ISSN 2278-2540 | DOI: 10.51583/IJLTEMAS | Volume XV, Issue X, October 2026

FinTech Adoption and Financial Decision-Making: The Role of Digital Financial Literacy and Perceived Financial Risk

Dr Neha S. Nair,

Associate Professor, Institute of Professional Education and Research, Bhopal, India

DOI: https://doi.org/10.51583/IJLTEMAS.2026.151000020

Received: 03 October 2026; Accepted: 08 October 2026; Published: 30 October 2026

ABSTRACT

FinTech has transformed access to payments, banking, investment, lending and other financial services. Although a substantial body of research explains why individuals adopt digital financial technologies, less attention has been given to whether actual FinTech use is associated with the quality of subsequent financial decision-making. This conceptual research proposal develops an empirical framework linking FinTech adoption, perceived financial risk and digital financial literacy with financial decision-making quality. Digital financial literacy is proposed as a moderator of the relationships between FinTech adoption and decision-making and between perceived financial risk and decision-making. The study deliberately distinguishes actual FinTech use from preferences and intentions, perceived financial risk from objective risk knowledge, and decision-making quality from confidence in decisions. The proposed empirical study will use a structured questionnaire containing self-report measures and objective knowledge/decision scenarios. A target of at least 300 eligible FinTech users is proposed, subject to a priori power analysis and data-quality screening. The planned analysis includes descriptive statistics, reliability and validity assessment, Pearson correlations, hierarchical/multiple regression, simultaneous moderation analysis, conditional effects and interaction plots. Demographic analyses will be treated as exploratory rather than as additional confirmatory hypotheses. No empirical results are claimed in this proposal; any numerical examples used in the methodological section are explicitly illustrative. The study seeks to contribute to FinTech and financial-management research by shifting attention from adoption as an endpoint toward the quality of financial decisions made through digital financial channels.

Keywords: FinTech adoption; actual usage; digital financial literacy; perceived financial risk; financial decision-making; financial decision quality; digital financial services.

INTRODUCTION

FinTech has changed the way individuals access, compare and use financial services. Technology adoption has led to faster and more convenient financial transactions such as the digital payment methods, mobile banking, online investment platforms, digital lending, digital insurance and more. The digitisation of payments infrastructure like UPI has been driving the adoption of digital payment channels into the everyday financial lives of Indians, which in turn has accelerated the growth of the payments sector.This has led to an increase in the use of digital payment channels in everyday transactions in India, especially with the rise of UPI, which has digitised the payments infrastructure.

However, the implications of FinTech go beyond just the acceptance and use of a technology by an individual.

Digital financial literacy may be particularly important in this relationship. Individuals who can locate, interpret and evaluate digital financial information may be better positioned to compare financial products, identify misleading information and recognise digital fraud. Perceived financial risk may also influence decision-making. Awareness of fraud, privacy, cybersecurity, transaction and financial-loss risks may encourage caution; however, excessive perceived risk may also discourage beneficial financial activity. These possibilities justify testing the relationships empirically rather than assuming a single direction.

ISSN 2278-2540 | DOI: 10.51583/IJLTEMAS | Volume XV, Issue X, October 2026

Accordingly, this study asks a different question from the conventional FinTech-adoption literature. Instead of focusing primarily on why consumers adopt FinTech, it asks whether and under what conditions FinTech use is associated with the quality of their financial decisions. The proposal therefore treats digital financial literacy as a potential boundary condition rather than as a simple substitute for adoption.

Research Gap and Contribution

Three gaps motivate the proposed study.

1. First, much FinTech research concentrates on adoption intention, acceptance, continuance and the antecedents of use. Adoption, however, does not logically imply better financial decision-making. The proposed study therefore separates actual usage from preference and behavioural intention.
2. Second, digital financial literacy is often measured through self-reported confidence or general digital-finance familiarity. Self-reports may not fully capture objective knowledge. The proposed questionnaire therefore combines self-reported digital-financial capability with objective knowledge questions and decision scenarios.
3. Third, perceived risk is commonly examined as an inhibitor of FinTech adoption. Less attention is paid to whether risk perception is associated with the quality of decisions among people who already use digital financial services. The proposed study examines this relationship directly and tests whether digital financial literacy changes its strength.

The contribution is therefore not a claim that FinTech adoption is inherently beneficial. Instead, the study proposes an evidence-based test of whether actual use is associated with decision quality and whether digital financial literacy conditions that association. It also improves construct separation by distinguishing use, preference/intention, risk perception, objective literacy, decision quality and decision confidence.

Objectives of the Study

1. To examine the relationship between actual FinTech adoption/use and financial decision-making quality.
2. To examine the relationship between perceived financial risk and financial decision-making quality among FinTech users.
3. To assess the relationship between digital financial literacy and financial decision-making quality.
4. To test whether digital financial literacy moderates the relationship between actual FinTech adoption/use and financial decision-making quality.
5. To test whether digital financial literacy moderates the relationship between perceived financial risk and financial decision-making quality.

Research Questions

RQ1: Is actual FinTech adoption/use significantly associated with financial decision-making quality?
RQ2: Is perceived financial risk significantly associated with financial decision-making quality?
RQ3: Is digital financial literacy significantly associated with financial decision-making quality?
RQ4: Does digital financial literacy moderate the relationship between actual FinTech adoption/use and financial decision-making quality?
RQ5: Does digital financial literacy moderate the relationship between perceived financial risk and financial decision-making quality?

Conceptual Definitions and Construct Boundaries

Construct	Operational meaning in the proposed study	What it is not
Actual FinTech Adoption/Use (FA)	Frequency, breadth and recency of actual use of digital financial services such as payments, banking, investments, lending and insurance.	Not preference, intention to use, or merely owning/downloading an

ISSN 2278-2540 | DOI: 10.51583/IJLTEMAS | Volume XV, Issue X, October 2026

		application.
FinTech Preference/Intention (FPI)	Preference and future intention to use digital financial services; collected as a separate descriptive/control variable.	Not part of the core FA score.
Perceived Financial Risk (PFR)	Perceived likelihood/seriousness of financial loss, fraud, privacy, cybersecurity, transaction and provider-related risk.	Not objective knowledge of risk and not demonstrated risk literacy.
Digital Financial Literacy (DFL)	A combined construct using self-reported digital-financial capability and objectively scored knowledge/scenario items, subject to validation.	Not only confidence or familiarity with FinTech.
Financial Decision-Making Quality (FDMQ)	Quality of choices assessed through decision-making statements and scenario-based items involving comparison, cost-benefit assessment, risk and consequences.	Not confidence in one's decisions.
Decision Confidence (DC)	Respondent's confidence in making financial decisions; analysed separately from FDMQ.	Not evidence that decisions are objectively high quality.

REVIEW OF LITERATURE

FinTech Adoption

FinTech adoption research has frequently drawn on technology-acceptance perspectives. The Technology Acceptance Model emphasises perceived usefulness and perceived ease of use, while UTAUT incorporates additional determinants of technology acceptance and use (Davis, 1989; Venkatesh et al., 2003). Reviews of digital-finance adoption similarly identify usefulness, trust, perceived risk, digital capability and related factors as important determinants of adoption (Kajol et al., 2022). These perspectives are useful for explaining adoption, but adoption should not be treated as equivalent to beneficial financial behaviour. The present proposal therefore defines the core adoption construct through actual usage rather than intention alone.

Financial Decision-Making

Financial decision-making encompasses choices concerning saving, spending, borrowing, investing, insurance and financial planning. Such decisions require evaluation of alternatives, understanding of costs and benefits, assessment of risks and consideration of consequences. Financial literacy research provides a theoretical basis for expecting knowledge and skills to influence financial choices (Lusardi & Mitchell, 2014). The proposed study extends this perspective to digital environments by assessing decision quality rather than relying only on respondents' confidence in their own decisions.

Digital Financial Literacy

Digital financial literacy combines financial capability with the ability to operate safely and critically in digital financial environments. It includes understanding digital financial products, evaluating online information, comparing alternatives, recognising scams and understanding privacy and cybersecurity issues. Recent literature has increasingly linked digital and financial literacy with FinTech engagement and financial behaviour. The present study strengthens this literature by separating self-reported capability from objective knowledge and decision scenarios where feasible.

Perceived Financial Risk

Perceived risk refers to the consumer's subjective assessment of uncertainty and possible adverse consequences. In digital financial services, relevant dimensions include monetary loss, fraud, privacy, cybersecurity, transaction failure and uncertainty about service providers. Featherman and Pavlou (2003)

ISSN 2278-2540 | DOI: 10.51583/IJLTEMAS | Volume XV, Issue X, October 2026

provide a foundational perceived-risk perspective for electronic services. The proposed study does not assume that risk perception is necessarily harmful: risk awareness may encourage more careful decision-making, while excessive risk perception may restrict participation. The direction is therefore tested empirically.

Research Gap and Proposed Contribution

Recent studies continue to investigate FinTech adoption, financial literacy, digital literacy, cybersecurity awareness and related behavioural factors. The proposed study differs by specifying financial decision-making quality as the principal outcome and by testing digital financial literacy as a moderator of two relationships simultaneously. It also separates actual usage, intention/preference, perceived risk, objective literacy, decision quality and confidence. This construct discipline is intended to reduce conceptual overlap and improve the interpretability of the empirical results.

THEORETICAL FRAMEWORK

The framework integrates three perspectives. Technology-acceptance theory provides the basis for understanding actual FinTech use (Davis, 1989; Venkatesh et al., 2003). Perceived-risk theory provides the basis for examining consumers' assessments of possible adverse consequences (Featherman & Pavlou, 2003). The financial-literacy perspective provides the basis for expecting knowledge and skills to be associated with financial decision quality (Lusardi & Mitchell, 2014).

The proposed structural relationships are:

- Actual FinTech Adoption/Use → Financial Decision-Making Quality
- Perceived Financial Risk → Financial Decision-Making Quality
- Digital Financial Literacy → Financial Decision-Making Quality
- Digital Financial Literacy × Actual FinTech Adoption/Use → Financial Decision-Making Quality
- Digital Financial Literacy × Perceived Financial Risk → Financial Decision-Making Quality

Preference/intention and demographic characteristics are measured separately. They are not silently combined with the actual-use construct. Demographic analyses are exploratory unless separately justified and preregistered as confirmatory.

HYPOTHESES

H01: There is a significant relationship between the actual use/actual adoption of FinTech and financial decision-making quality.

H02:The perceived financial risk is highly related to financial decision-making quality.

H03: Digital financial literacy has a significant positive relationship with the quality of financial decisions.

H4: There is a significant interaction effect between actual FinTech adoption/use and financial decision making quality through the lens of digital financial literacy.

H5: Digital financial literacy significantly interacts with the relationship between the perceived financial risk and the quality of financial decision making.

The five hypotheses are directly linked to the five research questions. There is no attempt to postulate an

"additional" mediation hypothesis. The previous definition of digital financial literacy as 'mediating' the relationship is deleted, as 'mediating' and 'moderation' are distinct modes of analysis.

The five hypotheses correspond directly to RQ1–RQ5. No separate mediation hypothesis is proposed. The earlier wording that described digital financial literacy as 'mediating' the relationship is removed because

ISSN 2278-2540 | DOI: 10.51583/IJLTEMAS | Volume XV, Issue X, October 2026

moderation and mediation are different analytical models.

PROPOSED RESEARCH METHODOLOGY

Research Design

The study is proposed as a cross-sectional empirical survey. The present manuscript is a research proposal; therefore, it reports the framework, hypotheses, questionnaire and planned methods rather than fabricated empirical findings. Any numerical example in this manuscript is illustrative only and will be clearly labelled as such.

Population and Sampling

The target population will consist of adults who have used at least one digital financial service during the defined reference period. Eligibility will require: (i) age 18 years or above; (ii) residence in India; (iii) use of at least one FinTech/digital financial service within the reference period; and (iv) informed consent. Respondents who do not meet the eligibility criteria, submit substantially incomplete questionnaires or fail pre-specified data-quality checks will be excluded.

A minimum target of 300 usable observations is proposed, subject to an a priori power analysis for the final regression and moderation model. Recruitment may use purposive/convenience online sampling supplemented by controlled distribution through relevant networks. Recruitment source, dates, number approached, number consenting, number completing and number retained will be reported transparently in the final empirical paper.

Ethical and Consent Procedure

Participants will receive an information statement explaining the study purpose, voluntary participation, confidentiality, approximate completion time and the right to discontinue before submission. No unnecessary personally identifying information will be collected. Consent will be obtained before the questionnaire begins. The final empirical manuscript will report the applicable institutional/ethical approval or exemption information, where required.

Data Collection

A structured questionnaire will be administered electronically. A pilot test with approximately 20–30 eligible participants is proposed to assess wording, completion time and item comprehension. Pilot responses will not be pooled with the final analytical sample unless the protocol permits it and the same eligibility, consent and data-quality procedures were followed.

Measurement and Scoring

Likert-type items will use a five-point scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree. Actual-use frequency items will use categorical or frequency-response formats rather than agreement scales where appropriate. Objective literacy/scenario items will be scored as correct/incorrect according to a pre-specified key.

For multi- item constructs, composite scores will be determined after assessing internal consistency and construct validity. Reverse-coded items, if any, will be identified before scoring. For the main analysis, a respondent-level composite will be computed as the mean of valid item responses when at least 80% of the construct's items are answered. Otherwise, the construct score will be treated as missing. The amount and pattern of missing data will be reported. If missingness is non-trivial, the final paper will justify complete-case analysis or an appropriate multiple-imputation strategy rather than silently replacing missing values.

ISSN 2278-2540 | DOI: 10.51583/IJLTEMAS | Volume XV, Issue X, October 2026

Proposed Questionnaire

Part A: Eligibility and Usage Profile

No.	Question	Response/Scoring
A1	Age	18–24; 25–34; 35–44; 45–54; 55+
A2	Have you used at least one digital financial service in the reference period?	Yes/No; No = not eligible
A3	Which digital financial services have you used?	Multiple response: UPI/digital payments; mobile banking; digital wallet; online investment; digital lending; digital insurance; other
A4	How frequently do you use digital financial services for financial activities?	Daily; several times a week; weekly; less than weekly; rarely
A5	How long have you used digital financial services?	<1 year; 1–3; 4–6; >6 years
A6	Do you intend to continue using digital financial services?	1–5 agreement scale

Part B: Actual FinTech Adoption/Use (FA)

Item	Statement	Scale
FA1	I regularly use digital financial services for my financial transactions.	1–5
FA2	I use digital financial services for more than one type of financial activity (e.g., payments, banking, investing or insurance).	1–5
FA3	Digital financial services are part of my routine management of money.	1–5
FA4	I use digital channels when I need to compare or access financial products or services.	1–5
FA5	I have used digital financial services recently rather than only registering for them.	1–5
FA6	I rely on digital financial channels for a meaningful portion of my financial activities.	1–5

Measurement note: These items are proposed for empirical testing and should not be presented as a validated pre-existing scale without source verification. They operationalise actual use rather than intention. Frequency and service-type questions in Part A provide behavioural checks against the self-report scale.

Part C: FinTech Preference/Intention (Separate Variable)

Item	Statement	Scale
FPI1	I prefer digital financial services when a comparable offline option is available.	1–5
FPI2	I intend to increase my use of digital financial services in the future.	1–5
FPI3	I would recommend suitable digital financial services to others.	1–5

FPI is not included in the core FA composite. It may be used descriptively or as an exploratory control iftheoretically justified.

ISSN 2278-2540 | DOI: 10.51583/IJLTEMAS | Volume XV, Issue X, October 2026

Part D: Perceived Financial Risk (PFR)

Item	Statement	Scale
PFR1	I am concerned about losing money because of errors or fraud in digital financial transactions.	1–5
PFR2	I am concerned about the privacy of my financial information when I use FinTech services.	1–5
PFR3	I am concerned about cybersecurity threats when using digital financial services.	1–5
PFR4	I am concerned that a technical failure could cause a financial loss or transaction problem.	1–5
PFR5	I am concerned about misuse of my personal or financial information by digital financial service providers.	1–5
PFR6	I perceive meaningful financial risk when using unfamiliar digital financial products or services.	1–5

Source basis: construct definition is informed by perceived-risk theory and Featherman and Pavlou (2003). The exact wording above is proposed/author-developed for this study and should not be represented as a direct reproduction of the cited scale.

Part E: Digital Financial Literacy (DFL)

E1. Self-reported capability

Item	Statement	Scale
DFL-S1	I can compare the important features and costs of digital financial products.	1–5
DFL-S2	I can evaluate whether online financial information is reliable before using it.	1–5
DFL-S3	I can recognise common signs of digital financial scams or phishing attempts.	1–5
DFL-S4	I understand important privacy and cybersecurity precautions when using digital finance.	1–5
DFL-S5	I can assess the benefits and costs of a digital financial product before choosing it.	1–5

E2. Objective knowledge/scenario items

Item	Question	Scoring
DFL-O1	A message asks you to click a link and enter your UPI PIN to receive a refund. What is the safest response?	Correct option = 1; otherwise, 0
DFL-O2	A digital loan advertises a low monthly instalment. Which information should you compare before deciding?	Correct option must identify total cost/interest/fees = 1; otherwise 0
DFL-O3	A website address differs slightly from the official financial institution's address and asks for login details. What is the safest action?	Correct option = 1; otherwise 0
DFL-O4	Two investment products have different risk and return characteristics. What should be assessed before choosing?	Correct option identifies risk, return, costs and suitability = 1; otherwise 0
DFL-O5	You receive an unexpected request for an OTP from someone claiming to be a bank employee. What should you do?	Correct option = 1; otherwise 0

ISSN 2278-2540 | DOI: 10.51583/IJLTEMAS | Volume XV, Issue X, October 2026

The objective items are proposed scenario-based measures, not established validated questions. Before fielding, the answer key and item wording should be reviewed by subject experts and pilot-tested. DFL may be analysed as separate self-report and objective components if reliability/validity does not support a single composite.

Part F: Financial Decision-Making Quality (FDMQ)

Item	Statement	Scale
FDMQ1	Before choosing a financial product, I compare relevant alternatives.	1–5
FDMQ2	I consider costs, fees and benefits before making a financial decision.	1–5
FDMQ3	I consider the risks and possible consequences of a financial decision.	1–5
FDMQ4	I check important terms and conditions before accepting a digital financial product or service.	1–5
FDMQ5	I use relevant financial information rather than relying only on advertisements or recommendations.	1–5
FDMQ6	I consider how a financial decision fits my financial goals and constraints.	1–5
FDMQ7	I compare information from more than one source when a financial decision is important.	1–5

The final empirical study should supplement these self-report items with decision scenarios where feasible, because agreement with good-decision statements may overestimate actual decision quality.

Part G: Decision Confidence (Separate from FDMQ)

Item	Statement	Scale
DC1	I feel confident making important financial decisions using digital financial services.	1–5
DC2	I am confident that I can identify the main risks before choosing a digital financial product.	1–5
DC3	I feel confident comparing alternative digital financial products.	1–5

FDMQ does not include decision confidence. It will be analysed separately so that confidence is not treated as evidence of objectively better decision quality.

Part H: Demographic and Socioeconomic Variables

The questionnaire will collect only variables justified by the research design, such as age group, gender where ethically and analytically appropriate, education, employment status, income band, location category and relevant financial-service experience. These variables will primarily describe the sample and may be included as statistical controls only when a theoretical or empirical justification is provided.

11. Item Sources and Validation Plan

Construct	Source basis	Status in this proposal
FinTech adoption/use	Davis (1989); Venkatesh et al. (2003) provide technology-acceptance foundations; Kajol et al. (2022) provides adoption literature.	Proposed author-developed behavioural items; exact scale-source equivalence must be established during validation.
Perceived financial risk	Featherman & Pavlou (2003); related FinTech adoption literature.	Proposed items adapted conceptually to digital financial risk; not claimed as verbatim reproduction.
Digital	Lusardi & Mitchell (2014) provides	Combination of proposed self-report

ISSN 2278-2540 | DOI: 10.51583/IJLTEMAS | Volume XV, Issue X, October 2026

financial literacy	financial-literacy foundation; recent FinTech/digital-literacy studies listed in references provide context.	and objective items; expert review and pilot testing required.
Financial decision-making quality	Lusardi & Mitchell (2014) provides financial-literacy/decision-making foundation.	Proposed author-developed quality items and scenarios; requires content and construct validation.
Decision confidence	Separate construct introduced to prevent overlap with decision quality.	Proposed author-developed items; exploratory unless validated.

Important source-control rule: the final empirical manuscript should cite the original instrument source for every adopted item or scale. If an item is author-developed, it should be explicitly labelled 'author-developed' rather than assigned an unsupported citation. Permission/licensing requirements must be checked where copyrighted scales are used.

DATA ANALYSIS PLAN

2.1 Preliminary Analysis

- Screen eligibility, duplicate responses, completion time and pre-specified quality checks.
- Report recruitment and analytical sample flow: approached/invited, consented, completed, excluded and final N.
- Report item-level missingness, construct means, standard deviations, skewness and relevant distributional diagnostics.
- Assess internal consistency using an appropriate reliability estimate; report item-total information where relevant.
- Assess construct validity through exploratory and/or confirmatory factor analysis as justified by sample size and the measurement model.
- Examine correlations among core constructs before regression.

Main Regression Model

The primary outcome is Financial Decision-Making Quality (FDMQ). The planned baseline model is:

$$FDMQ_i = b_0 + b_1FA_i + b_2PFR_i + b_3DFL_i + \Sigma b_k Control_{ki} + \varepsilon_i$$

The final report will provide the intercept (b_0), unstandardized coefficients (b), standardized coefficients (β), standard errors, 95% confidence intervals, t-statistics, p-values, degrees of freedom, R^2 and adjusted R^2. Assumption checks and multicollinearity diagnostics will also be reported.

Simultaneous Moderation Model

Both hypothesised interactions will be estimated in the same model so that each interaction is interpreted conditional on the other:

$$FDMQ_i = b_0 + b_1FA_i + b_2PFR_i + b_3DFL_i + b_4(FA_i \times DFL_i) + b_5(PFR_i \times DFL_i) + \Sigma b_k Control_{ki} + \varepsilon_i$$

Continuous predictors will be mean-centred before forming interaction terms. H4 is tested by b_4; H5 is tested by b_5. Conditional effects will be estimated at low (−1 SD), mean and high (+1 SD) levels of DFL, with 95% confidence intervals. Significant interactions will be displayed using interaction plots with predicted FDMQ across the relevant range of the predictor and moderator.

If the objective and self-reported components of DFL do not support a single composite after validation, separate moderation models will be justified and reported as sensitivity analyses rather than silently combining incompatible measures.

ISSN 2278-2540 | DOI: 10.51583/IJLTEMAS | Volume XV, Issue X, October 2026

12.4 Correlation and Group Analyses

Pearson correlations will be used when scale-level assumptions are reasonable; otherwise, a rank correlation will be considered. Frequency-of-use groups may be compared using one-way ANOVA when assumptions are met, with an appropriate post-hoc procedure for multiple comparisons. If assumptions are materially violated, a robust or non-parametric alternative will be reported.

Demographic comparisons are exploratory unless explicitly linked to a theoretical objective. They will not be converted into additional hypotheses simply because statistically significant differences appear in the data.

Chi-Square Analysis

Categorising a continuous decision-quality score for chi-square testing can discard information and create sparse cells. Therefore, educational qualification versus FDMQ will not be a primary hypothesis test. If a categorical association is substantively necessary, expected cell counts will be inspected. Where asymptotic chi-square assumptions are violated, a Fisher-Freeman-Halton exact procedure or a Monte Carlo p-value with a documented number of simulations and seed will be used, as appropriate. Categories may be substantively collapsed only when the revised categories are theoretically defensible and specified before testing.

The final empirical paper will report the contingency table, expected counts, test used, degrees of freedom where applicable, exact/Monte Carlo procedure and p-value. No chi-square result from the earlier synthetic dataset will be reported as evidence.

Reliability, Validity and Data Quality

- Content validity: expert review of each construct and each scenario item before fielding.
- Pilot testing: assess comprehension, completion time, response distributions and ambiguous wording.
- Internal consistency: report an appropriate reliability coefficient for each multi-item construct.
- Construct validity: examine factor structure and convergent/discriminant validity where sample size permits.
- Common-method risk: separate behavioural, objective and self-report measures where feasible and vary response formats appropriately.
- Objective literacy: score knowledge/scenario items using a pre-specified answer key; do not equate self-reported confidence with knowledge.
- Missing data: report extent and pattern; use a pre-specified rule for composite scores and justify any imputation.
- Outliers and influential observations: identify using pre-specified diagnostics and conduct sensitivity analyses where appropriate.

Reproducibility and Reporting Protocol

The empirical version of the study will maintain one documented dataset and one analysis script as the source of every reported table and statistic. A data dictionary will identify variable names, coding, item wording, reverse-coded items and composite-score rules. The analysis script will generate descriptive, reliability, correlation, regression, moderation and relevant group-analysis tables from the same analytical dataset. The final paper will report the exact analytical sample size for every model, including any exclusions.

For regression, the report will include unstandardized and standardized coefficients, standard errors, confidence intervals, intercepts, degrees of freedom and model fit. For moderation, it will include both interaction terms when jointly estimated, conditional effects and interaction plots. Any simulation or numerical illustration used during method development will be clearly labelled and will never be presented as evidence about real consumers.

ISSN 2278-2540 | DOI: 10.51583/IJLTEMAS | Volume XV, Issue X, October 2026

Expected Analytical Decision Rules

Research Question	Hypothesis	Planned test	Decision evidence
RQ1	H1	Multiple regression coefficient for FA; bivariate correlation as supplementary evidence.	95% CI for FA coefficient/association and p-value; direction interpreted substantively.
RQ2	H2	Multiple regression coefficient for PFR; bivariate correlation as supplementary evidence.	95% CI for PFR coefficient/association and p-value; no causal language.
RQ3	H3	Multiple regression coefficient for DFL; validity of DFL score first.	95% CI and p-value; objective and self-report components reported separately if required.
RQ4	H4	Simultaneous moderation: FA × DFL.	Interaction coefficient, 95% CI, conditional effects and interaction plot.
RQ5	H5	Simultaneous moderation: PFR × DFL.	Interaction coefficient, 95% CI, conditional effects and interaction plot.

Practical Implications—Conditional On Evidence

Because this manuscript is a proposal, practical recommendations are framed as contingencies rather than findings. If actual use is associated with higher decision quality, FinTech providers could examine which features support comparison, cost awareness and risk assessment. If use is unrelated or negatively associated with decision quality after adjustment, the evidence would support caution against equating transaction volume with consumer financial capability.

If digital financial literacy is positively associated with decision quality or significantly moderates either relationship, financial institutions and policymakers could consider targeted digital-financial education, scam-awareness tools and decision-support features. If perceived risk is positively associated with decision quality, risk-awareness interventions may be useful; if it is negatively associated with beneficial decisions, providers may need clearer security communication and consumer protection information. These recommendations will be narrowed or withdrawn depending on the observed evidence and confidence intervals.

LIMITATIONS OF THE PROPOSED STUDY

- The proposed cross-sectional design can identify associations but cannot establish temporal or causal effects.
- Non-probability recruitment may limit population generalisability.
- Self-reported usage and decision behaviour may contain recall or social-desirability bias; objective/scenario measures are included to reduce this limitation.
- Digital financial literacy is multidimensional and may not be adequately represented by a single composite; component-level analyses may be necessary.
- Rapid changes in digital financial services may affect the relevance of specific examples and questionnaire wording over time.

CONCLUSION

This research proposal reframes FinTech research from adoption as an endpoint to financial decision-making as an important downstream outcome. The proposed model examines actual FinTech use, perceived financial risk and digital financial literacy while treating preference/intention, objective risk knowledge and decision confidence as conceptually distinct constructs. Digital financial literacy is specified as a moderator of both the FinTech-use and perceived-risk relationships with decision quality. The study will use a transparent empirical protocol, a documented dataset and analysis script, complete measurement information and reproducible reporting. No numerical findings are claimed until actual observations are collected and analysed. This design

ISSN 2278-2540 | DOI: 10.51583/IJLTEMAS | Volume XV, Issue X, October 2026

is intended to provide a more defensible test of whether and under what conditions digital financial services are associated with better financial decision-making.

REFERENCES

1. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319–340.
2. Featherman, M. S., & Pavlou, P. A. (2003). Predicting e-services adoption: A perceived risk facets perspective. International Journal of Human-Computer Studies, 59(4), 451–474.
3. Kajol, K., Singh, R., & Paul, J. (2022). Adoption of digital financial transactions: A review of literature and future research agenda. Technological Forecasting and Social Change, 184, 121991.
4. Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. Journal of Economic Literature, 52(1), 5–44.
5. Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. MIS Quarterly, 27(3), 425–478.
6. Yang, J., Wu, Y., & Huang, B. (2023). Digital finance and financial literacy: Evidence from Chinese households. Journal of Banking & Finance, 156, 107005.
7. Aftab, R., Fazal, A., & Andleeb, R. (2025). Behavioral biases and FinTech adoption: Investigating the role of financial literacy. Acta Psychologica, 257, 105065.
8. Singh, P., & Katoch, R. (2025). Impact of financial literacy on Fintech adoption: The role of digital literacy and cybersecurity awareness in a two-stage SEM-ANN model. International Journal of Accounting and Economics Studies.
9. Bhojak, N. P., Momin, M. K., Joshi, B. H., Kumar, S., & Acharya, U. (2026). FinTech application adoption and satisfaction model with digital literacy and financial literacy extending Vroom's expectancy theory. South Asian Journal of Business Studies, 15(3), 390–408.
10. Understanding fintech adoption in India: The mediating role of trust and the moderating role of emotional intelligence. (2026). Future Business Journal.
11. Drivers of FinTech adoption: Insights from a global review of recent literature. (2026). Accounting Research Journal, 39(1), 84–103.
12. Exploring FinTech adoption: A systematic literature review on user acceptance. (2026). Telematics and Informatics Reports, 22, 100343.
13. Decoding financial behaviour through cognitive and digital pathways: A hybrid SEM–ANN study among Indian working women. (2025). Borsa Istanbul Review, 25(Supplement 1), 87–100.
14. An empirical study of digital and financial literacy in shaping FinTech engagement. (2026). Finance Research Letters, 109, 110503.