

Social sustainability practice innovation diffusion and its relationship to organizational improvement: A mechanism for Vietnamese handicraft companies

Abstract

Social sustainability practices (SSP) have gained global recognition as management innovations for improving organizational performance, thus promoting sustainable development of individual companies and across supply chains. However, the literature on the diffusion mechanisms of SSP, particularly in developing countries, remains ambiguous. This study aims to fill this gap by exploring SSP adoption in the Vietnamese handicraft industry. An explanatory sequential mixed-methods approach was employed, beginning with a survey of 310 Vietnamese handicraft companies. This was complemented by 12 in-depth case studies, providing a comprehensive view of the SSP diffusion process. The survey identified five distinct patterns of SSP adoption: innovative adopters, early adopters, early followers, late followers, and laggards. A deeper analysis revealed that companies with a proactive SSP approach, particularly the first three categories (innovative adopters, early adopters, and early followers), focus on supply chain responsibility-based and employee-oriented practices, leading to superior performance improvements compared to their reactive counterparts. These findings enhance stakeholder theory by illustrating its integration with the diffusion of innovation theory, offering an insightful diffusion mechanism toward full-scale SSP adoption in Vietnamese handicraft companies. Practically, the research outcomes provide valuable insights for managers, policymakers, and sustainability practitioners. They offer guidance on benchmarking SSP adoption and enhancing performance, with the identified adoption patterns serving as milestones for companies to achieve different levels of social sustainability.

Keywords Social sustainability practices; Innovation adoption; Adoption pattern; Organizational improvement; Handicraft companies; Diffusion of innovation

Social sustainability practices (SSP) encompass a range of actions and procedures adopted by companies to effectively promoting social sustainability responsibilities throughout their entire supply chain (Klassen & Vereecke, 2012; Lee & Jung, 2019). They represent management innovations designed to revolutionize business operations and processes, thereby contributing to sustainable development. This concept of sustainable development, defined as meeting the needs of the present without compromising the ability of future generations to meet their own needs (Development, 1987), because of the numerous potential benefits that they can offer (D'Souza et al., 2020; Ding et al., 2021; Zhu et al., 2012). For example, promoting employee welfare and fair working conditions is a critical aspect of SSP that transforms companies into more attractive employers (Shafiq et al., 2014). Engaging with and contributing to the local communities can help companies build their business reputation among their customers and the public (Bai & Chang, 2015; Hasan, 2016). Importantly, ensuring positive social conduct at suppliers' premises has a major role in achieving performance benefits of individual companies and along their supply chains (Lau, 2019; Mathiyazhagan et al., 2021). Consequently, SSP have become increasingly diffused by companies seeking to maintain their competitive advantage in the marketplace, as evidenced by research from Mani et al., (2020) and Xu & Zeng (2021).

Despite the significant potential of SSP, their recognition and adoption remain limited among many companies in developing countries, as noted by Govindan et al. (2020b) and Shaw et al. (2022). A case in point is the diffusion of SSP in Vietnamese handicraft companies. The diffusion of SSP by handicraft companies in Vietnam is a typical example. There are still cases of social sustainability incidents in Vietnamese handicraft companies. These companies often face social

sustainability challenges, primarily due to violations of labor practices, unsafe working environments, and the lack of environmentally friendly manufacturing processes(Le et al., 2018; VIRI, 2015). These incidents underscore the complexity and challenges involved in effectively diffusing SSP innovations among Vietnamese handicraft companies to promote sustainable development. The sustainable development of these companies is vital for Vietnam's economy. They create millions of jobs in rural areas, generate over USD 2.0 billion in annual export value, and contribute significantly to cultural preservation and tourism (Thu et al., 2019; UNIDO, 2013b). This situation underscores the urgent need for research into effective diffusion mechanisms of SSP innovations, which could play a pivotal role in promoting sustainable development among organizations in developing countries.

Much research has been done on the diffusion of SSP in organizations (Gunarathne & Sankalpani, 2021; Pimenta et al., 2021). This leads to the identification of a comprehensive range of practices, including but not limited to: improving labor conditions, advocating for human rights, enhancing working environments, supporting community development, promoting diversity, encouraging ethical behavior, and managing product and supply chain responsibilities (Lau, 2019; Nakamba et al., 2017; Tran et al., 2021). These studies have revealed various patterns of SSP adoption, reflecting different levels and perspectives of adoption(Shafiq et al., 2014; Tate et al., 2013; Zhu et al., 2012). often involve mechanisms where SSP diffuses from proactive adopters to their reactive counterparts, progressing through distinct stages (Hasan, 2016; Holt & Ghobadian, 2009; Zhu et al., 2011). However, these mechanisms predominantly focus on ethical behavior-based adoption, leaving the full-scale adoption of SSP in developing countries less explored. Previous studies indicate that companies proactively engaging in SSP tend to achieve better performance outcomes (Govindan et al., 2020a; Zhu et al., 2014). Several of them have successfully provided an insightful understanding of which specific categories of SSP can be most

effective in promoting the proactive approach and overall firm performance (see Zhu et al., (2012); Mitra and Datta (2014); Croom et al., (2018); and Zhuang et al., (2021)). Again, these studies have placed importance on ethical behavior-based practices, suggesting that further research taking a comprehensive set of SSP into consideration is required.

To address the identified gaps in the extant SSP research, this study draws on the stakeholder theory and integrates it with the diffusion of innovation (DOI) framework to propose that different clusters of companies characterized with specific SSP innovations, can be identified. Taking Vietnamese handicraft companies as the subjects of investigation, one research objective of this study is to integrate these two theories by advancing the assumption that the stakeholder theory justifies the benefits of adopting SSP, while insights from the DOI framework envisage that proactive adopters of SSP innovations would perform better than their reactive peers. Another objective is to examine whether companies could be categorized based on the SSP diffusion mechanism and, if so, which SSP categories lead to better performance outcomes among them. To achieve these objectives, an explanatory sequential mixed-methods approach is employed. The research begins with a comprehensive survey of 310 Vietnamese handicraft companies, followed by 12 detailed case studies to offer deeper insights that augment and complement the survey findings. By combining the DOI framework with stakeholder theory as a theoretical foundation, this study advances the sustainability research and theory by developing a taxonomy of SSP adoption patterns, particularly focusing on medium, small, and micro firms in developing countries. The taxonomy offers an integrated framework for understanding the diffusion mechanism of SSP, providing valuable insights for managers, public policymakers, and sustainability practitioners on how to diffuse SSP within companies and across supply chains.

Theoretical foundation and proposition development

Theoretical foundation

SSP are increasingly recognized as management innovations that are being diffused in companies to fulfill their social sustainability responsibilities, while promoting better outcomes of business performance (Gao et al., 2017; Zhu et al., 2012; Zhu et al., 2014). These responsibilities are integrated within specific business operations and processes, aiming to ensure the welfare and safety for both individuals and communities throughout the supply chains (Shafiq et al., 2014; Xu & Zeng, 2021). Specifically, SSP must encompass both present and future stakeholders, including employees, customers, communities, and suppliers (Lau, 2019; Lee & Jung, 2019). This leads to a broad set of innovations manifested in eight categories, namely labor conditions, human rights, working environments, community development, diversity support, ethical behavior, product responsibilities, and supply chain responsibilities (Klassen & Vereecke, 2012; Tran et al., 2021). In each category, SSP have diffused along a pathway from basic to advanced practices, leading to reactive and proactive approaches respectively for being socially sustainable (Croom et al., 2018; Marshall et al., 2015). The use of both reactive and proactive approaches is critical for realizing sustainable development within companies and across their entire supply chains.

Within these approaches, the DOI framework is particularly pertinent for examining how SSP are being diffused among organizations (Castka & Corbett, 2016; Sarkis et al., 2011; Tate et al., 2013). According to Rogers (2010), companies typically progress through a sequence of stages in their decision to fully embrace a specific innovation. These are divided into five stages, namely knowledge, persuasion, decision, adoption, and confirmation. The DOI framework further asserts that the innovation will be communicated through certain channels among the members of a social system over a period of time. As such, based on their willingness to adopt innovation, companies can be segmented into five distinct adoption patterns: innovative adopters, early adopters, early

followers, late followers, and laggards. These adoption patterns function as a diffusion path toward greater engagement in the innovation (Sarkis et al., 2011; Triguero et al., 2016; Zhu et al., 2012).

Many of the Vietnamese handicraft companies exhibit such adoption patterns, examples are illustrated in the case study in Box 1.

Box 1 Examining the adoption of social insurance in alignment with the patterns of SSP adoption among Vietnamese handicraft organizations

The new Social Insurance Law, implemented in January 2018, obligates Vietnamese enterprises to participate in a mandatory social insurance scheme, with non-compliance potentially resulting in legal consequences according to the Criminal Law.

Applying the qualitative approach detailed in the methodology section, we investigate the adoption of social insurance by 12 Vietnamese handicraft organizations. This exploration serves to illustrate how the adoption of the SSP aligns with the DOI framework. Through the insights garnered from interviews, we have categorized these organizations into three distinct groups, each showcasing distinct characteristics as outlined below:

Adoption patterns	Characteristics	Organizations	Quotations
Laggards	No adoption	Cooperative 4, Cooperative 6, Company 7, Company 9	Cooperative 6: <i>“The cooperative extends health and accident insurance coverage to its employees. Nonetheless, social insurance is not provided due to insufficient financial resources within the cooperative”</i> . Company 7: <i>“If we shoulder the burden of social insurance payments, it would escalate labor costs, consequently leading to higher product prices. This, in turn, would hinder our ability to successfully market and sell our products”</i> .
Late followers, early followers, early adopters	Partial adoption	Cooperative 10, Cooperative 11	Cooperative 10: <i>“The workforce benefits from comprehensive coverage, including social insurance, health insurance, and accident insurance. However, certain old employees express a disinterest in social insurance, leading them to be solely covered by health and accident insurance policies”</i> .
Innovative adopters	Full adoption	Company 1, Company 2, Company 3, Company 5, Company 8, Company 12	Company 8: <i>“We are obligated to provide them with clarifications and sometimes even compel them to contribute to social insurance. In the event of incidents like labor accidents, the social insurance organization will shoulder the associated costs. Failure to adhere to the law could potentially lead to legal actions or financial penalties”</i> .

The rationale behind the “non-adoption” and “partial adoption” categories is complex, encompassing perspectives from employees and organizations alike. For example, insights from interviews reveal that a significant number of workers are hesitant to contribute to social insurance, as they expect a deduction of approximately 10.5% from their earnings. This reluctance seems to be influenced by the prevailing tendency among rural workers to avoid permanent employment commitments. Similarly, many small enterprises in Vietnam are disinclined to adopt social insurance due to its significant financial burden. In Binh Duong province, the average monthly wage is around VND 4.2 million. When companies choose to cover social insurance expenses, it results in a 22% expenditure for the company, which is roughly VND 1 million per employee. Consequently, businesses often try to evade these financial responsibilities.

The analysis above highlights the alignment between social insurance adoption among Vietnamese handicraft companies and the DOI framework. While certain enterprises eagerly extend social insurance coverage to their workforce, a significant number choose not to do so. Both individuals and companies need time to fully grasp the importance of providing social insurance coverage for their workforce.

While the DOI framework has been instrumental in understanding innovation diffusion, its application in organizational studies, particularly for SSP adoption patterns, is notably limited in existing literature. Most prior studies on the DOI framework have concentrated on identifying which SSP are being adopted and the critical factors determining their adoption (Castka & Corbett, 2016; Gunarathne & Sankalpani, 2021; Tiwari & Thakur, 2021), or on exploring structural and relationship embeddedness that may facilitate higher diffusion of SSP among suppliers (Tate et al., 2013). As far as this study is concerned, several attempts have been made to analyze the adoption patterns based on which SSP companies are engaging under various circumstances. Zhu et al., (2012), for example, study the adoption of SSP amongst large-scale Chinese manufacturers, identifying three prominent patterns: early adopters, followers, and laggards. Triguero et al., (2016) capture important SSP adoption patterns in European SMEs, leading to leaders, followers, loungers, and laggards. In Indonesia context, Susanty and Sari (2018) propose two types of SSP adopters among SMEs, including early adopters and laggards. These findings highlight the importance of identified adoption patterns in representing a different stage mechanism of diffusing SSP from proactive adopters to reactive laggards. However, most of the existing studies focus on ethical behavior-based practices (Croom et al., 2018; Triguero et al., 2016). This leaves a crucial question of how a full range of SSP is being diffused has remained unanswered.

While the use of the DOI framework in identifying SSP adoption patterns has not been widely studied to date, stakeholder theory has received considerable scholarly attention to understand the more proactive companies appear to be, the greater performance improvements companies appear to attain (Bai & Chang, 2015; Mani & Gunasekaran, 2018; Shafiq et al., 2014; Yuen et al., 2017). The stakeholder theory (Freeman 1984) posits that to remain competitive, companies exceed stakeholder expectations regarding SSP adoption (Kitsis & Chen, 2021; Lau, 2019; Sarkis et al., 2011). The theory also highlights how pressures from diverse stakeholder have

been brought about the influences of laborers, the government, public, associations, customers, peers, and suppliers on a company's decisions to adopt SSP (Govindan et al., 2020b; Nakamba et al., 2017; Xu & Zeng, 2021; Zhu et al., 2014). Proactively incorporating these pressures into company strategies and policies is critical for achieving greater organizational performance, evidenced by increased sales revenue (Bai & Chang, 2015; Yuen et al., 2017), reduced costs (Agarwal et al., 2018; Zhang et al., 2020), and enhanced employee and customer satisfaction (Lasrado & Zakaria, 2020; Mani et al., 2020), ultimately leading to sustained competitive advantage. While the stakeholder theory provides an insightful theoretical foundation for better understanding that proactive companies may perform best, its use remains limited in explaining which SSP categories drive proactive behavior and subsequent performance improvements. One notable exception is Shafiq et al., (2014), who draws on the stakeholder theory to categorize firms into four main patterns as broadly-engaged, community-engaged, supplier-engaged, and unengaged with a descending order for improved financial performance. For them, community development-based and supply chain responsibility-based practices are the most crucial in clearly separating among patterns. Their focus has instead been on companies with proactive orientation from a developed country's setting, thus articulating a need for further research on reactive orientation ones in a developing country such as Vietnam of this current study. Since numerous Vietnamese handicraft companies involve multiple stakeholders, including the government and overseas customers, the utilization of stakeholder theory to explain their adoption of SSP, to meet both local and global ethical business standards, is deemed suitable. Box 2 provides a brief case study in Vietnam to exemplify this scenario.

Box 2 Multiple stakeholders and SSP adoption in Company 5

Established in 2010, Company 5 specializes in designing, manufacturing, and exporting bamboo and rattan handicrafts. The company has effectively served global clients, including prominent names like Walmart, Spire One, and Cosplus. To access international markets, the company has diligently achieved several SSP standards, including the Business Social Compliance Initiatives (BSCI) and Forest Stewardship Council (FSC) certifications. Notably, distinct customers have their specific standards and requirements. For instance, while European clients demand BSCI compliance, their counterparts in the USA follow their established code of conduct, effectively bypassing BSCI.

To maintain a sustainable supply chain, the company conducts annual evaluations of its suppliers. These assessments are guided by the company's specific criteria, which prevent complete adherence to BSCI standards due to the stipulation that assessors must hold BSCI certification. The company's supplier requirements encompass crucial aspects, including the prohibition of child labor, assurance of product quality, and adherence to Vietnam's labor laws regarding working hours and safety regulations. Additionally, the company considers extra factors, such as the historical collaboration between both parties and the suppliers' financial capability. As a sign of their commitment, suppliers demonstrate their dedication by endorsing and signing the pertinent documents.

The team in charge of supervising SSP adoption at Company 5 highlights the numerous benefits that come with embracing SSP practices. Chief among these is the potential for heightened profitability. Through aligning with the demands of social sustainability, the company stands to build a positive rapport with its customers. Obtaining certificates that verify these standards will inevitably lead to higher product purchase prices compared to uncertified products. Furthermore, customers are more likely to place significant orders with a single product code, as opposed to fragmented orders that involve multiple product codes.

In addition to financial benefits, the implementation of SSP also provides enhanced protection and advantages for the company's workforce. It is evident that refraining from SSP adoption might isolate customers, ultimately resulting in fewer job opportunities for employees. On the contrary, by embracing SSP principles, the company guarantees stability for its employees by offering steady employment and improved compensation.

The case study of Company 5 emphasizes the significant impact of various stakeholders, such as international customers, employees, suppliers, and governmental bodies, in propelling the implementation of SSP. This adoption has brought about numerous benefits for the company. Hence, stakeholder theory holds great significance for businesses, compelling them not only to meet but also to exceed stakeholder expectations regarding SSP adoption to uphold competitiveness.

An integrated framework that combines the DOI framework with stakeholder theory provides valuable insights into the diffusion mechanism where specific types of SSP can be identified to promote larger performance gains. In this context, the DOI framework serves as a secondary theoretical lens that sheds light on what practices will provide benefits. For example, Zhu et al., (2012) employed the DOI framework alongside ecological modernization theory to

distinguish between early adopters, followers, and laggards to analyze environmental, operational, and economic performance. The study by Zhu et al. (2012) revealed that factors such as internal environmental management and investment recovery are instrumental in positioning firms as SSP leaders, thereby enhancing their overall performance. Given this evidence, it emphasizes the significance of extending the stakeholder theory with the DOI framework in fully explaining the diffusion of SSP and its performance outcomes amongst Vietnamese handicraft companies. Fig. 1 illustrates the integrated framework adopted in this study.

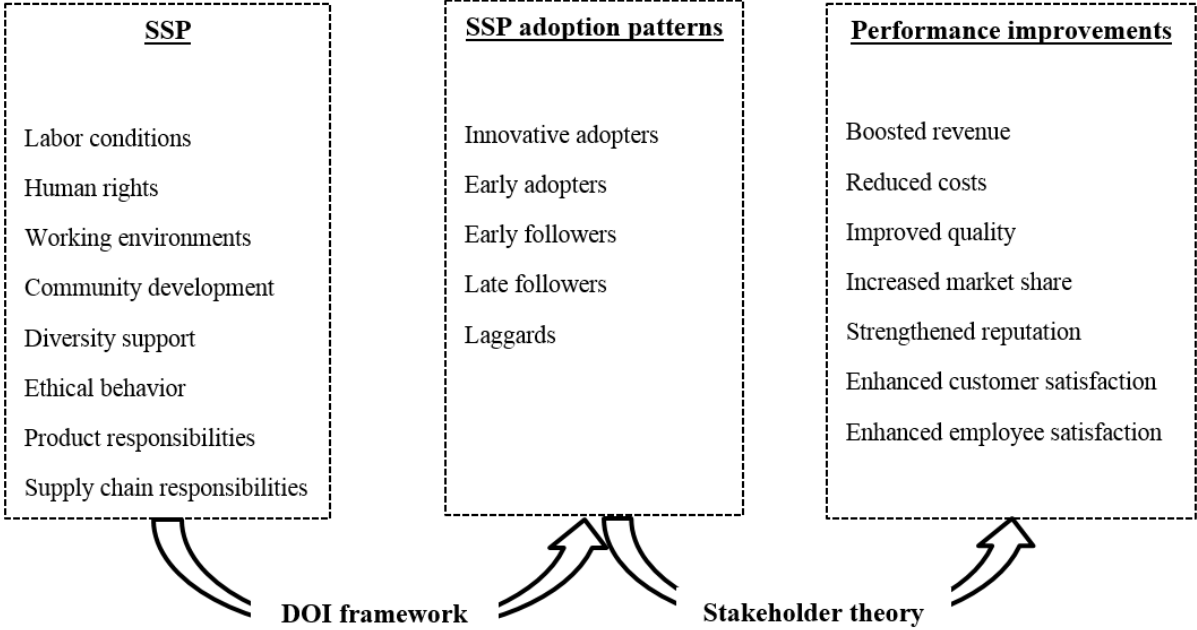


Fig. 1 The integrated framework

Proposition development

SSP adoption in companies can generally be categorized into reactive and proactive approaches. The reactive approach typically involves basic practices such as ensuring fair wages and prohibiting child labor and discrimination, aligning with governmental laws and regulations (Hasan, 2016; Huq & Stevenson, 2020). In contrast, the proactive approach encompasses advanced practices, including educational and training initiatives and the formalization of policies and

procedures regarding SSP (Marshall et al., 2015; Shafiq et al., 2014). As a developing country focusing on economic growth, particularly through exports, Vietnam has been actively integrating into the global economy since the late 1980s (Teo et al., 2020; Thu et al., 2019). This shift places Vietnamese handicraft companies, which primarily produce and export to developed countries, at the forefront of fulfilling social sustainability responsibilities in individual operations and along the whole supply chains (Tran et al., 2021). To encourage SSP adoption, the Vietnamese government, alongside non-governmental organizations, has initiated various programs. Notably, greener production initiatives have been supported by the United Nations Industrial Development Organization (UNIDO, 2013a, 2013b). Meanwhile, proactive companies who implement advanced SSP practices are often recognized as exemplary adopters. This effort facilitates a diffusion mechanism boosting the adoption of SSP by Vietnamese handicraft companies. Those recognized for their international standards of social and ecological obligations upon a satisfactory official assessment are provided with the Excellent label attached to their products (Tran, 2015). The strict demands for SSP adoption imposed by importers (VIRI 2015) and a shortage of skilled workers in the industry (Teo et al., 2020) generate competing demands upon Vietnamese handicraft companies seeking to be recognized as proactive enterprises.

The proactiveness of Vietnamese handicraft companies in SSP adoption is influenced by a range of contextual factors, including organizational size, export orientation, adherence to SSP standards (Tran et al., 2021), and national strategies and policies (UNIDO, 2013b; VIRI, 2015). Differing internal organizational characteristics drive companies to implement SSP under government pressures at varying levels (Zhu et al., 2012). Consequently, while some Vietnamese companies may gain significant advantages from their social efforts, others may face disadvantages.

Due to different organizational characteristics and stakeholder pressures, it is expected that different types of SSP adopting companies exist. For example, companies with a strong export orientation are likely to adopt SSP more extensively, driven by the pressures exerted by overseas customers than domestic-oriented companies (Tran et al., 2021). Large-scale companies having more financial and human resources at their disposal, might find it more feasible to implement comprehensive SSP initiatives than small-scale ones (Marshall et al., 2015; Shafiq et al., 2014). These arguments lead to an assumption, based on the DOI framework, that companies can be segmented into distinct adoption patterns according to their willingness and capability to implement SSP innovations. Following Zhu et al.'s (2012) recommendation to integrate propositions in quantitative research, the initial proposition of this study is structured as follows:

Proposition 1. Several distinct patterns can be identified among various companies based on their varying levels of SSP adoption.

Based on the principles of the DOI framework and stakeholder theories, it is posited that the diffusion of SSP innovations should result in observable enhancements in organizational performance (Zhu et al., 2012). Thus, companies often adopt SSP by committing organizational resources and integrating these practices comprehensively into their operations and processes (Kitsis & Chen, 2021; Mani & Gunasekaran, 2018). Their commitment is often seen as the confirmation stage, according to the DOI framework, taken by key decision-makers after observing the adoption behavior of peers within their social system (Castka & Corbett, 2016; Johnson, 2015). Proactive adopters, who respond to SSP demands earlier than their peers, are often positioned to pioneer new business processes, products, or markets. This innovative approach is likely to result in positive performance outcomes (Rogers, 2010; Zhu et al., 2012).

Faced with the increasing pressures for SSP adoption, especially those imposed by overseas customers, many Vietnamese handicraft companies have proactively incorporated SSP adoption into their business strategies and policies (UNIDO 2013b). Despite the growing trend towards proactive SSP adoption, the question of whether such proactive adopters outperform their reactive counterparts remains relatively unexplored. Given the fact that SSP adoption could generate significant performance improvement as companies transition towards more comprehensive engagement in SSP initiatives, this study proposes the following second proposition:

Proposition 2. Companies with higher levels of adopting SSP garner better performance.

Methodology

This study investigates the diffusion of SSP, as identified in prior research, and examine whether this diffusion correlates with improved performance outcomes in Vietnamese handicraft companies. To achieve this objective, the current study uses an explanatory sequential mixed-methods approach as detailed by Creswell and Creswell (2018). This methodology comprises two phases: an initial quantitative data collection and analysis, followed by qualitative data collection and analysis. Employing a mixed-methods approach serves a twofold purpose. Firstly, it allows for a comprehensive exploration of the research topic by leveraging the strengths of both quantitative and qualitative data. This dual approach provides a deeper grasp of the phenomenon being studied, thereby enhancing the robustness of the findings. Secondly, the sequential structure of this methodology provides a more profound explanation of relationships between variables. The qualitative phase offers insights into the nuances and contextual factors that may influence the quantitative results (Creswell & Creswell, 2018; Saunders et al., 2016). This methodological synergy contributes to a holistic and nuanced understanding of the complex interplay between stakeholders, SSP adoption patterns, and performance outcomes. This understanding is derived from analyzing a survey

involving 310 Vietnamese handicraft companies. This is complemented by qualitative insights from an additional 12 case studies within the same sector, enriching the breadth and depth of the findings.

A survey approach in the quantitative methodology

The study employs a survey-based approach for its quantitative methodology. The first step of the survey approach was to design a survey questionnaire to gather relevant data for analysis. The survey questionnaire encompassed three main sections. The first section aimed to capture a profile of the respondents and their associated handicraft companies in Vietnam, specifically targeted senior managers, given their experience, knowledge, and ability to provide informed responses.

The second section involved a list of 42 measurement items on SSP, categorized in eight dimensions. These dimensions are recognized as critical for promoting social responsibilities in Vietnamese handicraft companies. The items were generated based on a comprehensive literature review. Respondents were asked to assess the perceived level of adopting each of the 42 SSP using a three-point Likert-type scale (1 = not adopting it; 2 = partially adopting it; and 3 = fully adopting it). Such a scale is adopted from Henderson et al., (2012), who acknowledges partial adoption as a valid response, acknowledging that firms may choose to adopt all or just some aspects of an innovation. Furthermore, the scale is well-aligned with the use of “low”, “medium”, and “high” by the project UNIDO (2013a) in assessing SSP adoption. It is particularly chosen for this study to mitigate potential biases associated with socially desirable responses, as suggested by Morais & Silvestre (2018).

The last session comprised a list of seven measurement items reflecting how senior managers perceived their organizational performance on a five-point Likert-type scale (where 1 =

strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree). These performance measurements were adapted from the work of Mani et al., (2020) and Tran et al., (2021), aligning with established research in this field. The utilization of dual scales has been noted in various sustainability studies, as demonstrated by the works of Paulraj et al., (2017) and Tran et al., (2021). This approach functions as a tactic to alleviate the influence of common method bias. Aligning with this, we have adopted a similar methodology by employing a blend of scales.

A pre-test and a pilot test were carried out to ensure the content validity and reliability of the measurement items respectively (Churchill Jr, 1979; Creswell & Creswell, 2018). The pre-test enabled the incorporation of suggestions from 10 industrial experts and 12 senior managers responsible for social issues in Vietnamese handicraft companies. Following the pre-test, a pilot test was conducted with 35 senior managers from Vietnamese handicraft companies. The feedback gathered from this exercise led to several minor adjustments in language and terminology within the survey questionnaire, enhancing its clarity and relevance.

Data collection of the survey

Data collection of the survey was then conducted in two consecutive stages, namely sampling design and survey administration. Sampling design refers to the compilation of the sampling frame and the selection of sampling method and sample size (Hair et al., 2019). The sampling frame of this study consisted of the entire population of 1,500 handicraft companies in Vietnam. It was compiled from various online databases, such as the Yellow Pages of Vietnam, Vietnam Rural Industries Research and Development Institute, Handicraft and Wood Industry Association of Ho Chi Minh city, Vietnam Handicraft Exporter Association, and Vietnam Association of Craft Villages. The sampling frame provided detailed information about the top management in

Vietnamese handicraft companies, including names, postal addresses, contact numbers, and email addresses.

A simple random sampling technique was adopted for the survey as a detailed sampling frame with contact details of each company was conveniently accessible (Saunders et al., 2016). This technique was particularly suitable due to its ease of implementation and compatibility with our approach of using telephone calls to reach respondents, a practical choice given the geographic dispersion of the population across the country (Bryman & Bell, 2011). The sample size was determined based on the multivariate tests utilized for data analysis. It was calculated using a case-to-item ratio of 5 to 10 cases per item based on a commonly used rule of thumb (Hair et al., 2019). With 49 measurement items in the questionnaire, a minimum sample size of 250 companies was determined. Given a population of 1,500 companies and the response of survey questionnaire is usually around 20%, all the companies in the sampling frame were contacted.

For the administration of the survey, initial telephone calls were made to senior executives of Vietnamese handicraft companies to invite them to participate. Upon obtaining consent from the senior executives, follow-up survey questionnaires were sent via emails. To maximize the response rate, the survey was designed to accommodate multiple delivery options, including both telephone-based and paper-based responses, as recommended by Shafiq et al. (2014). This practice resulted in a total of 325 responses. Outlier analysis was then performed, leading to the 310 valid responses retained for the subsequent statistical analyses. The effective response rate is 20.7% which aligns with what has commonly achieved in SSP adoption-related studies (Paulraj et al., 2017). The non-response bias was also conducted to examine the differences in the demographics between telephone-based respondents ($n = 156$) and paper-based respondents ($n = 154$). No non-response bias was detected in the dataset.

Demographic characteristics of the respondents and their respective companies are summarized in Table 1 exhibited by position, position length, and education level. The data reveals that a majority of respondents in the Vietnamese handicraft companies are senior executives (92.3%). Notably, a significant proportion (40.3%) have been in their current positions for more than six years. Additionally, over half of the respondents (55.5%) possess a college or university degree. The above analysis suggests that most respondents are highly educated with considerable experience in the industry. Therefore, the information provided by these respondents is likely to be both relevant and valid for the purposes of this study.

Characteristics of the surveyed Vietnamese handicraft companies are demonstrated by length of establishment, company size, exportation, and standard adoption. As shown in Table 1, the surveyed companies are diverse in characteristics. Most surveyed companies (82.3%) have been operating for more than five years. In terms of company size, about 27.7% of the companies belong to micro-scale (< 10 employees), 51.6% are small scale (10–100 employees), while 20.6% are medium- and large-scale (> 100 employees). More than half of the surveyed companies (54.5%) indicate export sales, while a small number of them (34.8%) have adopted SSP standards, such as ISO 14000, ISO 26000, Fair Trade, BSCI, Initiative for Compliance Sustainability (ICS), and Social Accountability 8000.

Table 1 Demographic characteristics of respondents and companies

Information	Characteristics	Frequency (n=310)	Percentage (%)
Respondent position	Senior executive	286	92.3
	Others	24	7.7
Position length	< 1 year	33	10.6
	1–5 years	59	19.0
	6–10 years	98	31.6
	> 10 years	120	38.7
Education level	Below high school	75	24.2
	High school	63	20.3
	Diploma	25	8.1
	Bachelor	121	39.0
	Postgraduate	26	8.4

Length of establishment	< 5 years	55	17.7
	5–10 years	90	29.0
	11–15 years	47	15.2
	> 15 years	118	38.1
Company size	< 10 employees	86	27.7
	10–100 employees	160	51.6
	> 100 employees	64	20.6
Exportation orientation	Non-exporter	141	45.5
	Exporter	169	54.5
Standard adoption	Non-adopter	202	65.2
	Adopter	108	34.8

Table 2 provides an overview of SSP adoption (1 = not adopting it; 2 = partially adopting it; and 3 = fully adopting it) among the surveyed Vietnamese handicraft companies in which the rank order results are demonstrated. These results were calculated using the mean values reported by the surveyed companies. For each practice, a large mean value denotes greater adoption of SSP translating to a higher rank order.

Table 2 An overview of SSP adoption by Vietnamese handicraft companies

SSP	Mean	Rank	1 (%)	2 (%)	3 (%)
<i>Labor conditions (Marshall et al., 2015; Yawar & Seuring, 2017)</i>					
Fair wages and benefits	2.67	13	0.6	31.9	67.4
Fair working hours	2.68	12	1.0	30.3	68.7
Contract labor	2.21	24	20.0	39.0	41.0
No child labor	2.75	7	8.1	8.7	83.2
No forced labor	2.76	5	10.0	3.5	86.5
Training and educating employees	1.96	31	25.1	53.2	21.6
Formal policies and procedures	1.92	33	34.5	39	26.5
Average mean	2.42				
<i>Human rights (Nakamba et al., 2017; UNIDO, 2013a)</i>					
Freedom of association and collective bargaining	2.30	21	28.1	13.5	58.4
No discrimination	2.94	1	1.0	3.9	95.2
No sexual harassment	2.94	1	1.3	3.2	95.5
Training and educating employees	1.82	37	38.1	41.6	20.3
Formal policies and procedures	1.88	36	35.2	42.6	23.2
Average mean	2.38				
<i>Working environments (Shafiq et al., 2014; Yawar & Seuring, 2017)</i>					
Healthy working environment	2.65	14	0.3	34.5	65.2
Safe performance of duties	2.69	10	0.6	30.0	69.4
Clean areas for relaxation	2.56	16	4.5	35.2	60.3
Clear signs for safety	2.33	20	16.8	33.9	49.4
Training and educating employees	2.07	29	19.0	55.2	25.8
Formal policies and procedures	1.95	32	32.3	41.0	26.8
Average mean	2.37				
<i>Community development (Hasan, 2016; Tran et al., 2021)</i>					
Transparent relationships with local government officials	2.75	8	1.9	21.3	76.8
Participating in associations	2.20	25	21.9	35.8	42.3
Consulting local communities on production issues that affect them	2.19	26	19.4	42.3	38.4
Supporting charitable initiatives	2.38	19	5.8	50.6	43.5
Sponsoring educational and cultural activities	2.24	23	12.6	51.0	36.5

Providing vocational training	2.41	18	7.7	43.2	49.0
Using local suppliers	1.82	38	42.3	33.5	24.2
Farming areas for raw materials	2.50	17	2.6	44.5	52.9
Average mean	2.31				
<i>Diversity support (Marshall et al., 2015; Yawar & Seuring, 2017)</i>					
Purchasing from marginalized enterprises	1.72	41	39.0	50.0	11.0
Employing marginalized people	2.05	30	20.3	53.9	25.8
Supporting gender equality	2.76	6	1.6	21.0	77.4
Average mean	2.18				
<i>Ethical behavior (Agarwal et al., 2018; Lasrado & Zakaria, 2020; Zhu et al., 2012)</i>					
Purchasing through the fair-trade movement	1.50	42	61.3	27.4	11.3
Using eco-friendly manufacturing processes	2.61	15	2.3	34.8	62.9
Formal policies and procedures on the protection of the environment	2.12	28	22.3	43.5	34.2
Average mean	2.08				
<i>Product responsibilities (Shafiq et al., 2014; UNIDO, 2013a)</i>					
No breaches of marketing regulations	2.94	3	1.0	4.5	94.5
Customer health and safety	2.88	4	1.0	10.3	88.7
Good customer service	2.69	9	0.0	30.6	69.4
Product traceability	2.27	22	20.0	32.9	47.1
Cooperating with big customers	2.17	27	20.0	43.2	36.8
Average mean	2.59				
<i>Supply chain responsibilities (Croom et al., 2018; Tran et al., 2021)</i>					
Setting social standards for suppliers	1.89	34	34.5	42.3	23.2
Fair working conditions for employees at suppliers' locations	1.76	39	44.2	35.2	20.6
Safe and healthy working environments for employees at suppliers' locations	1.73	40	44.8	37.7	17.4
Regular auditing quality of raw materials	2.68	11	1.9	27.7	70.3
Cooperating with key suppliers	1.88	35	32.9	45.8	21.3
Average mean	1.99				

Notes: 1–Not adopted; 2–Partially adopted; 3–Fully adopted.

Tests for potential common method bias

Prior to conducting further statistical analyses, the survey data were rigorously examined for potential common method bias (CMB), following the procedural measures recommended by Podsakoff et al. (2003). As an initial step, different Likert scales were used for assessing items related to SSP and organizational performance. This technique addresses concerns about perceived correlations that might arise from using identical scales for different sets of items (Paulraj et al., 2017). To further reduce bias, anonymity was ensured for both the respondents and the companies, minimizing social desirability responses (Zhu et al., 2012). Finally, Harman's one factor approach was conducted through confirmatory factor analysis in which only one factor was extracted. In this approach, we utilized the mean values of eight dimensions of SSP to denote items for SSP. The fit indices of the one-factor model were $\chi^2/df=11.031$; $p=0.000$; RMSEA=0.180; GFI=0.578;

CFI=0.752; SRMR=0.1041, which suggest a poor model fit, implying that the likelihood for common method bias in our survey data is low.

Data analysis of the survey

Statistical analyses were conducted using the Statistical Package for the Social Sciences (SPSS) version 26.0. These analyses encompassed three major multivariate tests, namely cluster analysis, discriminant analysis, and one-way analysis of variance (ANOVA). Cluster analysis was utilized to group the surveyed companies based on similarities in their SSP adoption patterns. This was followed by discriminant analysis, which served to test and validate these classifications, ensuring the distinctiveness of each group. Through these analyses, five distinct SSP adoption patterns were identified, and the organizational characteristics of each pattern were closely examined. ANOVA test was then executed to examine if Vietnamese handicraft companies across patterns differ in their performance improvement.

A multiple case study approach in the qualitative methodology

In addition to the quantitative survey, this study adopted a multiple case study approach, involving in-depth examinations of 12 distinct Vietnamese handicraft companies. These companies were introduced by the Vietnam Rural Industries Research and Development Institute and the Vietnam Association of Craft Villages. The interviewed companies are detailed in Table 3, with their identities kept anonymous, a practice suitable for SSP research in all contexts (Walker & Jones, 2012). Employing interviews within the framework of the multiple case study approach is regarded as the most effective strategy to bolster the generalizability of the findings (Yin, 2016).

Organizations were selected using purposive sampling and the snowball method. The selection was based on two primary criteria: exporter/non-exporter and SSP standard adopter/non-

adopter (refer to Table 3). A total of 12 face-to-face interviews were conducted, each with a top manager from the respective organization. These formal interviews typically lasted around ninety minutes. The participants encompassed a range of roles, including a dedicated SSP staff member, a sales manager, a vice president, three cooperative presidents, and six Chief Executive Officers. All interviews were conducted in Vietnamese, recorded, transcribed, and subsequently translated into English before entering the data analysis phase. The English transcripts were then shared with certain interviewees proficient in English to review and confirm the accuracy of the translations. This meticulous review of the transcripts contributes to maintaining the rigor, credibility, and trustworthiness of the collected data (Nguyen et al., 2021).

Table 3 Profile of Vietnamese handicraft organizations participated in the interviews

Organization	Handicraft sector	Type	Years of existence	Size (employees)	Exportation	Adopted standards
Company 1	Soft toys	Joint stock company	>15	10–100	Yes	Fair Trade
Company 2	Bamboo and rattan	Limited company	>15	10–100	Yes	BSCI; SMETA; Fair Trade
Company 3	Metal	Private company	5–10	<10	0	No
Cooperative 4	Metal	Cooperative	>15	10–100	0	No
Company 5	Bamboo and rattan	Joint stock company	5–10	>100	Yes	BSCI; FSC
Cooperative 6	Bamboo and rattan	Cooperative	10–15	10–100	0	No
Company 7	Embroidery	Private company	10–15	<10	0	No
Company 8	Pottery and metal	Limited company	>15	>100	Yes	BSCI; ICS
Company 9	Bamboo and rattan	Limited company	>15	10–100	Yes	No
Cooperative 10	Bamboo and rattan	Cooperative	>15	10–100	Yes	No
Cooperative 11	Bamboo and rattan	Cooperative	>15	>100	Yes	No
Company 12	Soft toys	Limited company	5–10	>100	Yes	ISO 9001; EN71

Various measures were implemented to mitigate bias in qualitative responses. Firstly, secondary data were gathered from sources like websites, reports such as annual reports, SSP

policies, and internal newsletters. Secondly, on-site observations at select company locations were utilized to validate the received data. Thirdly, interviews were conducted with five sustainability practitioners hailing from a university, an NGO, two research institutions, and a government agency. These practitioners possess extensive education and a minimum of seven years of experience in the sustainability field. All these measures collectively form a triangulation strategy aimed at enhancing the validity and reliability of this study (Yin, 2016).

In analyzing the qualitative data collected from interviews, this study employed the theoretical thematic analysis technique, aligning with the identified theoretical dimensions of the DOI framework and stakeholder theory. Firstly, theoretical thematic analysis is particularly advantageous due to its practicality and straightforwardness in handling complex qualitative data sets (Braun & Clarke, 2006; Howitt, 2016; Nowell et al., 2017). It also facilitates the extraction of social interpretations from various participant perspectives, enabling comparisons and contrasts, and generating unforeseen insights throughout the dataset, enhancing the depth and breadth of the analysis. Secondly, the specific application of theoretical thematic analysis is essential when researchers are guided by distinct theoretical and epistemological commitments, as it is in this study (Braun & Clarke, 2006). This technique also allows for a more detailed scrutiny of specific aspects of the data, facilitating a comprehensive understanding of the phenomena under study (Braun & Clarke, 2006; Flick, 2014). Notably, this technique has the potential to 'include, address, or extend' predetermined themes often identified in the research questions (Braun & Clarke, 2006; Percy et al., 2015).

Survey results

Cluster analysis

To identify SSP adoption patterns among Vietnamese handicraft companies, we conducted a cluster analysis in two stages: first employing a hierarchical cluster method, followed by a non-hierarchical cluster method, as recommended by Hair et al. (2019). We used eight average adoption levels according to eight categories of SSP. The hierarchical cluster method was based on the squared distance Euclidean of Ward’s algorithm and the agglomeration coefficient to find the optimal number of clusters emerging from the dataset (D'Souza et al., 2020; Zhu et al., 2012). This step has suggested an optimal number of five clusters to group the data.

The second step using the iterative K-means algorithm (a non-hierarchical cluster method) of five clusters was performed. The ANOVA test was specifically applied according to this algorithm to evaluate whether significant differences do exist across the five clusters. Table 4 shows that all *p*-values of the ANOVA test are lower than 0.001, suggesting that the eight categories of SSP are significantly different across the five clusters. Thus, our analyses have identified a five-cluster solution, with 40, 71, 77, 58, and 64 companies classified into clusters numbered from 1 to 5 respectively. The numbers show a good distribution of Vietnamese handicraft companies across the five clusters. We also tested other possibilities of clustering using two, three, four and six clusters. In the end, the five-cluster solution yielded the best results. We labeled the five clusters as ‘innovative adopters’, ‘early adopters’, ‘early followers’, ‘late followers’, and ‘laggards’ representing five types of SSP adoption patterns amongst Vietnamese handicraft companies.

Table 4 ANOVA test and pattern means on SSP adoption

Factor/pattern	Innovative adopters (Pattern 4: n=58)	Early adopters (Pattern 2: n=71)	Early followers (Pattern 3: n=77)	Late followers (Pattern 5: n=64)	Laggards (Pattern 1: n=40)	F	Sig.
Labor conditions	2.82	2.75	2.49	1.99	1.82	176.580	.000
Human rights	2.84	2.65	2.50	1.89	1.77	241.516	.000
Working environments	2.88	2.67	2.51	1.87	1.65	236.936	.000

Community development	2.81	2.11	2.56	2.13	1.77	127.621	.000
Diversity support	2.52	1.89	2.43	2.17	1.71	58.682	.000
Ethical behavior	2.71	2.11	2.16	1.80	1.37	171.743	.000
Product responsibilities	2.96	2.81	2.64	2.36	1.94	157.098	.000
Supply chain responsibilities	2.80	2.31	1.97	1.39	1.25	295.963	.000
Average mean	2.79	2.41	2.41	1.95	1.66		

We further investigated organizational characteristics (size, exportation orientation, and standard adoption) of individual patterns to better understand the adoption behavior of Vietnamese handicraft companies toward SSP. Results of this investigation are provided in Table 5.

Table 5 Organizational characteristics of clusters

Organizational characteristics		Innovative adopters (%)	Early adopters (%)	Early followers (%)	Late followers (%)	Laggards (%)
Size	< 10	8.62	16.9	9.09	50	75
	10–100	44.83	50.7	75.32	48.44	22.5
	> 100	46.55	32.39	15.58	1.56	2.5
Exportation orientation	Non-exporter	12.07	18.31	29.97	92.19	97.5
	Exporter	87.93	81.69	70.13	7.81	2.5
Standard adoption	Non-adopter	18.97	40.85	77.92	98.44	97.5
	Adopter	81.03	59.15	22.08	1.56	2.5

As shown in Tables 4 and 5, the first adoption pattern, innovative adopters (n=58), accounts for 18.71% of the surveyed companies. We identify this pattern as ‘innovative adopters’ because they have the highest level of SSP adoption with a mean value of 2.79. A close examination finds that about half (46.55%) are medium and large companies (> 100 employees). Most companies in this pattern (87.93%) are export-based, while 81.03% are SSP standard-oriented.

The second SSP adoption pattern for Vietnamese handicraft companies is identified as ‘early adopters’, with 71 companies accounting for 22.9% of the sample companies. In this pattern, almost all categories of SSP have mean values above 2.31, except for the community-oriented practices, including community development (2.11), diversity support (1.89), and ethical behavior

(2.11). Among these companies, 81.69% indicate export activities, while 59.15% report SSP standard adoption in their business.

The pattern of ‘early followers’ (n=77) accounts for 24.84% of the sample. Companies in this pattern have partial adoption of SSP in almost all SSP categories (mean values greater than 2.16), except for the supply chain responsibility (1.97). Further analysis reveals that most companies (84.42%) have micro and small-scale with less than 100 employees. Furthermore, 70.13% and 22.08% of companies in this pattern are export-oriented and adopt SSP standards respectively.

There are 64 Vietnamese handicraft companies (20.65%) labeled as ‘late followers’. They tend to give less consideration to ethical behavior (1.80) and supply chain responsibilities (1.39). Further analysis indicates that only one medium and large-scale company (> 100 employees) is found. This pattern has 5 (7.81%) export-based companies and one SSP standard-based company.

Forty Vietnamese handicraft companies (12.9%), the smallest pattern in the sample, are labeled as ‘laggards.’ We identified this pattern as laggards because these companies have the lowest overall mean value of 1.66. Nearly all (97.5%) companies in this pattern come from micro or small size (< 100 employees). Only one company is export-oriented, and another one is SSP standard-oriented.

In sum, it is apparent from the above discussion that handicraft companies in Vietnam with medium and large scale (> 100 employees), exportation orientation, and SSP standard adoption are more likely to fall into patterns of the innovative adopters, early adopters, and early followers. In contrast, micro and small companies (< 100 employees), no exportation, and no SSP standard adoption are more likely to be clustered into late followers and laggards.

Discriminant analysis

Discriminant analysis was performed to validate the cluster analysis results. It examined the relationships between “cluster membership” (dependent variable) and the average mean of the eight categories of SSP (independent variables) (Hair et al., 2019). Results of the Wilks’ Lambda tests under discriminant analysis are presented in Table 6. All *p*-values of these tests are significant at the 0.05 level, indicating that there are significant differences across the five clusters. The cross-validated classification reveals that overall 93.9% of Vietnamese handicraft companies are properly classified. This finding suggests that the five-cluster classification in this study is appropriate.

Table 6 Results of the Wilks’ Lambda tests

Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1 through 4	.026	1106.998	32	.000
2 through 4	.289	375.685	21	.000
3 through 4	.715	101.626	12	.000
4	.883	37.720	5	.000

Table 7 presents the results from the discriminant loadings that emerged from the discriminant analysis. Discriminant loadings represent the simple linear correlations between the discriminant function and the independent variables. As a rule of thumb, a discriminant loading above 0.4 exhibits substantial importance of the discriminant function to differentiate among patterns (Hair et al., 2019; Shafiq et al., 2014). Results of the discriminant loadings provide sufficient evidence that all SSP categories are critical to distinguishing across the five identified clusters. Notably, supply chain responsibility-based practices and employee-oriented practices (human rights-based, working environment-based, and labor condition-based practices) emerged as having the most significant influences, while community-oriented practices and product responsibility-based practices are the least important.

Table 7 Results of discriminant loadings

	Discriminant function			
	1	2	3	4
Supply chain responsibilities	.606	-.186	-.564	.169
Human rights	.548	-.181	.241	-.514
Working environments	.544	-.149	.359	-.335
Labor conditions	.462	-.270	.343	-.144
Community development	.330	.615	.009	-.186
Diversity support	.162	.576	.207	.039
Product responsibilities	.435	-.060	.520	.643
Ethical behavior	.454	.274	-.134	.497

ANOVA analysis

To evaluate if companies with higher levels of SSP adoption attain better organizational performance, we first conducted an exploratory factor analysis (EFA) to assess the dimensionality of 7 measurement items for organizational performance, using a five-step guide proposed by Williams et al., (2010). Following the EFA, a one-way ANOVA test was performed. The aim was to determine if there are statistically significant differences in performance improvement across the five identified SSP adoption patterns. Table 8 presents the results of the EFA for SSP-related performance.

Table 8 Results of EFA for organizational improvement

Organizational improvement items	Factor loadings	Cronbach's alpha
Boosted revenue	0.840	0.912
Reduced costs	0.574	
Improved quality	0.826	
Increased market share	0.831	
Strengthened reputation	0.883	
Enhanced customer satisfaction	0.878	
Enhanced employee satisfaction	0.839	

Note: Extraction method: Principal component analysis; Rotation method: Varimax with Kaiser normalization.

Table 8 shows that organizational improvement generates a one-factor solution with all factor loadings greater than ± 0.5 , demonstrating that all measurement items are significant in representing the underlying construct "Organizational improvement". Further analysis shows that

these items have an eigenvalue of 4.664 and a total explained variance of 66.631%. This finding suggests that all items are cleanly loaded on the respective intended construct (Hair et al., 2019). As shown in Table 8, the reliability test result (Cronbach's alpha > 0.7) indicates that the organizational improvement factor is reliable.

A one-way ANOVA was performed to find the significant differences among the five SSP adoption patterns in achieving the overall organizational improvement. We began the analysis by running Levene's test to check for the homogeneity of variances in the dataset (Hair et al., 2019). The non-significant result of the test (p -value = 0.916) suggests that the variance in organizational improvement is roughly equal across the five patterns (Field 2013). Since the dataset satisfy the assumption of homogeneity of variances, the ANOVA statistical results (Table 9) are considered reliable demonstrating that the five SSP adoption patterns are significantly different in terms of overall organizational improvement at p -value < 0.001.

Table 9 ANOVA statistics and pattern means on organizational improvements

Factor/pattern	Innovative adopters (Pattern 4: n=58)	Early adopters (Pattern 2: n=71)	Early followers (Pattern 3: n=77)	Late followers (Pattern 5: n=64)	Laggards (Pattern 1: n=40)	F	Sig.
Overall organizational improvement	3.96	3.79	3.93	3.08	2.82	50.693	0.000

We took a follow-up Tukey's post hoc test to determine which specific SSP adoption patterns differ from one another (Hair et al., 2019). Table 10 shows the output of Tukey's post hoc test indicating that they are no statistically significant differences between SSP adopters/followers in the proactive group (innovative adopters, early adopters, and early followers) and those in the reactive group (late followers and laggards). On the other hand, statistically significant differences do exist across all pairs of SSP adopters/followers in which one comes from the proactive group and the other from the reactive group. Based on the mean values in Table 9, we can conclude that

companies in the proactive group achieve better SSP-caused performance improvements compared to those in the reactive group.

Table 10 The output of Tukey's post hoc test

(I) Cluster Number of Case	(J) Cluster Number of Case	Mean Difference (I-J)	Std. Error	Sig.
1	2	-1.40698236*	.15248839	.000
	3	-1.58868840*	.15033221	.000
	4	-1.65462326*	.15852710	.000
	5	-.34765887	.15546447	.169
2	1	1.40698236*	.15248839	.000
	3	-.18170604	.12690852	.608
	4	-.24764090	.13651682	.367
	5	1.05932349*	.13294812	.000
3	1	1.58868840*	.15033221	.000
	2	.18170604	.12690852	.608
	4	-.06593486	.13410408	.988
	5	1.24102952*	.13046940	.000
4	1	1.65462326*	.15852710	.000
	2	.24764090	.13651682	.367
	3	.06593486	.13410408	.988
	5	1.30696439*	.13983323	.000
5	1	.34765887	.15546447	.169
	2	-1.05932349*	.13294812	.000
	3	-1.24102952*	.13046940	.000
	4	-1.30696439*	.13983323	.000

Note: *. The mean difference is significant at the 0.05 level.

Discussion

Existence of distinct SSP adoption patterns

The findings strongly support the first proposition that Vietnamese handicraft companies can be segmented into several distinct patterns according to their varying levels of SSP adoption. This outcome corroborates the underlying assumption of the DOI framework, revealing five SSP adoption patterns among Vietnamese handicraft companies: innovative adopters, early adopters, early followers, late followers, and laggards. This assumption has been confirmed in earlier studies (see Zhu et al., (2012); Triguero et al., (2016); Susanty and Sari (2018)). Nevertheless, these studies found fewer adoption patterns because they were conducted in large-scale companies or SMEs.

Our study's focused on a diversified base of companies ranging from micro to large, allowed for the identification of a broader spectrum of SSP adoption patterns. As such, greater variations with five types of SSP adoption patterns were identified in this study.

The common behavior of Vietnamese handicraft companies across the eight SSP categories can be observed from the pattern mean values presented in Table 4. A notable observation is that all five patterns have placed product responsibility-based practices at the center of their SSP policies and strategies. This finding accords with the observation of Hasan (2016), which claims that consumer-oriented issues have received the most attention by individual companies on their way to adopting SSP. A possible explanation for this observation is rooted in the fact that the strongest pressure on SSP adoption, especially from targeted overseas markets of Vietnamese handicraft products, is imposed by customers and consumers (Teo et al., 2020; VIRI, 2015). To effectively address such pressure, Vietnamese handicraft companies value integrating customers' concerns into their products and processes to achieve legitimacy and survival in the marketplace.

Significant differences in the selection of SSP categories have been observed among Vietnamese handicraft companies across different adoption patterns. These variations are detailed based on the mean pattern values in Table 11. This table shows that innovative adopters have almost fully adopted all SSP categories. Early adopters have a strong focus on employees, customers, and suppliers and imitate the path of innovative adopters with partial adoption of community-oriented practices. Early followers only consider product responsibility-based practices, employee-oriented practices, and community-oriented practices, while following the path of innovative and early adopters with partial adoption of supply chain-based practices. Like early followers, late followers have only prioritized community-oriented practices and product responsibility-based practices. Employee-oriented practices and supply chain responsibility-based practices are less seriously

taken. Laggards fail to promote supply chain responsibility-based practices and frequently drag behind other industry peers in all SSP categories. These findings signify a mechanism of different SSP categories to determine to which SSP adoption pattern a company might belong. Under this mechanism, the five SSP adoption patterns can be interpreted as the multiple stages of diffusing SSP in companies and along their wider supply chains (Rogers, 2010; Zhu et al., 2012). To supplement the empirical findings, an illustration of the proactive adoption scenario is presented through a case study detailed in Box 3.

Box 3 Company 8 and its proactive adopter of SSP

Company 8 is located in Binh Duong, known as one of Vietnam's highly developed industrial provinces. The company excels in crafting pottery and metal items. The following table demonstrates the calculated average mean for each distinct SSP category within the company, in comparison with the overall average mean of innovative adopters.

Factor/pattern	Innovative adopters	Company 8
Labor conditions	2.82	2.71
Human rights	2.84	2.80
Working environments	2.88	2.83
Community development	2.81	2.75
Diversity support	2.52	2.67
Ethical behavior	2.71	2.67
Product responsibilities	2.96	3.00
Supply chain responsibilities	2.80	3.00
Average mean	2.79	2.80

As shown in the table, Company 8 is classified as an innovative adopter according to the computed average mean. Specifically, its organizational characteristics correspond to those of an innovation adopter, as previously outlined. It's noteworthy that the company is primarily export-oriented and has effectively achieved both BSCI and ICS standards. Moreover, Company 8 has nearly completely embraced all SSP categories.

Insights from the interview with the owner of Company 8 unveil that predominant pressures from customers and governmental entities exert a crucial influence in propelling a proactive adoption of SSP. The incorporation of the BSCI standard has led to a notable increase in orders for the company, preventing the potential loss of several customers. During the interview, the proprietor of Company 8 acknowledges the necessity to educate and, at times, enforce social insurance payments among the workforce. This becomes particularly significant in cases of unfortunate incidents like labor accidents, as the social insurance organization would bear the related expenses. Failure to comply with the law could potentially subject the company to litigation or fines.

Company 8 particularly distinguishes itself as a proactive adopter, supported by its highest perceived average score (3.0) concerning supply chain responsibilities. To fulfill these responsibilities, the company is mandated to provide customers with documentation confirming the origin of utilized materials. For instance, in the case of wood, the company is obligated to furnish materials certified by the FSC.

Table 11 The different foci of the five SSP adoption patterns

Pattern/SSP category	Employee-oriented practices	Community-oriented practices	Product responsibility-based practices	Supply chain responsibility-based practices
Innovative adopters	x	x	x	x
Early adopters	x	o	x	x
Early followers	x	x	x	o
Late followers	o	x	x	o
Laggards	o	o	o	o

Note: x—almost fully adopted; o—partially adopted

Results of the discriminant analysis in Table 7 highlight that supply chain responsibility-based practices and employee-oriented practices have the greatest differentiating strength among patterns. This finding suggests that Vietnamese handicraft companies should place significant emphasis on SSP efforts targeting suppliers and employees to progress along the identified SSP adoption patterns. The significance of these practices reveals the inconsistent diffusion mechanisms to SSP across developed and developing countries. Shafiq et al., (2014) claim that, in developed countries, community-oriented practices and supply chain responsibility-based practices have the most significance in discriminating among SSP adoption patterns. Supply chain responsibility-based practices predominantly appear to drive companies in both developed and developing countries toward a proactive approach to SSP adoption, which expects active collaboration efforts and long-term investments within organizations and among their supply chain members (Kitsis & Chen, 2021). While Shafiq et al., (2014) find that community-oriented practices can help promote greater SSP adoption among developed country-based companies, findings from this study highlight the importance of employee-oriented practices in this regard. The diverse institutional settings among countries could account for the inconsistency in findings across studies (Mani et al., 2020). In developed countries, most organizations advance their commitment to SSP adoption under a path to full employment welfare and benefits for all (Xu & Zeng, 2021). Nevertheless, such advancement is not well recognized in developing countries, such as Vietnam, where insufficient efforts have been undertaken by companies, especially for late followers and laggards, to fulfill their social responsibilities associated with employees (Govindan et al., 2020b; Huq & Stevenson, 2020; Nakamba et al., 2017).

Relationship between SSP adoption patterns and company performance

The findings of this study substantiate the second proposition, indicating that Vietnamese handicraft companies with higher levels of SSP adoption demonstrate improved performance. Notably, our results reveal that proactive companies, in terms of SSP adoption, significantly outperform their reactive counterparts in overall performance improvement. This outcome corroborates the underlying assumption of the stakeholder theory, which suggests that companies would attain different levels of performance improvements, based on their varying SSP adoption patterns under the pressures of various stakeholders such as employees, communities, customers, and suppliers (Bai & Chang, 2015; Kitsis & Chen, 2021; Zhu et al., 2014). Such assumption is also reflected in the studies of Zhu et al., (2012) and Shafiq et al., (2014), highlighting the value of actively promoting SSP adoption in shaping better performance outcomes for individual companies.

This study further reveals the critical roles of specific SSP categories in propelling Vietnamese handicraft companies towards greater adoption of SSP and, consequently, improved organizational performance. The results point out that supply chain responsibility-based practices and employee-oriented practices are most influential in driving this progress. From a theoretical perspective, these findings suggest the necessity of integrating the DOI framework with stakeholder theory. This integration provides a more comprehensive understanding of how specific SSP categories contribute to a proactive approach, ultimately enhancing company performance. Both the DOI framework and the stakeholder theories are critical in explaining how specific categories of SSP may translate into a proactive approach for superior performance of companies in pursuing sustainable development. Such explanations help strengthen the argument of many studies, such as those by Govindan et al. (2020a) and Mani et al. (2020), which assert the positive impact of SSP adoption on organizational performance.

Contrary to initial expectations, this study reveals insignificant differences in organizational performance both among reactive and proactive Vietnamese handicraft companies regarding SSP adoption. Many reactive companies demonstrate reluctance in adopting SSP, which correlates with their inability to realize performance improvements that could stem from such practices. This reluctance is often due to skepticism about the tangible benefits of SSP adoption. For example, since most companies are operating in micro, small-, and medium-scale and engaging in short-term outlook on such adoption, they may fail to realize the cost advantages (Hasan, 2016; Koster et al., 2019). Since the adoption of SSP often requires significant financial resources for managing innovations across supply chains, with the payoff potentially being distant (Croom et al., 2018; Zhu et al., 2012). Furthermore, Vietnamese handicraft companies often perceive that buyers prioritize high quality, low prices, and timely delivery over social responsibility (Venkatesh et al., 2021). Consequently, they may fear that their social efforts won't translate into tangible sales revenue or market share gains. Companies also express concerns that focusing on employee-oriented practices may not always result in improved product quality. In the handicraft industry, the use of protective gears and tools can sometimes impede operational efficiency and lower productivity (Yang & Shafi, 2020). All these concerns may lead to the indifferent perception of SSP-related benefits among proactive companies.

Contributions

With these findings, the study contributes to existing sustainability research from both theoretical and practical perspectives.

Theoretical contributions

This research significantly extends existing literature on SSP adoption by examining the diffusion mechanism within a comprehensive set of SSP, particularly relevant to companies operating along their supply chains. By encompassing eight aspects of SSP, this study enables companies to effectively benchmark their practices against a broad spectrum of sustainable development criteria. The five distinguish adoption patterns serve as the diffusion mechanism advancing companies toward greater SSP adoption. Of particular importance is the focus on developing countries like Vietnam, where micro-, small-, and medium-scale firms are predominant. This study represents a pioneering effort in exploring the diffusion mechanism of SSP in such a context.

While numerous studies have investigated the link between SSP adoption and organizational performance (Croom et al., 2018; Mani et al., 2018; Shafiq et al., 2014), a significant gap remains in identifying which specific SSP categories are most instrumental in enhancing a firm's proactive stance and performance. Our study addresses this void in SSP literature, particularly in the context of developing countries like Vietnam. By delineating the specific SSP categories that are most impactful, it offers a clearer direction for firms in selecting SSP initiatives that respond effectively to diverse stakeholder concerns. The insights gained from this study could encourage firms, especially in developing countries, to strategically choose SSPs that not only align with stakeholder expectations but also contribute significantly to their sustainable development and performance enhancement (Govindan et al., 2020a; Mathiyazhagan et al., 2021)

This study significantly enriches SSP theory by effectively integrating two established frameworks: the Diffusion of Innovations (DOI) framework and stakeholder theories. The successful alignment of these theoretical lenses with empirical data from real-world companies demonstrates the appropriateness and merit of extending stakeholder theory through the incorporation of the DOI framework. The extended stakeholder theory provides a nuanced

explanation of the improved performance gains associated with diverse SSP adoption patterns, emphasizing the role of varying SSP categories. Our findings comprehensively address the question of whether proactive adopters embracing a higher level of SSP adoption would attain better outcomes. This affirms the importance of proactive SSP adoption for organizational success. Thus, SSP are validated as significant management innovations that enable firms to enhance their competitiveness, particularly in the globalization of supply chains.

In recent years, management studies in the Asia-Pacific region tend to focus on digital transformation and technology management (Kim et al., 2022; Rueckel et al., 2020), sustainable business practices (Hosain, 2021; Kim & Lee, 2018), supply chain management and globalization (Bu & Wu, 2022; Mahadevan et al., 2023), and corporate governance and ethics (Elmghaamez & Gan, 2023; Rowley & Oh, 2018), among other areas. Building on these thematic pillars, this study adds a novel dimension by focusing on social sustainability practices and its relationship to organizational performance. It bridges various research themes yet stands out by specifically examining how small and medium-sized enterprises, particularly in the handicraft sector, can harness social sustainability practices to enhance their competitive edge. This approach differentiates our study from previous works on sustainable social development (EASCAP, 2018; Pawar, 2017), by providing a deeper exploration into the practical application of SSP for SMEs in the Asia-Pacific region.

Practical contributions

This study provides valuable managerial insights into the diffusion mechanism of SSP within Vietnamese handicraft companies, offering a pragmatic approach to sustainable development. A thorough grasp of the full range and various adoption patterns of SSP enables firms to recognize the importance of adopting a proactive approach in their sustainability efforts. This outcome

implies that firms should prioritize collaboration with stakeholders and investment in advanced SSP practices. Specifically, focusing on supply chain-based and employee-oriented practices can yield significant benefits. Vietnamese handicraft companies must benchmark their practices against the multiple aspects of SSP. Setting clear objectives in this regard is crucial for developing effective plans and strategies to promote SSP diffusion both within individual firms and across their supply chains. Among these strategies, adopting and implementing SSP standards should be a key focus. These standards can serve as guidelines for social initiatives, ensuring alignment with broader sustainability goals.

This study illustrates that the five distinct SSP adoption patterns identified can be seen as representing progressive levels of social sustainability that Vietnamese handicraft companies should aim to achieve. The findings suggest that the diffusion of SSP across firms is more of an accumulative process rather than a static one (Yuen et al., 2017). This indicates a continual advancement in adopting sustainable practices. Further, the study provides robust evidence that higher levels of SSP adoption correlate with greater performance benefits. This underscores the importance of SSP as a driver of organizational success. Therefore, it becomes imperative for firms to equip themselves with adequate organizational resources and capabilities. This preparedness is crucial to transition into proactive SSP adopters, ultimately leading to enhanced innovations and improved performance gains.

The findings of this study hold particular significance for developing nations such as Vietnam, where resource constraints are a reality, yet strategic planning and phased implementation render SSP adoption feasible. In Vietnam, where there is a close collaboration between the government and industry practitioners through centralized planning, these findings are especially pertinent. They provide a valuable framework for promoting SSP adoption effectively. The

identified SSP adoption patterns, along with their distinctive features, can be instrumental for the government in formulating suitable policies and strategies. These can be tailored to provide the necessary support and guidance to organizations at different stages of SSP adoption. With appropriate governmental assistance, organizations can be facilitated to advance their SSP efforts from one level to the next. This progressive approach is exemplified in the case study presented in Box 4, illustrating how such support can translate into tangible SSP advancements.

Box 4 Endeavors to encourage SSP adoption by the Vietnamese government and industry stakeholders

In alignment with the United Nations’ Sustainable Development Goals, the Vietnamese government and key industry stakeholders have dedicated significant efforts to encourage the adoption of SSP, as depicted in the following table.

Year	Stakeholders	Project	SSP adoption-based endeavors
2020-2025	Vietnam Association of Enterprise Development and United State Agency for International Development (USAID)	Improving private sector competitiveness	Ethical behavior
2023-2024	Vietnam Agency of Enterprise Development (AED), Vietnam Chamber of Commerce and Industry, Australian government, UN Women, and Vietnam Women Entrepreneurs Council	Strengthen capacity and competitiveness to access supply chains for women owned enterprises and gender responsive enterprises	Diversity support
2021-2024	AED, UNDP, and Global Affairs Canada	Leverage Vietnam’s social impact business ecosystem in response to COVID-19	Diversity support and ethical behavior
2022	Thua Thien Hue Innovation Hub, UNDP, Environmental Economic Policy Institute, Embassy of the Netherlands, and Saxion University of Applied Sciences	Circular Economy Capacity Building Program for Enterprises in Viet Nam	Ethical behavior
2016-2020	Thua Thien Hue and Quang Nam Provincial People's Committees, USAID	USAID Green Annamites	Ethical behavior
2015	Vietnam Rural Industries Research and Development Institute, Vietnam Tea Association, Vietnam Coffee and Cocoa Association, and Vietnam Handicraft Exporters Association (Vietcraft), and European Union	Promoting Fair Trade in Vietnam	Ethical behavior
2009-2013	Vietnam Trade Promotion Agency, Vietcraft, and United Nations Industrial Development Organization	Greening value chains for sustainable handicrafts production in Vietnam	Ethical behavior

During our interview, Company 9 emerged as a beneficiary of the USAID Green Annamites project. This initiative strategically aims to rejuvenate the handicraft and agricultural sectors, which have been grappling with the outflow of young labor to industries such as textiles, garments, and electronics due to their appealing remuneration and improved working conditions. In response to this challenge, Company 9 secured project funding to conduct training programs focused on enhancing handicraft production skills for individuals above the age of 40 in rural areas. By generating supplementary income through handicraft production, the agricultural workforce can still remain engaged in the agricultural sector. As a result, Company 9 effectively contributes to the sustainable progress of both the handicraft and agricultural industries.

The USAID Green Annamites project stands as a prominent instance of collaborative endeavors between the government and industry stakeholders, aimed at promoting SSP adoption in Vietnam. Nonetheless, these cooperative initiatives are clearly rooted in the principles of diversity and ethical behavior-oriented practices. As a result, there exists a necessity for additional initiatives that embrace a holistic viewpoint on SSP, employing our research findings as a guiding framework.

This study underscores the significant role of various stakeholders in driving the diffusion of SSP in individual companies and throughout the supply chains in the Vietnamese handicraft industry. It is essential for firms to aptly respond to these pressures to maintain their legitimacy and competitiveness in a rapidly evolving market environment. Most critically, companies should focus on SSP initiatives that align with the needs and expectations of suppliers and employees. These stakeholders are identified as having the most significant influence on organizational performance outcomes. By strategically prioritizing SSP that resonate with the most influential stakeholders, Vietnamese handicraft companies can enhance their sustainable practices, thereby fostering a more resilient and competitive industry.

While this study focuses on the Vietnamese handicraft industry, its findings offer practical insights and recommendations that extend beyond Vietnam, resonating with managers in other developing countries within the Asia-Pacific region. Many countries in the Asia-Pacific share similar cultural, economic, and social contexts. This common ground suggests that the strategies and insights derived from this research are highly relevant and potentially effective for businesses and organizations operating in these regions. Understanding the dynamics of social sustainability practices and innovation diffusion, as illuminated by this study, can significantly contribute to organizational improvement across diverse settings in the Asia-Pacific. Consequently, this research not only enhances our understanding of SSP in the specific context of Vietnam but also provides a valuable framework for managers in other similar environments aiming to leverage SSP for greater organizational success.

Limitations and future work

Despite its noteworthy contributions, this study faces several limitations that need to be considered in future research. The first limitation pertains to the context-specific nature of the study using

Vietnamese handicraft companies as subjects of investigation. As such, caution must be applied, as the findings might not be totally transferrable to other business environments (Shafiq et al., 2014; Zhang et al., 2020). It would be interesting to gain a more insightful understanding of a diffusion mechanism across multiple industries or countries to enable a comparison of research findings.

Also, the current study was designed to identify generic SSP adoption pattern through the behaviours of firm in certain commonly recognised SSP categories. Despite the successful identification of five distinctive SSP patterns through in-depth empirical analyses, the level of details in the classification are still limited. For example, a firm can be an early adopter of advanced practices but a late adopter of basic practices. Also, a firm can be proactive in some practices but reactive in the others. Such more refined classification can be investigated in future research to extend the taxonomy developed in the current study.

Another limitation is the narrow scope of organizational performance examined in this study. Future research could explore more aspects of performance, such as social, operational, and financial performance. Specifically, a possible future avenue is to study the impact of specific categories of SSP on those individual aspects. Another possible future avenue is to assess the differences among adoption patterns with respect to various business performance areas to answer the calls for more studies proposed by Zhu et al., (2012) and Shafiq et al., (2014).

Conclusion

The research paper investigates the diffusion of SSP and their impact on organizational performance in Vietnamese handicraft companies. It employs an explanatory sequential mixed-methods approach, comprising a survey of 310 companies and 12 case studies. The study identifies

five distinct SSP adoption patterns: innovative adopters, early adopters, early followers, late followers, and laggards. It reveals that companies with proactive SSP adoption (including innovative adopters, early adopters, and early followers) focus on supply chain responsibility and employee-oriented practices, resulting in better performance than reactive companies (late followers and laggards). The paper contributes to stakeholder and diffusion of innovation theories by demonstrating a mechanism for full-scale SSP adoption, offering insights for managers and policymakers.

References

- Agarwal, A., Giraud-Carrier, F., & Li, Y. (2018). A mediation model of green supply chain management adoption: The role of internal impetus. *International Journal of Production Economics*, 205, 342-358.
- Bai, X., & Chang, J. (2015). Corporate social responsibility and firm performance: The mediating role of marketing competence and the moderating role of market environment. *Asia Pacific Journal of Management*, 32(2), 505-530.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Bryman, A., & Bell, E. (2011). *Business research methods* (3rd ed.). Oxford University Press.
- Bu, N., & Wu, T. (2022). The Asia-Pacific region: The new center of gravity for international business. *International Business in the New Asia-Pacific: Strategies, Opportunities and Threats* (pp. 3-29).
- Castka, P., & Corbett, C. (2016). Adoption and diffusion of environmental and social standards. *International Journal of Operations & Production Management*, 36(11), 1504-1529.
- Churchill, G. A., Jr. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, 16(1), 64-73.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- Croom, S., Vidal, N., Spetic, W., Marshall, D., & McCarthy, L. (2018). Impact of social sustainability orientation and supply chain practices on operational performance. *International Journal of Operations & Production Management*, 38(12), 2344-2366.
- D'Souza, C., McCormack, S., Taghian, M., Chu, M.-T., Sullivan Mort, G., & Ahmed, T. (2020). An empirical examination of sustainability for multinational firms in China: Implications for cleaner production. *Journal of Cleaner Production*, 242, 118446.
- World Commission on Environment and Development. (1987). *Our common future*. Oxford University Press.
- Ding, H., Hu, Y., Yang, X., & Zhou, X. (2021). Board interlock and the diffusion of corporate social responsibility among Chinese listed firms. *Asia Pacific Journal of Management*, 1-34.

- United Nations Economic and Social Commission for Asia and the Pacific (ESCAP). (2018). Economic and social survey of Asia and the Pacific 2018: Mobilizing finance for sustained, inclusive and sustainable economic growth.
- Elmghaamez, I. K., & Gan, X. Y. (2023). Corporate governance and financial performance of firms listed on Asian Pacific stocks: Evidence from Malaysia, Thailand, and Singapore. *International Journal of Business Governance and Ethics*, 17(2,) 155-181.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). Sage.
- Flick, U. (2014). *An introduction to qualitative research* (5th ed.). SAGE Publications Ltd.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Pitman.
- Gao, D., Xu, Z., Ruan, Y. Z., & Lu, H. (2017). From a systematic literature review to integrated definition for sustainable supply chain innovation (SSCI). *Journal of Cleaner Production*, 142, 1518-1538.
- Govindan, K., Rajeev, A., Padhi, S. S., & Pati, R. K. (2020a). Supply chain sustainability and performance of firms: A meta-analysis of the literature. *Transportation Research Part E: Logistics and Transportation Review*, 137, 101923.
- Govindan, K., Shaw, M., & Majumdar, A. (2020b). Social sustainability tensions in multi-tier supply chain: A systematic literature review towards conceptual framework development. *Journal of Cleaner Production*, 279, 123075.
- Gunarathne, N., & Sankalpani, U. (2021). Diffusion of cleaner production in a developing country: The case of Sri Lanka. *Journal of Cleaner Production*, 311, 127626.
- Hair, J. F., Anderson, R. E., Babin, B. J., & Black, W. C. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning EMEA.
- Hasan, N. (2016). Measuring and understanding the engagement of Bangladeshi SMEs with sustainable and socially responsible business practices: An ISO 26000 perspective. *Social Responsibility Journal*, 12(3), 584-610.
- Henderson, D., Sheetz, S. D., & Trinkle, B. S. (2012). The determinants of inter-organizational and internal in-house adoption of XBRL: A structural equation model. *International Journal of Accounting Information Systems*, 13(2), 109-140.
- Holt, D., & Ghobadian, A. (2009). An empirical study of green supply chain management practices amongst UK manufacturers. *Journal of Manufacturing Technology Management*, 20(7), 933-956.
- Hosain, M. S. (2021). What does it take to be green? Evidence from Asia and the Pacific. *Journal of Sustainable Development Studies*, 14, 4.
- Howitt, D. (2016). *Introduction to qualitative methods in psychology* (3rd ed.). PEARSON.
- Huq, F. A., & Stevenson, M. (2020). Implementing socially sustainable practices in challenging institutional contexts: Building theory from seven developing country supplier cases. *Journal of Business Ethics*, 161, 415-442.
- Johnson, M. P. (2015). Sustainability management and small and medium-sized enterprises: Managers' awareness and implementation of innovative tools. *Corporate Social Responsibility and Environmental Management*, 22(5), 271-285.
- Kim, K., & Lee, S. M. (2018). Does sustainability affect corporate performance and economic development? Evidence from the Asia-Pacific region and North America. *Sustainability*, 10(4), 909.

- Kim, J. Y., Park, J., & Jun, S. (2022). Digital transformation landscape in Asia and the Pacific: Aggravated digital divide and widening growth gap. Bangkok: United Nations ESCAP, Information and Communications Technology and Disaster Risk Reduction Division.
- Kitsis, A. M., & Chen, I. J. (2021). Do stakeholder pressures influence green supply chain practices? Exploring the mediating role of top management commitment. *Journal of Cleaner Production*, 316, 128258.
- Klassen, R., & Vereecke, A. (2012). Social issues in supply chains: Capabilities link responsibility, risk (opportunity), and performance. *International Journal of Production Economics*, 140(1), 103-115.
- Koster, M., Vos, B., & van der Valk, W. (2019). Drivers and barriers for adoption of a leading social management standard (sa8000) in developing economies. *International Journal of Physical Distribution & Logistics Management*, 49(5), 534-551.
- Lasrado, F., & Zakaria, N. (2020). Go green! Exploring the organizational factors that influence self-initiated green behavior in the United Arab Emirates. *Asia Pacific Journal of Management*, 37(3), 823-850.
- Lau, C. K. (2019). The economic consequences of business sustainability initiatives. *Asia Pacific Journal of Management*, 36(4), 937-970.
- Le, V. T., Nguyen, T. H., & Nguyen, V. T. (2018). Environment security for traditional craft villages in Bac Ninh province (Vietnam). *American Scientific Research Journal for Engineering, Technology, and Sciences (ASRJETS)*, 48(1), 14-23.
- Lee, K., & Jung, H. (2019). Dynamic semantic network analysis for identifying the concept and scope of social sustainability. *Journal of Cleaner Production*, 233, 1510-1524.
- Mahadevan, K., Elias, A., & Samaranayake, P. (2023). Supply chain performance measurement through collaborative effectiveness: an Asia–Pacific perspective. *International Journal of Productivity and Performance Management*, 72(6), 1667-1687.
- Mani, V., & Gunasekaran, A. (2018). Four forces of supply chain social sustainability adoption in emerging economies. *International Journal of Production Economics*, 199, 150-161.
- Mani, V., Gunasekaran, A., & Delgado, C. (2018). Enhancing supply chain performance through supplier social sustainability: An emerging economy perspective. *International Journal of Production Economics*, 195, 259-272.
- Mani, V., Jabbour, C. J. C., & Mani, K. T. N. (2020). Supply chain social sustainability in small and medium manufacturing enterprises and firms' performance: Empirical evidence from an emerging Asian economy. *International Journal of Production Economics*, 227, 107656.
- Marshall, D., McCarthy, L., McGrath, P., & Claudy, M. (2015). Going above and beyond: How sustainability culture and entrepreneurial orientation drive social sustainability supply chain practice adoption. *Supply Chain Management: An International Journal*, 20(4), 434-454.
- Mathiyazhagan, K., Mani, V., Mathivathanan, D., & Rajak, S. (2023). Evaluation of antecedents to social sustainability practices in multi-tier Indian automotive manufacturing firms. *International Journal of Production Research*, 61(14), 4786-4807.
- Mitra, S., & Datta, P. (2014). Adoption of green supply chain management practices and their impact on performance: An exploratory study of Indian manufacturing firms. *International Journal of Production Research*, 52(7), 2085-2107.
- Morais, D. O. C., & Silvestre, B. S. (2018). Advancing social sustainability in supply chain management: Lessons from multiple case studies in an emerging economy. *Journal of Cleaner Production*, 199, 222-235.

- Nakamba, C. C., Chan, P. W., & Sharmina, M. (2017). How does social sustainability feature in studies of supply chain management? A review and research agenda. *Supply Chain Management: An International Journal*, 22(6), 522-541.
- Nguyen, G. N., Mani, V., Kha M, K., & Papadopoulos, T. (2021). Supply chain social responsibility in labour-intensive industries: A practitioner's perspective. *Production Planning & Control*, 1-20.
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1), 1-13.
- Paulraj, A., Chen, I. J., & Blome, C. (2017). Motives and performance outcomes of sustainable supply chain management practices: A multi-theoretical perspective. *Journal of Business Ethics*, 145(2), 239-258.
- Pawar, M. (2017). Social development in Asia and the Pacific: Major trends and issues. In *Transforming Society* (pp. 53-67). Routledge.
- Percy, W. H., Kostere, K., & Kostere, S. (2015). Generic qualitative research in psychology. *The Qualitative Report*, 20(2), 76-85.
- Pimenta, H. C. D., Ball, P., & Salonitis, K. (2021). Supply chain environmental and social sustainability practice diffusion: Bibliometrics, content analysis and conceptual framework. *Corporate Social Responsibility and Environmental Management*, 28(6), 1870-1890.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903.
- Rogers, E. M. (2010). *Diffusion of innovations* (4th ed.). The Free Press.
- Rowley, C., & Oh, I. (2018). Business ethics and the role of context: Institutionalism, history and comparisons in the Asia Pacific region. In *Business Ethics in East Asia* (pp. 1-13). Routledge.
- Rueckel, D., Muehlburger, M., & Koch, S. (2020). An updated framework of factors enabling digital transformation. *Pacific Asia Journal of the Association for Information Systems*, 12(4), 1-26.
- Sarkis, J., Zhu, Q., & Lai, K.-H. (2011). An organizational theoretic review of green supply chain management literature. *International Journal of Production Economics*, 130(1), 1-15.
- Saunders, M. N. K., Lewis, P., & Thornhill, A. (2016). *Research methods for business students* (7th ed.). Pearson Education Limited.
- Shafiq, A., Klassen, R. D., Johnson, P. F., & Awaysheh, A. (2014). Socially responsible practices: An exploratory study on scale development using stakeholder theory. *Decision Sciences*, 45(4), 683-716.
- Shaw, M., Majumdar, A., & Govindan, K. (2022). Barriers of social sustainability: An improved interpretive structural model of Indian textile and clothing supply chain. *Sustainable Development*, 30(6), 1616-1633.
- Susanty, A., & Sari, D. P. (Year). Exploring the implementation of green supply chain with cluster and discriminant analysis: Case study: Furniture industry at central Java Semarang. *IEEE* (pp. 526-530).
- Tate, W. L., Ellram, L. M., & Gölgeci, I. (2013). Diffusion of environmental business practices: A network approach. *Journal of Purchasing and Supply Management*, 19(4), 264-275.
- Teo, P.-C., Geat, J., Ho, T., & Ting, C. (2020). Contemporary issues in global market: Analysis on handicraft industry in Vietnam. *International Journal of Academic Research in Business and Social Sciences*, 10(3), 242-263.

- Thu, L. A., Fang, S., & Kessani, S. S. (2019). Factors influencing Vietnam's handicraft export with the gravity model. *Journal of Economics and Development*, 21(2), 156-171.
- Tiwari, V., & Thakur, S. (2021). Environment sustainability through sustainability innovations. *Environment, Development and Sustainability*, 23(5), 6941-6965.
- Tran, K. (2015, Vietnam announces official label for craft products). Retrieved April 5, 2022 from <https://vir.com.vn/vietnam-announces-official-label-for-craft-products-38564.html>
- Tran, T. H. U., Lau, K. H., & Ong, C. E. (2021). Adoption of social sustainability practices in an emerging economy: Insights from Vietnamese handicraft organizations. *Sustainable Production and Consumption*, 28, 1204-1215.
- Triguero, A., Moreno-Mondéjar, L., & Davia, M. A. (2016). Leaders and laggards in environmental innovation: An empirical analysis of SMEs in Europe. *Business Strategy and the Environment*, 25(1), 28-39.
- UNIDO. (2013a). Achieving, assessing and communicating sustainability – a manual for the Vietnamese handicraft sector. Retrieved January 2, 2022, from https://www.researchgate.net/publication/304705178_Achieving_Assessing_and_Communicating_Sustainability_A_manual_towards_branding_the_Vietnamese_handicraft_sector
- UNIDO. (2013b). Greening value chains for sustainable handicrafts production in Vietnam. Retrieved March 14, 2022, from http://www.mdgfund.org/sites/default/files/PS_STUDY_Viet_Greening%20Value%20Chains%20for%20Sustainable%20Handicrafts.pdf
- Venkatesh, V., Zhang, A., Deakins, E., & Mani, V. (2021). Antecedents of social sustainability noncompliance in the Indian apparel sector. *International Journal of Production Economics*, 234, 108038.
- VIRI. (2015). Assessment of fair trade development potentials in tea, coffee, cocoa, spice and handicraft industries in Vietnam. Vietnam Rural Industries Research and Development Institute. Retrieved January 7, 2022, from <http://fairtrade.org.vn/english/wp-content/uploads/training-docs/Fair-Trade-in-Vietnam-Final-Report-Eng.pdf>
- Walker, H., & Jones, N. (2012). Sustainable supply chain management across the UK private sector. *Supply Chain Management: An International Journal*, 17(1), 15-28.
- Williams, B., Onsmann, A., & Brown, T. (2010). Exploratory factor analysis: A five-step guide for novices. *Australasian Journal of Paramedicine*, 8(3), 1-13.
- Xu, Y., & Zeng, G. (2021). Corporate social performance aspiration and its effects. *Asia Pacific Journal of Management*, 38(4), 1181-1207.
- Yang, Y., & Shafi, M. (2020). How does customer and supplier cooperation in micro-enterprises affect innovation? Evidence from Pakistani handicraft micro-enterprises. *Asian Business & Management*, 19(5), 530-559.
- Yawar, S. A., & Seuring, S. (2017). Management of social issues in supply chains: A literature review exploring social issues, actions and performance outcomes. *Journal of Business Ethics*, 141(3), 621-643.
- Yin, R. K. (2016). *Qualitative research from start to finish* (2nd ed.). The Guilford Press.
- Yuen, K. F., Wang, X., Wong, Y. D., & Zhou, Q. (2017). Antecedents and outcomes of sustainable shipping practices: The integration of stakeholder and behavioural theories. *Transportation Research Part E: Logistics and Transportation Review*, 108, 18-35.

- Zhang, M., Zeng, W., Tse, Y. K., Wang, Y., & Smart, P. (2020). Examining the antecedents and consequences of green product innovation. *Industrial Marketing Management, 93*, 413-427.
- Zhu, Q., Geng, Y., Sarkis, J., & Lai, K.-h. (2011). Evaluating green supply chain management among Chinese manufacturers from the ecological modernization perspective. *Transportation Research Part E: Logistics and Transportation Review, 47*(6), 808-821.
- Zhu, Q., Sarkis, J., & Lai, K.-h. (2012). Green supply chain management innovation diffusion and its relationship to organizational improvement: An ecological modernization perspective. *Journal of Engineering and Technology Management, 29* (1), 168-185.
- Zhu, Y., Sun, L.-Y., & Leung, A. S. M. (2014). Corporate social responsibility, firm reputation, and firm performance: The role of ethical leadership. *Asia Pacific Journal of Management, 31*(4), 925-947.
- Zhuang, Y., Zhu, Q., & Sarkis, J. (2021). Examining antecedents, consequences, and contingencies of proactive environmental strategy. *Sustainable Production and Consumption, 28*, 1475-1490.