

DOI: [10.55643/fcaptop.3.62.2025.4740](https://doi.org/10.55643/fcaptop.3.62.2025.4740)

Nguyen Thi Thanh Nhan

D.Sc. in Economics, Hai Phong University, Hai Phong, Vietnam;
ORCID: [0009-0007-9026-2408](https://orcid.org/0009-0007-9026-2408)

Nguyen Thi Kim Thanh

D.Sc. in Economics, Electric Power University, Ha Noi, Vietnam;
ORCID: [0009-0005-6743-094X](https://orcid.org/0009-0005-6743-094X)
(Corresponding author)

Pham Thanh Huong

D.Sc. in Economics, Accounting and Auditing Institute, Thuongmai University, Ha Noi, Vietnam;
ORCID: [0009-0002-0523-6031](https://orcid.org/0009-0002-0523-6031)

Pham Huy Hung

Doctoral Student, Faculty of Economics, Hanoi University of Natural Resources and Environment, Ha Noi, Vietnam;
e-mail: phamhuyhung0302@gmail.com
ORCID: [0000-0002-0352-514X](https://orcid.org/0000-0002-0352-514X)
(Corresponding author)

Received: 18/02/2025

Accepted: 20/05/2025

Published: 30/06/2025

© Copyright
2025 by the author(s)



This is an Open Access article distributed under the terms of the [Creative Commons CC-BY 4.0](https://creativecommons.org/licenses/by/4.0/)

SUSTAINABLE TOURISM FINANCING MODELS: BEHAVIOURAL INSIGHTS FROM VIETNAMESE TOURISM COMPANIES

ABSTRACT

This study explores the factors influencing the adoption of sustainable financial models in the tourism industry, focusing on Vietnamese tourism companies. It examines the interplay between financial literacy, leadership commitment, environmental awareness, risk perception, and perceived feasibility. Using data from 368 managers, including CEOs and CFOs of 124 travel companies, the study employs a quantitative approach and analyzes relationships using the PLS-SEM model with SPSS 22 and AMOS 20. The findings reveal that financial literacy and leadership commitment significantly drive perceived feasibility, which strongly impacts the adoption of sustainable financial models. Notably, environmental awareness has a positive but weaker-than-expected influence, while risk perception is not a significant barrier. These results highlight the crucial role of perceived feasibility in bridging behavioural factors and the implementation of sustainable finance models. The study provides actionable recommendations for travel companies, emphasizing the need to improve financial literacy, foster leadership commitment, and demonstrate the practicality of sustainable finance. These strategies are essential for accelerating the adoption of sustainable financial models, ultimately promoting sustainable growth in the tourism industry.

Keywords: green finance, sustainable finance, sustainable tourism development, Vietnam

JEL Classification: G32, Q56, O16

INTRODUCTION

Sustainable tourism has become a key component of global efforts to address environmental challenges, promoting economic growth and social justice Richardson (2021). The tourism industry, while an important driver of economic development, is also a significant contributor to environmental degradation, especially in resource-dependent economies such as Vietnam. Sustainable tourism practices, including mitigating environmental impacts, protecting biodiversity, and supporting local communities have received increasing attention as key strategies to balance economic development with ecological conservation (UNWTO, 2018). However, the implementation of these activities often requires significant financial investment that makes sustainable financial models such as green loans, sustainable bonds, and carbon credit systems necessary for tourism companies to achieve their sustainable development goals (Tang & Zhang, 2020).

The adoption of sustainable finance models is particularly important in the context of Vietnam, where the tourism sector is the main driver of economic activity. In 2019, the tourism industry contributed 9.2% to the country's GDP and directly supported more than four million jobs, accounting for a significant portion of the national workforce (WTTC, 2020). The rapid growth of the sector has made it the cornerstone of Vietnam's economic development strategy. However, this growth comes at the expense of the environmental impacts of mass tourism that increasingly threaten the natural resources on which the sector depends. For example, Ha Long or the Mekong Delta are important tourism centres that are facing serious environmental degradation, including water pollution and exacerbated biodiversity loss due to tourism-related activities (Nguyen et al.,

2021). Recognizing these challenges, the Vietnamese government has prioritized sustainability in its tourism development strategies. Policies such as the Tourism Development Strategy to 2030 emphasize ecological conservation, sustainable resource management and the promotion of environmentally friendly activities (Vietnam National Administration of Tourism, 2022). In parallel, financial incentives such as tax breaks for green projects and subsidies for renewable energy installers have been introduced to encourage businesses to adopt sustainable financing mechanisms. Although the government's efforts are significant, many tourism companies in Vietnam still face challenges in accessing and using sustainable finance due to behavioural and institutional barriers. Limited financial literacy, concerns about risks, and a lack of leadership commitment to sustainability hinder their ability to perceive these models as feasible. Additionally, while environmental awareness is growing, it does not consistently translate into actionable adoption of sustainable financial mechanisms. This research addresses these challenges by exploring how these factors influence perceived feasibility and adoption, providing insights into the underlying behavioural dynamics that shape decision-making in the tourism sector.

One of the major barriers is the limited level of financial literacy among managers. Studies show that the level of financial literacy is important for understanding the costs and benefits of sustainable financial instruments, such as green loans and sustainable bonds in order to make appropriate financial decisions (Lusardi & Tufano, 2015; Nguyen & Do, 2020). A lack of understanding of such tools often prevents managers from identifying or pursuing available financial opportunities. For example, a study of green finance adoption in Southeast Asia found that only 35% of SMEs are aware of green finance options and even fewer understand their application process (ADB, 2021). In addition, risk awareness plays an important role in hindering the adoption of sustainable financial models. Managers often express concerns about uncertain returns from investments in sustainability, especially when considering the high upfront costs and long payback periods associated with green projects that make companies reluctant to pursue these options (Weber et al., 2002; Slovic, 1987). Moreover, regulatory complexity and inconsistent enforcement of environmental policies exacerbate regulators' perception of risk, further hindering their willingness to adopt sustainable financial models (Nguyen & Do, 2020), and it is these that have attracted the research interest of academics and practitioners.

A number of studies conducted around the world show that factors such as financial literacy, environmental awareness, risk perception, and leadership commitment to sustainability significantly influence how managers perceive the feasibility of sustainable financial models. For instance, more financially savvy managers will have better visibility to assess the costs, risks, and benefits of financial options making them more likely to perceive these models as viable (Huston, 2010). Similarly, environmental awareness plays an important role, managers who are more concerned about the environmental impact of their operations are more likely to prioritize sustainability and seek funding to support green initiatives (Bamberg & Möser, 2007). In contrast, negative risk perception, such as fear of financial loss or regulatory punishment can serve as psychological barriers that prevent managers from pursuing sustainable financial options (Mitchell, 1999). Leadership commitment to sustainability is another important driver, as leaders' commitment will support the promotion of a culture of sustainability and ensure that resources are allocated to green projects (Waldman et al., 2006).

The above studies have improved the understanding of behavioural factors affecting sustainable finance in developed economies or regions with advanced financial systems but have largely ignored the challenges and opportunities that are specific to developing countries such as Vietnam. For example, tourism companies in Vietnam often face more barriers to accessing green finance due to the limited institutional support and the nascent state of the country's green financial market (Nguyen & Do, 2020). In addition, cultural and behavioural factors that influence the decision-making process of managers (Yates & De Oliveira, 2016), such as attitudes toward risk and leadership styles may differ from other areas that require context-specific research. Meanwhile, several domestic studies have looked at sustainable tourism practices (Nguyen & Do, 2020; Nguyen et al., 2021), but they have mainly focused on environmental impacts rather than perceptions of the behaviour of financial models. Therefore, unlike its predecessors that emphasized environmental impact, this study integrates financial literacy, leadership commitment, and risk perception into its analysis, providing a comprehensive behavioural framework. This study attempts to fill a critical gap in the literature by addressing the unique challenges faced by tourism companies in a developing economy such as Vietnam, thereby making practical recommendations to improve adoption rates.

Therefore, we conducted this study to examine the influence of behavioural factors such as financial literacy, environmental awareness, risk perception, and leadership commitment on the perceived feasibility of sustainable finance models. The study also investigates how perceived feasibility impacts their application. Specifically, this study aims to:

- (Examine the influence of financial literacy, leadership commitment, environmental awareness, and risk perception on the perceived feasibility of sustainable financing models.
- Investigate how perceived feasibility impacts the adoption of sustainable financing models in Vietnamese tourism companies.

- Provide actionable recommendations for improving the adoption of sustainable financing models to foster sustainable growth in the tourism sector.

Achieving the above objectives will help to increase the understanding of behavioural factors affecting the application of sustainable finance in developing economies, with conditions similar to those of Vietnam. The study will provide actionable insights for tourism companies, policymakers, and financial institutions to overcome barriers and promote financial strategies focused on sustainability.

LITERATURE REVIEW

Theoretical framework

Extending the theory of planned behaviour

The Theory of Planned Behaviour (TPB) (Ajzen, 1991) is a widely utilized psychological framework that explains how individual behaviour is influenced by three primary factors: attitudes, subjective norms, and perceived behavioural control. Attitudes refer to an individual's evaluation of whether a behaviour is favourable or unfavourable. Subjective norms describe the social pressures or expectations that influence an individual's decision to engage in a particular behaviour. Perceived behavioural control represents the individual's belief in their ability to perform the behaviour, based on available resources and opportunities. TPB posits that these factors collectively shape behavioural intentions, which are the strongest predictors of actual behaviour. This theory is commonly applied in studies of decision-making and behavioural change, especially in contexts requiring the adoption of new practices or innovations.

In the context of this study, the TPB provides a framework for understanding how managers' perceptions and intentions influence their adoption of sustainable financing models. Attitudes are shaped by environmental awareness, as managers who view sustainability positively are more likely to adopt green financing practices. Subjective norms, such as societal and industry expectations around sustainability, act as external pressures encouraging companies to align with sustainable practices. Perceived behavioural control is reflected in the perceived feasibility of sustainable financing models, which depend on factors like financial literacy and leadership commitment to sustainability. This theory underpins the study's focus on examining how these behavioural and normative factors drive the adoption of sustainable financing models in the tourism sector, particularly in Vietnam.

Resource-based view

The Resource-Based View (RBV) (Barney, 1991) offers a strategic management perspective underscoring the significance of an organization's internal resources and capabilities in fostering competitive advantage. Under this paradigm, resources that are valuable, rare, inimitable, and non-substitutable (VRIN) enable firms to differentiate themselves and achieve enduring success. These resources can be tangible (e.g., financial resources, infrastructure) or intangible (e.g., knowledge, leadership, organizational culture). The RBV emphasizes the role of organizational capabilities, such as financial literacy or managerial competencies, in leveraging resources effectively to achieve strategic goals. By focusing on internal strengths, RBV provides a foundation for understanding how organizations can adapt to changing environments and adopt innovative practices.

The RBV is applied in this study to highlight how internal resources, such as financial literacy and leadership commitment to sustainability, influence the perceived feasibility and adoption of sustainable financing models. Financial literacy is an intangible capability that allows managers to understand, evaluate, and utilize tools like green loans and sustainability bonds effectively. Companies with higher levels of financial literacy are better equipped to assess the risks and benefits of such financing mechanisms, making their adoption more feasible. Similarly, leadership commitment to sustainability is a critical organizational resource that drives strategic decision-making and fosters a culture of innovation. Leaders who prioritize sustainability allocate resources to green initiatives, overcoming barriers to adoption. By applying RBV, this study examines how these internal capabilities position tourism companies to adopt sustainable financing models as a strategic response to environmental and market challenges.

Risk perception theory

Risk Perception Theory (Slovic, 1987) explores the psychological and cognitive processes by which individuals evaluate and respond to perceived risks. Unlike objective measures of risk, perceived risk is subjective and influenced by personal, social, and contextual factors. Slovic (1987) argues that individuals assess risks based on their emotional responses, past

experiences, and the perceived severity or uncertainty of outcomes. Higher perceived risks often lead to risk-averse behaviours, while lower perceived risks encourage action and innovation. Risk Perception Theory is particularly useful in understanding decision-making in contexts characterized by uncertainty, such as financial investments or the adoption of new technologies. It highlights the role of perceived financial, regulatory, and operational risks in shaping attitudes and behaviours.

Risk Perception Theory is used to examine how managers' perceptions of financial, regulatory, and operational risks act as barriers to the perceived feasibility of sustainable financing models. For example, managers may view sustainability-focused investments as financially risky due to uncertainty in returns or high upfront costs. Additionally, concerns about regulatory compliance or market instability may further discourage adoption. These perceived risks create psychological and organizational barriers, even when the actual risks are manageable. By incorporating Risk Perception Theory, this study provides insights into how negative risk perceptions hinder the adoption of sustainable financing models in the tourism sector. It also highlights the need for strategies to mitigate these perceptions, such as financial education or government incentives, to encourage broader adoption.

Transformational leadership theory

Transformational Leadership Theory (Bass, 1990) emphasizes the role of leaders in inspiring and driving organizational change. Transformational leaders go beyond traditional managerial roles by motivating employees, fostering innovation, and aligning organizational goals with broader societal or environmental objectives. This leadership style is characterized by four key components: idealized influence (leading by example), inspirational motivation (articulating a compelling vision), intellectual stimulation (encouraging creativity and problem-solving), and individualized consideration (supporting employees' needs and development). Transformational leaders are particularly effective in navigating complex challenges and fostering a culture of adaptability and sustainability within organizations.

Transformational Leadership Theory is applied in this study to explore how leadership commitment to sustainability influences the perceived feasibility of sustainable financing models. Leaders who prioritize sustainability act as change agents, setting an example by integrating environmental goals into strategic decision-making. They inspire their teams to align with sustainability objectives, allocate resources to green initiatives, and overcome resistance to change. For instance, leaders willing to invest in sustainability, even at the expense of short-term profitability, create an environment where sustainable financing models are viewed as feasible and aligned with long-term goals. This study leverages Transformational Leadership Theory to analyze how leadership behaviours and priorities play a critical role in shaping organizational perceptions and fostering the adoption of sustainable financing practices in the tourism sector.

Technology acceptance model

The Technology Acceptance Model (TAM) (Davis, 1989) posits that perceived usefulness and perceived ease of use shape the adoption of new technologies or practices. Perceived usefulness denotes the degree to which individuals anticipate that a given technology or tool will enhance their performance, whereas perceived ease of use reflects the extent to which it is effortless to operate. TAM posits that these two factors shape attitudes toward adoption, which in turn influence behavioural intentions and actual adoption. The model is widely applicable in contexts where individuals or organizations evaluate the practicality and benefits of innovative tools or systems, making it a valuable framework for studying decision-making processes.

TAM is applied in this study to examine how the perceived feasibility of sustainable financing models influences their adoption. Perceived feasibility is conceptually similar to perceived ease of use in TAM, as it reflects managers' assessments of whether sustainable financing models are practical, manageable, and aligned with organizational goals. For example, managers who believe that tools like green loans and sustainability bonds are easy to implement and beneficial for their company's sustainability performance are more likely to adopt them. Factors such as financial literacy and environmental awareness enhance perceived feasibility by increasing managers' understanding of these models and their alignment with strategic objectives. This study uses TAM to analyze how these perceptions translate into actual adoption, providing insights for improving the uptake of sustainable financing models in the tourism industry.

Research hypothesis development

This research is based on a multidisciplinary background, combining psychological theories, organizational theories, and innovation-focused theories. These theoretical frameworks together explain how behavioural factors affect perceived feasibility and the application of sustainable finance models. These theoretical foundations are integral to the study's focus. Building on these bases, the authors elucidate the following relationships:

Financial knowledge and feasibility of sustainable financial models

Financial literacy refers to an individual's ability to understand, analyze, and effectively use financial concepts and instruments to make sound decisions (Lusardi & Mitchell, 2014). Managers and decision-makers with extensive financial knowledge are more likely to understand the benefits, risks, and practical applications of sustainable finance models that enable them to perceive these tools as feasible for their organization. Understanding sustainable financial mechanisms often requires mastery of financial principles, such as risk assessment, return on investment (ROI) calculations, and financial planning (Bebbington & Larrinaga, 2014). Managers with financial knowledge are said to be able to assess the costs and benefits of adopting sustainable practices. For example, they can identify how green financial instruments align with corporate strategic objectives, such as reducing environmental impact while maintaining profitability. In addition, financial literacy reduces uncertainty by helping managers assess the long-term financial viability of sustainability-focused investments that make these models more practical and manageable.

Financial knowledge enhances the ability to make informed investment decisions, as evidenced by studies showing a positive correlation between financial knowledge and effective investment strategies (Obi-Anike et al., 2023; Seraj et al., 2022; Baihaqqy et al., 2020). This understanding helps managers perceive sustainable financial instruments as viable options for their organization, facilitating the transition to greener economic activities (Quatrini, 2021; Ayaz, 2023). Moreover, financial knowledge not only supports understanding complex financial products but also fosters confidence in making strategic decisions in line with sustainable development goals, especially when balancing profits with strategic goals (Khan et al., 2020; Balagobei & Prashanthan, 2021).

In the context of this study, financial literacy enables managers to view sustainable financing models as feasible options that align with their organization's goals. Managers with higher financial literacy are more likely to overcome perceived barriers to adoption, such as uncertainty or complexity, by leveraging their understanding of financial tools and concepts. Grounded in the theoretical framework, this paper advances the following hypothesis:

H1: Financial literacy has a positive effect on the perceived feasibility of sustainable financing models.

Environmental awareness and feasibility of sustainable financial models

Environmental awareness refers to an individual's knowledge and understanding of environmental challenges (Kollmuss & Agyeman, 2002), such as climate change, resource depletion, and pollution, as well as recognition of the importance of adopting sustainable practices to mitigate these issues. In the tourism industry, where economic growth is often accompanied by environmental degradation, environmental awareness plays a key role in shaping decision-making processes, especially in relation to the adoption of sustainability-focused initiatives such as green finance models. Managers with greater environmental awareness are more likely to appreciate the importance of sustainable financing mechanisms and see them as viable solutions for aligning business operations with environmental objectives.

Bacsi & Szanati (2021) assert that increasing environmental awareness among consumers drives the tourism industry towards more sustainable practices while stressing the importance of aligning business practices with environmental goals. This adjustment is important because managers who recognize the environmental impact of tourism activities tend to prioritize sustainability and see sustainable finance models as practical solutions for achieving their environmental goals. Furthermore, environmental awareness promotes a proactive approach to compliance with environmental regulations that often requires significant financial investment. Byrd (2007) discusses the importance of stakeholder engagement in sustainable tourism development and points out that understanding the interests and roles of different stakeholders can enhance compliance and support for sustainability initiatives. This view is supported by (Peters et al., 2018), who note that decision-making in family-owned tourism businesses is significantly influenced by long-term sustainable development goals, further reinforcing the need for sustainable financing models to meet regulatory requirements and remain competitive. Previous studies have shown support for a positive correlation between environmental awareness and sustainability-oriented decision-making. For example, Kollmuss & Agyeman (2002) found that individuals with higher environmental awareness are more likely to engage in behaviours that reduce their environmental footprint, a finding that underscores the potential of managers to adopt sustainable practices when they have a strong awareness of environmental issues. Bamberg & Möser (2007) also argue that environmental awareness is a key determinant of environmentally friendly behaviour in an organizational context, reinforcing the notion that higher awareness leads to more sustainable decision-making. Furthermore, Stern (2000) emphasizes the awareness of consequences for the environment that motivates companies to adopt sustainable practices thereby enhancing the perceived feasibility of financial instruments that support these initiatives. Grounded in the theoretical framework, this paper advances the following hypothesis:

H2: Environmental awareness has a positive effect on the perceived feasibility of sustainable financing models.

Perceived risk perception and feasibility of sustainable financial models

Risk perception refers to the subjective judgment that an individual or organization makes about potential negative outcomes or uncertainties associated with a particular decision, activity, or investment (Slovic, 1987). In the context of sustainable financial models, risk perception often stems from concerns about financial returns, implementation challenges, regulatory compliance, and market acceptance (Weber & Felzmate, 2016). Travel companies, operating in a highly competitive and resource-intensive industry, are particularly sensitive to the perceived risks of adopting innovative practices such as green bonds, sustainability-linked loans, or other sustainable financing mechanisms.

When the perceived risks associated with sustainable financial models are high, managers may consider these tools less viable due to uncertainty about their financial viability or practicality in operations (Yucel, 2023). In the tourism industry, where financial and operational risks are often seasonal, competitive, and resource-constrained, negative risk perception can serve as a significant barrier to the adoption of sustainable financial models. Managers who perceive high levels of uncertainty or potential negative consequences may be reluctant to commit to sustainable financing even if these models align with long-term strategic and environmental goals. Some empirical studies support this notion by showing that risk-avoidance behaviours arise when decision-makers lack confidence in managing uncertainties (Weber, 2002). For example, Ziolo et al. (2020) found that organizations with a high-risk perception associated with sustainability initiatives are less likely to undertake environmentally friendly activities. Furthermore, regulatory complexity and market demand uncertainty exacerbate these negative perceptions leading to reluctance to invest in sustainable practices (Durrani et al., 2020). Therefore, addressing these perceptions through enhanced information and support mechanisms is critical to promoting sustainable finance in the tourism industry (Rani, 2023). Grounded in the theoretical framework, this paper advances the following hypothesis:

H3: Risk perception has a negative effect on the perceived feasibility of sustainable financing models.

Leadership commitment to sustainability and perceived feasibility of sustainable financial models

Leadership commitment to sustainability refers to the dedication and proactive efforts of organizational leaders to integrate sustainability principles into strategic goals, decision-making processes, and operational practices (Bass & Avolio, 1994). In the tourism industry, where environmental and social issues are increasingly influencing consumer preferences and regulatory frameworks, leadership plays a critical role in fostering a culture of sustainability. Leaders who prioritize sustainability not only inspire organizational change but also influence the adoption of innovative financing mechanisms, such as sustainable financial models, by demonstrating their feasibility and strategic importance.

Leaders who prioritize sustainability provide a clear vision and strategic direction, which reduces uncertainty and encourages the integration of financial tools like green bonds into organizational objectives (Elshaer, 2024). This commitment fosters organizational learning and resource allocation, enabling capacity building through training and expert hiring, thus addressing knowledge gaps and operational constraints (Jamali, 2006). Furthermore, strong leadership signals legitimacy to stakeholders, motivating employees and reassuring investors about the organization's dedication to sustainability (Crumley et al., 2021). Empirical evidence supports the positive correlation between leadership commitment and sustainability initiatives, demonstrating that proactive leadership enhances the implementation of sustainable practices and innovative financing mechanisms (Iqbal et al., 2021). Transformational leadership, in particular, has been shown to inspire change and innovation, creating a shared vision that mobilizes resources effectively (Aarons et al., 2017; Elshaer, 2024; Hadi et al., 2024). Grounded in the theoretical framework, this paper advances the following hypothesis:

H4: Leadership commitment to sustainability has a positive effect on the perceived feasibility of sustainable financing models.

Awareness of the feasibility of sustainable financial models and the application of sustainable financial models in tourism companies

The perception of feasibility refers to an individual's or organization's belief that a particular tool, strategy, or initiative is practical, achievable, and aligned with their goals and capabilities (Ajzen, 1991). In the context of tourism companies, the perceived feasibility of sustainable financing models - such as green bonds, sustainability-linked loans, or other environmentally focused financial mechanisms - plays a crucial role in determining their adoption (Weber & Felzmate, 2016). When managers perceive these models as viable, they are more likely to integrate them into their financial and operational strategies to support sustainability objectives (D'Amato et al., 2009).

The perception of feasibility is a critical precursor to action because it reduces uncertainties and provides confidence in the potential benefits of adopting innovative tools. Tourism companies face unique challenges, such as seasonality, resource dependency, and intense competition, which often lead to risk-averse decision-making. If managers perceive sustainable financing models as feasible - based on their alignment with organizational goals, financial compatibility, and ease of implementation - they are more likely to overcome resistance and adopt these tools (Palacios-Florencio et al., 2021).

Empirical research supports the relationship between perceived feasibility and adoption behaviour. Ajzen's (1991) theory of planned behaviour highlights that perceived behavioural control (similar to perceived feasibility) is a key determinant of intention and subsequent action. Similarly, Rogers' (2003) diffusion of innovations theory emphasizes that the perceived compatibility and relative advantage of an innovation strongly influence its adoption. In the context of sustainability, studies by Schaltegger et al. (2012) show that when managers perceive sustainable business models as feasible and beneficial, they are more likely to implement them. Grounded in the theoretical framework, this paper advances the following hypothesis:

H5: Perceived feasibility of sustainable financing models has a positive effect on the adoption of sustainable financing models.

AIMS AND OBJECTIVES

The purpose of this study is to examine the behavioural factors influencing the adoption of sustainable financing models in the tourism sector, with a specific focus on Vietnamese tourism companies. It aims to explore how financial literacy, environmental awareness, risk perception, and leadership commitment impact the perceived feasibility of sustainable financing models and how this perception, in turn, influences their adoption. The research objectives include: (i) analyzing the role of financial literacy, environmental awareness, risk perception, and leadership commitment in shaping perceived feasibility; (ii) investigating the relationship between perceived feasibility and adoption of sustainable financing models; and (iii) providing actionable recommendations to enhance sustainable financial practices in the tourism industry.

METHODS

Based on the foundational theories and empirical studies presented above, the authors argue that an in-depth study is needed to expand the theoretical framework, providing more empirical evidence to consider the influence of behavioural factors such as financial literacy, environmental awareness, risk perception, and leadership commitment to the perceived feasibility of sustainable finance models. At the same time, the study also investigates how perceived feasibility impacts the application of sustainable finance models in tourism companies in Vietnam. The study clarified this influence using the PLS-SEM linear structural equation model, with the support of SPSS 22 and AMOS 20 software (Arbuckle, 2011).

For optimal robust outcomes, the authors implemented a comprehensive validation procedure in accordance with Anderson and Gerbing (1988). First, scale reliability was confirmed through Cronbach's alpha (> 0.7) and corrected item-total correlation (> 0.3). Next, Exploratory Factor Analysis (EFA) was conducted, ensuring $0.5 \leq$ Kaiser-Meyer-Olkin (KMO) ≤ 1 , a significant Bartlett's test of sphericity ($p \leq 0.05$), variance explained above 50%, Eigenvalues > 1 , and factor loadings > 0.5 (Hair et al., 1998).

Subsequently, Confirmatory Factor Analysis (CFA) was performed, recognizing that the Chi-square test ($p > 0.05$) can be sensitive to large sample sizes. Thus, additional indices, including CMIN/df, GFI, TLI, CFI, and RMSEA, were evaluated to gauge model fit. When $N > 200$, CMIN/df < 5 is acceptable (Kettinger et al., 1995). In this study, with a sample size of 368 (> 200), the model is considered satisfactory if GFI, TLI, and CFI exceed 0.9 and RMSEA remains below 0.08. Notably, RMSEA < 0.05 indicates a particularly strong fit (Steiger, 1990), and values of GFI slightly under 0.9 may still be acceptable (Zikmund et al., 2000). Furthermore, TLI and CFI in the range of 0.8 to 0.9 alongside CMIN/df < 5 and RMSEA ≤ 0.08 are also deemed acceptable in some studies (Awang, 2012; Forza & Filippini, 1998). Finally, Structural Equation Modeling (SEM) was undertaken to complete the validation process.

The guiding equation for this research can be expressed as follows:

$$\text{PFSF} = f(\text{FiL}, \text{EnA}, \text{RiP}, \text{LcS}) \quad (1)$$

$$\text{ASTF} = f(\text{PFSF}) \quad (2)$$

The research model is illustrated in Figure 1.

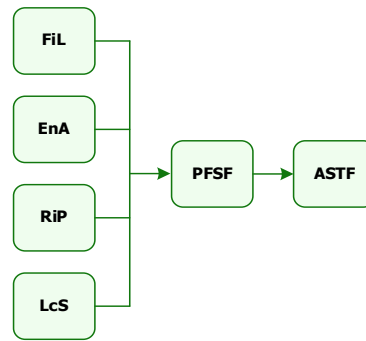


Figure 1. Research Model.

The variables within this PLS-SEM model are assessed using a Likert-type scale with five distinct levels (Likert, 1932). Specifically, the scale is arranged from 1 to 5, where 1 indicates “complete disagreement,” 2 signifies “disagreement,” 3 represents a neutral viewpoint, 4 denotes “agreement,” and 5 corresponds to “strong agreement.” The number of items used to measure each construct is grounded in the study’s theoretical framework and literature review, as outlined in Table 1.

Table 1. Measurement scales and research variables.

No.	Code	Questionnaire content	Source
I Financial Literacy (FiL)			
1	FIL1	I have a strong understanding of financial tools, such as green loans or bonds, that support sustainability initiatives	Lusardi & Tufano (2015)
2	FIL2	I can effectively evaluate the financial risks and benefits of sustainability-focused investments	Atkinson & Messy (2012)
3	FIL3	I am confident in making financial decisions that align with both profitability and sustainability goals	Huston (2010)
II Environmental Awareness (EnA)			
4	EnA1	I am aware of the environmental impact of tourism activities and the need for sustainability initiatives	Kollmuss & Agyeman (2002)
5	EnA2	I stay updated on environmental regulations and policies that affect the tourism industry	Bamberg & Möser (2007)
6	EnA3	I believe implementing sustainable practices is crucial for reducing the environmental footprint of our company	Stern (2000)
III Risk Perception (RiP)			
7	RIP1	I believe investing in sustainability initiatives poses significant financial risks for our company	Weber et al. (2002)
8	RIP2	Uncertainty in the return on investment discourages us from adopting sustainable financing models	Slovic (1987)
9	RIP3	I perceive regulatory or market risks as barriers to implementing sustainable tourism financing models	Mitchell (1999)
IV Leadership Commitment to Sustainability (LcS)			
10	LcS1	Our company’s leadership prioritizes sustainability in strategic decision-making processes	Waldman et al. (2006)
11	LcS2	I actively advocate for sustainability initiatives and encourage their adoption in our company	Egri & Herman (2000)
12	LcS3	Our leadership is willing to allocate resources for sustainability, even if it impacts short-term profitability	Aragón-Correa & Sharma (2003)
V Perceived Feasibility of Sustainable Financing Models (PFSF)			
13	PFSF1	Sustainable financing models, such as green bonds or loans, are practical for our company	Davis (1989)
14	PFSF2	The adoption of sustainable financing models aligns with our company’s financial and strategic goals	Ajzen (1991)
15	PFSF3	Our company has sufficient knowledge and resources to implement sustainable financing models effectively	Tornatzky & Klein (1982)
16	PFSF4	Adopting sustainable financing models is a realistic option for improving our company’s sustainability performance	Rogers (2003)
VI Adoption of Sustainable Tourism Financing Models (ASTF)			
17	ASTF1	Our company actively allocates financial resources to sustainability-related projects	Pan & Zhang (2021)
18	ASTF2	We regularly evaluate the financial risks and returns of sustainability-focused investments	Bocken et al. (2014)
19	ASTF3	Our company frequently engages with external financing mechanisms, such as green loans or bonds, to support sustainability projects	Tang & Zhang (2020)
20	ASTF4	Sustainability considerations influence our company’s financial decision-making and long-term investment strategies	Eccles et al. (2014)

The model comprises six measurement scales, with a total of twenty observed variables.

To ensure an adequate sample size for SEM analysis, this study follows the suggestions of Bentler & Chou (1987), who recommend a ratio of five to ten participants per survey item. In addition, Kline (2023) advises that SEM procedures should include at least 200 respondents or 10 cases for each observed variable, whichever is greater. Based on these guidelines, the minimum required sample in this research is calculated as $n = 10 \times i$, where “i” is the total number of observed variables. Since this study’s model consists of 20 observed variables, the sample size set at 10×20 is 200. To further enhance the reliability of the collected data, the largest possible sample within the suggested range was selected.

Respondents targeted CEOs, CFOs and chief investment officers of 124 Vietnamese tourism companies, including tour operators, hotels, eco-tourists and tour operators. These individuals are directly involved in making strategic decisions related to financial and sustainability initiatives. This study uses stratified random sampling to ensure that tourism companies of various types across Vietnam are adequately represented. By using stratified random sampling, this study minimizes sampling bias and enhances the study’s ability to generalize its findings as the sample more accurately reflects the diversity of travel companies operating in Vietnam. It is particularly important to examine the adoption of sustainable finance models as perceptions and behaviours can vary significantly depending on the type of company and the focus of operations.

The questionnaire is divided into two sections. The first section covers demographic details such as gender, age group, education level, organizational position, years of experience, and the type of travel company. The second section focuses on the FiL, EnA, RiP, LcS, PFSF, and ASTF variables, along with their respective measurement scales.

Before distributing the questionnaire, a preliminary review was conducted with a small group consisting of two Finance Directors, one Investment Director, and two lecturers in the financial field. This step ensured that the survey was clear, reliable, and aligned with the research objectives. Feedback from this process was incorporated to refine the questionnaire before its official launch.

To maximize response rates, the final survey was administered both online and in person. Online surveys were managed via Google Drive, while in-person surveys were distributed in the workplace to CEOs, CFOs, and other senior financial officers.

Data collection took place between June 10, 2024, and September 25, 2024. The analysis is based on 368 valid responses, providing sufficient data for statistical examination. The research team cleaned and organized these responses in Excel and then employed SPSS 22 and AMOS 20 to run the model.

Throughout this process, strict adherence to research ethics was maintained to safeguard participant anonymity and privacy. Respondents were fully informed about the study’s purpose and how their data would be used. Participation was entirely voluntary, with no undue pressure or obligation placed on individuals to complete the survey.

RESULTS

Descriptive statistical analysis

The results of the demographic analysis from the survey sample are presented in Table 2 below.

Table 2. Demographic characteristics of the survey participants. (Source: compiled from survey data)

No.	Participant demographics		Person	Percentage (%)
1	Gender	Male	224	60.87
		Female	144	39.13
2	Age Group	Below 30	58	15.76
		30–39	139	37.77
		40–49	112	30.43
		50 and above	59	16.03
3	Educational Qualification	Secondary school diploma or equivalent	19	5.16
		Bachelor’s degree	168	45.65
		Master’s degree	124	33.70
		Doctorate	57	15.49

(continued on next page)

Table 2. Continued.

No.	Participant demographics		Person	Percentage (%)
4	Job Title/Position	CEO	131	35.60
		CFO	142	38.59
		Investment Director	95	25.81
5	Years of operation	Less than 5 years	82	22.28
		5–10 years	172	46.74
		More than 10 years	114	30.98
6	Type of Tourism Company	Hotel and accommodation services	105	28.53
		Travel agency	87	23.64
		Tour operator	103	27.99
		Ecotourism company	73	19.84

The statistical results based on the survey sample provide insights into the demographic and organizational characteristics of the respondents. The sample includes 60.87% male respondents (224 individuals) and 39.13% female respondents (144 individuals), indicating a higher representation of male participants in the study. The majority of respondents fall into the 30–39 age group (37.77%), followed by those aged 40–49 (30.43%). The youngest group, aged below 30, comprises 15.76%, while the oldest group, aged 50 and above, represents 16.03%. Regarding educational qualifications, respondents with a bachelor's degree make up the largest group (45.65%), followed by those with a master's degree (33.70%). A smaller proportion of respondents hold a doctorate (15.49%), and 5.16% have a high school diploma or equivalent. In terms of job titles, the sample is fairly distributed among key leadership positions, with CFOs making up the largest group (38.59%), followed by CEOs (35.60%), while Investment Directors account for 25.81% of the respondents. Most companies have been operating for 5–10 years (46.74%), while 30.98% have been in operation for more than 10 years, and companies with less than 5 years of operation make up 22.28% of the sample. Regarding the type of tourism company, hotel and accommodation services represent the largest group (28.53%), followed closely by tour operators (27.99%), while travel agencies make up 23.64%, and ecotourism companies constitute the smallest group (19.84%).

Assess the reliability of the scale

Specific Cronbach's Alpha reliability test findings are reported in Table 3.

Table 3. Scale analysis findings for variables in the SEM model. (Source: Statistical analysis using SPSS 22 software)

Variable	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Financial Literacy (FiL): $\alpha = 0.897$				
FIL1	14.51	15.550	0.733	0.878
FIL2	14.48	15.653	0.733	0.878
FIL3	14.41	15.639	0.726	0.879
Environmental Awareness (EnA): $\alpha = 0.896$				
EnA1	13.93	18.389	0.699	0.882
EnA2	13.59	17.846	0.796	0.861
EnA3	13.59	19.004	0.747	0.873
Risk Perception (RiP): $\alpha = 0.767$				
RiP1	9.91	3.536	0.683	0.645
RiP2	10.11	4.118	0.538	0.727
RiP3	10.03	4.190	0.549	0.722
Leadership Commitment to Sustainability (LcS): $\alpha = 0.841$				
LcS1	9.24	4.431	0.765	0.765
LcS2	9.19	4.155	0.718	0.778
LcS3	9.12	4.315	0.643	0.813
Perceived Feasibility of Sustainable Financing Models (PFSF): $\alpha = 0.855$				
PFSF1	14.85	8.424	0.652	0.844
PFSF2	14.77	7.905	0.679	0.837
PFSF3	14.84	8.266	0.632	0.849
PFSF4	14.43	7.954	0.671	0.839
Adoption of Sustainable Tourism Financing Models (ASTF): $\alpha = 0.805$				
ASTF1	10.67	5.425	0.516	0.770
ASTF2	10.71	4.304	0.650	0.705
ASTF3	10.66	4.697	0.723	0.668
ASTF4	10.60	5.433	0.502	0.777

The findings indicate that all measurement scales exhibit Cronbach’s Alpha coefficients above 0.6, with values ranging from 0.767 (lowest) to 0.897 (highest). Moreover, the total item correlations exceed 0.3. These results confirm the reliability of the study’s scales, enabling their use in subsequent exploratory factor analysis.

Exploratory factor analysis

An Exploratory Factor Analysis (EFA) was performed using Principal Component Analysis (Gerbing & Anderson, 1988), retaining variables with loadings ≥ 0.5 (Hair et al., 1998). As shown in Table 4, the KMO measure is 0.822 (> 0.5), and Bartlett’s Test yields $p = 0.000$ (< 0.05), confirming the dataset’s suitability for factor analysis. The analysis further indicates that the observed indicators consolidate into six variable groups while preserving their original sequence, with all loadings exceeding 0.5. Hence, the theoretical model remains intact and demonstrates both convergent and discriminant validity.

Additionally, Table 4 reports an Eigenvalue of 1.147 (> 1), signifying that each extracted factor accounts for a substantial proportion of the variance. The total variance explained (Extraction Sums of Squared Loadings) is 67.214% ($> 50\%$), indicating that five independent factors jointly explain 67.214% of the research model.

Table 4. Rotated Component Matrix^a. (Source: Statistics using SPSS 22 software)

Pattern Matrix ^a						
	Component					
	1	2	3	4	5	6
FIL2	.859					
FIL1	.838					
FIL3	.814					
PFSF3		.846				
PFSF4		.821				
PFSF2		.786				
PFSF1		.706				
EnA2			.876			
EnA1			.868			
EnA3			.799			
ASTF1				.853		
ASTF2				.787		
ASTF4				.709		
ASTF3				.691		
RiP1					.857	
RiP2					.689	
RiP3					.689	
LcS2						.864
LcS1						.855
LcS3						.780
Kaiser-Meyer-Olkin Measure of Sampling Adequacy: 0.822						
Sig. = 0.000						
Eigenvalues = 1.147						
Total variance extracted = 67.214%						
Extraction Method: Principal Component Analysis. Rotation Method: Promax with Kaiser Normalization.						
a. Rotation converged in 6 iterations.						

PLS-SEM analysis

In accordance with the theoretical framework, the model must fulfill the measurement requirements. When applied to actual data, the measurement model should conform to five established criteria: (i) Cmin/df; (ii) TLI; (iii) CFI; (iv) NFI; and (v) RMSEA.

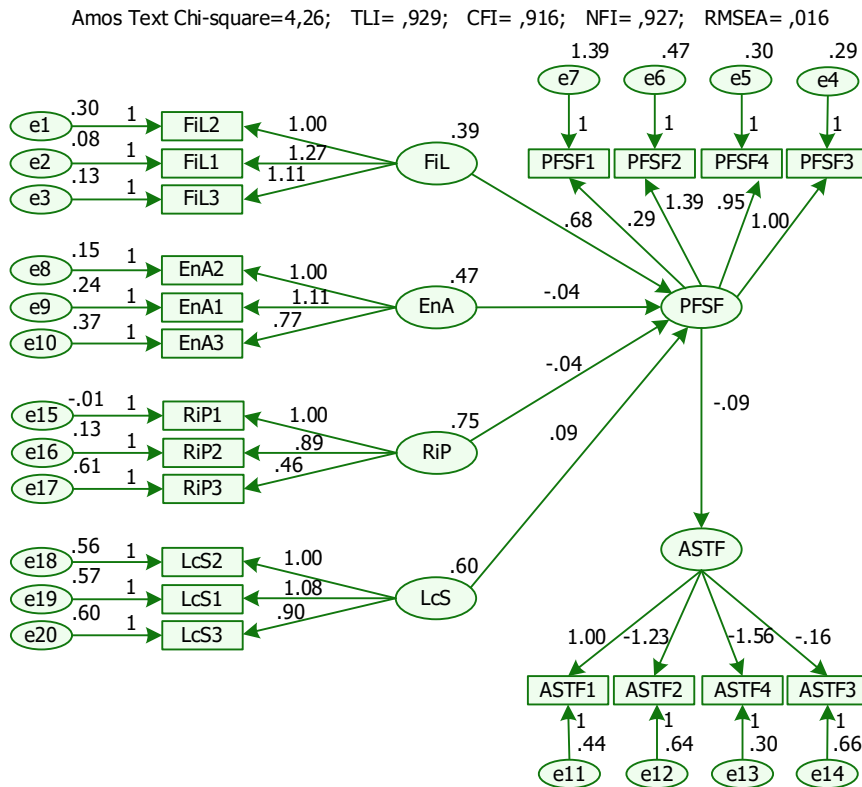


Figure 2. Regression estimation outcomes for the model. (Source: Data analyzed by the authors using AMOS 20 software)

Table 5. Assessment of model goodness-of-fit. (Source: data analyzed by the authors using AMOS 20)

No.	Metrics and examinations	Ampersand	Reference values	Model value
1	Freely Adjusted Chi-Square Ratio (Cmin/df)	x ² /df (Cmin/df)	x ² /d.f <= 5 Cmin/df<=5	4.26
2	Tuker-Levis Index	TLI	TLI > 0.90	0.929
3	Comparative Fit Index	CFI	The Comparative Fit Index (CFI) should surpass 0.90, with values closer to 1 indicating a superior model fit.	0.916
4	Normal Fit Index	NFI	An NFI value approaching 1 signifies a strong model fit.	0.927
5	Root Mean Square Error Approximation	RMSEA	An RMSEA value below 0.05 is considered acceptable.	0.016

Table 5 indicates that the integrated model aligns well with the observed data, as it fulfils the necessary accreditation criteria.

Table 6. Presents the outcomes of the hypothesis tests. (Source: Statistics obtained by using AMOS 20 software)

Hypothesis	Impact	Estimate	S.E.	C.R.	P	Label
H1	PFSF <--- FiL	0,281	0,061	4,606	***	Accept
H2	PFSF <--- EnA	0,066	0,049	1,347	0,017	Accept
H3	PFSF <--- RiP	-0,036	0,021	-1,714	0,090	Refuted
H4	PFSF <--- LcS	0,090	0,028	3,214	0,001	Accept
H5	ASTF <--- PFSF	0,112	0,041	2,731	0,002	Accept

Table 6 demonstrates that Hypotheses H1, H2, H4, and H5 are supported at $p \leq 0.05$ ($\geq 95\%$ confidence), indicating that the factors in the model are statistically significant and justify their acceptance. By contrast, Hypothesis H3 is rejected due to a p -value ≥ 0.05 .

DISCUSSION

The research results show that financial literacy has a significant positive impact on the perceived feasibility of sustainable financing models, indicating that individuals with higher financial knowledge are more likely to perceive these models as practical and effective. Leadership commitment to sustainability also shows a strong positive effect, emphasizing the crucial role of organizational leadership in driving perceptions of feasibility. Environmental awareness, while significant, demonstrates a weaker influence on the perceived feasibility of sustainable financing models, suggesting that awareness alone may not be sufficient to create confidence in adopting such models. Risk perception, contrary to expectations, does not have a significant negative impact on perceived feasibility, indicating that concerns about risks may not be as influential in this context as previously thought. Lastly, the perceived feasibility of sustainable financing models significantly influences the adoption of sustainable tourism financing models, establishing it as a critical mediator in the decision-making process. These results highlight the importance of financial literacy and leadership commitment as key predictors of success, while environmental awareness and risk perception play secondary roles. Overall, enhancing perceived feasibility remains a crucial step in fostering the adoption of sustainable financing models in the tourism sector.

The findings of this study are consistent with several previous studies that provide support for the positive relationships proposed in some hypotheses. Significant positive effects of financial knowledge on the perceived feasibility of sustainable finance models are consistent with predecessor studies, such as Lusardi & Tufano (2015), Khan et al. (2020), Balagobei & Prashanthan (2021), which emphasizes the importance of financial knowledge in decision-making and the ability to manage risk effectively. Similarly, the strong influence of leadership commitment on sustainability is consistent with the findings of Bass (1990), Schaltegger et al. (2012), Elshaer (2024), Aarons et al. (2017), which emphasizes the important role of organizational leadership in implementing and promoting sustainability initiatives. Furthermore, the role of perceived feasibility is consistent with the theory of planned behaviour of Ajzen (1991), Rogers' (2003), Schaltegger et al. (2012), which holds that perceived feasibility is an important factor influencing the adoption of new behaviours. These results reinforce the idea that perceived financial literacy, leadership commitment, and feasibility are key factors in driving the adoption of sustainable financial models.

However, the new findings in this study are contrary to some previous studies that provide new insights into the context of sustainable finance. The weaker-than-expected impact of environmental awareness on perceived feasibility contrasts with previous studies, such as Ajzen (1991) and Kollmuss & Agyeman (2002) that emphasize environmental awareness as a key driver of sustainable behaviour. This result shows that, although environmental awareness is important, it does not directly translate into awareness of feasibility in the context of tourism companies in Vietnam. This may stem from practical constraints, such as the fact that the majority of travel agencies in Vietnam have limited resources, are under financial pressure, and often focus on short-term profits rather than long-term sustainability. In addition, the negligible impact of risk perception challenges the findings from Slovic (1987), Ziolo et al. (2020), Durrani et al. (2020), Rani (2023), which emphasizes the important role of perceived risk in shaping behaviour and decision making. This difference implies that tourism managers in Vietnam place more emphasis on opportunities (e.g., financial and reputational benefits) rather than barriers. This suggests that efforts to promote sustainable financial models should highlight their practical advantages and feasibility rather than address risk concerns.

POLICY IMPLICATIONS FOR MANAGERS

To accelerate the adoption of sustainable finance models, travel companies must take targeted and feasible steps. Drawing on the findings from the research model, the authors propose recommendations aimed at enhancing understanding of sustainable finance, reinforcing leadership commitment, and demonstrating the practicality and benefits of sustainable financing approaches. These recommendations specifically address the unique barriers of the tourism industry, as outlined below:

First, tourism companies should prioritize training in financial literacy to equip leaders with the knowledge and skills needed to evaluate and implement sustainable financial models. Many of these models, such as green bonds, carbon credits, or sustainability-linked loans are complex and require a deep understanding of financial mechanisms. Managers can acquire financial literacy from tailor-made training programs that focus on these specific financial instruments and their relevance

for sustainability. Seminars, symposia, and online courses offered by financial associations, commercial banks, universities, or international organizations specializing in sustainable finance can be very valuable. In addition, companies should establish partnerships with financial professionals to provide strategic advice and support. Practical lessons, such as case studies or simulations based on real-world financial challenges, can help leaders apply their knowledge effectively.

Second, it is necessary to integrate sustainable development goals into tourism company strategies and promote accountability. Strengthening leadership commitment to sustainability requires integrating clear, measurable sustainability goals into the company's long-term strategies. Leaders should integrate these goals into the company's vision, mission, and operational plan to make sustainability a core focus of the organization. For example, companies can set specific goals, such as reducing energy consumption by 20% within five years, switching to renewable energy sources, or achieving a certain percentage of sustainability certifications for their tourism services. To ensure accountability, travel agencies should establish key performance indicators (KPIs) to monitor progress and conduct regular sustainability audits. Management can further demonstrate its commitment by establishing sustainability committees or appointing sustainability officers to oversee these efforts. Furthermore, incorporating sustainability metrics into performance reviews and incentivizing employees with rewards for achieving sustainability goals can foster a culture of accountability. For example, offering bonuses to teams that successfully implement environmentally friendly activities or achieve resource efficiency can motivate employees at all levels to adhere to the company's sustainability vision.

Third, demonstrate the feasibility and benefits of sustainable finance models by introducing successful case studies from within the tourism industry. For example, hotels that have adopted energy-saving technologies through green finance can highlight the potential for cost savings and increased customer satisfaction as evidence of the model's success. Pilot projects provide another opportunity to test and refine sustainability finance initiatives at a smaller scale before they are fully implemented. For example, a tour operator could pilot a project that funds electric vehicles for transportation, tracking outcomes such as reducing fuel costs and improving customer awareness of environmental responsibility.

Collaboration is also key to proving feasibility. Travel agencies can form partnerships with financial institutions, government agencies, and sustainability organizations to access resources, funding, and expertise. General workshops or conferences that bring together industry stakeholders to share useful information and successful examples can further reduce scepticism. In addition, companies should provide clear financial forecasts and statements to quantify the long-term benefits of sustainable finance, such as reducing operating costs, enhancing brand reputation, and complying with sustainability regulations. By implementing the above recommendations, tourism companies can address barriers to adopting a sustainable finance model that ensures alignment with long-term sustainable development goals and position themselves as leaders in the transition to a more sustainable tourism industry.

CONCLUSIONS

The findings of this study provide valuable insights into the factors influencing the adoption of sustainable financing models in the tourism sector, with a specific focus on Vietnamese tourism companies. The results highlight the critical roles of financial literacy and leadership commitment to sustainability in shaping the perceived feasibility of sustainable financing models. Financial literacy emerged as a strong predictor, underscoring the importance of equipping leadership teams with the knowledge and skills to evaluate and implement innovative financing tools effectively. Leadership commitment also demonstrated a significant positive effect, reaffirming the necessity of integrating sustainability goals into organizational strategies and fostering a culture of accountability. While environmental awareness was found to have a positive but weaker-than-expected impact, this suggests that awareness alone may not be sufficient to influence perceptions of feasibility unless supported by practical initiatives and organizational alignment. Interestingly, risk perception did not exhibit the anticipated negative effect, indicating that concerns about risk may be less of a barrier in this context than previously assumed. Furthermore, the study confirmed the mediating role of perceived feasibility, which significantly affects the adoption of sustainable financing models. These findings emphasize the importance of targeting specific areas, such as improving financial literacy, strengthening leadership commitment, and demonstrating the feasibility and benefits of sustainable financing models, as practical strategies to enhance adoption.

The insights derived from the research model enable companies to address the tourism sector's complex challenges while capitalizing on opportunities that foster sustainable growth. Although the study included 368 respondents, the sample was limited to Vietnamese tourism companies which may limit the generalizability of the findings to other regions or industries. In the future, the authors will continue to conduct research on this issue for other industries for cross-comparison analysis. At the same time, explore qualitative methods to better understand why certain variables, such as risk perception, differ from theoretical expectations.

ADDITIONAL INFORMATION

AUTHOR CONTRIBUTIONS

All authors have contributed equally.

FUNDING

The Authors received no funding for this research.

CONFLICT OF INTEREST

The Authors declare that there is no conflict of interest.

REFERENCES

1. Aarons, G., Ehrhart, M., Torres, E., Finn, N., & Beidas, R. (2017). The humble leader: association of discrepancies in leader and follower ratings of implementation leadership with organizational climate in mental health. *Psychiatric Services, 68*(2), 115-122. <https://doi.org/10.1176/appi.ps.201600120>
2. ADB. (2021). Green finance adoption in Southeast Asia: Barriers and opportunities for SMEs. *Asian Development Bank*.
3. Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes, 50*(2), 179-211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
4. Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin, 103*(3), 411-423. <https://doi.org/10.1037/0033-2909.103.3.411>
5. Aragón-Correa, J. A., & Sharma, S. (2003). A contingent resource-based view of proactive corporate environmental strategy. *Academy of Management Review, 28*(1), 71-88. <https://doi.org/10.5465/amr.2003.8925233>
6. Arbuckle, J. L. (2011). IBM SPSS Amos 20 User's Guide. *Amos Development Corporation*.
7. Atkinson, A., & Messy, F.-A. (2012). Measuring financial literacy: Results of the OECD/International Network on Financial Education (INFE) pilot study. *OECD Working Papers on Finance, Insurance and Private Pensions, 15*. <https://doi.org/10.1787/5k9cfs90fr4-en>
8. Awang, Z. (2012). *Research methodology and data analysis* (Second edition). UiTM Press.
9. Ayaz, G. (2023). Exploring the multidimensional landscape of sustainable finance: A thematic analysis approach. *Journal of Business & Tourism, 9*(01), 37-50. <https://doi.org/10.34260/jbt.v9i01.281>
10. Bacsí, Z., & Szanati, A. (2021). Influence of national culture and environmental awareness on the demand for domestic camping tourism – A cross-country analysis among European countries. *Geografický Časopis - Geographical Journal, 73*(2), 143-160. <http://dx.doi.org/10.31577/geogrcas.2021.73.2.08>
11. Baihaqqy, M., Nugraha, N., & Sari, M. (2020). The correlation between education level and understanding of financial literacy and its effect on investment decisions in capital markets. *Journal of Education and E-Learning Research, 7*(3), 306-313. <https://doi.org/10.20448/journal.509.2020.73.306.313>
12. Balagobei, S., & Prashanthan, V. (2021). Impact of financial literacy on investment decisions: Evidence from individual investors in Jaffna District. *International Journal of Accounting and Business Finance, 7*, 155. <http://dx.doi.org/10.4038/ijabf.v7i0.113>
13. Bamberg, S., & Möser, G. (2007). Twenty years after Hines, Hungerford, and Tomera: A new meta-analysis of psychosocial determinants of pro-environmental behavior. *Journal of Environmental Psychology, 27*(1), 14-25. <https://doi.org/10.1016/j.jenvp.2006.12.002>
14. Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*(1), 99-120. <https://doi.org/10.1177/014920639101700108>
15. Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics, 18*(3), 19-31. [https://doi.org/10.1016/0090-2616\(90\)90061-S](https://doi.org/10.1016/0090-2616(90)90061-S)
16. Bass, B. M., & Avolio, B. J. (1994). Improving organizational effectiveness through transformational leadership. *Sage Publications*.
17. Bebbington, J., & Larrinaga, C. (2014). Accounting and sustainable development: An exploration. *Accounting, Organizations and Society, 39*(6), 395-413. <https://doi.org/10.1016/j.aos.2014.01.003>
18. Bentler, P. M., & Chou, C. P. (1987). Practical issues in structural modeling. *Sociological Methods and Research, 16*(1), 78-117. <http://dx.doi.org/10.1177/0049124187016001004>
19. Byrd, E. (2007). Stakeholders in sustainable tourism development and their roles: Applying stakeholder theory to sustainable tourism development. *Tourism Review, 62*(2), 6-13. <https://doi.org/10.1108/16605370780000309>
20. Crumley, E., Grandy, K., Sundararajan, B., & Roy, J. (2021). Media interviews as strategic external communication to

- maintain legitimacy for sustainability activities. *Corporate Communications an International Journal*, 27(1), 148-166. <https://doi.org/10.1108/CCIJ-03-2021-0029>
21. D'Amato, A., Henderson, S., & Florence, S. (2009). Corporate social responsibility and sustainable business: A guide to leadership tasks and functions. Center for Creative Leadership.
 22. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
 23. Durrani, A., Rosmin, M., & Volz, U. (2020). The role of central banks in scaling up sustainable finance – What do monetary authorities in the Asia-Pacific region think? *Journal of Sustainable Finance & Investment*, 10(2), 92-112. <https://doi.org/10.1080/20430795.2020.1710307>
 24. Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). The impact of corporate sustainability on organizational processes and performance. *Management Science*, 60(11), 2835–2857. <https://doi.org/10.1287/mnsc.2014.1984>
 25. Egri, C. P., & Herman, S. (2000). Leadership in the North American environmental sector: Values, leadership styles, and contexts of environmental leaders and their organizations. *Academy of Management Journal*, 43(4), 571–604. <https://doi.org/10.5465/1556356>
 26. Elshaer, I. (2024). The nexus between green transformational leadership, employee behavior, and organizational support in the hospitality industry. *Administrative Sciences*, 14(6), 107. <https://doi.org/10.3390/admsci14060107>
 27. Forza, C., & Filippini, R. (1998). TQM impact on quality conformance and customer satisfaction: A causal model. *International Journal of Production Economics*, 55(1), 1-20. [https://doi.org/10.1016/S0925-5273\(98\)00007-3](https://doi.org/10.1016/S0925-5273(98)00007-3)
 28. Gerbing, D. W., & Anderson, J. C. (1988). An updated paradigm for scale development incorporating unidimensionality and its assessment. *Journal of Marketing Research*, 25(2), 186–192. <https://doi.org/10.2307/3172650>
 29. Hadi, S., Setiawati, L., Kirana, K. C., Lada, S. B., & Rahmawati, C. H. T. (2024). The effect of digital leadership and organizational support on innovative work behavior: the mediating role of emotional intelligence. *Calitatea*, 25(199), 74-83. <http://dx.doi.org/10.47750/QAS/25.199.09>
 30. Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis* (5th ed.). Prentice-Hall.
 31. Hung, P. H. (2023). Discover the views of the local community on sustainable tourism development in SaPa, Vietnam. *Central Asian Journal of Innovations on Tourism Management and Finance*, 4(10), 1-6. <https://doi.org/10.17605/cajitm.v4i10.614>
 32. Huston, S. J. (2010). Measuring financial literacy. *Journal of Consumer Affairs*, 44(2), 296–316. <https://doi.org/10.1111/j.1745-6606.2010.01170.x>
 33. Iqbal, Q., Ahmad, N., & Li, Y. (2021). Sustainable leadership in frontier Asia region: Managerial discretion and environmental innovation. *Sustainability*, 13(9), 5002. <https://doi.org/10.3390/su13095002>
 34. Jamali, D. (2006). Insights into triple bottom line integration from a learning organization perspective. *Business Process Management Journal*, 12(6), 809-821. <https://doi.org/10.1108/14637150610710945>
 35. Kettinger, W. J., Lee, C. C., & Lee, S. (1995). Global measures of information service quality: A cross-national study. *Decision Sciences*, 26(5), 569-588. <https://doi.org/10.1111/j.1540-5915.1995.tb01440.x>
 36. Khan, M., Rabbani, N., & Kadoya, Y. (2020). Is financial literacy associated with investment in financial markets in the United States? *Sustainability*, 12(18), 7370. <https://doi.org/10.3390/su12187370>
 37. Kline, R. B. (2023). Principles and practice of structural equation modeling (5th ed.). Guilford Press.
 38. Kollmuss, A., & Agyeman, J. (2002). Mind the gap: Why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research*, 8(3), 239–260. <https://doi.org/10.1080/13504620220145401>
 39. Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology*, 22(140), 1–55. https://www.academia.edu/118125341/A_technique_for_the_measurement_of_attitudes
 40. Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5–44. <https://doi.org/10.1257/jel.52.1.5>
 41. Lusardi, A., & Tufano, P. (2015). Debt literacy, financial experiences, and overindebtedness. *Journal of Pension Economics & Finance*, 14(4), 332–368. <https://doi.org/10.1017/S1474747215000232>
 42. Mitchell, V.-W. (1999). Consumer perceived risk: Conceptualisations and models. *European Journal of Marketing*, 33(1/2), 163–195. <https://doi.org/10.1108/03090569910249229>
 43. Nguyen, T. N., Pham, T. H., & Le, H. T. (2021). Sustainable tourism and environmental protection in the Mekong Delta. *Journal of Environmental Science and Management*, 24(2), 15-24.
 44. Nguyen, T. T., & Do, D. H. (2020). Environmental impacts of mass tourism in Vietnam: Current challenges and policy recommendations. *Sustainability*, 12(15), 6183. <https://doi.org/10.3390/su12156183>
 45. Nunnally, J. C. (1978). *Psychometric theory*. New York: McGraw-Hill.
 46. Obi-Anike, H., Daniel, O., Onodugo, I., Ike, O., & Imhanrenialena, B. (2023). The role of financial information literacy in strategic decision-making effectiveness and sustainable performance among agribusiness entrepreneurs in Nigeria. *Sustainability*, 15(13), 10416. <https://doi.org/10.3390/su151310416>
 47. Palacios-Florencio, B., Santos-Roldán, L., Berbel-Pineda, J., & Canalejo, A. (2021). Sustainable tourism as a driving

- force of the tourism industry in a post-COVID-19 scenario. *Social Indicators Research*, 158(3), 991-1011. <https://doi.org/10.1007/s11205-021-02725-7>
48. Pan, X., & Zhang, D. (2021). Corporate environmental responsibility and financial performance: The moderating role of corporate life cycle. *Journal of Cleaner Production*, 281, 124575. <https://doi.org/10.1016/j.jclepro.2020.124575>
 49. Peters, M., Kallmuenzer, A., & Buhalis, D. (2018). Hospitality entrepreneurs managing quality of life and business growth. *Current Issues in Tourism*, 22(16), 2014-2033. <https://doi.org/10.1080/13683500.2018.1437122>
 50. Peterson, R. A. (1994). A meta-analysis of Cronbach's coefficient alpha. *Journal of Consumer Research*, 21(2), 381-391. <https://doi.org/10.1086/209405>
 51. Pham, H. H. (2024). Impact of Environmental Audits on the Performance of Vietnamese Tourism Companies. *Central Asian Journal of Innovations on Tourism Management and Finance*, 5(2), 34-44. <https://doi.org/10.17605/cajtmf.v5i2.703>
 52. Quatrini, S. (2021). Challenges and opportunities to scale up sustainable finance after the COVID-19 crisis: Lessons and promising innovations from science and practice. *Ecosystem Services*, 48, 101240. <https://doi.org/10.1016/j.ecoser.2021.101240>
 53. Rani, A. M., Dariah, A. R., Madhoun, W. A., & Srisusilawati, P. (2023). Awareness of sustainable finance development in the world from a stakeholder perspective. *International Journal of Management and Sustainability*, 12(3), 323-336. <https://doi.org/10.18488/11.v12i3.3428>
 54. Richardson, R. B. (2021). The role of tourism in sustainable development. In *Oxford Research Encyclopedia of Environmental Science*. <https://doi.org/10.1093/acrefore/9780199389414.013.689>
 55. Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.
 56. Schaltegger, S., Lüdeke-Freund, F., & Hansen, E. G. (2012). Business cases for sustainability: The role of business model innovation for corporate sustainability. *International Journal of Innovation and Sustainable Development*, 6(2), 95-119. <https://doi.org/10.1504/IJISD.2012.046944>
 57. Seraj, A., Alzain, E., & Alshebami, A. (2022). The roles of financial literacy and overconfidence in investment decisions in Saudi Arabia. *Frontiers in Psychology*, 13, 892784. <https://doi.org/10.3389/fpsyg.2022.892784>
 58. Slovic, P. (1987). Perception of risk. *Science*, 236(4799), 280-285. <https://doi.org/10.1126/science.3563507>
 59. Steiger, J. H. (1990). Structural model evaluation and modification: An interval estimation approach. *Multivariate Behavioral Research*, 25(2), 173-180. https://doi.org/10.1207/s15327906mbr2502_4
 60. Stern, P. C. (2000). Toward a coherent theory of environmentally significant behavior. *Journal of Social Issues*, 56(3), 407-424. <https://doi.org/10.1111/0022-4537.00175>
 61. Tang, Y., & Zhang, Y. (2020). Green credit, corporate investment efficiency, and environmental performance: Evidence from China. *Energy Economics*, 90, 104859. <https://doi.org/10.1016/j.eneco.2020.104859>
 62. Tornatzky, L. G., & Klein, K. J. (1982). Innovation characteristics and innovation adoption-implementation: A meta-analysis of findings. *IEEE Transactions on Engineering Management*, 1, 28-45. <https://doi.org/10.1109/TEM.1982.6447463>
 63. UNWTO. (2019). Transport-related CO2 emissions of the tourism sector: Modelling results. *United Nations World Tourism Organization*.
 64. Waldman, D. A., Siegel, D., & Javidan, M. (2006). Components of CEO transformational leadership and corporate social responsibility. *Journal of Management Studies*, 43(8), 1703-1725. <https://doi.org/10.1111/j.1467-6486.2006.00642.x>
 65. Weber, E. U., Blais, A.-R., & Betz, N. E. (2002). A domain-specific risk-attitude scale: Measuring risk perceptions and risk behaviors. *Journal of Behavioral Decision Making*, 15(4), 263-290. <https://doi.org/10.1002/bdm.414>
 66. Weber, O., & Felzmate, B. (2016). Sustainable banking: Managing the social and environmental impact of financial institutions. University of Toronto Press.
 67. WTTC. (2020). Vietnam: Economic Impact Report 2020. World Travel and Tourism Council. <https://wttc.org/research/economic-impact/>
 68. Yates, J. F., & De Oliveira, S. (2016). Culture and decision making. *Organizational Behavior and Human Decision Processes*, 136, 106-118. <https://doi.org/10.1016/j.obhdp.2016.05.003>
 69. Yucel, O. (2023). Sustainable investment attitudes based on sustainable finance literacy and perceived environmental impact. *Sustainability*, 15(22), 16026. <https://doi.org/10.3390/su152216026>
 70. Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2000). *Business research methods*. Dryden Press.
 71. Ziolo, M., Bał, I., & Cheba, K. (2020). The role of sustainable finance in achieving sustainable development goals: Does it work? *Technological and Economic Development of Economy*, 27(1), 45-70. <https://doi.org/10.3846/tede.2020.13863>

Нгуєн Тхі Тхань Н., Нгуєн Тхі Кім Т., Фам Тхань Т., Фам Хуй Х.

МОДЕЛІ ФІНАНСУВАННЯ СТАЛОГО ТУРИЗМУ: ПОВЕДІНКОВІ ДОСЛІДЖЕННЯ В'ЄТНАМСЬКИХ ТУРИСТИЧНИХ КОМПАНІЙ

У цьому дослідженні розглянуті фактори, що впливають на впровадження сталих фінансових моделей у туристичній галузі, з фокусом на в'єтнамські туристичні компанії. Автори вивчають взаємозв'язок між фінансовою грамотністю, прихильністю керівництва, екологічною свідомістю, сприйняттям ризиків і сприйняттям доцільності. Використовуючи дані 368 менеджерів, у тому числі генеральних і фінансових директорів 124 туристичних компаній, дослідження застосовує кількісний підхід і аналізує взаємозв'язки за допомогою моделі PLS-SEM із використанням SPSS 22 й AMOS 20. Результати показують, що фінансова грамотність і прихильність керівництва суттєво впливають на сприйняття здійсненності, що дуже впливає на прийняття стійких фінансових моделей. Варто зазначити, що екологічна обізнаність має позитивний, але слабший, ніж очікувалося, вплив, водночас сприйняття ризиків не є суттєвим бар'єром. Ці результати підкреслюють вирішальну роль сприйняття доцільності в поєднанні поведінкових факторів і впровадження моделей сталого фінансування. Дослідження надає практичні рекомендації для туристичних компаній, наголошуючи на необхідності підвищення фінансової грамотності, розвитку прихильності керівництва та демонстрації практичності сталого фінансування. Ці стратегії мають важливе значення для прискорення впровадження сталих фінансових моделей, що врешті-решт сприятиме сталому зростанню туристичної галузі.

Ключові слова: зелені фінанси, стале фінансування, сталий розвиток туризму, В'єтнам

JEL Класифікація: G32, Q56, O16