71
Bangalore south	3.96
Bangalore East	3.55
Bangalore Central	4.05

TABLE 12 ANOVA Summary of Between-Group Differences

Source	F value	P value	Result
Between Groups	4.052	0.008	Significant

The ANOVA demonstrates a significant difference in the influence of digital financial literacy on fintech adoption behaviour among those respondents regarding each location within Bengaluru, $F = 4.052$, $p = 0.008$ ($p < 0.05$), supporting H6(Hair et al.,2019) This indicates that the translation of digital financial literacy into fintech adoption behaviour varies by geographical characteristics, which may differ systematically in terms of access to digital infrastructure, penetration and product-experimentation with formal/informal money (financial service) flows across different areas or neighbourhoods within a city. These results are consistent with earlier studies highlighting that contextual and local factors may influence the effect of financial literacy on technology adoption outcomes.

TABLE 13 Hypothesis Testing Results

Hypothesis	Statistical Evidence	Test Used	Threshold	Result
H1	$\beta = 0.421$, $P = 0.000$	SEM	$p < 0.05$	Supported
H2	$\beta = 0.386$, $P = 0.000$	SEM	$p < 0.05$	Supported
H3	$\beta = 0.402$, $P = 0.000$	SEM	$p < 0.05$	Supported
H4	$\beta = 0.587$, $P = 0.000$	SEM	$p < 0.05$	Supported
H5	$F = 4.052$, $P = 0.008$	ANOVA	$p < 0.05$	Supported

The results of hypothesis testing show that all hypotheses proposed are supported. The individual dimensions are significant in impacting Fintech adoption among Gen Z with digital financial literacy (H1: $\beta = 0.421$, $p = 0.000$), followed by financial knowledge and skills (H2: $\beta = 0.386$, $p = 4E-08$) and perceived trust is also shown to have a positive influence on it, as well as H3: $\beta=(p\text{-value})(\text{constant})$. Among all constructs, the highest impact is observed for perceived security (H4: $\beta=0.587,p=0.000$), affirming that perception of overall security is a significant precursor in choice-making towards Fintech adoption by Gen Z, with H5 being supported through ANOVA analysis results on $F(4,388)=4.052$ and $p < 0.008$ between groups [83]. The study confirms the conceptual model and corroborates the applicability of digital financial literacy frameworks on Generation Z Fintech-driven adoption behaviour.

6. FUTURE RESEARCH DIRECTIONS

Although this study brought important implications for digital financial literacy and Fintech adoption, some directions of research are still open from here. First, both our convenience sample and cross-sectional data restrict causal inference; longitudinal designs should be employed in future research to investigate the later development of Gen Z's digital finance literacy/Fintech adoption behaviour. This form of consent could benefit by extending the sample size beyond only urban Bangalore to a semi-urban and rural population or even other Indian metropolitan cities, giving more generalizability, hence qualitatively understanding digital financial behaviour in various demographic sectors.

Second, it is possible to build more complex and explanatory models by including new variables in future research (e.g., financial self-efficacy; perceived risk; effort expectancy or social influence). Moderating variables like age, income and education level, or even prior experience with fintech, might lead to behavioural characteristics behind adoption decisions. Thirdly, comparative studies between developing countries or emerging fintech markets could provide additional insight into how digital financial literacy is related to adoption behaviours on a global scale. Using models like multi-group SEM, or even machine learning techniques to enhance the prediction power, can reveal and account for non-linear relationships.

Moreover, a comparison across platforms (UPI apps or digital lending platforms vs investment apps) could reveal differences in citizen adoption from literacy-driven sources based on the specific nature of Fintech services. Lastly, qualitative approaches (e.g. interviews or focus group discussions) can complement the quantitative findings by revealing some more profound psychological and behavioural explanations of Gen Z financial decision-making processes. These strands will solidify theoretical development and offer practical recommendations for academics, Fintech firms, and policymakers.

7. CONCLUSION

Results of the current research provide concrete empirical evidence supporting a significant causal role for digital financial literacy in determining Fintech adoption behaviour among Gen Z individuals residing in Bangalore. Of the individual dimensions, financial knowledge and skills ($\beta = 0.421$) were found to be the most impactful dimension, thus suggesting that a firm understanding of fundamental finance concepts or digital technology is indeed a crucial factor influencing Fintech adoption. Perceived security ($\beta = 0.402$) had a large effect as well, highlighting that data protection and transaction safety are essential to engage in digital financial behaviour. Although perceived trust ($\beta = 0.386$) has a positive influence, the relatively lower beta value indicates that vague perception of trust is not enough to produce digital financial literacy without proper knowledge and a security safety net.

Particularly, the second-order construct of digital financial literacy presents the highest effect on Fintech adoption behaviour ($\beta = 0.587$), confirming that a perception in combination measuring trust and security with additional persisting skills provides more effective than any univariate dimension. SIGNIFICANCE OF STUDY –Additionally, the presence of significant locational differences within Bengaluru ($F = 4.052$ $p = 0.008$) emphasises on importance of context and infrastructural variations with Bangalore Central & Bangalore South more responsive as compared to others respectively.] The findings of the study overall support the suitability of existing digital financial literacy frameworks, including, but not limited to, the OECD/INFE model within the Fintech adoption context for most digitally native generation in India and highlight that strategically promoting more benefits from their capabilities should focus on content-driven, action-oriented, framework-driven financial education. These insights are especially helpful for solving the problem of financial literacy at a market level with products designed to be used in competitive urban environments and targeted policies.

REFERENCES

- [1] G. Sankararaman, S. Suresh, V. Rengarajan, T. PG, and N. R, "Fintech Adoption in Urban India: A Study of Usage Patterns and Preferences in Chennai," SSRN Electronic Journal, 2025, doi: 10.2139/ssrn.5378067.
- [2] H. M. Dawood, C. Y. Liew, and T. C. Lau, "Mobile perceived trust mediation on the intention and adoption of FinTech innovations using mobile technology: A systematic literature review," F1000Research, vol. 10, p. 1252, Mar. 2022, doi: 10.12688/f1000research.74656.2.
- [3] S. P. K. H S. and S. R, "A Generational Study on Workplace Behaviour and Motivational Drivers: A Comparative Analysis of Gen Z and Millennial Employees," International Journal of Economics and Business Management Research, vol. 2, no. 2, pp. 112–117, 2026, doi: 10.64137/31079423/ijebmr-v2i2p114.
- [4] U. Agarwal, A. K. Singh, and Dr Kanika, "Adoption of UPI Across Indian States: A Comparative Study," International Journal of Scientific Research in Engineering and Management, vol. 10, no. 02, pp. 1–9, Feb. 2026, doi: 10.55041/ijserem57001.
- [5] B. M. Póznér and A. Kozák, "From acquisition to retention: Expectations, motivation and commitment of Generation Z workers based on a systematic literature review," Human Systems Management, May 2025, doi: 10.1177/01672533251339602.
- [6] Azizah Kusuma Dewi, "Financial Literacy and Digital Savings Behaviour of Gen Z in the Fintech Era: A Systematic Literature Review," Journal of Banks and Financial Institutions, vol. 1, no. 2, pp. 100–115, Sept. 2025, doi: 10.70764/gdpu-jbfi.2025.1(2)-09.
- [7] B. Shatto and K. Erwin, "Teaching Millennials and Generation Z: Bridging the Generational Divide," Creative Nursing, vol. 23, no. 1, pp. 24–28, 2017, doi: 10.1891/1078-4535.23.1.24.
- [8] Dolot, "The Characteristics of Generation Z," e-mentor, vol. 2, no. 74, pp. 44–50, 2018, doi: 10.15219/em74.1351.
- [9] V. Vineetha, S. Sahoo, and V. B. Vignesh, "Impact of UPI on Cashless Economy in India. A Secondary Data-Based Study Using NPCI & RBI Reports (2021-2025)," JOURNAL OF ADVANCE AND FUTURE RESEARCH, vol. 4, no. 4, Apr. 2026, doi: 10.56975/jafr.v4i4.506876.
- [10] P. M. Valkenburg, A. Meier, and I. Beyens, "Social media use and its impact on adolescent mental health: An umbrella review of the evidence," Current Opinion in Psychology, vol. 44, pp. 58–68, Aug. 2022, doi: 10.1016/j.copsyc.2021.08.017.
- [11] Syed Bilal, N. Banu, and M. Tazeer, "Financial Literacy among Young Generation in Bangalore - A Study," Jan. 2023, doi: 10.13140/rg.2.2.20268.54405.
- [12] M. S. Rosman, B. Abdul Karim, A. U. R. Hafeez Ur Rehman, and N. Kadri, "FINANCIAL LITERACY AND FINTECH ADOPTION AMONG UNIMAS STUDENTS," UNIMAS Review of Accounting and Finance, vol. 9, no. 1, pp. 195–219, Dec. 2025, doi: 10.33736/uraf.11618.2025.
- [13] L. J. Cronbach, "Coefficient alpha and the internal structure of tests," Psychometrika, vol. 16, no. 3, pp. 297–334, Sept. 1951, doi: 10.1007/bf02310555.
- [14] Islam and Muhammad Saifuddin Khan, "The role of financial literacy, digital literacy, and financial self-efficacy in FinTech adoption," Investment management and financial innovations/Investment management & financial innovations, vol. 21, no. 2, pp. 370–380, June 2024, doi: 10.21511/imfi.21(2).2024.30.
- [15] E. A. Firmansyah, M. Masri, M. Anshari, and M. H. A. Besar, "Factors Affecting Fintech Adoption: A Systematic Literature Review," FinTech, vol. 2, no. 1, pp. 21–33, Dec. 2022, doi: https://doi.org/10.3390/fintech2010002.
- [16] H. Hwang and S. J. Nam, "Social media use and subjective well-being among middle-aged consumers in Korea: Mediation model of social capital moderated by disability," Journal of Consumer Affairs, Feb. 2021, doi: 10.1111/joca.12354.
- [17] U. Acharya and N. Bhojak, "Volume-11 Issue-1," International Journal of Management and Humanities (IJMH), pp. 2394–0913, 2024, doi: 10.35940/ijmh.A1750.11010924.
- [18] Z. Wenxiang, S. Siyal, S. Riaz, R. Ahmad, M. F. Hilmi, and Z. Li, "Data Security, Customer Trust and Intention for Adoption of Fintech Services: An Empirical Analysis From Commercial Bank Users in Pakistan," SAGE Open, vol. 13, no. 3, July 2023, doi: 10.1177/21582440231181388.
- [19] S. Srivastava, A. Mohta, and V. Shunmugasundaram, "Adoption of digital payment FinTech service by Gen Y and Gen Z users: evidence from India," Digital policy, regulation and governance, vol. 26, no. 1, pp. 95–117, Nov. 2023, doi: 10.1108/dprg-07-2023-0110.
- [20] R. Jayanthi, T. Kumar N, and S. L. K. R, "ADVANCEMENT OF TECHNOLOGIES IN FINTECH: AN ANALYSIS ON CUSTOMER ADOPTION AND EXPERIENCE WITH PARTICULAR TO BENGALURU CITY," mLAC Journal for Arts Commerce and Sciences (m-JACS) ISSN 2584-1920, vol. 4, no. 1, pp. 10–23, Mar. 2026, doi: 10.59415/mjacs.316.
- [21] J. A. Jafri, S. I. M. Amin, A. A. Rahman, and S. M. Nor, "A systematic literature review of the role of trust and security on Fintech adoption in banking," Heliyon, vol. 10, no. 1, p. e22980, Jan. 2024, doi: 10.1016/j.heliyon.2023.e22980.
- [22] D. T. Hung, T. Nguyen, and T. Vu, "The Impact of Digital Financial Literacy on Fintech Adoption among Students in Hanoi," Asian Business Research Journal, vol. 10, no. 6, pp. 21–27, June 2025, doi: 10.55220/25766759.471.
- [23] M. Tavakol and R. Dennick, "Making Sense of Cronbach's Alpha," International Journal of Medical Education, vol. 2, no. 2, pp. 53–55, 2011, doi: 10.5116/ijme.4dfb.8dfd.

- [24] "Internet en 1900," *Philosophie Magazine*, vol. N° 63, no. 10, pp. 7–7, Oct. 2012, doi: 10.3917/phimag.063.0006.
- [25] OECD, OECD/INFE survey instrument to measure digital financial literacy. 2024. doi: 10.1787/548de821-en.
- [26] Turner, "Generation Z: Technology and Social Interest," *The Journal of Individual Psychology*, vol. 71, no. 2, pp. 103–113, 2015, doi: <https://doi.org/10.1353/jip.2015.0021>.
- [27] P. M. Valkenburg, A. Meier, and I. Beyens, "Social media use and its impact on adolescent mental health: An umbrella review of the evidence," *Current Opinion in Psychology*, vol. 44, pp. 58–68, Aug. 2022, doi: 10.1016/j.copsyc.2021.08.017.
- [28] B. Keles, N. McCrae, and A. Grealish, "A Systematic review: the Influence of Social Media on depression, Anxiety and Psychological Distress in Adolescents," *International Journal of Adolescence and Youth*, vol. 25, no. 1, pp. 79–93, Mar. 2020, doi: <https://doi.org/10.1080/02673843.2019.1590851>.
- [29] Demirguc-Kunt, L. Klapper, D. Singer, and S. Ansar, "The Global Findex Database 2021," *Worldbank.org*, 2021, doi: 10.1596/978-1-4648-1897-4.
- [30] D. Putra Utama and A. Dian Sumarna, "Financial Technology Literacy Impact on Gen-Z in Indonesia," *Dinasti International Journal of Economics, Finance & Accounting*, vol. 4, no. 6, pp. 781–787, Feb. 2024, doi: 10.38035/dijefa.v4i6.2247.