Impact of Green Banking Practices on Sustainable Banking: A Case of Commercial Banks in Pakistan

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Abstract

The global focus on environmental protection and corporate social responsibility has brought significant attention to sustainable banking in recent years. Green banking practices aim to incorporate environmental considerations into the operations and decision-making processes of the financial sector. Despite the increasing awareness and significance of sustainable banking practices, the adoption and implementation of green banking initiatives in Pakistan's banking sector remain limited. The study examined the impact of green banking practices on sustainable banking in Pakistan. The participants of the study included 320 banking sector employees working at public sector banks in Pakistan. The study was cross-sectional in nature and data were collected from the respondents using a survey questionnaire administered by the principal author. Questionnaires measured five green banking practices (perceived usefulness=6 items, perceived ease of use=4 items, management control and support=5 items, competitor pressure=5 items, customer pressure=5 items) and sustainable banking (7 items). Using SPSS Version 27, the results of linear regression analysis revealed that perceived usefulness brings 13% change, perceived ease of use brings 18% change, management control and support brings 25% change, competitor pressure brings 21% change and customer pressure brings 29% change in sustainable banking. This study offers insight into understanding the proposed relationships in the novel context of the banking sector of Pakistan. Based on the findings of the study, we have discussed the implications of the study and offered directions for further research.

Keywords: Green Banking Practices, Sustainable Banking, Commercial Banks.

Introduction

During the last few years, the idea of sustainability has gained significant attention across various sectors, including the banking industry. With increasing environmental concerns and the need to address climate change, there has been a growing interest in promoting sustainable practices within the banking sector (Zahra et al., 2022). Green banking referred to as sustainable or eco-banking, is an emerging trend that focuses on integrating environmental and social concerns into banking operations (Khalid et al., 2020). It involves an array of initiatives aimed at mitigating detrimental environmental impacts and promoting social well-being through financial operations (Arimura et al., 2018).

The economic development of a country largely depends on the growth of its banking sector. Banks are not only responsible for financial intermediation (Khan et al., 2023) but also significantly affect

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the society and environment via their lending and investment activities (Siddiqui et al., 2019). Recognizing this influence, there has been a global shift towards incorporating environmental and social factors into banking practices (Park & Kim, 2020). Green banking practices encompass a wide range of initiatives, such as sustainable lending, responsible investment, energy-efficient operations, and stakeholder engagement, all aimed at minimizing the environmental footprint of the banking industry (Bukhari et al., 2019).

Pakistan, like many other countries, has recognized the importance of sustainable banking to mitigate environmental risks and promote a greener economy (Bukhari et al., 2019). But as a developing nation, it has experienced several environmental difficulties, such as scarcity of water, deforestation, rapid change of climate, and pollution (Khan et al., 2022). These challenges have far-reaching consequences on the economy, public health, and the overall well-being of its citizens (Qureshi & Hussain, 2022). To address these issues, Pakistan's banking sector must adopt and promote sustainable practices that are aligned with global practices promoting the environmental goals of the country (Siddiqui et al., 2019).

Despite the increasing awareness and significance of sustainable banking practices, the adoption and implementation of green banking initiatives in Pakistan's banking sector remain limited (Khan et al., 2016). The banking sector in Pakistan lacks the serious strategic resolve to adopt and implement green initiatives in the banking sector to contribute to the national drive for sustainability (Khan et al., 2023; Quraishi et al., 2022). This raises concerns about the sector's ability to effectively contribute to environmental sustainability and address the challenges posed by climate change (Tariq et al., 2019).

Further, at the academic frontiers, there is limited evidence of studies on the concept of sustainable banking practices as well as the adoption and implementation of green initiatives in the banking sector of Pakistan (Zahra et al., 2022; Bukhari et al., 2019). There has been a debate over the banking practices that promote sustainability in the country (Khan et al., 2023). Further, studies mainly focused on customer-driven banking practices instead of environment-focused banking practices. Moreover, at the theoretical frontiers, most of the studies employed the theory of planned behavior (Chen et al., 2023), the Environmental, Social, and Governance (ESG) Framework, and the resource-based view (Jafri & Rezaee, 2014). However, we found weaker evidence of studies employing corporate social responsibility theory (An et al., 2023) to examine sustainable banking. Hence, we may find practical, contextual, and theoretical research deficit in the banking sector of Pakistan that needs to be addressed.

This study examines the current green banking practices as well as their influence on sustainable banking in Pakistan. The outcomes of this study are poised to offer valuable insights for policymakers, banking executives, and researchers aiming to adopt sustainable banking practices that are not only aligned with the distinctive socio-economic landscape of Pakistan but also contribute to the overarching objectives of environmental preservation and societal welfare. The objective of this study is to investigate the influence of selected green banking practices on the sustainability of banks in Pakistan. The study would examine how green banking practices i.e. perceived usefulness (PU), perceived ease of use (PEU), management commitment and support (MCS), competitors' pressure (CP), and customer pressure (CsP) would affect sustainable banking in Pakistan.

Literature Review

The global focus on environmental protection and corporate social responsibility has brought significant attention to sustainable banking in recent years (Maulani, 2015). Green banking practices aim to incorporate environmental considerations into the operations and decision-making processes of the financial sector (Chen et al., 2022). Pakistan's banking sector, being an integral part of the country's economy, has recognized the importance of adopting sustainable practices (Bukhari et al., 2019). Based on CSR theory, our study investigates the influence of selected green banking practices on sustainable banking in Pakistan.

Perceived Usefulness and Sustainable Banking

Perceived usefulness refers to the notion that utilizing a technology or service will enhance performance and simplify life. Sustainable banking encompasses the assimilation of governance and socio-environmental factors into operations to foster sustainable development (Ghani et al., 2022). The perceived usefulness of sustainable banking yields increased adoption, customer satisfaction, loyalty, market differentiation, an improved corporate image, and long-term financial performance. Effective communication of the advantages of sustainable banking is advantageous for financial institutions as sustainability gains prominence (Mufarih et al., 2020).

Empirical evidence suggests that if individuals perceive sustainable banking as valuable for attaining financial objectives and contributing to well-being, they are more inclined to embrace it (Rono, 2014). Similarly, the perceived usefulness of sustainable banking practices that align with personal values enhances customer satisfaction and promotes loyalty. Studies suggest that banks that provide practical sustainable banking services can distinguish themselves, by attracting environmentally conscious customers (Prastiawan et al., 2021).

Studies also suggest that sustainable banking enhances a bank's reputation as a conscientious and ethical institution, attracting socially conscious investors, employees, and customers (Khan et al., 2023; Jafri & Rezaee, 2014). Moreover, the integration of sustainable banking practices mitigates risks and generates appealing returns, appealing to investors prioritizing both financial and non-financial performance (Rono, 2014). According to Ghani et al. (2020), peer influence in social networks and confidence in the legitimacy of financial institutions are important variables. Institutions must follow transparent ESG practices, promote the dual financial and ethical benefits of sustainable banking, and employ public awareness campaigns and regulatory frameworks to increase perceived utility to encourage the implementation of sustainable banking (Men et al., 2023). Based on the review of the literature, it may be hypothesized that;

H1: Perceived usefulness has a significant positive impact on sustainable banking in Pakistan.

Perceived Ease of Use and Sustainable Banking

Perceived ease of use encompasses the perceptions of an individual of how effortless and user-friendly a technology or service is to use. Sustainable banking involves financial institutions integrating environmental, social, and governance (ESG) factors into their operations to promote sustainable development (Prastiawan et al., 2021).

Literature suggests that the perceived ease of use of sustainable banking services can significantly influence their adoption by individuals and organizations. If people perceive sustainable banking as easy to understand, navigate, and incorporate into their financial routines, they are more likely to embrace such practices (Rono, 2014). The perceived ease of use acts as a facilitating factor for individuals to choose sustainable banking products and services (Prastiawan et al., 2021).

Further, when individuals perceive sustainable banking practices as easy to use, it enhances their overall engagement with the financial institution (Park & Kim, 2020). They are more likely to interact with sustainable banking features, such as accessing ESG-related information or making sustainable investment choices. This increased engagement can lead to higher customer satisfaction as individuals find it convenient to incorporate sustainable principles into their banking activities (Ghani et al., 2022).

Substantial literature shows that perceived ease of use in sustainable banking can contribute to improving individuals' financial literacy regarding sustainable practices. By providing intuitive interfaces, clear explanations of ESG factors, and accessible educational resources, financial institutions can help customers better understand the environmental and social impact of their financial decisions (Ko et al., 2012). This improved financial literacy can further encourage individuals to adopt and support sustainable banking practices. Perceived ease of use lowers the barriers to entry for sustainable banking, particularly for individuals who may have limited technological skills or knowledge (An et al., 2023). By offering user-friendly interfaces, simplified processes, and clear instructions, financial institutions can attract a broader range of customers who might otherwise be hesitant or intimidated by complex sustainable banking practices (Naruetharadhol, et al., 2021).

Studies also suggest that individuals find sustainable banking services easy to use and integrate into their lives, they are more likely to share positive experiences with others (Khan et al., 2023). This can lead to positive word-of-mouth marketing and advocacy for sustainable banking, helping to expand its reach and influence (Martínez-Navalón et al., 2023). Based on the literature review, it may be hypothesized;

H2: Perceived use of ease has a significant positive impact on sustainable banking in Pakistan.

Management Commitment and Sustainable Banking

Management commitment and support play a vital role in the success and effectiveness of sustainable banking practices. When senior management exhibits a strong dedication to sustainable banking, it aligns the organization's overall strategy with sustainable development goals (Khan et al., 2023). This commitment establishes the foundation for integrating ESG factors into the institution's operations, products, and services (Bukhari et al., 2022). Similarly, management commitment and support are crucial in allocating the necessary resources, such as financial investments, technological infrastructure, and skilled personnel, for the effective implementation of sustainable banking practices. Proper resource allocation demonstrates the organization's genuine commitment to sustainability (Wei et al., 2023).

There is ample evidence that suggests that management commitment and support are instrumental in developing comprehensive sustainability policies and guidelines. These policies provide a framework for incorporating ESG considerations into decision-making processes across various departments within the financial institution (Hasan et al., 2022). Moreover, sustainable banking necessitates the integration of ESG factors into day-to-day business operations. Management commitment ensures that sustainable practices are deeply ingrained in core processes, ranging from risk management and product development to customer relations and reporting. This integration helps foster a culture of sustainability throughout the organization (Saxena et al., 2021).

Literature shows that commitment and support of management foster employee engagement and enthusiasm for sustainable banking initiatives (Bukhari et al., 2022). When employees witness the genuine dedication of their leaders to sustainability, they are more likely to actively participate and contribute to achieving sustainable goals. This can include training programs, workshops, and incentives that promote awareness and understanding of sustainability among employees (Shamshad et al., 2018). Moreover, the support and commitment of management enhance stakeholder confidence in the financial institution. Customers, investors, and regulators view a strong commitment as an indication of the organization's ethical values, long-term viability, and responsible business practices. This confidence can result in increased customer loyalty, investor interest, and positive relationships with regulators and stakeholders (Saxena et al., 2021).

Studies also depict that management commitment and support position the financial institution as a leader in sustainable banking within the industry. By actively promoting sustainable practices and collaborating with industry peers, the organization can affect the implementation of sustainable banking initiatives across the sector, driving positive change on a broader scale (Men et al., 2023). On the basis of this literature review, we hypothesize that

H3: Management commitment and support have a significant positive impact on sustainable banking in Pakistan.

Customer Pressure and Sustainable Banking

Customer pressure refers to the influence exerted by customers' preferences and demands for sustainable banking products and services (Elahi et al., 2023). Banks need to respond to changing customer expectations and align their practices with sustainable development goals (Mufarih et al., 2020). Research indicates that customer pressure significantly predicts green banking practices as banks strive to retain existing customers and attract new ones by offering environmentally friendly products and services (Bukhari et al., 2019). CP plays a crucial role in shaping sustainable banking practices. Customers apply pressure on financial institutions to provide sustainable banking options. Their growing environmental and social awareness drives them to actively seek out products and services that align with their values. Financial institutions must respond to this demand by integrating ESG factors into their offerings (Bukhari et al., 2022).

Studies on green baking suggest that customer pressure compels financial institutions to raise consumer awareness and educate them about sustainable banking (Ko et al., 2012). Institutions invest in educational campaigns and resources to inform customers about the environmental and social impacts of their financial decisions. This helps customers understand the benefits of sustainable banking and make informed choices (Taneja & Ali, 2021). Similarly, studies depict that the pressure of customers significantly influences the priorities of financial institutions. Banks that prioritize sustainability and respond to customer demands for sustainable options gain a competitive advantage. They align their strategies and allocate resources toward sustainable banking initiatives, recognizing the importance of meeting customer expectations (Ahmad et al., 2013).

Customers expect transparency from financial institutions regarding their sustainability efforts. They demand clear and comprehensive reporting on ESG practices, impact assessments, and progress toward sustainability goals. Customer pressure motivates financial institutions to enhance their transparency and disclosure practices, fostering trust and accountability (Taneja & Ali, 2021). Further, customers hold financial institutions accountable for their actions and expect them to adhere to ethical practices. They actively choose banks that demonstrate responsible business conduct and social and environmental stewardship. This customer pressure encourages financial institutions to integrate sustainable practices into their operations and avoid activities that harm the environment or society (Bukhari et al., 2019).

Literature shows that customer pressure pushes financial institutions to actively engage in sustainability initiatives and collaborate with stakeholders. Customers expect banks to participate in sustainable development projects, support community initiatives, and engage in dialogues with customers and advocacy groups (Zimmermann, 2019). Financial institutions respond to customer pressure by fostering collaborations and partnerships to address sustainability challenges. Further, customer pressure significantly influences the reputation and brand loyalty of financial institutions.

Banks that demonstrate a strong commitment to sustainability and meet customer expectations build a positive reputation as socially responsible institutions. This reputation enhances brand loyalty and attracts customers who prioritize sustainability (Khan et al., 2023). Based on the review of the literature, it may be hypothesized that;
H4: Customer pressure has a significant positive impact on sustainable banking in Pakistan.

Competitive Pressure and Sustainable Banking
Competitive refers to the influence exerted by the actions and practices of rival banks. In an increasingly competitive banking sector, banks face pressure to adopt green practices to enhance their reputation, gain a competitive advantage, and meet customers' expectations (Maulani, 2015). Competitive pressure exerts a substantial influence on sustainable banking practices by motivating financial institutions to innovate and differentiate themselves by incorporating sustainable banking practices (Khan et al., 2022). To gain a competitive advantage, banks may create fresh products and services that integrate ESG factors. This drive for innovation fosters the growth and progression of sustainable banking in response to market demand (Zahra & Ayub, 2022).
Further, the competitive landscape widens with the expansion of financial institutions embracing sustainable banking practices. This expansion enhances the availability and accessibility of sustainable banking options for customers. The presence of multiple players in the market stimulates competition and can result in a more widespread adoption of sustainable practices across the industry (Raut et al., 2017).
Competitive pressure impacts the pricing and cost dynamics of sustainable banking. Financial institutions may adjust their pricing structures to remain competitive, making sustainable options more affordable and appealing to customers. This adjustment contributes to the broader adoption of sustainable banking as cost barriers are minimized (Ahmad et al., 2013). Moreover, competitive pressure compels financial institutions to enhance their reporting and transparency regarding sustainability efforts. They may disclose ESG metrics, produce sustainability reports, and engage in industry benchmarks to demonstrate their commitment to sustainability (Jafri & Rezaee, 2014). This transparency fosters trust and enables customers to make informed choices based on the sustainability performance of financial institutions (Avrampou et al., 2019).
Studies show that competitive pressure drives collaboration and partnerships among financial institutions. Banks may join forces to establish industry-wide standards, exchange best practices, and collaborate on sustainability initiatives (Javeria et al., 2020). This collaborative approach encourages collective efforts to advance sustainable banking practices and address common challenges faced by the industry (Galletta & Mazzù, 2023). Similarly, competitive pressure can result in heightened regulatory scrutiny and requirements about sustainability in banking. Governments and regulatory bodies may introduce regulations or standards that mandate or incentivize sustainable practices. Financial institutions must respond to these regulatory changes to maintain a competitive position and ensure compliance (Nosratabadi et al., 2020). Based on the literature review, it may be hypothesized;
H5: Competitive pressure has a significant positive impact on sustainable banking in Pakistan.

Theoretical Framework
The theoretical foundations of sustainable development and corporate social responsibility (CSR) in the banking industry serve as the basis for this investigation. According to the Brundtland Commission's definition of sustainable development (Brundtland, 1987), it is crucial to address current needs without jeopardizing the capacity of future generations to address their own (Keeble,

1988). Three pillars comprise the concept of sustainable development: environmental protection, social progress, and economic development.
Within the banking sector, sustainable development principles are operationalized through the concept of CSR. CSR emphasizes the responsibilities of organizations to contribute positively to society, beyond their financial goals (Carroll, 1999). In the context of green banking, CSR encourages banks to adopt environment friendly initiative into their business operations, risk management practices, and product offerings. By aligning their activities with sustainable development goals, banks can help address environmental challenges, foster social inclusion, and enhance financial stability.

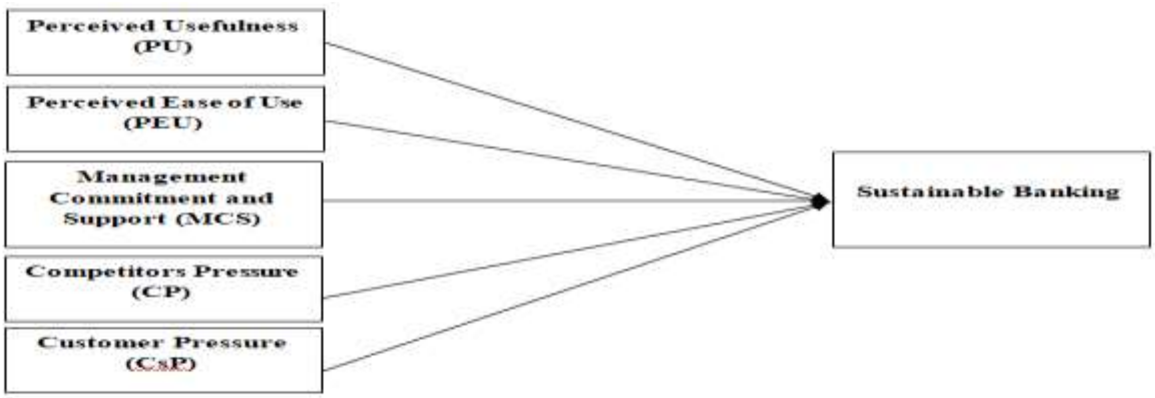

Figure 1: Framework of sustainable banking in Pakistan

Methodology

Population

All the 20042 banking sector employees of National Bank of Pakistan and Bank of Khyber in the province of Khyber Pakhtunkhwa (KP), Pakistan constituted the population of this study. The reason for selection of these banks is their wider customer base and established organizational culture.

Sampling and Sample Size

We used simple random sampling technique to select the representative sample. Responses were anchored as strongly agree=05 to strongly disagree=01. The respondents were recruited employing rule of ten devised by Bentler & Chou (1987). According to this rule, 10 respondents for every item of the questionnaire are selected. Hence, in this case, the participants of the study included 320 banking sector employees.

Instrument

Perceived usefulness: We used a 6 items scale of Davis (1989) to measure PU. The reliability of the scale in the context of Pakistani banking sector was 0.91 showing a high internal consistency.
Perceived ease of use: A 4 items scale of Davis (1989) was used to measure PEU. The reliability of the scale in the context of Pakistani banking sector was 0.82 showing a high internal consistency.
Management commitment and support: A 5 items scale of Bukhari et al. (2022) was used to measure MCS. The reliability of the scale in the context of Pakistani banking sector was 0.93 showing a high internal consistency.

Competitor pressure: We used a 5 items scale used by Aslam and Jawaid (2022) to measure CP. The reliability of the scale in the context of Pakistani banking sector was 0.92 showing a high internal consistency.
Customer pressure: We used a 5 items scale used by Aslam and Jawaid (2022) to measure CsP. The reliability of the scale in the context of Pakistani banking sector was 0.84 showing a high internal consistency.
Sustainable banking: We used a 7 items scale used by Aslam and Jawaid (2022) to measure sustainable banking. The reliability of the scale in the context of Pakistani banking sector was 0.94 showing a high internal consistency.

Data Collection
We used a combined survey questionnaire to seek the responses of banking sector employees on variables understudy. A total of 320 questionnaires were administered to the respondents through paid surveyors. However, we received 298 workable and complete questionnaires having a response rate of 93% which is excellent.

Data Analysis and Findings
Respondents' Profile
Out of 298 respondents, 188 (63%) were male bankers while 110 (37%) were female bankers. As far as designation of the respondents is concerned, 159 (53%) were managers while 139 (47%) were banking officers.

Reliability Analysis
Table 1: Reliability, validity and factor loading (N=320)

Constructs	Items	Outer Loading	Cronbach's Alpha	CR	AVE
Perceived Usefulness	PU1	0.64	0.91	0.90	0.61
(06×items)	PU2	0.83			
	PU3	0.78			
	PU4	0.72			
	PU5	0.81			
	PU6	0.84			
Perceived Ease of Use	PEU1	0.77	0.82	0.83	0.63
(04×items)	PEU2	0.79			
	PEU3	0.77			
	PEU4	0.73			
Management Control and Support	MCS1	0.81	0.93	0.92	0.75
(05×items)	MCS2	0.85			
	MCS3	0.89			
	MCS4	0.85			
	MCS5	0.87			
Competitor Pressure	CP1	0.71	0.92	0.91	0.67
(05×items)	CP2	0.84			
	CP3	0.81			
	CP4	0.83			

	CP5	0.76			
Customer Pressure	CsP1	0.75	0.84	0.93	0.72
(05×items)	CsP2	0.70			
	CsP3	0.71			
	CsP4	0.65			
	CsP5	0.72			
Sustainable Banking	ES1	0.80	0.94	0.92	0.73
(7×items)	ES2	0.78			
	ES3	0.84			
	ES4	0.86			
	ES5	0.85			
	ES6	0.80			
	ES7	0.72			

Correlation Analysis

Table 2 below shows that sustainable banking has significant positive relationship with perceived usefulness (r=-0.591**), perceived ease of use (r= 0.503**), management support and control (r=-0.632**), competitor pressure (0.559**) and customer pressure (r=-0.673**). The results clearly suggest that sustainable banking has significant positive relationship with all the green banking practices.

Table 2: Correlation analysis

	PU	PEU	MCS	CP	CsP	SB
PU	1					
PEU	.482**	1				
MCS	.537**	.529**	1			
CP	.213*	.203**	.373**	1		
CsP	.332**	.313**	.462**	.548**	1	
SB	.591**	.503**	.632**	.559**	.673**	1

PU=Perceived Usefulness, PEU=Perceived Ease of Use, MCS=Management Commitment and Support, CP=Competitors' Pressure, Customers' Pressure, SB=Sustainable Banking

Linear Regression Analysis

The table below shows that 13% change is accounted in sustainable banking due to perceived usefulness (β=0.13**, P<0.05) supporting the 1st hypothesis (H1) of the study. Similarly, perceived ease of use brings 18% change in sustainable banking (β=0.18**, P<0.05) supporting the 2nd hypothesis (H2) of the study. Table further shows that management control and support brings 25% change in sustainable banking (β=0.25**, P<0.05) supporting the 3rd hypothesis (H3) of the study. Results also show that 21% change is accounted in sustainable banking due to competitor pressure (β=0.21**, P<0.05) supporting the 4th hypothesis (H4) of the study. Moreover, customer pressure brings 29% change in sustainable banking (β=0.29**, P<0.05) supporting the 5th hypothesis (H5) of the study. The clearly show that green banking especially management control and support and customer pressure bring significant change in sustainable banking.

Table 3: Linear regression analysis

	Sustainable Banking		
	β-Coefficient	P-Value	Result
Perceived Usefulness	0.131**	0.01	Significant
Perceived Ease of Use	0.182**	0.03	Significant
Management Control and Support	0.253**	0.03	Significant
Competitor Pressure	0.212**	0.04	Significant
Customer Pressure	0.291**	0.02	Significant

Discussion

Results of our study reported that 13% change is accounted for in sustainable banking due to perceived usefulness (β=0.13**, P<0.05). Our findings are similar to the findings of the studies of Ghani et al. (2022), Mufarih et al. (2020), Morteza et al. (2011), and Al-Samadi (2012). These studies suggest that perceived usefulness promotes for adoption of green banking. Similarly, the results of our study revealed that perceived ease of use brings an 18% change in sustainable banking (β=0.18**, P<0.05). These findings are aligned with the findings of the studies of Naruetharadhol, et al.(2021), Prastiawan et al. (2021), Aranda and Amado (2011), and Baraghani (2008). The findings of these studies suggest that perceived ease of use was the critical factor that positively affects the intention to adopt green banking.

Results of our study revealed that management control and support bring 25% change in sustainable banking (β=0.25**, P<0.05) which are similar to the findings of the studies of Hasan et al. (2022), Ramdani et al. (2009) and Ifinedo (2011) who found that enthusiasm, encouragement, involvement and motivation given by management to its employees and other stakeholders promotes adoption of the sustainable banking.

Our study depicts that a 21% change is accounted for in sustainable banking due to competitor pressure (β=0.21**, P<0.05). Our findings are similar to the findings of the studies of Elahi et al. (2023), Bukhari et al. (2022), Morteza et al. (2011) and Ifineo (2011). Their studies suggest that competitor pressure (CP) as an external factor leads to the adoption of sustainable banking. Further, our study revealed that customer pressure brings a 29% change in sustainable banking (β=0.29**, P<0.05). These findings are similar to the findings of the studies of Elahi et al. (2023), Taneja & Ali (2021), Pavlou and Sawy (2006), and Ifineo (2011). Results of these studies also revealed that Customer pressure leads to the creation of more advanced products and services in the banking industry which will lead to sustainability in their performance. Based on the results of our study and the findings of the previous studies, it may be safely argued that green banking practices promote sustainable banking.

Conclusion

We proposed a framework a framework of green banking practices that may affect sustainable banking in Pakistan. The practices included management commitment and support, competitors' pressure, customers' pressure, perceived usefulness, and perceived ease of use. The results of this study revealed that these green banking practices predict sustainable banking. Based on the results of this study, it has certain significant implications for financial institutions and policymakers. Firstly, financial institutions should recognize the importance of perceived usefulness and ease of use in promoting the adoption of sustainable banking practices. By emphasizing the benefits and user-friendly nature of green banking, banks can enhance their chances of successfully implementing sustainable initiatives.

Secondly, management control and support are crucial for driving the adoption of sustainable banking practices. Managers and leaders should actively demonstrate enthusiasm, encouragement, involvement, and motivation towards sustainability efforts. This can create a positive organizational culture and foster employee and stakeholder engagement in sustainable banking initiatives. Furthermore, competitor pressure and customer pressure are external factors that strongly influence sustainable banking practices. Financial institutions should pay attention to market dynamics and customer demands, leveraging competitive and customer pressures to drive innovation and the development of advanced sustainable products and services.

The research suggests that green banking practices not only contribute to environmental and social sustainability but also promote the overall sustainability of financial institutions. By incorporating sustainable practices, banks can enhance their performance, reputation, and customer loyalty.

Limitations and Further Research

The study is not free from limitations like other studies. First, a cross-sectional design was used in the study, which entailed gathering data at a single point in time. Future studies could use experimental or longitudinal designs to look at the dynamic relationships between banking sustainability and green banking practices.

Secondly, the study has been conducted in the banking sector and the results of this study may hardly be generalized to any other setting. Further research is needed to replicate the model in other sectors as well.

The study utilizes a quantitative approach to examine the relationships between variables. While this approach provides valuable statistical insights, it may not capture the richness and depth of participants' experiences and perspectives. Employing qualitative methods, such as interviews or focus groups, could complement the quantitative findings and provide a more comprehensive understanding of the phenomenon.

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