



Digital Green Banking Adoption and Sustainable Consumer Behaviour: A Systematic Review

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Abstract

Digital green banking has emerged as an important pathway through which financial institutions can integrate digital transformation with environmental sustainability and influence consumer behaviour. This systematic literature review synthesizes evidence on digital green banking adoption and sustainable consumer behaviour. Following PRISMA 2020 guidelines, relevant studies published between 2016 and 2026 were identified through scholarly databases, publisher platforms, and manual screening. From 270 initially identified records, 25 studies met the eligibility criteria and were included in the final synthesis. The review shows that digital green banking adoption is shaped by customer trust, awareness, perceived environmental value, satisfaction, green image, behavioural willingness, and environmental consciousness. Digital banking channels and green FinTech platforms enhance the accessibility and visibility of sustainability-oriented financial services, while green financial products connect consumer financial decisions with broader sustainable consumption practices. The findings also indicate that customers are more likely to adopt digital green banking services when green claims are credible, services are convenient, and environmental benefits are clearly communicated. However, the literature remains fragmented, with limited evidence on actual usage behaviour, longitudinal adoption patterns, and measurable environmental outcomes. This review highlights the need for integrated theoretical models and stronger empirical evidence to understand how digital green banking can promote sustained consumer engagement and responsible financial behaviour.

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Introduction

Banks have a significant institutional role in the transition toward sustainable development because they shape capital flows, consumer behaviour, corporate sustainability, and sustainable finance. The concept of sustainable banking offers a wider lens on how banks account for environmental, social and governance (ESG) issues in their products and services, operations and engagement with stakeholders (Aracil et al., 2021). In this sense green banking has gained interest as an instrument that can foster environmentally responsible banking by providing paperless banking, green loans, sustainable investment products, energy efficiency and digital service delivery. Green banking is important because of the role of the bank in linking sustainability goals with the financial behavior of consumers. Banks can influence the perception, attitude and loyalty of their customers by providing green products and services, thereby promoting environment-friendly services. Practicing green banking has been found to be associated with banks' environmental performance and green financing (Chen et al., 2022), indicating that by taking actions in their operations and lending, banks are able to contribute to sustainability. Sustainable banking practices can also impact consumer perceptions of financial institutions at the customer level, particularly if these sustainable practices help build corporate reputation and foster an impression of corporate social responsibility (Igbudu et al., 2018).

Digital finance has further transformed the role of banks in sustainability. Digital banking channels, mobile banking, online financial platforms and FinTech based services ease the burden of branch- and paper-based banking and offer opportunities to provide efficient delivery of green services. Digital finance has the potential to contribute to sustainability through financial inclusion, service efficiency, transparency, and access to sustainable financial products, but regulatory, cybersecurity and equitable access are still significant concerns (Beirne & Fernandez, 2023). Digital green banking is a blend of financial digitalization and environmental responsibility in this context.

Innovation and sustainable technology diffusion are also facilitated by green digital finance. Green digital finance can create synergies between financial technologies and environmental goals to promote more environmentally friendly technologies and investment habits (Tan et al., 2024). Sustainable development has also been associated with FinTech as it can increase the availability of financial services, lower the transaction cost, facilitate data-driven decision making, and enable sustainable finance (Hasan et al., 2024). The developments are relevant for consumer markets as digital platforms can affect awareness, trust, convenience and behavioural willingness.

Consumer behaviour is at the heart of digital green banking. Consumers' understanding, trust, and perceived value of green products are key to adoption, even when banks offer green products through digital platforms. Customer preferences for banking institutions may be affected by their perceptions of environmental and social responsibility; this suggests that sustainability-related attributes are gaining importance when customers select a financial service provider (Gaspar & Pinto, 2024). The sustainable consumer behaviour in banking is thus related to: readiness to use paperless services, choosing green banking products, being pro-active with responsible banks, and making financial decisions based on environmental values.

The connection between digital finance, green finance, and social finance indicates the need to consider sustainability-oriented banking within a wider financial system. Digital finance could help facilitate green and social finance in the area of access, effectiveness, and innovation in financial services for sustainability (Ozili, 2021). There are also cases where the use of FinTech's models, such as peer-to-peer finance and digital platforms, has been linked to sustainable development outcomes with the right governance and consumer engagement (Deng et al., 2019). What has also been highlighted recently is the need to prioritize financial technology for sustainable development and not solely for the purpose of financial efficiency (Manta, 2024).

The literature is dispersed with regard to the banking and FinTech literature, as well as the green finance and consumer behavior literature, despite an increasing curiosity in green banking, digital finance, and sustainable consumption. Existing literature usually investigates these domains in isolation, and there is a need for a systematic synthesis that builds a link between the adoption of digital green banking and sustainable consumer behaviour. Thus, the following objectives serve as the foundation for this systematic review:

- To consolidate literature on digital green banking adoption and sustainable consumer behaviour.
- To examine the key factors influencing consumer adoption, including trust, awareness, perceived environmental value, satisfaction, behavioural willingness, and adoption intention.
- To analyse the role of green FinTech, green financial products, and digital banking channels in promoting sustainable consumer behaviour, while identifying key thematic patterns and research gaps in the literature.

Methods

Protocol and Reporting Standard

This systematic literature review was carried out following the guidelines of Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020). All phases of the review process were conducted in accordance with a defined methodological protocol to ensure transparency, consistency, and methodological quality during study identification, screening, eligibility assessment, and final inclusion. The thorough synthesis of data on the adoption of digital green banking and sustainable consumer behavior was the aim of this review.

Data Sources and Search Strategy

A comprehensive search of the literature was carried out and relevant studies published in the last 10 years (2016–2026) were identified. Although the search covered the period 2016–2026, the studies that met the final eligibility criteria were published between 2019 and 2026. The time period has been chosen to reflect recent trends in green banking, digital banking, green FinTech, green financial products and consumer behaviour. The studies were selected to be full text accessible in order to be sure of the authenticity and accessibility of the evidence base.

Major scholarly sources in the fields of banking, finance, sustainability, technology adoption and consumer behaviour were used in electronic searches. Searches were conducted using Google Scholar and major publisher platforms, including ScienceDirect, SpringerLink, Taylor & Francis, MDPI, Frontiers, and other relevant sources. Relevant studies were also manually screened from reference lists and journal webpages for further relevant studies. 230 records were found using a database search, and an additional 40 records were found through manual screening, for a total of 270 records before duplicates were eliminated.

The search strategy included terms related to green banking, digital banking, green finance, green FinTech, and sustainable consumer behaviour. Boolean operators were used to combine relevant terms. The final search was conducted in May 2026. Search strings were adapted according to the requirements of each platform. These included terms like “green banking” AND “consumer behaviour”, “digital green banking” AND “customer adoption”, “green banking practices” AND “customer satisfaction”, “green FinTech” AND “consumer trust”, “green financial products” AND “behavioral willingness”, “green finance” AND “purchase intention”, and “sustainable banking” AND “consumer awareness”.

Eligibility Criteria

Inclusion Criteria

According to the predetermined qualifying criteria, studies were deemed qualified for inclusion. Studies published in English, between 2016 and 2026, available as full-text accessible articles were selected for the study. Studies were selected if they studied green banking, digital green banking, green FinTech, green financial products, sustainable banking practices, or green finance and consumers or customers or banking service users.

Also, studies that explored consumer-related outcomes (e.g., customer awareness, intention of adoption, behavioral willingness, customer trust, customer satisfaction, green image, green loyalty, consumer's eco-consciousness, green purchase intention, and sustainable consumer behaviour) were included. Studies that directly supported the review objective were considered eligible for inclusion in the empirical, conceptual, bibliometric, systematic review and meta-analytical studies.

Exclusion Criteria

Studies that did not fit the predetermined eligibility requirements were excluded. Specifically, studies were excluded if they were unrelated to green banking, digital banking, green FinTech, green financial products, sustainable banking, or consumer behaviour. Studies focusing only on institutional banking performance, corporate sustainability reporting, macro-level green finance, or environmental policy without a clear consumer or adoption-related component were excluded.

Non-English publications, inaccessible full-text articles, duplicate records, editorials, book reviews, opinion papers, conference abstracts, and studies lacking sufficient bibliographic or methodological detail were also excluded. Studies published outside the selected review period of 2016–2026 were not considered for final inclusion.

Study Selection Process

Identification

Studies were identified through systematic searches of scholarly databases, publisher platforms, and manual screening. These searches yielded a total of 270 records related to digital green banking, green banking adoption, green FinTech, sustainable banking, green financial products, and sustainable consumer behaviour. Of these, 40 records were found by manual screening and 230 records were found using database searches. 225 distinct records were left for screening after 45 duplicate records were eliminated.

Screening

The abstracts and titles of the 225 records were reviewed to ensure they were pertinent to the objectives of the review. During this stage, 165 records were excluded because they did not focus on digital green banking adoption, green banking practices, green FinTech, green financial products, or sustainable consumer behaviour. Records were also excluded when they lacked a consumer, customer, or adoption-related focus. Following screening, 60 records were retained for full-text assessment.

Eligibility

The remaining 60 articles' full-text were evaluated for eligibility. At this point, 35 studies were eliminated for specific reasons. Specifically, 14 studies were excluded for not being directly related to digital green banking or sustainable consumer behaviour, 8 studies did not examine consumer/customer adoption outcomes, 5 studies were inaccessible as full text, 4 studies lacked sufficient methodological or bibliographic detail, and 4 studies were outside the selected scope or showed duplicate conceptual overlap.

Included

After exclusion of these 35 full-text articles, 25 studies met all predefined eligibility criteria and were included in final synthesis. These studies constituted evidence base for evaluating digital green banking adoption and sustainable consumer behaviour. Broader sustainable consumer behaviour studies were included only when they helped explain consumer behavioural mechanisms relevant to green financial products, green purchase intention, or sustainability-oriented banking adoption. The study selection process is summarized using a PRISMA 2020 flow diagram (Figure 1).

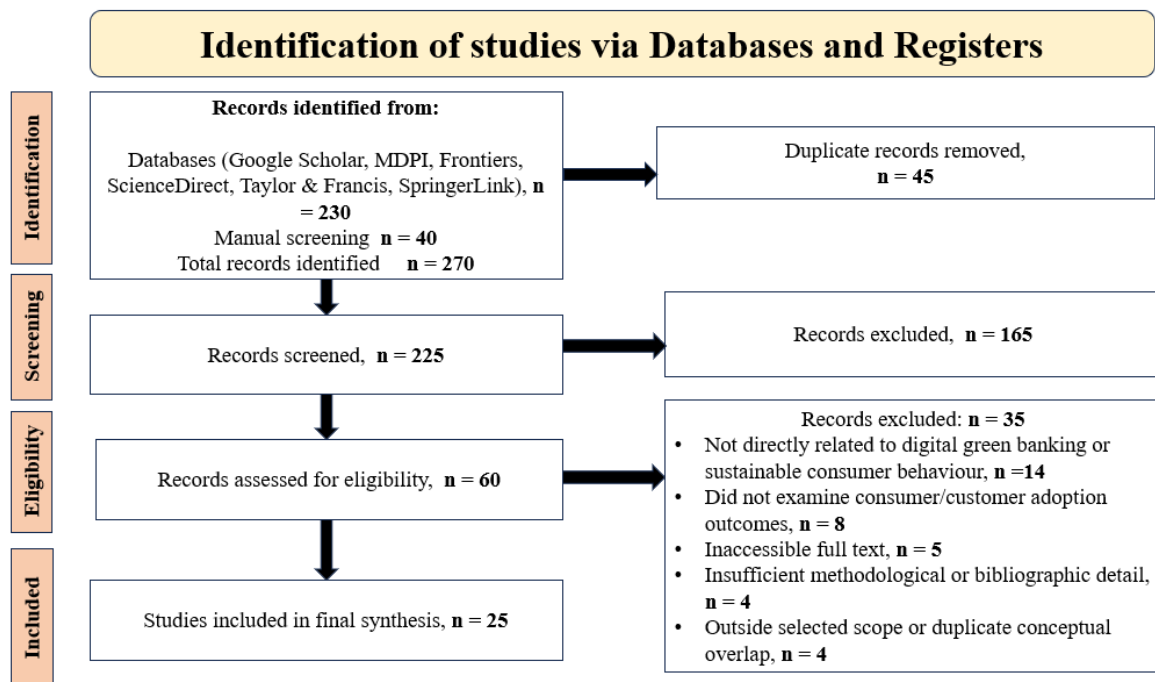


Figure 1. PRISMA Flow Diagram Illustrating the Study Selection Process

Data Extraction

Data was extracted from the included studies with a standardized extraction form to unify the data collection process. Data extracted consisted of publication information, year published, country or study context (if applicable), research design, theoretical model/conceptual framework, focus area, key variables, consumer related outcomes, and major findings. Systematic records were made of the various aspects of green banking, digital green banking, green FinTech, green financial products, consumer awareness, consumer trust, consumer satisfaction, consumer loyalty, behavioural willingness, intention to adopt and sustainable consumer behaviour. The information was then condensed and arranged thematically for the purpose of making comparisons within the studies included.

Data Synthesis

Given the heterogeneous nature of studies included in the review with regard to research design, theoretical underpinnings, geographic context, variables and outcome measures, a quantitative meta-analysis was not conducted. Rather, a structured narrative approach has been used to synthesize the evidence. The studies were classified based on their primary theme of research, which were: digital green banking adoption, green banking practices, green FinTech awareness and trust, green financial-product willingness, customer satisfaction and

loyalty, and sustainable consumer behaviour. Findings in each group were analyzed for patterns, differences and themes that emerged.

For each study, consumer-related outcomes were evaluated alongside the methodological and conceptual approaches used. Consistency and variation across studies were examined to identify dominant adoption drivers, behavioural outcomes, and sustainability-related consumer responses. Results were synthesized to highlight how digital green banking and related green financial services influence customer awareness, trust, satisfaction, loyalty, adoption intention, and sustainable behavioural choices. No pooled effect size was calculated because the included studies differed substantially in design, variables, measurement scales, and outcome definitions.

Quality Assessment

The methodological relevance and quality of included studies were examined based on clarity of objectives, appropriateness of research design, relevance to digital green banking or sustainable consumer behaviour, transparency of methods, and adequacy of findings. Studies with insufficient methodological or bibliographic detail were excluded.

Results

Characteristics of Included Studies

The final synthesis included 25 studies. The studies included were published between the years 2019 and 2026, and focused on the adoption of digital green banking, green banking practices, green FinTech, green financial products, sustainable banking and sustainable consumer behaviour. These studies were of different orientations such as empirical, conceptual, bibliometric, systematic review, and meta-analytical studies. The chosen studies were primarily focussed on customer awareness and trust, customer satisfaction and customer loyalty, behavioral willingness, perception, intention to adopt, and customers' green purchase behaviour. Table 1 summarizes the key features of the included studies.

Table 1. Characteristics of Included Studies (n = 25)

Sr. No.	Study	Study Orientation	Main Focus Area	Primary Outcome Domain
1	Ibe-Enwo et al. (2019)	Empirical banking study	Green banking practice, green image, and bank trust	Bank loyalty and trust
2	Sun et al. (2020)	Empirical banking study	CSR, co-creation, and green banking initiatives	CSR-linked green consumer loyalty
3	Milićević et al. (2023)	Customer-focused sustainability study	Banking support for energy security	Customer aspect of sustainable banking support
4	Rahman et al. (2023)	Comparative green banking study	Green banking initiatives in Bangladesh and India	Green banking and sustainability outcomes
5	Taneja et al. (2024)	Bibliometric study	Green banking strategies	Strategic and thematic research trends
6	Xie et al. (2024)	Empirical behavioural study	Green financial products	Behavioural willingness to use green financial products
7	Mehta and Handriana (2024)	Empirical digital banking study	Green banking digitalization and CSR	Customer engagement, environmental value, and eco-consciousness
8	Jain et al. (2024)	Conceptual model	Green banking practices and customer behaviour	Customer attitudes and behavioural response
9	Nair and Rajendran (2024)	Conceptual/model-based study	Consumer behaviour for green banking practices	Green banking behaviour model
10	Muchiri et al. (2025)	Systematic review	Green banking practices, opportunities, and challenges	Green banking development and challenges
11	Mir et al. (2025)	Empirical banking study	Green banking practices and customer satisfaction	Customer satisfaction and green sustainability
12	Piotrowska and Piotrowski (2025)	Consumer awareness study	Green FinTech	Consumer awareness of green financial technology

13	Klein and Polzin (2025)	Empirical retail banking study	Green retail bank account adoption	Sustainable bank account adoption
14	Han et al. (2025)	Empirical banking consumer study	CSR and green loyalty	Sustainable choices and green loyalty among banking consumers
15	Choedon and Prabhavathi (2025)	Consumer awareness study	Green banking practices in Bengaluru	Awareness of green banking practices
16	Kandaramath Hariharan and Nedumaran (2025)	Empirical adoption study	Environmental consciousness and green banking services	Environmental consciousness and adoption
17	Joshi and Mishra (2026)	Empirical adoption study	Customer perception and green banking services	Customer perception and adoption
18	Nachaal and Kalsi (2025)	Empirical consumer study	Green banking initiatives and purchase behaviour	Green banking-linked consumer purchase behaviour
19	Ruhi and Kumar (2025)	Empirical model-based study	Trust and willingness in green banking behaviour	Trust, willingness, and adoption behaviour
20	Veckalne (2025)	Green FinTech study	Trust in green FinTech platforms	Consumer trust in green FinTech
21	Gu et al. (2023)	Empirical consumer study	Green finance availability	Green purchase intention and consumer consciousness
22	Barbu et al. (2022)	Systematic review	Consumer behaviour toward green products	Determinants of sustainable consumer behaviour
23	Zhuang et al. (2021)	Meta-analysis	Green purchase intention	Determinants of green purchase intention
24	Susanty et al. (2021)	Empirical behavioural study	Antecedents of green purchasing behaviour	Learning, social cognition, and green marketing
25	Chen et al. (2022)	Empirical consumer behaviour study	Green product purchase attitudes and behavioural intention	Green purchase attitude and behavioural intention

Green Banking Practices, Trust, Satisfaction, and Loyalty

The first set of studies were those related to the green banking practices and their impact on customer trust, satisfaction, loyalty and perceptions of sustainable banking. The results of these studies showed that adopting green banking practices can lead to a more intense relationship between the bank and the customer when customers think of the bank as responsible, credible and trustworthy in terms of its environmental activities. The factors of green image, CSR initiatives, perceived environmental value and customer satisfaction were consistently identified as factors related to loyalty-based outcomes.

The evidence indicates that green banking is not only an internal sustainability strategy for banks but also a customer-oriented strategy that influences how customers evaluate banking services. Research on green banking loyalty indicated that trust in banking or green image is a mediator or enhancer between green banking practices and customer loyalty. In a similar way, green banking programs were correlated with green consumer loyalty when the customers felt this was the right thing to do and was in line with their sustainable goals.

Important outcomes also included customer satisfaction. The satisfaction was correlated with green banking practices when customers equated green banking practices with responsible service delivery, environmental concern, and sustainability. The studies that focused on green banking practices, trust, satisfaction, and loyalty are summarized in Table 2.

Table 2. Green Banking Practices, Trust, Satisfaction, and Loyalty

Green Banking Context	Key Variables	Main Observations	Source
Green banking practice and bank loyalty	Green banking practice, green image, bank trust, loyalty	Green image and trust were important in explaining the relationship between green banking practice and customer loyalty	Ibe-Enwo et al. (2019)
CSR, co-creation, and green banking	CSR, co-creation, green banking initiatives, loyalty	Green banking initiatives supported green consumer loyalty through CSR-related and co-creation mechanisms	Sun et al. (2020)

Green banking and customer satisfaction	Green banking practices, satisfaction, sustainability	Green banking practices were associated with customer satisfaction and sustainability-oriented banking perception	Mir et al. (2025)
CSR and sustainable consumer choices	CSR initiatives, green loyalty, sustainable choices	CSR initiatives shaped sustainable choices and green loyalty among banking consumers	Han et al. (2025)
Trust and green banking behaviour	Trust, willingness, green banking behaviour	Trust and willingness emerged as important factors in green banking behavioural response	Ruhi and Kumar (2025)

Digital Green Banking, Green FinTech, and Consumer Adoption

The second thematic group dealt with the themes of digital green banking, green banking digitalization, green FinTech, and consumer adoption of sustainability-oriented financial technologies. The findings of these studies suggest that digital channels are key in reaching and making green banking services visible. The digitalization of green banking was linked with customer participation, environmental value perceived by customers and the degree of environmental consciousness, indicating that digital platforms can support customer engagement, if environmental value is clearly communicated.

Consumer awareness and trust were highlighted as a focus of Green FinTech studies. Awareness was key due to the need for consumers to comprehend their function, advantages, and their environmental significance prior to becoming receptive to their usage. Trust was also a critical factor since consumers can be reluctant to use new digital green financial platforms when they lack trust in credibility, transparency, data security or green claims.

Retail banking evidence also indicated that the adoption of green banking products is related to the perception of consumers, perceived value and willingness to interact with sustainable financial services. The results indicate a mix of technology-related and sustainability-related factors drive digital green banking adoption. The evidence with respect to digital green banking, green FinTech, and the consumer adoption is included in Table 3.

Table 3. Digital Green Banking, Green FinTech, and Consumer Adoption

Digital / Green Finance Area	Adoption-Related Focus	Main Observations	Source
Green banking digitalization	CSR, customer engagement, perceived environmental value, eco-consciousness	Digitalized green banking supported customer engagement when consumers perceived environmental value in banking services	Mehta and Handriana (2024)
Green FinTech awareness	Consumer awareness of green FinTech	Awareness was an important condition for consumer understanding and acceptance of green FinTech	Piotrowska and Piotrowski (2025)
Consumer trust in green FinTech	Trust in green FinTech platforms	Trust was identified as a central factor in consumer response to green FinTech platforms	Veckalne (2025)
Green retail banking	Green bank account consumers	Consumer adoption of green retail banking was linked with sustainable service preference and perceived value	Klein and Polzin (2025)
Environmental consciousness and green banking	Environmental consciousness, adoption of green banking services	Environmentally conscious consumers showed stronger readiness to adopt green banking services	Kandaramath Hariharan and Nedumaran (2025)
Customer perception and green banking adoption	Perception, adoption of green banking services	Positive customer perception supported adoption of green banking services	Joshi and Mishra (2026)

Consumer Awareness, Perception, and Behavioural Willingness

Consumer awareness, perception, and behavioural willingness were repeatedly identified as important factors in green banking adoption. Research in this category indicated that customers would be more receptive to green banking if they would know the importance, utility and meaning of green banking. Knowledge of green banking practices, green FinTech platforms and sustainable financial products, therefore, seems to be a prerequisite for adoption.

Studies focusing on green financial products and green banking services also included behavioural willingness as an important outcome. The willingness of consumers to use green financial products was related to attitudes toward sustainable finance, environmental concern, trust and perceived usefulness of sustainable finance. Furthermore, specific regional studies revealed that perception of consumers plays a fundamental role in the introduction of green banking services and that, in some regions, green banking is not yet a common practice. The results indicate that the adoption of digital green banking is not merely dependent on its availability as a service to consumers. Rather, the adoption is determined by the consumers' perceptions of the environmental value, reliability, usefulness, and personal relevance of green banking services. A summary of the studies related to consumer awareness, perception and behavioural willingness is summarized in Table 4.

Table 4. Consumer Awareness, Perception, and Behavioural Willingness

Consumer Dimension	Key Outcome	Main Observations	Source
Awareness of green banking practices	Consumer awareness	Awareness of green banking practices was central to customer understanding and adoption readiness	Choedon and Prabhavathi (2025)
Green FinTech awareness	Consumer awareness	Awareness influenced consumer readiness to understand and engage with green FinTech services	Piotrowska and Piotrowski (2025)
Consumer willingness to use green financial products	Behavioural willingness	Willingness to use green financial products was influenced by consumer attitudes and adoption-related factors	Xie et al. (2024)
Customer perception and adoption	Perception and adoption	Positive perception of green banking services supported customer adoption	Joshi and Mishra (2026)
Banking support for energy security	Customer perception of sustainability support	Customers recognized the role of banking support in wider sustainability and energy-security concerns	Milićević et al. (2023)
Green banking initiatives and purchase behaviour	Consumer purchase behaviour	Green banking initiatives were linked with purchase-related behavioural responses among consumers	Nachaal and Kalsi (2025)

Green Financial Products and Sustainable Consumer Behaviour

In another set of studies, green financial products, green finance availability, intention to purchase green products, and general behaviour of sustainable consumers was studied. These studies are relevant to digital green banking as banking institutions are increasingly providing banking products relating to green finance via digital means. The willingness of the consumers to use green financial products is hence an important link between the adoption of banking and sustainable consumer behaviour.

The studies included in this paper revealed that consumer's attitude towards green financial products and green purchases has been affected by environmental consciousness, attitude, perceived value, learning experiences, social-cognitive factors and marketing related factors. The availability of green finance was linked with purchase intention, which means that if finance is available, this could induce consumers and retailers to make more sustainable purchases. More general studies on consumer behaviour reinforced the notion that green purchase intention is influenced by psychological and situational factors.

Based on these findings, it can be concluded that the digital green banking can help the sustainable behavior of consumers if the green financial products are available, reliable, and consumer values are in line with the green financial products. Table 5 shows the evidence pertaining to green financial products and sustainable consumer behaviour.

Table 5. Green Financial Products and Sustainable Consumer Behaviour

Sustainability-Focused Area	Behavioural Focus	Main Observations	Source
Green financial products	Willingness to use green financial products	Consumer willingness was shaped by behavioural and adoption-related factors	Xie et al. (2024)
Green finance availability	Purchase intention	Availability of green finance influenced purchase intention, with	Gu et al. (2023)

		consumer consciousness playing an important role	
Green purchase intention	Meta-analytical evidence	Green purchase intention was influenced by multiple psychological and behavioural determinants	Zhuang et al. (2021)
Green product purchase attitude	Attitude and behavioural intention	Green product purchase attitude was associated with behavioural intention	Chen et al. (2022)
Green purchasing behaviour	Learning experiences, social cognitive factors, green marketing	Green purchasing behaviour was influenced by learning, social cognition, and green marketing factors	Susanty et al. (2021)
Green product consumer behaviour	Sustainable consumer behaviour determinants	Consumer behaviour toward green products was shaped by multiple individual and contextual factors	Barbu et al. (2022)

Discussion

The findings of the review suggest that the issue of digital green banking adoption and sustainable consumer behaviour are closely related, and that factors such as trust, awareness, perceived environmental value, digital engagement, and behavioural willingness are key. Green banking cannot only be adopted for internal banking operations or for environmental reporting, but it can also be put into practice to impact customer attitude, customer loyalty, customer satisfaction and sustainable financial decision making. Green banking practice that is made available digitally is more accessible, more visible, and so it has a stronger potential to change sustainable behaviour.

Trust was found to be a key element of digital green banking adoption. Banks that are perceived as being true to their environmental responsibility will have a better chance of getting a positive response from customers. This is crucial as green banking can be met with scepticism if there isn't an actionable commitment to sustainability demonstrated. For sustainable banking practices, the credibility of banking practices in the environment and institutional accountability plays a crucial role, along with transparent communication to enhance customer trust (Mir & Bhat, 2022).

Digitalization also enhances the adoption of green banking by making it more convenient, accessible and engaging for customers. Digital finance allows paperless transactions, digital statements, green finance products, and communications around sustainability online and via mobile. This aligns with the notion that digital finance can play a role in achieving sustainability by making finance more accessible, efficient, and environmentally sustainable (Bansal et al., 2025). But digitalization alone is not enough, consumers need to feel the usefulness, security, reliability and environmental value of digital green banking.

Another critical aspect of the review is green FinTech. Consumer trust and awareness are essential factors for the adoption of a green FinTech platform. FinTech can facilitate green banking in the following ways: 1) digital payments, 2) green investments, 3) ESG connected products, 4) data-based sustainability assessment and 5) customer-focused financial innovations (Rahman et al., 2024). Digital platforms can also increase the visibility and accessibility of sustainable finance, by increasing transparency and participation (Jovović & Vuković, 2024). Therefore, digital green banking should be understood as part of a wider digital sustainable finance ecosystem.

Consumers' awareness also surfaced as an adoption factor. Unless consumers are aware of the environmental benefits and applications of green banking services, they are incapable of effectively using them. The awareness determines the perception and the perception influences the willingness of the people to act. Hence, it is essential to educate customers, share environmental messages and communicate transparently, rather than just having them available, to help these customers embrace green banking. This is consistent with the literature on green consumption that has found that knowledge, environmental concern, sense of responsibility, and perceived effectiveness of consumers play significant roles in influencing green behaviour (Megha, 2024).

The review also demonstrates that digital green banking could be a tool to facilitate sustainable consumer behaviour by changing the purchase intention, green product adoption and responsible financial choices. Financial products like green loans, sustainable investment options, green savings accounts, and eco-friendly banking services can help motivate consumers to align their financial choices with environmental impact. Attitudes, norms, perceived control, personal values, and contextual opportunities (Syed et al., 2024) are factors that influence sustainable consumption behaviour. Digital green banking platforms can serve as effective tools to promote sustainable decisions in this context.

Some of the studies which were included had their attention on emerging economies, especially India, Bangladesh and China. Here, digital literacy, environmental awareness, institutional trust, infrastructure, and regulatory assistance could be influencing banking practices in the green sector. Although consumers may be interested in

sustainable banking, they often lack awareness, don't trust green claims, have trouble accessing the internet, and don't understand the added value of green products. For this reason, besides making the products available, banks need to educate, embrace digital inclusion and have effective communication.

The findings also indicate that customer satisfaction and customer loyalty are outcomes of the green banking practices. If customers find green banking easy, responsible and trusted, they may be more loyal to banks. But loyalty is founded on authenticity. Green banking, as a symbolic or promotional tool, could have a reduced impact. Digital green banking service therefore should not only be consistent with the marketing words but also should be matched with measurable sustainable practice by banks.

Digital green banking adoption is both a technological and behavioural phenomenon overall. It brings together the technology adoption, green consumer behavior, trust, CSR, perceived value and sustainable consumption perspectives. Further research would benefit from building on the cross-sectional models and intention-based frameworks, and investigate actual usage behaviour, longitudinal adoption, country-level differences, evidence of transactional impact, and measurable environmental impact (e.g. paper saving, reduced branch visitation, etc.).

Conclusion

This systematic review aimed to synthesize the evidence on digital green banking adoption and sustainable consumer behaviour, and included 25 eligible studies that were identified during the review period of 2016–2026, with the final set of studies published between 2019 and 2026. As demonstrated in the review, digital green banking represents a new frontier where banking innovation, sustainability, and behavior converge. The results suggest that green banking practices have a positive impact on customers via trust, satisfaction, green image, perceived environmental value, loyalty, and behavioural willingness. Digitalisation contributes to this connection by enhancing the access, convenience, awareness and engagement to green financial services. The review also highlights the crucial point that consumers' adoption of digital green banking depends not only on the availability of digital services, but also the credibility and perceived usefulness of green initiatives. Consumers are more likely to choose green banking and green FinTech services if they feel receptive towards the bank, aware of the environmental benefits of the service and feel that it has a personal and social value for them. Thus, sustainable consumer behaviour is shaped by both technological factors and environmental attitudes. By connecting financial behavior with the sustainable outcome, the use of a Green financial product, a Green FinTech platform and a digital banking service can support responsible financial decisions. But the literature is still spread across different areas: green banking, digital finance and consumer sustainable behaviours. Most studies are on intention, perception and self-reported behaviour, and very few are on actual adoption, or measurable environmental outcomes. Adoption behavior along the life cycle, cross-country comparisons, evidence of digital transactions and assessing the actual environmental effects of digital green banking practices, should therefore be explored in future research. This review finds that, overall, digital green banking has potential to encourage sustainable consumer behaviour, provided that it is backed by trust, awareness, and transparent communication, credible green practices, and accessible digital financial services.

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