The Impact of Supply Chain Challenges on Sustainable Efficiency in Sri Lankan Star Hotels: Literature Review

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Abstract - Sustainable practices have become increasingly important in a variety various business, especially the hotel industry in Sri Lanka. The aim of this research is to identify the impact of supply chain challenges on sustainable efficiency in star hotels in Sri Lanka. Further, this study identified the factors affecting sustainable efficiency where the researcher has identified logistics and transportation, waste management, stakeholder pressure and technology adoption impact to the sustainability in star hotels. This study addresses only Western Province Star hotels in Sri Lanka because, the research problem addresses the critical question of how supply chain challenges impact on sustainable efficiency in star hotels in Sri Lanka. Western Province was selected by researchers because there are more issues in the supply chain of star hotels in urban areas. As the gap of this research, very limited consideration is given to hotel industry. There are limited research articles that comprehensively focus on supply chain challenges based on sustainable efficiency. The researchers focus on specific challenges such as logistics and transportation, waste management, technology adoption, stakeholder pressure are integrated into supply chain side in Sri Lankan star hotels. The research focused on all-star-rated hotels in Sri Lanka as the population, with a particular emphasis on the 53star hotels located in the Western Province. To determine the sample size, cluster sampling techniques were employed, targeting specific groups within this region. The study adopted a quantitative data collection method, and the data analysis to conduct using multiple linear regression analysis. This research goes by through the deductive approach. This research is supportive for each manager who works in the star hotel sector in Western Province star hotels.

Keywords: Supply Chain Challenges, Star Hotels, Sustainable Efficiency, Western Province

I. INTRODUCTION

Sustainable efficiency has become increasingly important. Sustainable efficiency is the outcome of producing more with fewer resources used, it is an affordable option that offers a path towards economic growth. They are the principal factors of a successful company model (Haie, 2020). Sustainable efficiency not only benefits the environment but also contributes to success and resilience of businesses in a rapidly changing world. Especially for industries such as the hotel industry where there can be a significant social impact. In Sri Lankan context, this study intends to explore the implications of supply chain challenges on sustainable efficiency in Sri Lankan star hotels

In the context of Sri Lankan star hotel sector, where industry provides significantly to the country's Gross Domestic Product (GDP), resolving supply chain challenges is essential to retaining high service standards, reducing expenses, and improving customer fulfilment (Kengatharan & Suganya, 2022). Hotels need to make strategic investments in technological advances, relationships with suppliers, and strong logistical plans to mitigate risks and capture growth and efficiency-oriented opportunities (Ashta & Herrmann, 2021). This research aims to examine the impact of supply chain challenges on supply chain efficiency in star hotels in Western Province in Sri Lanka, providing recommendations for potential solutions to ease these challenges and creating a more sustainable hotel environment practice. This study conducted only for Western

Province star hotels in Sri Lanka. Examining the supply chain processes and sustainable efficiency connected to supply chain management, sourcing and procurement within the star hotels is required for this. The research aims to understand the impacts of these challenges for sustainable efficiency by identifying and assessing difflerent difficulties faced by the supply chain in meeting sustainable efficiency objectives, such as Logistics and Transportation (LT), Waste Management (WM), Stakeholder Pressure (SP), Technology Adoption (TA) are main sustainable standards and practices focusing on here.

Comprehensively, the mathematical model provides an optimal plan for a distribution network and suggests solutions to considering. The uncertainties due to operational risk are rooted in customer demand, yield, production or transportation costs, lead times, a production rate of machines or procurement prices for raw materials (Suryawanshi & Dutta, 2021). According to this article researchers identified that when these factors increase sustainable efficiency is decreased. The researchers explored the influence of stakeholders on environmental management practices in hotels based on the legitimacy of those stakeholders. Based on that factor, researchers have identified that sustainable efficiency decreases as stakeholder pressure increases, means balancing profitability with the growing pressure from investors and stakeholders to adopt sustainable practices (Mensah, 2014).

Hotels may fortify the supply chain strategy and improve overall efficiency by placing a high priority on cost control and sustainability, in addition to reducing risks, this strategy puts star hotels in a competitive and sustainable growth position within the rapidly evolving star hotels in Sri Lanka a thriving and expanding tourist destination, have difficulties in sustainable efficiency while ensuring supply chain efficiency. This research intends to add to the amount of research on sustainable supply chain management in the star hotel industry through studying the impact of supply chain challenges on sustainable efficiency. This research is supportive for each manager who works in the star hotel sector in Western Province star hotels. This study aims to enhance the theoretical understanding of the measure impact supply chain challenges on sustainable efficiency in the star hotels in Western Province, particularly in the context of the Western Province star hotels in Sri Lanka. By examining how to analyze WM and LT developing for delivery issues, lead times, and bulk damage, we aim to assess how technology adoption can enhance sustainable efficiency. It addresses a significant gap in academic discourse regarding the specific supply chain challenges faced by hotel chains in developing countries.

From a practical point of view, the findings of this study have considerable implications for the Star hotels supply chain department. Identifying the impact of supply challenges on sustainable efficiency enables star hotels supply chain department to develop targeted strategies to address these issues, ultimately enhancing supply chain performance and sustainability. The research emphasizes the importance of enhancing supply chain processes, adopting technology and addressing supply chain challenges to create a more resilient and sustainable supply chain model. By addressing the identified supply chain challenges, star hotels can improve their market competitiveness, reduce costs, and enhance their reputation as responsible businesses committed to sustainability, thereby attracting environmentally conscious guests and contributing positively to the local economy. As the gap of this research, very limited consideration is given to hotel industry. There are limited research articles that comprehensively focus on supply chain challenges such as logistics and transportation, waste management, technology adoption, stakeholder pressure are integrated into supply chain side in Sri Lankan star hotels.

II. LITERATURE REVIEW

This section of the research mainly focusses on the initial literature review part the researchers, or the authors identified in literature on delays of supply chain process, supply chain efficiency, hotel efficiency by the side of hotel (Kularatne et al., 2019).

A. Hotel Industry

Studies on the star hotels in Sri Lanka, becoming an important part of the island's tourism economy, has had a lot of opportunities as well as difficulties lately (SLTDA | Sri Lanka Tourism Development Authority, 2024). This sector includes a wide range of lodging options, including eco-lodges, guesthouses with moderate cost of living, and boutique and luxury hotels (Gnjidic & Vukovic, 2018). Study about the Sri Lankan hotel industry the scholars have identified several categories and includes resorts, motels, chain hotels, luxury hotels likewise (Dambhare & Kumar, 2023). The Sri Lanka Tourism Department Authority use the ranking system as the star level (SLTDA: Sri Lanka Tourism Development Authority, 2024).

The ranking method based on the hotel's facilities, popularity, customer services and management practices (Sri Lanka Tourism Development Authority, 2024). Especially they consider the safety and security of the local and foreign customers. As the other responsibility the hotels adopting to the eco-friendly practices with growing on sustainability (Kokkhangplu et al., 2023). The hotel industry is the most sensitive to economic and seasonal demand. In the study the authors mainly focus about the Impact of Supply Chain Challenges on Sustainable Efficiency in Sri Lankan Star Hotels (Koya & Chowdhury, 2022). Studying with the hotel industry the scholars have find specifically Western Province star hotels and all the star level hotels spread in the whole island managing the rating under the Sri Lanka Tourism Department Authority (SLTDA). Considering this study the scholars have selected one hundred and thirty number of star hotels around the Sri Lankan context.

B. Supply Chain Management

Most of the research articles many scholars have mentioned about hotel supply chain mainly consider between customer and supplier (Chandramohan et al., 2023). Internal function integration as well as supplier and customer integration make up the service industry's application of Supply Chain Management (SCM) (Kularatne et al., 2019). That is mainly due to scholars in the field of SSCM have explored the significance of cooperating with suppliers and customers at every stage of the supply chain to implement environmental projects that minimize waste and adhere to regulations (Hussain et al., 2019). However, this study aims to fulfil this gap in the literature and offer suggestions to future researchers on how supply chain challenges impact to sustainable efficiency in the Western Province star hotels in Sri Lanka.

1) Logistics and Transportation: According to logistics and supply chain disruption acts as the two types. Internal disruptions, these may result from internal inefficiencies like inadequate staffing, faulty equipment, or inadequate planning. External disruptions, elements including bad weather, traffic congestion, dependable suppliers, and legal concerns (Suryawanshi & Dutta, 2021). Nevertheless, because there are a growing number of disturbances, the decision-making processes have seen significant setbacks. Road construction and maintenance initiatives, for instance, may result in obstructions and detours, which further complicate travel plans. In addition to causing delays, weather

conditions like heavy rain and fog can also affect visibility and the state of the roads (Miththapala et al., 2013).

Additionally, this disruption may result from ineffective logistics planning techniques like insufficient scheduling or poor route optimization. Finally, strikes by drivers or a lack of labor can seriously interfere with schedules, delaying the delivery of goods (Archetti et al., 2022). Stock shortages caused by supply delivery holdups may force star hotels to either pay more for emergency supplies or risk upsetting customers by not being able to provide certain services or amenities (Wahyudin et al., 2023). This puts pressure on the Star Hotels' operating budget in addition to degrading the supplier experience. Logistics and transportation disruptions can also cause scheduled events and activities to be postponed, which could result in financial losses and reputational harm (Archetti et al., 2022). To reduce the chance of interruptions, star hotels could need to diversify their suppliers or raise their inventory levels, but these measures come with extra expenses and logistical challenges (Ahmadi-Javid & Seddighi, 2013). Hotels must have strong backup plans and an effective supply chain management system in place to handle the difficulties caused by disruptions in transit, so they can keep their supply chain running smoothly and maintain their high standards of service (Kasemsap, 2016).

Proactive management is made possible by putting in place sophisticated tracking and real-time monitoring technologies, which allow for quick remedial action and timely updates. Establishing strategic partnerships with reputable logistics companies guarantees access to substitute choices in the event of disruptions (Roy et al., 2019). Furthermore, keeping buffer or safety stock on hand can lessen the effects of holdups and guarantee order fulfilment and continuing production. Using flexible procurement techniques like multi-sourcing or nearshoring shortens lead times and shortens supply chain lines. Putting money into predictive analytics enables routing decisions to be optimized and possible disruptions to be anticipated (Wahyudin et al., 2023). This study indicates the Logistics & Transportation impact as the supply chain challenges on sustainable efficiency in star hotels in Sri Lanka.

2) Waste Management: A prominent example of a service supply chain is the Western Province star hotels. Damaged items may need to be disposed of during SC, which results in lost income and resource waste. Waste Management frequently happens during handling, transit, and storage because of poor packaging, incorrect stacking, or staff maltreatment (Ksoll et al., 2021). The repercussions include higher replacement costs for damaged items, postponed delivery, and lowered customer satisfaction levels for star hotels. To mitigate waste management, this is necessary to develop using technology adoption to monitor items throughout the SC, train employees on correct handling procedures, and provide sturdy packaging solutions (Omare, 2022). Providing a more robust and effective SC, possible weak areas may be found and addressed with the aid of literature on the star hotels SC performance frequent audits and process changes.

According to the more researcher's Major wastages can render several rooms or common areas unusable, which could lower occupancy rates and result in lost revenue. And increase maintenance and repair expenses, which puts a strain on the hotel's finances and resources. Problems with waste management in supply chain can seriously impair logistics' effectiveness and economy (Madhani, 2019). In the end, this waste hurt the bottom line by increasing return rates and increasing replacement prices. A diversified strategy is needed to address these problems. Risks can be reduced by improving packing supply chain and techniques, putting stronger handling procedures in place, and spending money on cutting-edge tracking devices (Kan & Miller, 2022). Reducing waste and stressing sustainability in packaging are also essential for environmental responsibility and long-term resilience. Based on the study the researchers identified about the how waste management impact to sustainable efficiency in the Sri Lankan star hotels.

3) *Technology Adoption:* The star hotels recognize the growing importance of sustainable efficiency, balancing economic success with environmental and social responsibility (Kruesi & Remy, 2024). Technology provides a significant opportunity to enhance this efficiency. This review focuses on the potential positive impact of technology adoption on sustainable efficiency in western province star hotels in Sri Lanka. Several studies suggest that technology adoption has a significant positive impact on sustainable efficiency (Sivashanker, 2022). For instance, the international journal explores how technologies like smart room management systems can optimize energy consumption, contributing to environmental sustainability. Furthermore, in The International Journal of Logistics Management, discuss the potential of technological tools for optimizing logistics and reducing transportation emissions, contributing to a more sustainable efficiency (Björklund & Piecyk-Ouellet, 2021).

While the broader advantages of technology adoption are established, limited research explores its specific application within the Western Province star rating hotels. Studies like in the Journal of Enterprise Information Management, suggest that technology adoption in developing economies can be slower due to infrastructure limitations and a lack of technology literacy (Björklund & Piecyk-Ouellet, 2021). This highlights the need for research focused on Sri Lanka to understand about the current level of technology adoption in Western Province star hotels in Sri Lanka, the specific technological tools and technology adoption are most relevant for enhancing sustainable efficiency in this context, the potential challenges and opportunities associated with technology adoption for Western Province star hotels in Sri Lanka. The review of the literature suggests that technology adoption can also contribute to reducing supply chain challenges, potentially leading to improved efficiency (Guo & Ma, 2023). Investigating this aspect in the star hotel context of Sri Lankan could be particularly fruitful, as supply chain challenges can be a significant hurdle Western Province star hotel.

Greentech presents a promising opportunity for Western Province star hotels to achieve sustainable efficiency. Existing research indicates the potential for technological tools to enhance resource utilization, promote ethical sourcing practices, and improve supply chain management. However, further research is needed to understand the specific opportunities and challenges associated with technology adoption in the Sri Lankan star hotel area. By examining the current level of technological adoption, exploring relevant technologies, and examining the role of Greentech in addressing supply chain challenges, this research can contribute to a more sustainable and efficient Western Province star hotel industry in Sri Lanka. The major reviewing the previous articles, the technology adoption provides a minor positive impact on sustainable efficiency in various industries. But the results found on the without sustainable efficiency of supply chain challenges in the Sri Lankan star hotels.

4) Stakeholder Pressure: The star hotels in Sri Lanka strive to maintain a consistent sustainable efficiency, balancing economic success with environmental and social responsibility. The stakeholders are any group or individuals who have an impact on or are impacted by an organization's success in achieving its goals. For this reason, achieving

environmental sustainability in the hotel sector and all its activities necessitates the involvement and dedication of all stakeholders (Alreahi et al., 2023). However, supply chain challenges can hinder these efforts. This review examines the impact of supply chain issues on effective sustainable efficiency and explores the potential of stakeholder pressure as a factor of a mitigating factor (Vidal et al., 2022). Several studies demonstrate the negative impact of supply chain challenges on sustainable efficiency in the star hotel industry.

The impact of supply chain challenges extends beyond sustainable efficiency. Emphasize the importance of sustainable supply chain practices for achieving overall sustainability goals in an organization (Joshi & Kabra, 2020). Similarly, the international journal of productivity and performance management highlights the environmental consequences of supply chain issues, such as increased transportation emissions due to sourcing from distant supply chain process (Samaranayake et al., 2023). While supply chain challenges pose significant challenges, several studies suggest that robust stakeholder pressure can be a crucial component in reducing their impact. Furthermore, in the journal mentioned direct or indirect support from the government, directives and laws are regarded as important for promoting and implementing an environmental orientation (Alreahi et al., 2023). The authors identified stakeholders pressure a major impact on sustainable efficiency as the supply chain challenges in Sri Lankan star hotels.

C. Supplier Challenges

Supply challenges mainly impact sustainable efficiency for the star hotel industry. Studies on the sustainable efficiency of star hotel industry have provided insight into several issues that affect the sector as a whole and star hotels' managers specifically (Kularatne et al., 2019). In this research the scholars identified variable related to the supply chain challenges how impact to the star hotels in Western Province in Sri Lanka. As the existing research consideration should be given to driver safety considering the lengthy driving hours, cost effectiveness, and importance. Since the supply chain process must accelerate to prevent logistics and transportation delays, the driver in this scenario will also be more at risk of road dangers (Lajimi et al., 2017). Even though articles about Greentech in the supply chain field usually concentrate on explaining the solutions and opportunities of the technology for supply chain management. Most of the research articles the authors have studied are about waste management as the challenge of the supply chain. As well as manufacturing facilities worldwide now need to be digitalized to compete in today's quality and service standards. Thus, companies can benefit from intelligent technologies while addressing the problems and difficulties associated with Sustainable Supply Chain Management (SSCM) (Kumar, 2020).

The fundamental purpose of supply chain management is to reduce investment without compromising customer satisfaction, thereby serving as a strategic weapon to create a sustainable competitive advantage (Dirsehan & Cankat, 2021). Many scholars propose that businesses should constantly focus on developing friendly and close bonds with their suppliers. Some contend that businesses need to determine how frequently and for what kinds of goods special relationships are required. For example, we propose that sustainability-based hotels should evaluate their supply chain based on things like how satisfied they are with new raw materials, what kind of goods they supply and how relevant those goods are to foods overall, and how long it takes for them to deliver (Huang et al., 2020).

D. Sustainable Efficiency in the Supply Chain Process

The past decades have seen a rise in environmental sustainability consciousness worldwide, which is responsible for a major increase in the attention that sustainable development has received in literature (Omrani et al., 2022). Using this approach in relation with an empirical study and a thorough literature review on sustainability as it relates to logistical processes (Mejías et al., 2016). The authors show a taxonomy of sustainable supply chain challenges classified into four areas: logistics & transportation, waste management, technology adoption, stakeholder pressure.

Logistics includes all our primary modes of transportation (air, sea, rail, and road), and the systems and resources needed to move goods are massive in terms of the quantity and dimensions of terminals, vehicles, and handling equipment. Logistics and transportation companies are adopting and implementing carbon-related management practices more often to uphold their social contracts while also looking for ways to increase their logistical efficiency and generate revenue (Herold & Lee, 2017). Due to the industrial revolution, people started migrating from rural to urban regions in the sixteenth century, which resulted in a significant increase in the volume of waste generated. Countries have successfully tackled a significant portion of the health and environmental contamination problems linked to waste production. On the other hand, the speed at which emerging nations are developing and urbanizing is causing the historical issues that developed nations have previously faced to recur (Amasuomo & Baird, 2016). Technology adoption refers to the process through which people, organizations, or communities start utilizing and incorporating new technologies into their routines, processes, or way of life. It covers the process of making decisions about technical innovation from its first awareness to its complete adoption and application (Pappas et al., 2021). Stakeholder pressure has become more significant in the context of sustainability as companies are under pressure to lessen their environmental effect and adopt more moral business practices in response to the public's growing concerns (Shahzad et al., 2020)

According to the more authors also supported declarations that are easily implementable by businesses located in areas with highly developed and sustainable infrastructure, like developed nations. Studying this topic is essential due to the gap in the literature on supply chain efficiency problems in Sri Lanka so far, especially logistical disruption in food and beverages. Something that happens how has the luxury hotel management made decisions for that? Taking a selected Western province star hotels in Sri Lanka to talk to them about solutions and ideas and plans that they can provide together and conducting research. The highlighted that recent contributions in the field of green & sustainable practices for more study about the relevant articles for based on the scholars' research topic.

III. METHODOLOGY

This study is a literature review based on published research in exploring the impact of supply chain challenges on sustainable efficiency in Sri Lankan star Hotels. It is created based on the content of selected articles according to deductive approach, and it aims to gather knowledge regarding the impact of supply chain challenges on sustainable efficiency in Sri Lankan star hotels. This study will utilize quantitative method, quantitative data to provide a comprehensive analysis (Yuan, 2023).

The deductive research approach selected by the researchers involves developing hypotheses based on existing theories and testing them through realistic observation and

data analysis (Chiwaridzo, 2024). This approach allows the researchers to explore the impact of supply chain challenges on sustainable efficiency in Sri Lankan star hotels. This study is giving questionnaires to the department of supply chain in star hotels and analyzing data (Dilshan & Toko, 2022). Due to that research design, there is a quantitative approach.

The researchers focus on the Sri Lankan star hotels as the population. This study focusing on one hundred and thirty number of star hotels (Sri Lanka Tourism Development Authority, 2024). The choice of the 53 star hotels in Western Province as the sample is based on its importance in the Sri Lankan hotel industry and its commitment to sustainability efficiency (Wang, 2019). The population under investigation comprises star hotels in Sri Lanka, with the sample selected using a probability or random cluster sampling technique (Dilshan & Toko, 2022). Data collection for this study will involve primary data. Primary data will be collected through questionnaires conducted with departments of supply chain in star hotels in Sri Lanka (Osei & Cheng, 2023).

The main data sources used in this study are research papers from the year 2011 to 2024 considering the knowledge updates and relevancy. Most of the papers that were assessed were taken from main research databases such as Research gate, Science direct and emerald Insight. The search process involved main keywords including sustainable efficiency, supply chain challenges, star hotels, Western province, Sri Lanka. As along with the article count at each stage from three main databases. Figure 1 illustrated by an initial literature review. There is no duplication among the 60 articles (Hao et al., 2024). The screening stage consists of 17 title screening articles, 12 full text screening articles, 24 abstract and keyword searching articles and 7 depth analysis articles. This is shown in the figure below.

Search Results Total= 60				
Emerald=38	Research Gate=7	Science Direct=15		
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Title Screening=17				
Emerald=8	Research Gate=2	Science Direct=7		
Full text screening=12				
Emerald=10	Emerald=10 Research Gate=1 Science Direct=1			
Abstract& key words search=24				
Emerald=17	Research Gate=3	Science Direct=4		
Available for analysis =7				
Emerald=3	Research Gate=1	Science Direct=3		

Figure 1. Literature Review

Source: Authors' compilation.

Figure 1 presents the categorization based on the literature survey. Articles published from the years 2015 to 2024 are exclusively online to ensure the usage of the most up to date information. The advanced literature search enables us to find 60 articles from the databases and the table illustrates the breakdown of scholarly work under each database.

	Total number of articles	
Emerald Insight	38	
Research Gate	7	
Science Direct	14	
Total	60	

Source: Authors' compilation.

Table 1 shows the number of articles published in recent years. The researchers followed many articles in the latest years (2021-2024).



Figure 2. Articles Published from 2011-2024

Source: Authors' compilation.

Article counts by Journal are presented in Table 2.

Table	2.	Articles	Counts	bv	Journal
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Journal Name	Article Count
Advances in Hospitality and Leisure	1
Applications of Management Science	1
Benchmarking	1
British Food Journal	4
Business Process Management Journal	2
Cogent Business & Management	1
Computers and Industrial Engineering	1
Computers and Industrial Engineering	1
Energy for Sustainable Development	1
European Journal of Innovation Management	1
Foresight	1

Heliyon	2
Industrial Management and Data Systems	1
International Journal of Contemporary Hospitality Management	4
International Journal of Hospitality Management	1
International Journal of Information Systems and Supply Chain	1
Management	
International Journal of Lean Six Sigma	3
International Journal of Logistics Management	2
International Journal of Operations and Production Management	1
International Journal of Process Management and Benchmarking	1
International Journal of Production Economics	2
International Journal of Productivity and Performance	1
Management	
International Journal of Retail and Distribution Management	1
International Journal of Sustainable Engineering	1
Journal of Agribusiness in Developing and Emerging Economies	1
Journal of Cleaner Production	1
Journal of Enterprise Information Management	1
Journal of Hospitality and Tourism Insights	5
Journal of Hospitality and Tourism Management	1
Journal of Hospitality and Tourism Technology	1
Journal of Science and Technology Policy Management	1
Journal of Small Business and Enterprise Development	1
Management of Environmental Quality	1
PACKAGING TECHNOLOGY AND SCIENCE	1
Procedia - Social and Behavioral Sciences	1
Progress in Disaster Science	1
South Asian Journal of Operations and Logistics	1
Supply Chain Analytics	1
Supply Chain Management	2
Supply Chain Management: An International Journal	1
Sustainable Tourism	1
Tourism Management	1
TQM Journal	1
UGC Care Journal	1

Source: Authors' compilation.

Figure 3. Research Area



Source: Authors' compilation.

Figure 3 presents the research area. Researchers often use a combination of literature surveys and case studies to identify variables and gain insights into a research topic. A recent study found that researchers rely on literature surveys for 70% of their variable identification, while case studies account for 30%. This approach allows researchers to leverage existing knowledge from literature while also gaining in-depth, context-specific insights from case studies.

Methodology	Number of Articles	Percentage
Mixed	13	22%
Qualitative	22	37%
Quantitative	35	41%
Total	60	100%

Table 3. Articles Counts by Journal

Source: Authors' compilation.

Table 3 shows the articles classifications. The researchers identified methodology in mixed, quantitative and qualitative methods. This table represents as a percentage

Rank	Country	Journal Articles
1	UK	32
2	China	4
3	UAE	4
4	USA	3
5	Thailand	3
6	Turkey	3
7	Sri Lanka	2
8	India	2
9	Greece	1
10	Germany	1
11	Singapore	1
12	Pakistan	1
13	Japan	1
14	Netherlands	
15	Australia	1

Table 4. Country Wise Publications

Source: Authors' compilation.

IV. CONCLUSION

This research study has undertaken a comprehensive examination of the potential ramifications of supply chain challenges on sustainable efficiency in Sri Lankan star hotels. By examining the impact of supply chain challenges such as logistics and transportation, waste management, technology adoption and stakeholder pressure, the investigation on sustainable efficiency.

The quantitative method approach, encompassing questionnaires, has facilitated a thorough understanding of the challenges facing star hotels in Sri Lanka and the potential solutions offered by enhanced sustainable efficiency of supply chain. The selection of the 53-star hotels in Western Province as a sample size has provided a robust foundation for initial analysis, while future research opportunities exist to expand the sample size to encompass a broader range of Sri Lankan star hotels in Western Province.

By identifying key areas for enhancement within supply chain challenges, the study equips hoteliers with the necessary knowledge to implement sustainable efficiency. Furthermore, the research findings have the potential to contribute to the broader body of knowledge surrounding sustainable efficiency. Additionally, the exploration of technology adoption presents opportunities for identifying innovative solutions to optimize supply chain process and suggests sustainable efficiency across the Sri Lankan star hotels.

The potential publication of this research in high-ranking logistics and supply chain journal articles will ensure its findings reach a wider audience. This dissemination of knowledge can foster collaboration between hoteliers, suppliers, ultimately leading to a more sustainable and efficiency on star hotels in Sri Lanka and beyond.

V. IMPLICATIONS TO THEORY, PRACTICALITY AND FUTURE RESEARCH

In terms of the significance of the results for theory, authors can study the key articles in the related literature cited in this paper to gain a deeper insight into supply chain challenges in the hotel industry. When considering the practicality of the findings, suppliers can implement four supply chain challenges and have significant impact on sustainable efficiency in the Sri Lankan Star Hotels. The implication for future research is to figure out the elements of the supply chain performance that will be evaluated.

The research demonstrates a high level of originality by focusing on a relatively underexplored area: the impact of supply chain challenges on sustainable efficiency within the context of star hotels in Sri Lanka, an area that has received limited scholarly attention. By concentrating on specific challenges such as logistics and transportation, waste management, the integration of technology adaptation and stakeholder pressure this study offers a fresh perspective that is particularly relevant to the hotel industry. While supply chain challenges have been extensively documented in various industries, applying this framework to the Sri Lankan hotel context especially with an emphasis on sustainable efficiency provides new insights that can enhance both academic discourse and practical applications in the hotel industry.

Furthermore, the study's contribution to localized sustainable efficiency in a developing economy underscores its originality and relevance, highlighting the potential for these findings to inform strategies that improve sustainable efficiency within the supply chain management.

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