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Customer Adoption of Sustainable Fin Tech Services and Customer Loyalty in Commercial Banks: The Mediating Roles of Trust and Satisfaction

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Abstract*—The fusion of financial technology and sustainability is transforming the commercial banking service. Digital payments, paperless banking, mobile banking, online account services and digitally-enabled green financial products provide opportunities for better accessibility of products and services, operational efficiency and environmental responsibility. But even when such services are adopted, it is not a sure bet that it will result in a lasting relationship with the customer. Customers can assess sustainable financial technologies based on their usefulness, convenience, security, reliability, environmental value and on the credibility of banks' commitment to sustainability. This paper brings together the literature of Fin Tech adoption, sustainable banking, customer trust, customer satisfaction and relationship loyalty at a critical level and This conceptual framework aims to explain how the adoption of sustainable Fin Tech services can influence customer loyalty by building trust and improving customer satisfaction. Based on technology acceptance views, relationship marketing and commitment-based theories of customer retention, the review differentiates technological adoption from continued usage/loyalty. It suggests that if the adoption of these technologies enables greater trust and satisfaction of the customers, adoption will strengthen the relationships between them; however, perceived risk, digital exclusion, service failures, and doubts about the environmental claims may weaken the relationships. The paper also shows that there are gaps in the conceptualization of sustainable Fin Tech, in the mediation of trust and satisfaction, and in the different relationships of initial adoption and continued use; as well as limited contextualization of these relationships in emerging banking markets. The suggested framework aims to serve as the basis for empirical study in the future and as implications for commercial banks that want to combine digital innovation with credible sustainability practices*.

***Keywords*—** *Commercial banks; customer adoption; customer loyalty; customer satisfaction; customer trust; digital financial services; green banking; sustainable Fin Tech*.

I. INTRODUCTION

The financial technology has changed the way how commercial banks provide services, communicate with their customers and manage the financial transactions. Mobile banking, Internet banking, electronic payment, e-statements, automated banking channels, even online financial products are all part of modern banking. The opportunities from these developments have been identified as providing for the enhancement of convenience, accessibility, speed and operational efficiency. Meanwhile, the increasing significance of environmental and social sustainability has prompted financial institutions to reflect on how technology can help them to deliver more responsible financial services.

Sustainable Fin Tech may be defined as the use of financial technology for financial services in a way that is designed to be environmentally sustainable, socially inclusive and economically viable. Examples include paperless transactions, electronic statements, digital channels that eliminate unnecessary physical banking processes, technology-based access to sustainable financial products and digital systems that facilitate financial inclusion in commercial banking. However, the digitization of a banking service is not sufficient to conclude that the service is environmentally sustainable. Its sustainability implications can vary based on the extent of the resources saved, the digital infrastructure, accessibility, energy use and the credibility of the bank's claims.

Studies have focused on customer attitudes towards banking and banking practices and on the acceptance of Fin Tech and green banking. A literature review on sustainable banking reveals the themes linking ethics, sustainable products and business-related outcomes [8]. A wider overview of sustainable finance also illustrates the growing link between sustainable finance, financial services and Fin Tech [4]. Existing studies on Fin Tech adoption have focused on technology acceptance [1, 10, 11], perceived usefulness, trust, security, and perceived risk as dimensions of customer behavior. While these research streams offer valuable building blocks, the results from them must be synthesized to describe how a sustainable digital banking experience can become a lasting customer relationship. In the commercial banking context, customer loyalty is especially crucial as customers can evaluate the quality of service, convenience, cost, security features, and product availability among various banks. Adoption of a digital service initially could be based on convenience, not commitment to the bank. Likewise, customers who use paperless banking services may not necessarily feel good about the bank's overall relationship and trust in their sustainability efforts.

This difference can be attributed to trust and satisfaction. Trust is customers' ability to rely on a bank, as a function of attitudes and perceptions about its competence, integrity, security and reliability. Satisfaction is a measure of customers' evaluations of their experience compared with their expectations. While there are similarities, these constructs are

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not synonymous. For example, customers might feel confident in a bank's integrity and not like a specific digital platform or they might like a service without feeling confident about a bank's data practices or its environmental commitments.

In this context, this paper reviews the conceptual relationships between sustainable Fin Tech adoption, customer trust, customer satisfaction and customer loyalty in commercial banks.

1.1 Research objectives

There are four objectives for the paper:

1. To explain the idea and boundaries of sustainable Fin Tech implementation in commercial banking.
2. To combine the theoretical explanations relating to the sustainable adoption of Fin Tech to customer trust, satisfaction, and loyalty.
3. To build a conceptual framework with trust and satisfaction as potential mediators.
4. To pinpoint areas of research and develop propositions for future empirical studies.

1.2 Research questions

The review covers the following questions:

1. What are the avenues for Fin Tech sustainable adoption in commercial banking?
2. What are the potential channels for sustainable Fin Tech adoption to impact customer loyalty?
3. What can be the role of customer trust and customer satisfaction in this relation?
4. What are the gaps in theory, method and context that need to be explored further?

II. CONCEPTUAL BACKGROUND

2.1 Commercial banking and sustainable Fin Tech services.

Fin Tech is an umbrella term for the use of technology in financial services provision, delivery, and management in general. A sustainability dimension is added to this technological transformation with Sustainable Fin Tech. It's not just about the way financial services are provided, but about how the design, accessibility, and use of these services can support the environmental and social goals.

For the purposes of this review, sustainable Fin Tech services are considered in four dimensions.

Digital banking and paperless banking: Mobile statements, electronic documents, digital transaction records, and online service requests can help to minimize reliance on paper-based processes.

Digital banking channels can offer access to sustainable financial products such as green loans, sustainability linked financial products or other financial products related to sustainable goals.

Inclusive digital financial services: Accessible digital channels could also help to increase banking services for undeserved clients, however, affordability, digital literacy, connectivity and accessibility constraints must be considered.

Responsible and secure digital service delivery: Robust data protection, open and honest communication, dependable service delivery, and responsible use of technology contribute to responsible digital banking.

These dimensions must not be assumed to be one homogeneous concept that can be substituted for each other. One bank could excel in digital convenience but lag in environmental transparency or accessibility. It thus remains to see in future empirical studies whether sustainable Fin Tech should be viewed as a multidimensional construct, a higher-order construct or rather as a collection of individual characteristics of the service.

2.2 Customer adoption

Customer adoption can mean either adoption of the service, usage of the service, or the incorporation of the service into the customer's normal financial habits. These outcomes are closely linked, but they are in different concepts.

Behavioral intention reflects a customer's intention or willingness to use a service. The real adoption is whether or not the customer starts using it. Continued use: continued engagement over time. Loyalty is a general measure of relationship outcome that may be manifested as repeat usage, preference for the bank, positive recommendations and reluctance to switch.

Technology acceptance models lay the foundation for understanding customer adoption of digital services. Factors that can impact decisions to adopt include perceived usefulness, ease of use, performance expectations, and facilitating conditions. The sustainability aspect, however, presents other challenges, such as the environmental credibility, perceived social benefit and the risk that sustainability statements can be seen as marketing rather than fact.

This paper, therefore, does not treat the sustainable adoption of Fin Tech as synonymous with customer loyalty, but instead as a separate entity.

2.3 Customer trust

Trust is at the core of banking as customers rely on banks to secure their money, ensure their personal data is protected, and ensure that transactions are conducted properly and contractual promises are kept. Even though the physical bank environment might have fostered such fears, digital service environments might amplify them, as customers depend on technology mediated service interactions and potentially have less interaction with bank staff.

Trust in the case of sustainable Fin Tech can be viewed from three different aspects that are closely related to each other:

- Institutional trust: Trust in the competence, integrity, reliability and responsible conduct of the bank.
- Digital service trust: Trust in the security, reliability and proper operation of the technology.
- Sustainability-claim credibility: Confidence that bank’s environmental and social claims are accurate, transparent and backed up by credible practices.

These dimensions should be differentiated when measuring. Having trust in a payment application does not mean trust in a bank's environmental efforts. Likewise, trust in a bank's sustainability initiatives can't replace worries over cybersecurity and ease fears over transaction reliability. Trust

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can affect adoption directly and it can be created via multiple successful experiences. Thus, the temporal link between adoption and the development of trust is an important question for future research.

2.4 Customer satisfaction

Customer satisfaction is the overall assessment that a customer makes about a service or relationship. It can be because the expectations are not matched with the actual performance, such as service reliability, convenience, responsiveness, transparency, security and accessibility.

However, when digital services are convenient, dependable, easy to use, and customers have expectations about how their banking is being done responsibly, Sustainable Fin Tech can help contribute to satisfaction. However, technological innovation is not enough to ensure satisfaction. If the interfaces are difficult to use, the system is down, transactions are not permitted, design is inaccessible, or support is lacking, customers may have a poor opinion.

Satisfaction needs to be measured therefore as a separate relationship outcome and not as a measure of adoption or use frequency.

2.5 Customer loyalty

Customer loyalty is about more than making repeat purchases. It can cover attitudinal preference, the intention to continue using a bank, the willingness to recommend a bank and the decrease of intention to switch banks.

For digital banking, the overall experience of technological performance, relationship quality, trust, satisfaction, service recovery, and perceived value could have an impact on loyalty. Sustainability can enhance customer preference if they perceive the bank's practices as credible, personally important, and socially important. On the other hand, if environmental claims are not supported, then they risk losing trust and loyalty.

This separation implies that sustainable Fin Tech adoption can be used as the potential precursor to loyalty and not just as proof of loyalty.

III. Theoretical Foundations

3.1 Technology Acceptance Model

According to Davis [3] the Technology Acceptance Model (TAM) is a model which predicts acceptance of a technology, primarily based on perceived usefulness and perceived ease of use. Usefulness in the context of sustainable Fin Tech can refer to, among others, quicker transactions, easier access, the reduction of paperwork and access to relevant financial products. Easy-to-use could make it easier to interact with online banking.

TAM helps to explain adoption, but the classic form of this model fails to account for institutional trust, sustainability-claim credibility and loyalty to the relationship. An extended approach would thus be appropriate.

3.2 Unified Theory of Acceptance and Use of Technology

Venkatesh's et al. [9] Unified Theory of Acceptance and Use of Technology (UTAUT) includes the concepts of performance expectancy, effort expectancy, social influence and facilitating conditions. These considerations may apply in terms of customers' choice for sustainable digital banking services.

For instance, performance expectancy might include expected convenience and facilitating conditions might include having an internet connection, having access to a device, digital literacy and help if something goes wrong. This is especially true in markets where your customers have a wide range of access to technology.

However, a more theoretical development of the relationship between technology acceptance and customer loyalty is needed as technology acceptance models focus on explaining technology acceptance and use but not the quality of an ongoing banking relationship.

3.3 Relationship marketing and commitment-based perspectives

In relationship marketing, the focus is on building and enhancing long-term relationships with customers. The perspective on trust and satisfaction is crucial, as customers are more likely to continue their relationships when they feel they are beneficial and reliable.

In their commitment-trust theory, Morgan and Hunt [6] focus on trust and relationship commitment. Trust in banking can be a means to decrease uncertainty about the bank itself, and satisfaction can be a way to further cement the value of the banking relationship.

This present review takes the relation-oriented thought to sustainable Fin Tech. It suggests that digital service experiences can play a role in loyalty if they create confidence and are a satisfactory experience. However, the suggested mechanisms need to be tested empirically in the particular context of sustainable digital banking.

3.4 Integrating technology acceptance and relationship perspectives

Three stages can be tied together in an integrated framework:

1. Technology and sustainability evaluations: Customers evaluate usefulness, usability, security, accessibility and credibility of sustainability.
2. Experiences shape evaluations of the relationship: Trust and satisfaction.
3. Relationship outcomes: Possibly, trust and satisfaction can lead to the loyalty.

This model recognizes that the adoption of technology is not enough. The nature of the experience and its credibility can make or break if it is going to sustain the adopted banker in a banking relationship.

IV. Review Method and Scope

This manuscript takes an integrative critical review perspective to relate research streams that are often investigated independently. It builds on the conceptual foundations and available published research on customer satisfaction, customer loyalty, the role of trust, sustainable banking and green banking in the context of Fin Tech adoption.

Mattaparthi Sri Venkata Kishore, “Customer Adoption of Sustainable Fin Tech Services and Customer Loyalty in Commercial Banks: The Mediating Roles of Trust and Satisfaction,” *International Journal of Multidisciplinary Research and Publications (IJMRAP)*, Volume 9, Issue 5, pp. 68-74, October 2026.

Literature search to inform this initial draft included combinations of words including 'sustainable Fin Tech,' 'green banking,' 'digital banking adoption,' 'customer trust,' 'customer satisfaction,' 'bank loyalty,' 'Fin Tech adoption review'. It was an exploratory search that aimed to find appropriate research themes and theory.

This is a draft and does not make the claim of being a systematic review. The manuscript has not undergone an exhaustive database search, independent screening process, formal quality appraisal or PRISMA compliant study-selection procedure. For this reason, the discussion is necessarily conceptual, and not a quantitative review of the evidence.

Scopus, Web of Science, and other relevant scholarly databases should be included in the search process for a publication-ready systematic review. The final protocol should include the search dates, publications period, inclusion/exclusion criteria, screening stages, reasons for exclusion, data extraction process and quality assessment process. The actual number of records retrieved and included should be reported and not estimated or invented in the resulting article.

V. Critical Synthesis of the Literature

5.1 From digital adoption to sustainable Fin Tech adoption

The factors of Fin Tech adoption have been explored including perceived usefulness, perceived ease of use, trust, security, perceived risk, and facilitating conditions. The systematic review of Fin Tech adoption and its implications for the traditional banks by Albuainain and Ashby [1] offers a relevant foundation to grasp the enablers and barriers to customer acceptance.

A more extensive systematic review on Fin Tech user acceptance released in 2026 [11] also highlights the significance of traditional technology acceptance models along with the factors of trust and perceived risk.

But, sustainable Fin Tech is not just about embracing technology. A customer can be motivated to use mobile banking, simply because it saves time and there is no environmental association with the service. Another customer might appreciate paperless banking because it appears to decrease the usage of unneeded paper. The third customer might be interested in green financial products, but might not feel secure using the bank's digital platform.

As these examples illustrate, there is a distinction between usefulness and perceived sustainability value of technology, which should be made analytically. Future research should consider whether sustainability-related beliefs contribute to the explanation of technology acceptance factors.

5.2 Sustainable banking and customer responses

Sustainable banking research focuses on the way banks integrate environmental, social, ethical and economic aspects in their activities. In 2021, a literature review was published, which classified sustainable banking research based on ethical frame, sustainable banking products, and business-related issues.

Research at the customer level is more directly related to the current topic. Ibe-enwo et al. [7] explore green banking practices and bank loyalty with an analysis of green image and bank trust as potential mediators, suggesting that green image and bank trust do not necessarily mediate the relationship.

Especially in the past few years, green banking practices and customer satisfaction including digital banking, green services, and green loans have been discussed in a research [5]. This gives a relevant foundation to study the association between banking practices oriented towards sustainability and positive customer assessments.

According to these studies, sustainable banking and sustainable relationship are viable research areas, which are indeed related in a meaningful manner. However, green banking should not be equated with green banking practices, digitization of banking services, perceived environmental performance and sustainable Fin Tech. However, the level of transferability between these areas needs to be carefully analyzed.

5.3 Trust as a mechanism connecting adoption and loyalty

In the context of sustainable Fin Tech, trust can play a number of roles. First, trustworthy technology and clear service procedures can minimize uncertainty regarding electronic transactions. Secondly, good data management can promote trust in the bank. Thirdly, if there is a credible sustainability disclosure, there will be greater confidence that the bank's environmental claims are not just marketing.

Jafri et al. [10] compile evidence regarding trust and security issues in banking Fin Tech adoption, which underscores the importance of these two issues with regard to digital banking behaviors. A review of the literature on trust in green Fin Tech in 2026 analyzes the nature of trust in the context of technology acceptance and sustainability issues in the literature [2].

The link between adoption and trust can, nevertheless, run in both directions. Customers might trust a digital service, which might make them more likely to adopt the service and positive experiences following the adoption might bolster that trust. All variables are measured at one time in a cross-sectional design, which is not sufficient to determine which process comes first.

Thus, where possible, a theoretically supported temporal design should be used to examine the mediating role of trust. There is also a need for researchers to differentiate between trust in the bank and trust in the technology/credibility of sustainability claims.

5.4 Satisfaction as a mechanism connecting adoption and loyalty

Customer satisfaction can serve as a secondary factor explaining the link between the adoption of sustainable Fin Tech and customer loyalty. If digital banking services align with customers' expectations of convenience, reliability, accessibility and transparency, they might have a more positive outlook on their banking relationship.

However, impacts of Sustainable Fin Tech on satisfaction are not likely to be equal. The same technology may enhance the customer experience for those who have good connectivity and digital skills, but may cause problems for customers who need help or are faced with accessibility issues.

Mattaparthi Sri Venkata Kishore, “Customer Adoption of Sustainable Fin Tech Services and Customer Loyalty in Commercial Banks: The Mediating Roles of Trust and Satisfaction,” *International Journal of Multidisciplinary Research and Publications (IJMRAP)*, Volume 9, Issue 5, pp. 68-74, October 2026.

It is therefore important that a balanced analysis does not take it for granted that digitization will lead to increased customer satisfaction. Rather, researchers should focus on the characteristics of the service and contextual conditions in which sustainable Fin Tech leads to positive evaluations.

Satisfaction can impact loyalty in its own right, apart from trust. While convenience and meeting expectations may encourage customers to remain a bank customer, trust may represent greater confidence in the bank's reliability and integrity. They should be studied separately, not joined together in one index of quality of relationships.

5.5 The potential joint mediation of trust and satisfaction

The key focus of this paper is the combined analysis of trust and satisfaction as mechanisms to link sustainable Fin Tech adoption with customer loyalty.

Two complementary pathways can be discerned.

The first pathway suggests that the experiences of adoption can lead to increased trust and continue the customer's relationship with the bank. This pathway is particularly relevant in situations where customers assess the security of transactions, institutional integrity and credibility of sustainability commitments.

The second path suggests that adoption can be related to satisfaction in terms of convenient, reliable and useful service experiences. This satisfaction could then lead to continued use, preference and recommendation.

Another option would be a sequential path where sustainable Fin Tech experiences would lead to trust, trust to satisfaction, and satisfaction to loyalty. It is also possible that an alternative sequence is valid: Service performance first affects satisfaction, which, in turn, affects trust and loyalty. The appropriate sequence should be determined by theory, previous findings and appropriate longitudinal testing, not just on the basis of statistical fit.

These pathways have foundations in the existing literature but the strength and generalizability of the joint mediation model should not be taken for granted. It is an empirical issue whether the trust and satisfaction mediate or act in series, and whether they have different effects for different customer groups and types of services.

VI. Research Gaps

6.1 Conceptual gap

The concepts of Fin Tech adoption, digital banking, green banking, sustainable banking, and sustainable Fin Tech are not synonymous and overlap. A well-defined and validated sustainable Fin Tech adoption conceptualization is required.

Future studies should differentiate between digital convenience and environment value, and examine the coherence of the dimensions.

6.2 Theoretical integration gap

The technology acceptance research usually centers on adoption intentions and use, while the relationship marketing centers on trust, satisfaction, commitment, and loyalty. These may be combined in an effort to understand how beginnings of acceptance lead to longer-term relationships.

The proposed framework needs to be tested empirically to identify if there is additional variance in loyalty due to relationship variables than traditional adoption variables.

6.3 Mediation gap

While trust and satisfaction have been explored in banking research, their separate and joint effects in a well-defined sustainable Fin Tech adoption model are still not well researched.

Studies should be conducted to compare parallel mediation, sequential mediation and plausible alternative causal structures.

6.4 Measurement gap

Different measures for green banking practices, sustainable Fin Tech, trust, satisfaction, and loyalty are applicable for studies. These disparities can make it challenging to compare.

Reliability, validity, and evidence of discriminant validity, along with the scale sources, should be reported in future studies. Claims and pronouncements on sustainability should be kept away from technology usability and overall bank reputation.

6.5 Contextual gap

The connection between sustainable Fin Tech and loyalty can vary from country-to-country, banking system-to-banking system, customer segment and/or levels of digital inclusion.

Studies in India and other developing countries might investigate the distinction in between city and country consumers, public and private sector banks, as well as digitally literate and less literate customers. These differences are not to be assumed but tested.

6.6 Methodological gap

Cross-sectional surveys are good for looking at relationships but are not able to show the order of events and how they cause each other. Estimates of relationships may suffer from common method bias, self-selection into digital banking and omitted variables.

Longitudinal studies, observed measures of usage, multi-group analysis and carefully-designed quasi-experimental designs could help to provide more compelling evidence regarding the direct effect of adoption experiences on trust, satisfaction and loyalty over time.

6.7 Sustainability-credibility gap

Digital services are not automatically sustainable and the environmental claims do not necessarily reflect measurable environmental impacts. Future studies should differentiate between the perception of sustainability and the actual environmental performance, as independently verifiable, of the customers.

Where there is a theoretical basis, future frameworks should include green washing concerns and sustainability-claim credibility.

Mattaparthi Sri Venkata Kishore, "Customer Adoption of Sustainable Fin Tech Services and Customer Loyalty in Commercial Banks: The Mediating Roles of Trust and Satisfaction," *International Journal of Multidisciplinary Research and Publications (IJMRAP)*, Volume 9, Issue 5, pp. 68-74, October 2026.

VII. Proposed Conceptual Framework and Research Propositions

Sustainable Fin Tech adoption is proposed as the main explanatory construct, trust and satisfaction are proposed as the mediators, and customer loyalty is the outcome.

7.1 Conceptual relationships

Sustainable Fin Tech adoption → Customer trust → Customer loyalty
Adoption of sustainable Fin Tech → Customer satisfaction → Customer loyalty.
An additional pathway can be explored:
Sustainable Fin Tech adoption → Customer trust → Customer satisfaction → Customer loyalty
The pathways are suggested relationships and not causal findings.

7.2 Research propositions

P1 is supported: Sustainable Fin Tech adoption is positively related to customers' trust in commercial banks.
P2: There is a positive relationship between Sustainable Fin Tech adoption and Customer satisfaction.
P3: There is a positive relationship between customer trust and customer loyalty.
P4: There is a positive relationship between customer satisfaction and customer loyalty.
P5: Sustainable Fin Tech adoption affects customer loyalty through customer trust.
P6: Customer satisfaction is a mediator in the relationship between sustainable Fin Tech adoption and customer loyalty.

P7: The mediation between sustainable Fin Tech adoption and customer loyalty is twofold: P7a: Trust mediates sustainable Fin Tech adoption, whereas satisfaction mediates between sustainable Fin Tech adoption and customer loyalty; OR P7b: Trust and satisfaction mediate in parallel in the two-step relationship between sustainable Fin Tech adoption and customer loyalty, with a theoretically justifiable sequential pathway.

Alternative explanations should be considered when evaluating these propositions. For instance, a positive attitude towards a bank can impact both trust and satisfaction levels, which in turn can affect adoption rates, and past loyalty can also drive higher adoption.

7.3 Potential boundary conditions

Besides these, other potential moderator or control variables such as perceived security risk, digital literacy, environmental concern, sustainability-claim credibility, service quality and access to digital infrastructure could be addressed in future studies.

The importance of each factor should be supported by a valid explanation. Too many variables, without a clear causal explanation, might diminish the explanatory clarity of the proposed model.

VIII. Implications for Commercial Banks

8.1 Integrating sustainability with customer-centered design

The impact of digital innovation on banks must be assessed not just on the basis of the speed and the cost of the transactions but also on usability, accessibility, customer support and the credibility of any claims that may be made about the underlying sustainability. If your customers don't find your digital service easy to use, it might not yield the desired relationship outcomes.

8.2 Building trust through transparent practices

Banks need to be clear about data protection, transaction process, scope of services and the environmental benefit they can offer. Sustainability disclosures should be factual and grounded in credible evidence, and not use promotional language.

8.3 Improving satisfaction through service reliability

Good digital platforms, user-friendly interfaces, quick issue resolution and suitable customer support can contribute to a satisfactory service experience. Banks must also consider those customers who require non-digital alternatives, or extra assistance.

8.4 Measuring loyalty beyond adoption statistics

Trust, satisfaction, and user loyalty are not necessarily reflected in the number of digital users registered. Banks need to differentiate between registration, activation and ongoing usage, satisfaction, recommending and switching when assessing digital banking strategies.

8.5 Supporting responsible digital inclusion

These Digital Literacy, Accessibility, Connectivity, and Customer Protection should not be overlooked in any Sustainable Fin Tech strategies. The banking strategy should not have an adverse impact on customers who do not have access to technology.

IX. Future Research Agenda

Future research can be done in a number of complementary ways to develop the proposed framework.

First, by developing research on scaling, it is possible to have a clear operational definition of sustainable Fin Tech adoption and test its dimensions.

Additionally, survey-based research can explore these relationships, while also comparing different mediation models—both parallel and sequential—using appropriate structural equation modelling techniques.

Thirdly, longitudinal studies could research if trust and satisfaction vary after customers have accepted sustainable digital service. Where feasible, real customer usage data or repeated survey responses can be used to complement self-reported information.

Fourth, comparative research can be used to identify regional differences and differences in the model by banking category, customer age group, level of digital literacy, and type of sustainable financial services.

Fifth, future studies may investigate how the strength of the relationships can be affected by the environmental concern, sustainability claim credibility, perceived risk, and digital inclusion variables.

Mattaparthi Sri Venkata Kishore, "Customer Adoption of Sustainable Fin Tech Services and Customer Loyalty in Commercial Banks: The Mediating Roles of Trust and Satisfaction," *International Journal of Multidisciplinary Research and Publications (IJMRAP)*, Volume 9, Issue 5, pp. 68-74, October 2026.

Finally, mixed-method research can delve into customers' perceptions of sustainable Fin Tech, what they see as acceptable proof of sustainability and why they sometimes don't turn into loyal customers after using sustainable Fin Tech.

X. CONCLUSION

The nexus between Sustainable Fin Tech adoption and customer loyalty is an important research opportunity at the intersection of the fields of financial technology, sustainability, and relationship marketing. Theories of technology acceptance and sustainable banking research reveal that environmental and ethical issues are relevant and that important aspects of digital service adoption are explained by technology acceptance theories. Relationship-related approaches serve as a foundation for the study of customer trust and satisfaction as possible ways to link the service experiences to customer loyalty.

This review builds up an integrative conceptual framework to illustrate how sustainable Fin Tech adoption can impact customer loyalty directly and indirectly via trust and satisfaction. It also stresses the fact that digitalization does not necessarily result in loyalty and that environmental benefits perceived as such should not be equated with independently verified sustainability results.

This paper aims to contribute by integrating adoption, trust, satisfaction, and loyalty in a sustainable commercial banking context with a focus. It is still a theoretical framework of propositions, which needs empirical validation. Future research should be transparent in its use of a literature review process, have a clear definition of construct, solid measurement, and research design which allows conclusions of association versus causation.

The overall takeaway for commercial banks is that sustainable digital transformation needs to be both fun and functional, as well as trustworthy in delivering services, customer satisfaction, accessibility, and credible sustainability practices. To better explain when sustainable Fin Tech adoption becomes a bedrock for lasting customer relationships it is important to understand these relationships.

REFERENCES

[1] A. Albuainain and S. Ashby, "Enablers and barriers in FinTech adoption: A systematic literature review of customer adoption and its impact on bank performance," *FinTec*h, vol. 4, no. 3, Art. no. 49, 2025. doi: 10.3390/fintech4030049.

[2] S. Balaskas, "Trust as predictor and mechanism in green FinTech adoption: A systematic review and meta-analysis," *FinTech*, vol. 5, no. 1, Art. no. 22, 2026. doi: 10.3390/fintech5010022.

[3] F. D. Davis, "Perceived usefulness, perceived ease of use, and user acceptance of information technology," *MIS Quarterly*, vol. 13, no. 3, pp. 319–340, 1989. doi: 10.2307/249008.

[4] M. K. Maneesha and N. Saravanabhavan, "Mapping sustainable finance in financial services through bibliometric and systematic literature review," *Discover Sustainability*, vol. 7, Art. no. 1407, 2026. doi: 10.1007/s43621-026-03791-9.

[5] A. A. Mir, A. A. Bhat, A. S. Al-Adwan, S. Farooq, D. Jamali, and I. A. Malik, "Green banking practices and customer satisfaction—way to green sustainability," *Innovation and Green Development*, vol. 4, no. 2, Art. no. 100221, 2025. doi: 10.1016/j.igd.2025.100221.

[6] R. M. Morgan and S. D. Hunt, "The commitment-trust theory of relationship marketing," *Journal of Marketing*, vol. 58, no. 3, pp. 20–38, 1994. doi: 10.1177/002224299405800302.

[7] G. Ibe-enwo, N. Igbudu, Z. Garanti, and T. Popoola, "Assessing the relevance of green banking practice on bank loyalty: The mediating effect of green image and bank trust," *Sustainability*, vol. 11, no. 17, Art. no. 4651, 2019. doi: 10.3390/su11174651.

[8] E. Aracil, J.-J. Nájera-Sánchez, and F. J. Forcadell, "Sustainable banking: A literature review and integrative framework," *Finance Research Letters*, vol. 42, Art. no. 101932, 2021. doi: 10.1016/j.frl.2021.101932.

[9] V. Venkatesh, M. G. Morris, G. B. Davis, and F. D. Davis, "User acceptance of information technology: Toward a unified view," *MIS Quarterly*, vol. 27, no. 3, pp. 425–478, 2003. doi: 10.2307/30036540.

[10] J. A. Jafri, S. I. Mohd Amin, A. Abdul Rahman, and S. Mohd Nor, "A systematic literature review of the role of trust and security on FinTech adoption in banking," *Heliyon*, vol. 10, no. 1, Art. no. e22980, 2024. doi: 10.1016/j.heliyon. 2023.e22980.

[11] P. Bhowal and P. Shil, "Exploring FinTech adoption: A systematic literature review on user acceptance," *Telematics and Informatics Reports*, vol. 22, Art. no. 100343, 2026. doi: 10.1016/j.teler.2026.100343.

Mattaparthi Sri Venkata Kishore, "Customer Adoption of Sustainable Fin Tech Services and Customer Loyalty in Commercial Banks: The Mediating Roles of Trust and Satisfaction," *International Journal of Multidisciplinary Research and Publications (IJMRAP)*, Volume 9, Issue 5, pp. 68-74, October 2026.