


**THE IMPACT OF OUTSOURCING MODEL ON SUPPLY CHAIN EFFICIENCY AND PERFORMANCE IN SMES: A CASE OF THE HOSPITALITY INDUSTRY**

**Ezmigna Ibrahim<sup>A</sup>, Qusai Khraisat<sup>B</sup>, Mahmoud Alghizzawi<sup>C</sup>, Siti Zaleha Omain<sup>D</sup>,  
Anna Mohammed Humaid<sup>E</sup>, Norafidah Binti Ismail<sup>F</sup>**



ARTICLE INFO	ABSTRACT
<p><b>Article history:</b></p> <p><b>Received</b> 07 April 2023</p> <p><b>Accepted</b> 04 July 2023</p>	<p><b>Purpose:</b> The study's main goal was to determine the impact of outsourcing models on supply chain efficiency and SMEs' performance in the hospitality industry. The qualitative research design was used to achieve the objectives.</p>
<p><b>Keywords:</b></p> <p>SMES; Supply Chain; Performance; Outsourcing; Hospitality; Qualitative Research.</p>	<p><b>Theoretical framework:</b> Outsourcing model is one of the key business trends experienced in the contemporary business sector. Outsourcing is an organizational operational approach in which a corporation hires a third party to perform planned or ongoing obligations. Whatever the case may be, it entails the transfer of people and assets from one business to another. The approach is concerned with establishing answers to the whys and how's of the research question.</p> <p><b>Design/methodology/approach:</b> Secondary data was entirely used to assess the research questions. Articles were obtained from the selected databases comprising Google Scholar, Science Direct, Scribed, Scopus, JSTOR, and DOAJ using the keywords. The PRISMA framework was used to appraise the articles and only 13 met the critical. Data was synthesized and analysed using the thematic approach.</p>
	<p><b>Findings:</b> Outsourcing models have contributed significantly in enhancing the efficiency of the supply chain. Additionally, SME's have portrayed improved performance after adopting the outsourcing models. This is closely associated and reflected by complimenting resources and capabilities, access to better and qualified personnel, high quality products and services, competitive prices and cost reduction.</p> <p><b>Research, Practical &amp; Social implications:</b> The incorporation of outsourcing models in hospitality industry is a mandatory exercise in the contemporary business sector Nevertheless, the strategy is instrumental in enhancing supply chain efficiency and improving the entire performance. In addition, outsourcing models are key trends in hospitality industry thus all the market should incorporate the conforming strategies to avoid stiff completion.</p> <p><b>Originality/value:</b> The findings suggest several consequences forth fields of Outsourcing Model on Supply Chain Efficiency and Performance in SMES. Although outsourcing models are associated with multiple benefits, the implementation should be guided by expert depending on the model. Also, a link</p>

<sup>A</sup> PhD Candidate. Business Management Department, Azman Hashim International Business School, University Technology Malaysia. Malaysia. E-mail: [ibrahim.ezmigna@graduate.utm.my](mailto:ibrahim.ezmigna@graduate.utm.my)  
Orcid: <https://orcid.org/0000-0003-2379-8046>

<sup>B</sup> PhD Candidate. Business Management Department, Faculty of Business, Cyprus International University. Cyprus. E-mail: [qusaikhraisat@gmail.com](mailto:qusaikhraisat@gmail.com) Orcid: <https://orcid.org/0000-0003-2379-8046>

<sup>C</sup> Assistance Professor. Marketing Department, Faculty of Business, Amman Arab University. Jordan. E-mail: [m.alghzawi@aau.edu.jo](mailto:m.alghzawi@aau.edu.jo) Orcid: <https://orcid.org/0000-0002-9406-4632>

<sup>D</sup> Professor. Business Management Department, Azman Hashim International Business School, University Technology Malaysia. Malaysia. E-mail: [zaleha@utm.my](mailto:zaleha@utm.my) Orcid: <https://orcid.org/0000-0002-4047-0969>

<sup>E</sup> PhD Candidate. Business Management Department, Business School, University Utara Malaysia. Malaysia. E-mail: [amnahumaid86@gmail.com](mailto:amnahumaid86@gmail.com) Orcid: <https://orcid.org/0000-0001-8089-5585>

<sup>F</sup> Professor. Business Management Department, Business School, University Utara Malaysia. Malaysia. E-mail: [amnahumaid86@gmail.com](mailto:amnahumaid86@gmail.com) Orcid: <https://orcid.org/0000-0002-6492-0311>

should be established between the research objectives, outsourcing model and strategic management.

Doi: <https://doi.org/10.26668/businessreview/2023.v8i6.3224>

## O IMPACTO DO MODELO DE OUTSOURCING NA EFICIÊNCIA E DESEMPENHO DA CADEIA DE SUPRIMENTOS EM PMES: UM CASO DA INDÚSTRIA HOTELEIRA

### RESUMO

**Objetivo:** O principal objetivo do estudo foi determinar o impacto dos modelos de terceirização na eficiência da cadeia de suprimentos e no desempenho das PMEs do setor hoteleiro. O desenho de pesquisa qualitativa foi utilizado para alcançar os objetivos.

**Referencial teórico:** O modelo de terceirização é uma das principais tendências empresariais vivenciadas no setor empresarial contemporâneo. A terceirização é uma abordagem operacional organizacional na qual uma corporação contrata um terceiro para executar obrigações planejadas ou contínuas. Seja qual for o caso, implica a transferência de pessoas e ativos de um negócio para outro. A abordagem está preocupada em estabelecer respostas para os porquês e como da questão de pesquisa.

**Desenho/metodologia/abordagem:** Dados secundários foram inteiramente usados para avaliar as questões de pesquisa. Os artigos foram obtidos das bases de dados selecionadas compreendendo Google Scholar, Science Direct, Scopus, JSTOR e DOAJ usando as palavras-chave. O framework PRISMA foi utilizado para avaliação dos artigos e apenas 13 atingiram a crítica. Os dados foram sintetizados e analisados por meio da abordagem temática.

**Resultados:** Os modelos de terceirização têm contribuído significativamente para aumentar a eficiência da cadeia de suprimentos. Adicionalmente, as PMEs têm apresentado melhora de desempenho após a adoção dos modelos de terceirização. Isso está intimamente associado e se reflete na complementação de recursos e capacidades, acesso a pessoal melhor e qualificado, produtos e serviços de alta qualidade, preços competitivos e redução de custos.

**Implicações de pesquisa, práticas e sociais:** A incorporação de modelos de terceirização na indústria hoteleira é um exercício obrigatório no setor empresarial contemporâneo. No entanto, a estratégia é fundamental para aumentar a eficiência da cadeia de suprimentos e melhorar o desempenho como um todo. Além disso, os modelos de terceirização são tendências importantes na indústria de hospitalidade, portanto, todo o mercado deve incorporar as estratégias de conformidade para evitar a conclusão rígida.

**Originalidade/valor:** Os resultados sugerem várias consequências para os campos do Modelo de Terceirização na Eficiência e Desempenho da Cadeia de Suprimentos em PMES. Embora os modelos de terceirização estejam associados a múltiplos benefícios, a implementação deve ser orientada por especialista dependendo do modelo. Além disso, deve-se estabelecer um vínculo entre os objetivos da pesquisa, o modelo de terceirização e a gestão estratégica.

**Palavras-chave:** PME, Cadeia de Abastecimento, Desempenho, Outsourcing, Hotelaria, Pesquisa Qualitativa.

## EL IMPACTO DEL MODELO DE TERCERIZACIÓN EN LA EFICIENCIA Y EL RENDIMIENTO DE LA CADENA DE SUMINISTRO EN LAS PYMES: UN CASO DE LA INDUSTRIA DE LA HOSPITALIDAD

### RESUMEN

**Objetivo:** El objetivo principal del estudio fue determinar el impacto de los modelos de subcontratación en la eficiencia de la cadena de suministro y en el desempeño de las PYME en el sector de la hospitalidad. Se utilizó el diseño de investigación cualitativa para lograr los objetivos.

**Marco teórico:** El modelo de outsourcing es una de las principales tendencias empresariales que se vive en el sector empresarial contemporáneo. La subcontratación es un enfoque operativo organizacional en el que una corporación contrata a un tercero para realizar obligaciones planificadas o en curso. En cualquier caso, implica transferir personas y activos de un negocio a otro. El enfoque se preocupa por establecer respuestas a los porquês y cómo de la pregunta de investigación.

**Diseño/metodología/enfoque:** Los datos secundarios se utilizaron en su totalidad para evaluar las preguntas de investigación. Los artículos se recuperaron de bases de datos seleccionadas que comprenden Google Scholar, Science Direct, Scopus, JSTOR y DOAJ utilizando palabras clave. Se utilizó el marco PRISMA para evaluar los artículos y solo 13 alcanzaron el punto crítico. Los datos fueron sintetizados y analizados utilizando el enfoque temático.

**Resultados:** Los modelos de externalización han contribuido significativamente a aumentar la eficiencia de la cadena de suministro. Además, las pymes han mostrado un mejor desempeño después de adoptar modelos de

tercerización. Esto está íntimamente asociado y se refleja en la complementación de recursos y capacidades, acceso a personal mejor y más calificado, productos y servicios de alta calidad, precios competitivos y reducción de costos.

**Investigación, implicaciones prácticas y sociales:** La incorporación de modelos de outsourcing en la industria hotelera es un ejercicio obligado en el sector empresarial contemporáneo. Sin embargo, la estrategia es fundamental para aumentar la eficiencia de la cadena de suministro y mejorar el rendimiento general. Además, los modelos de externalización son tendencias importantes en la industria hotelera, por lo que todo el mercado debe incorporar estrategias de cumplimiento para evitar una finalización rígida.

**Originalidad/Valor:** Los resultados sugieren varias consecuencias para los campos del Modelo de Outsourcing en la Eficiencia y Desempeño de la Cadena de Suministro en las PYMES. Si bien los modelos de subcontratación están asociados con múltiples beneficios, la implementación debe ser impulsada por expertos según el modelo. Además, se debe establecer un vínculo entre los objetivos de la investigación, el modelo de externalización y la gestión estratégica.

**Palabras clave:** PYMES, Cadena de Suministro, Desempeño, Outsourcing, Hotelería, Investigación Cualitativa.

## INTRODUCTION

The contemporary business sector has emerged to be highly competitive as some firms continue to experience elimination from the market as others register underperformance (Alnaser et al., 2020; Aoun et al., 2022). Nevertheless, the competition is associated to adoption of emerging business trends and technologies (Alghizzawi, 2019). Business entities wishing to excel in the market should identify and utilize competitive advantage appropriately (Al-Shibly et al., 2019; Rahi et al., 2021) Despite the incorporation of modern technology in day-to-day operations, multiple business entities are still struggling to achieve both short-term and long-term goals. (Dekkers, 2000)The situation is associated with a lack of adequate resources and an inadequate workforce to implement the recommended strategies. (Shamina & Borisova, 2018) Besides, some institutions lack well-developed operational techniques and execution of day-to-day activities especially those revolving around manufacturing and supply (Faridi & Malik, 2020)As a result, scholars and business owners have been investing heavily in research to identify the most appropriate measures needed to enhance supply chain efficiency and performance. The processes are highly adopted in Medium and Small Sized Enterprises (SMEs) since they are prone to stiff and unhealthy competition (Al- Samirae et al., 2020; Osibanjo & Adeniji, 2017) Such institutions are essential in the economic model since they outnumber large firms considerably, employ huge numbers of people, and are generally commercial in nature, helping to shape innovation (Faridi & Malik, 2020; Muhaisen, 2020).

Outsourcing is an organizational operational strategy whereby a firm hires another to execute planned or existing tasks internally (Alghzawi et al., 2020; Attaran, 2020; Habes, Alghizzawi, et al., 2023; Rahi et al., 2019). Nevertheless, it entails transferring workers and assets from one firm to another. The exercise is characterized by contracted business operations,

particularly the key functions such as facility management, manufacturing and generally executing day-to-day activities (Truong et al., 2017). Consequently, the outsourcing models are comprehensive terminologies referring to how projects are approached and delivered (Khan & Fitzgerald, 2004). The model-suiting project or a business entity depends on the specifications and the product-anticipated achievements. However, the three most effective software-outsourcing models are generally considered to be delivery team, software outsourcing, and staff augmentation (Martin Christopher, 2016). Nevertheless, outsourcing models are dictated by the nature of the process, the variations, involved countries, and the sector. In the contemporary business sector, the incorporation of outsourcing models has experienced an increasing trend (Gujarati et al., 2004). Although the concept is associated with benefits, there are associated uncertainties. (Paulraj & Blome, 2017) The adoption of outsourcing models especially in SMEs has been a controversial topic. While some investors and business entities associate the models with improved organizational performance, others have reported insignificant changes (United Nations Economic Commission for Europe, 2017). The resulting contradictions have left many firms undecided on the best approach to adopt (Alghizzawi et al., 2018). It is worth noting that the concept is sensitive as it affects multiple business aspects (THUN, 2010). In addition, several SMEs have ignored outsourcing models and prioritized traditional operational strategies due to a lack of adequate information. Consequently, the primary rationale of this study is to scrutinize the impacts of the outsourcing model on supply chain efficiency and performance in SMEs (Eragbhe & Omoye, 2014; Tian et al., 2020).

The hospitality industry has been centrally positioned in adopting and implementing outsourcing models in day-to-day operations (Kanyama et al., 2022). It has been reported to be an effective and reliable strategy in providing staff solutions that are instrumental in reducing costs while improving efficiency. Besides, they ensure hospitality industry players deliver outstanding services to the consumers (Doricic et al., 2019). Nevertheless, incorporation of outsourcing models helps the SME's match the standards of the international players and large-scale enterprises. In addition, outsourcing is considered to be a mandatory exercise in the current hospitality sector due to the wide range of the involved activities. This implies that there are multiple moving pieces resulting to complexity as the world changes. Consequently, the outsourcing models shine in addressing these challenges. (Liang et al., 2017).

Consequently, this study anticipates determining the effects of the outsourcing model on supply chain efficiency and performance in SMEs while focusing on the hospitality industry. (Pham et al., 2019) As a result, the benefits of outsourcing models in SMEs will be

critically outlined thus making the necessary recommendations. Nevertheless, the study is essential since SMEs operating in the hospitality industry significantly outnumber the large business entities and they contribute substantially to the economy. Therefore, investigation of their supply chain efficiency and the general performance as associated with outsourcing models is crucial (Khan & Fitzgerald, 2004). The majority of the conducted studies have reported outsourcing models to be essential tools in small and mid-sized enterprises. In addition, majority of the studies have approached the issue generally with less focus on the hospitality sector. However, there is a lack of empirical evidence establishing the relationship between outsourcing models, supply chain, and SMEs performance among firms operating in the hospitality industry (Rivera et al., 2015). Since outsourcing models are an aspect of the technological advancements incorporated in the business sector, it makes sense to conduct a research study on the subject and present the necessary proposals and recommendations to enhance SME's success.

Nevertheless, this study is closing a gap by combining the outcomes of recently conducted studies on the effect of outsourcing models in SMEs operating in the hospitality sector. The presented empirical evidence will be instrumental not only to SMEs but also business entities in different levels wishing to adopt outsourcing models. (Alghizzawi et al., 2019) Nevertheless, the findings will not be applicable to only firms operating in the hospitality industry but different sectors. Additionally, the approach will influence decision-makers in the strategic planning process while prioritizing the best measures to implement outsourcing techniques.

## **RESEARCH AIM**

The study anticipated determining the impact of outsourcing on supply chain efficiency and performance of Small and Mid-Sized Enterprises (SMEs) particularly operating in the hospitality sector. It will shed light on the importance of outsourcing models in day-to-day business operations, especially SMEs. Additionally, through identifying the supply chain efficiencies and SME's performance effects, the necessary recommendations will be outlined to facilitate excellence. Consequently, the study is not only instrumental to SMEs operating in the hospitality industry but also the entire economy and diverse sectors since they are key players (Jabbar & Hussein, 2017). This is because SMEs help maintain revenues, assets, or a number of employees below a certain threshold and are accorded the necessary attention in different countries. Therefore, the findings will not only be instrumental to firms operating in

hospitality industry but diverse sectors since outsourcing is a key trend in enhancing business excellence.

## LITERATURE REVIEW

Outsourcing is a comprehensive and complex structure characterized by multiple activities and responsibilities resulting in a series of administrative and managerial concerns (Eragbhe & Omoye, 2014) However, theoretical frameworks have been developed to help scientists understand the operations thus assisting enterprise managers to handle the processes effectively. According to Shqairat and Sundarakani, ( 2018) the key theories include the transaction cost economics (TCE), core competencies theory, relational theory, resource-based theory, and knowledge-based theory. TCE provides the best decision formulation tools needed to help firms determine the operations to be outsourced. Consequently, they make the necessary preparations to implement the associated organizational changes (Shqairat & Sundarakani, 2018)The core competencies theory highlights the measures of combining diverse productive skills and the integration methods through different technologies to enhance performance (Dekkers, 2000) In addition, the relational theory defines how business entities may acquire and maintain competitive advantage concerning the association with other firms. According to the resource-based theory, resources and capabilities deviate substantially among business institutions. (Cordery & Parker, 2009)However, the differences may remain stable. The knowledge-based perspective outlines the skills required to understand how individuals collaborate to produce goods and deliver services. Additionally Shamina and Borisova, ( 2018) highlight outsourcing as the exercise of establishing and managing contractual associations with an external supplier. The primary objective is improving organizational day-to-day activities and cutting costs. However, the model might differ depending on the involved organization's objectives (Suriyankietkaew & Petison, 2020)The common actual standards include preparation, vendor selection, transition, managing relationship, and reconsideration (Weber & Badenhorst-Weiss, 2016)Nevertheless, the complexity of the outsourcing process and the cyclic and outsourcing features of the outsourcing management dictate the frameworks. Therefore, the other theoretical frameworks are based on evolutionary economic, agency traits, and neoclassical economics(Evans, 2010).

## OUTSOURCING MODEL

The outsourcing model is a project implementation technique that entails the delegation of software development or any other aspect of the organizational operation to an outsourcing company. The institution granted the contract executes all the processes from planning to release (Alghizzawi et al., 2018; Sakas et al., 2021) In the 21st century, the outsourcing model is considered a key aspect of project management. However, the responsibilities of the outsourcing company depend on the agreements and terms but in most settings, the organization is entirely responsible for delivering the final product according to the specification and timeline (Khan & Fitzgerald, 2004). In the 21st century, outsourcing models have been widely adopted especially by large business institutions, as it is associated with unlimited benefits. Nevertheless, small and mid-sized enterprises have been reluctant to adopt the outsourcing models especially in third world countries (Lim et al., 2018) Additionally, there is a lack of a well-detailed outsourcing model adoption framework in SMEs especially in matters concerning the supply chain.

The process of selecting an outsourcing model is comprehensive, sensitive, and controversial since different parties have been presenting diverging opinions (Pellathy et al., 2018). However, the most appropriate outsourcing model is determined by the organizational needs as well as the outlined short-term and long-term goals. Therefore, a business entity can consider the location-based types of outsourcing and the relationship-based. These incorporate how far the team resides and how tasks are to be implemented or the working strategy (Khan & Fitzgerald, 2004). It is recommended that the software development project is unique indicating why vendors offer few models fitting the needs of different projects. However, the strategies employed by the key competitors should be considered. SMEs or investors having doubts about picking or determining the appropriate outsourcing model should consult with the vendor (Kumar et al., 2016) Moreover, the project should be described, the requirements or resources, time, and the budget constraints. In addition, the reason for selecting the house team should be outlined as well as the expected flexibility level (Loice, 2015)

The contemporary business sector has emerged to be highly competitive leading to poor performance and indefinite elimination of business entities (International Labour Organization, 2020) In endeavours to avoid stiff competition and facilitate the achievement of the set goals, the outsourcing concept has been highly adopted. According to Sakas, Kamperos and Reklitis, (2021) strategic outsourcing is probably the most powerful tool in the current business sector dominated by modern technology. A study conducted by (Kumar et al., 2016) identified SMEs

to have similar objectives as large organizations. The key objectives comprise enhanced customer satisfaction, delivering cost savings, improving performance, having access to modern technologies and skilled labour force, and regularly extending service offerings (Montaseb et al., 2018). According to International Labour Organization, (2020) strategic incorporation of outsourcing model in SMEs significantly improves the general performance. However, the effectiveness of the subject depends on cost and focus-driven outsourcing.

## **SUPPLY CHAIN**

The supply chain is a key aspect of a business organization, which entails all the activities necessary for the firm to deliver products and services to the final consumer. Nevertheless, it incorporates the processes of converting raw materials to finished goods and (Anjomshoae et al., 2017). There exists a close relationship between operations management and supply chain since for the products to be ready for consumption, manufacturing must occur as well as transportation (de Boer, Gaytan & Arroyo, 2006). Nevertheless, a supply chain can adopt product or services based supply where services come together to offer overall customer services as opposed to finished goods. For instance, when shipping customer goods, staff, supply of vessel, and fuel are needed to provide the shipping service to the consumer (Baah, 2019) In addition, a supply chain network is established when the organizational supply chain is connected with that of suppliers and consumers. The outsourcing models adopted by different organizations prioritize supply chain management through understanding the strategic decisions influencing the supply chain activities. Also, multiple tools are supporting the building of the supply chain strategy such as consumer perceptions and the product value. Severally, value is delivered through the differentiation of products and services through either offering innovation or cost. (Burney & Saleem, 2008a) Therefore, cost or differentiation is a key aspect of the corporate strategic objective and should be accorded the necessary attention during the selection of the outsourcing model. After selection of the strategy and outsourcing model, all decisions made within the supply chain must ensure that they deliver against corporate strategy such that the supply chain management is in operation. Therefore, an efficient supply chain ensures that the raw materials reach the organization promptly and the products reach the final consumer in a timely manner (Burney & Saleem, 2008b) Consequently, these are fundamental considerations while selecting the outsourcing models, especially in SMEs. (Soh et al., 2015)



## METHODOLOGY

Research design refers to the selected technique to integrate the different components of the study in a coherent and logical way thus ensuring that the research problem is appropriately addressed. The qualitative research design was used to achieve the objectives. The approach is concerned with establishing answers to the whys and how of the research question (Al Olaimat et al., 2022; Habes, Alghizzawi, et al., 2023) Consequently, the qualitative research design is defined as being subjective as opposed to quantitative. Additionally, the findings are gathered in a written format as opposed to numerical (Habes et al., 2021; D. N. Tahat et al., 2022; Wang et al., 2022) The qualitative approach was selected due to its comprehensiveness in approaching the research question (Habes, Alghizzawi, et al., 2023; Habes, Ali, et al., 2023) As a result, the research was equipped with unlimited information thus facilitating achievement of the objectives. The study employed an inductive approach, which entails the use of observations and theories in investigating the research question (Salloum et al., 2019) . As a result, patterns, resemblances, and regularities in experience are determined to reach conclusions and empirical evidence. (Habes et al., 2022; K. M. Tahat et al., 2022)In addition, the systematic procedure uses the research objectives to analyse qualitative data. In this setting, the inductive approach strictly used secondary data only.

## DATA COLLECTION

Secondary data was entirely used to assess the research questions. These comprise of the previously conducted studies on the research topic (Alghizzawi et al., 2019)The approach was preferred due to availability of wide range of studies existing on the topic. Therefore, the keywords were searched from the selected databases. The keywords comprised; outsourcing model, hospitality industry, SMEs, supply chain efficiency, business performance, SMEs performance, and outsourcing models, supply chain efficiency, hospitality industry SMEs supply chain effectiveness and hospitality industry SME's performance. In addition, the databases include Google Scholar, Science Direct, Scribed, Scopus, JSTOR, and DOAJ. Nevertheless, the selection of the articles was based on the inclusion-exclusion criteria (Lee et al., 2019)The inclusion criteria encompass articles produced within the last ten years, authored in English, based on statistical methodologies, peer-reviewed and critically examining the impact of the outsourcing model on supply chain efficiency and SME's performance. The PRISMA model was used to appraise the articles and execute the data collection process (Mahmoud et al., 2020).

## DATA ANALYSIS

The thematic approach was used for the data analysis process. It is a qualitative data analysis method entailing searching across a data set to identify, analyze, and report repeated patterns (Alshibly et al., 2019; Rahi et al., 2021) As a result, the data is described and interpreted in the process of selecting codes and constructing themes (Castleberry & Nolen, 2018). Consequently, the themes were categorized based on the frequency or prevalence thus facilitating the achievement of the research objectives.

## RESULT AND DISCUSSION

The business sector is undergoing mass transformation powered by the modern technologies. Nevertheless, the emerging trends are critical since they are associated with convenience and efficiency in execution of day-to-day activities. As portrayed in the literature review, outsourcing models have been adopted by businesses operating in diverse sectors. The 21st century has witnessed mass input of the techniques especially in the hospitality industry. However, some business entities are incorporating the outsourcing models blindly since they lack a detailed implementation procedure based on the anticipated objectives. In addition, there is lack of empirical evidence showing effectiveness of outsourcing models between SME's and large-scale business. Consequently, it is essential that the effect of outsourcing model on supply chain efficiency and SME's performance is critically investigated.

Since the study focused on the hospitality industry, 13 studies were explored to determine the effects of outsourcing model on supply chain efficiency and SME's performance. The studies were not limited to any geographical location as the research question was approached generally. However, only studies focusing on hospitality industry outsourcing models while focusing on SME's supply chain and performance were considered in the analysis part. The international research studies were instrumental in understanding in depth the role of outsourcing models in the hospitality sector's supply chain and performance.

Consequently, the table below portrays all the extracted hospitality industry's outsourcing models in a thematic approach through categorizing the factors according to the relevant themes.

Table 1: Themes

Source	Common Factors	Sub-Themes
(Huang et al., 2019)	Call centres	Cost Efficiency (cost reduction)
(Liang et al., 2017)	Accounting and RFP	Customer satisfaction
(Saleh & Ryan, 1991)	Bids and Contracts	

		Enhanced performance/better results Competitive advantage Operative efficiency Service quality
(Cardoso et al., 2012) (Sarrab et al., 2013) (Battye, 2020)	Technical skills Maintenance Marketing/sales Staff training Information systems Business Process Outsourcing (BPO)	Complimenting resources and capabilities Access to better and qualified personnel High quality Competitive prices Cost reduction Loss of control over activities, differentiation and hotel management Irreversible
(Siamagka et al., 2015)	Strategic sourcing Commodity and customized sourcing Supplier selection and relationships Limited strategic sourcing practices	Goal setting in supply chain Widened VMI (Vendor-Managed Inventory) use Successful supply chain
(Espinoza Morales & Alvarez Postosme, 2015) (Ramírez-Correa et al., 2015) (Evans, 2010)	Strategic outsourcing benefits Level of outsourcing Partnership quality	More time to execute tasks Better task execution Focusing on hotel's key activities Enhance quality of hotel services Beneficial decisions Obtaining organizational goals Time-based competitiveness Cost-based competitiveness Customer performance and financial performance
(Althaqafi, 2021) (Um, 2017)	Security Gardening Cleaning Back office activities Primary activities Supporting activities	Competitive edge source Embedded with organizational objectives Organizational profitability Cost saving Restructuring Better customer service (communication and monitoring)
(Fonseca & Azevedo, 2020)	Procedural justice Distributive justice Interactional justice	Acceptance and better evaluations

Source: Prepared by the authors

The research reviewed 13 articles and journals addressing the impact of outsourcing model on supply chain efficiency and SME's performance while focusing on the hospitality

sector. Nevertheless, the studies were conducted in the last ten years indicating that the provided information was up to date. According to table 1, the application of outsourcing model in hospitality industry SME's significantly affects supply chain and the entire performance. In addition, the outsourcing models in SME's hospitality industry comprises establishment of Call centres, Accounting and RFP, Bids and Contracts, Technical skills, Maintenance, Marketing/sales, Staff training, Information systems and Business Process Outsourcing (BPO). The supply chain is characterized by Strategic sourcing, Commodity and customized sourcing, Supplier selection and relationships and limited strategic sourcing practices. The application of outsourcing models facilitates Goal setting in supply chain and widened VMI (Vendor-Managed Inventory) thus successful supply chain. SME's operating in the hospitality industry have experienced substantial impact characterized by improved performance due to the effectiveness of the outsourcing strategies.

### **The Impact of Outsourcing Models on SME's Supply Chain**

The hospitality industry is characterized by wide range of activities and movements. Suppliers are among the key stakeholders since they execute key role of delivering raw materials to the firm and products to the final consumer. Therefore, most of SME's operating in the hospitality sector prefer outsourcing the supply chain networks. This entails hiring organization to address the organizational logistics needs. Nevertheless, the approach is prioritized by many players due to the associated efficiency and convenience which in turn results in improved customer satisfaction.

According to (Nowicka, 2018) strategic outsourcing revolves around ensuring that raw materials and final products are delivered on time and at low fee. Also, in the 21st century, SME's in the hospitality industry are adopting commodity and customized sourcing, strengthening supplier selection and relationships and incorporation of limited strategic sourcing practices. Commodity and customized sourcing is adopted to ensure that the hospitality industry players provide unique services. Nonetheless, the strategic approach prioritizes partnership such that the involved parties are in good terms. It is instrumental that SME's operating in the hospitality industry deliver to achieve the competitive advantage. According to (Nowicka, 2018) one technique of achieving the objective is detailing the supplier selection and strengthening the relationship. However, one challenge affecting the SMEs supply chain is incorporation of limited strategic sourcing practices. Although the issue is strongly associated to financial constraints, it might have negative impact on the supply chain

if the appropriate corrective measures are not adopted. In addition, as reported by (Nowicka, 2018) The outsourcing model entails goal setting in supply chain and widened VMI (Vendor-Managed Inventory) use thus successful supply chain. Consequently, SMEs operating in the hospitality industry and adopting the outsourcing model have established and reliable supply chain. As successful supply chain is one of the strategic outsourcing benefits and significantly depends on the level of outsourcing and partnership quality (Shqairat & Sundarakani, 2018).

### **The Impact of Outsourcing Models on SME's Performance**

Organizational performance is a comprehensive and sensitive subject characterized by financial milestones, organizational productivity, customer relationships and the quality of the products. According to Parveen, Jaafar and Ainin, (2016) the popularity of outsourcing model is correlated to the associated benefits. SMEs operating in the hospitality industry and adopting outsourcing models have been reported to enjoy wide range of benefits leading to improved performance. Espino-Rodriguez and Ramirez-Fierro (2018) reported outsourcing model to be effective in establishing call centres, accounting and RFP and bids and contracts. The outcomes are cost efficiency (cost reduction), customer satisfaction, enhanced performance/better results, competitive advantage, operative efficiency and service quality (Fonseca & Azevedo, 2020) Outsourcing means that the involved business gets the quality products and in high quantity. Besides, day-to-day activities are implemented efficiently and without delays. Therefore, the hotels are strategically positioned to meet the customer's needs. Such aspects grant the firms competitive advantage, which implies better performance or results. Additionally, outsourcing models in the hospitality industry entails technical skills, maintenance, marketing/sales, staff training, information systems and Business Process Outsourcing (BPO) (Espino-Rodriguez et al., 2012). Currently, the approach is primarily based on modern technologies thus leading to sophisticated and complex organizational management. According to Althaqafi, (2021)the models are essential since they can be transformed and twisted to meet organizational demands. This is instrumental since diverse players in the hospitality industry have different needs (Blome et al., 2013) . The reflection in hotel's performance is enhanced by complimenting resources and capabilities, access to better and qualified personnel, high quality products and services, competitive prices and cost reduction (Roehrich et al., 2017) Since the institutions incur less cost or expenses, they are strategically positioned to offer relatively lower process. However, it is worth noting the business becomes more profitable when outsourcing expenses are recovered.

## CONCLUSION

The primary objective of the study was determining the effect of outsourcing model on supply chain efficiency and SMEs performance while focusing on the hospitality industry. Outsourcing is an organizational operational strategy in which a company contracts a third party to carry out planned or current responsibilities within the company (Regardless, it comprises the transfer of employees and assets from one company to another. The exercise is defined by contractual company operations, especially critical tasks such as facilities management, production, and general day-to-day operations. The hospitality industry has adopted outsourcing models characterized by security, gardening, cleaning, back office activities, primary activities and supporting activities. These reflects all day-to-day activities to facilitate health competition. According to the findings, outsourcing models have contributed significantly in enhancing the efficiency of the supply chain. In the contemporary business sector, e-commerce has taken over implying that transactions are conducted without physical presence. Therefore, most SMEs in the hospitality industry outsource to ensure that raw materials and final products are delivered on time. Therefore, with the outsourcing model, supply of goods and services has never been that easier. Initially, it was a tedious process characterized by delays and inconveniences to the consumer. However, the outsourcing models have kept the supply chain efficient while conforming to the SME's needs.

## LIMITATIONS & RECOMMENDATIONS

Although the study objectives were achieved, some limitations were noted which are likely to have compromised the reliability, accuracy and credibility of the findings. First, the research faced lack of sufficient evidence since most of the identified studies focused on SME's supply chain efficiency and performance with less focus on the hospitality industry. Second the fact that the study included articles published in the last ten years, implies that some of the findings might be outdated. Outsourcing models are related to the technological trends which keep on updating. Additionally, the sample size reviewed by some of the included studies does not represent the target population thus making it difficult to generalize the findings. The incorporation of outsourcing models in hospitality industry is a mandatory exercise in the contemporary business sector. Nevertheless, the strategy is instrumental in enhancing supply chain efficiency and improving the entire performance. In addition, outsourcing models are key trends in hospitality industry thus all the market should incorporate the conforming strategies

to avoid stiff completion. Although outsourcing models are associated with multiple benefits, the implementation should be guided by expert depending on the model. Also, a link should be established between the research objectives, outsourcing model and strategic management.

## REFERENCES

Al- Samirae, Z., S. Alshibly, M., & Alghizzawi, M. (2020). Excellence in Drawing up Marketing Mix Strategies for Small and Medium Enterprises (SMEs) and Their Impact on the Marketing Performance. *Business, Management and Economics Research*, 63, 30–36. <https://doi.org/10.32861/bmer.63.30.36>

Al-Shibly, M. S., Alghizzawi, M., Habes, M., & Salloum, S. A. (2019). The Impact of De-marketing in Reducing Jordanian Youth Consumption of Energy Drinks. *International Conference on Advanced Intelligent Systems and Informatics*, 427–437.

Al Olaimat, F., Habes, M., Hadeed, A., Yahya, A., & Al Jwaniat, M. I. (2022). Reputation management through social networking platforms for PR purposes: A SEM-based study in the Jordan. *Frontiers in Communication*, 11, 247.

Alghizzawi, M. (2019). The role of digital marketing in consumer behavior: A survey. *International Journal of Information Technology and Language Studies*, 3(1).

Alghizzawi, M., Habes, M., & Salloum, S. A. (2019). The Relationship Between Digital Media and Marketing Medical Tourism Destinations in Jordan: Facebook Perspective. *International Conference on Advanced Intelligent Systems and Informatics*, 438–448.

Alghizzawi, M., Salloum, S. A., & Habes, M. (2018). The role of social media in tourism marketing in Jordan. *International Journal of Information Technology and Language Studies*, 2(3).

Alghzawi, M., Alghizzawi, M., & Tarabieh, S. (2020). Consumer impulsive buying behavior of services sector in Jordan. *JournalNX-A Multidisciplinary Peer Reviewed Journal*, 6(7), 227–237.

Alnaser, A. S., Al-Shibly, M. S., Alghizzawi, M., & Habes, M. (2020). Impacts of Social Media and Demographical Characteristics on University Admissions: Case of Jordanian Private Universities. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 17(11), 6433.

Alshibly, M. S., Alghizzawi, M., & Al Zaabi, A. D. (2019). The Effect of Country of Origin on Consumers' Perceptions of Hospitality Products. *International Journal of Information Technology and Language Studies*, 3(2).

Althaqafi, T. (2021). Determinants influencing the supply chain performance in Saudi Arabia. *Uncertain Supply Chain Management*, 9(1), 187–194. <https://doi.org/10.5267/j.uscm.2020.10.002>

Anjomshoae, A., Hassan, A., Kunz, N., Wong, K. Y., & de Leeuw, S. (2017). Toward a dynamic balanced scorecard model for humanitarian relief organizations' performance management. *Journal of Humanitarian Logistics and Supply Chain Management*.

- Aoun, C. G., Lagadec, L., & Habes, M. (2022). An Extended Modeling Approach for Marine/Deep-Sea Observatory. *International Conference on Advanced Machine Learning Technologies and Applications*, 502–514.
- Attaran, M. (2020). Digital technology enablers and their implications for supply chain management. *Supply Chain Forum: An International Journal*, 21(3), 158–172.
- Baah, C. (2019). Green Logistics and Organisational Performance: Exploring Time-Based Compet...: EBSCOhost. *Journal of Supply Chain Management Systems*, 8(3), p25-36.
- Battye, A. (2020). Changing circumstances. *Who's Afraid of AAC?*, 10(1), 262–274. <https://doi.org/10.4324/9781315172910-15>
- Blome, D., Schoenherr, T., & Rexhausen, C. (2013). Antecedents and enablers of supply chain agility and its effect on performance: A dynamic capabilities perspective. *International Journal of Production Research*. <https://doi.org/10.1080/00207543.2012.728011>
- Burney, S. M., & Saleem, H. (2008a). Inductive & deductive research approach. *Soft Computing Applications for Decision Making in Supply Chain Management*, March, 6–9.
- Burney, S. M., & Saleem, H. (2008b). Inductive & deductive research approach Hussain Saleem assistant professor. *Soft Computing Applications for Decision Making in Supply Chain Management*, March, 6–9.
- Cardoso, A. F., Moreli, L., Braga, F. T. M. M., Vasques, C. I., Santos, C. B., & Carvalho, E. C. (2012). Effect of a video on developing skills in undergraduate nursing students for the management of totally implantable central venous access ports. *Nurse Education Today*, 32(6), 709–713. <https://doi.org/10.1016/j.nedt.2011.09.012>
- Cordery, J., & Parker, S. K. (2009). Work Organization. *The Oxford Handbook of Human Resource Management*, 9780199547(June 2020). <https://doi.org/10.1093/oxfordhb/9780199547029.003.0010>
- Dekkers, R. (2000). Decision models for outsourcing and core competencies in manufacturing. *International Journal of Production Research*, 38(17), 4085–4096.
- Dorcic, J., Komsic, J., & Markovic, S. (2019). Mobile technologies and applications towards smart tourism – state of the art. In *Tourism Review* (Vol. 74, Issue 1, pp. 82–103). Emerald Group Publishing Ltd. <https://doi.org/10.1108/TR-07-2017-0121>
- Eragbhe, E., & Omoye, A. S. (2014). SME characteristics and value added tax compliance costs in Nigeria. *Mediterranean Journal of Social Sciences*, 5(20), 614–620. <https://doi.org/10.5901/mjss.2014.v5n20p614>
- Espinoza Morales, J. L., & Alvarez Postosme, M. C. (2015). *Estudio del comportamiento del consumidor: Factores internos y externos que Influyen en el comportamiento de los consumidores*. Universidad Nacional Autónoma de Nicaragua.
- Evans, D. (2010). *Social Media Marketing: The Next Generation of Business Engagement*.
- Faridi, M. R., & Malik, A. (2020). Digital transformation in supply chain, challenges and opportunities in SMEs: a case study of Al-Rumman Pharma. *Emerald Emerging Markets Case*



*Studies*, 10(1), 1–16. <https://doi.org/10.1108/EEMCS-05-2019-0122>

Fonseca, L. M., & Azevedo, A. L. (2020). COVID-19: Outcomes for Global Supply Chains. *Management and Marketing*, 15(1), 424–438. <https://doi.org/10.2478/mmcks-2020-0025>

Gujarati, D. N., Bernier, B., & Bernier, B. (2004). *Econométrie*. De Boeck Brussels.

Habes, M., Alghizzawi, M., Elareshi, M., Ziani, A., Qudah, M., & Al Hammadi, M. M. (2023). E-Marketing and Customers' Bank Loyalty Enhancement: Jordanians' Perspectives. In *The Implementation of Smart Technologies for Business Success and Sustainability* (pp. 37–47). Springer.

Habes, M., Ali, S., & Pasha, S. A. (2021). Statistical Package for Social Sciences Acceptance in Quantitative Research: From the Technology Acceptance Model's Perspective. *FWU Journal of Social Sciences*, 15(4), 34–46. <https://doi.org/http://doi.org/10.51709/19951272/Winter-2021/3> Statistical

Habes, M., Ali, S., Qamar, A., Elareshi, M., Ziani, A., & Alsridi, H. (2023). Public Service Advertisements and Healthcare Attitudinal Changes in Developing Countries: Pakistanis' Perspectives. *International Conference on Business and Technology*, 433–442.

Habes, M., Salous, M. H., & Al Jwaniat, M. I. (2022). Applying the Uses and Gratifications Theory to College Major Choice Using Social Networks Online Video. *International Conference on Advanced Machine Learning Technologies and Applications*, 388–400.

Huang, Y. C., Chang, L. L., Yu, C. P., & Chen, J. (2019). Examining an extended technology acceptance model with experience construct on hotel consumers' adoption of mobile applications. *Journal of Hospitality Marketing and Management*, 28(8), 957–980. <https://doi.org/10.1080/19368623.2019.1580172>

International Labour Organization. (2020). *ILO Sectoral Brief: COVID-19 and the Education Sector*. March, 1–8.

Jabbar, A. A., & Hussein, A. M. (2017). THE ROLE OF LEADERSHIP IN STRATEGIC MANAGEMENT. *International Journal of Research -GRANTHAALAYAH*. <https://doi.org/10.29121/granthaalayah.v5.i5.2017.1841>

Kanyama, J., Nurittamont, W., & Siripipatthanakul, S. (2022). Hotel service quality and its effect on customer loyalty: The case of Ubon Ratchathani, Thailand during COVID-19 Pandemic. *Journal of Management in Business, Healthcare, and Education*, 1(2), 1–20.

Kumar, S., Duhan, M., & Haleem, A. (2016). Evaluation of factors important to enhance productivity. *Cogent Engineering*, 3(1). <https://doi.org/10.1080/23311916.2016.1145043>

Lee, H. W., Pak, J., Kim, S., & Li, L. Z. (2019). Effects of Human Resource Management Systems on Employee Proactivity and Group Innovation. *Journal of Management*, 45(2), 819–846. <https://doi.org/10.1177/0149206316680029>

Liang, S., Schuckert, M., Law, R., & Masiero, L. (2017). The relevance of mobile tourism and information technology: an analysis of recent trends and future research directions. *Journal of Travel and Tourism Marketing*, 34(6), 732–748.

<https://doi.org/10.1080/10548408.2016.1218403>

Lim, S. F. W. T., Jin, X., & Srari, J. S. (2018). Consumer-driven e-commerce: A literature review, design framework, and research agenda on last-mile logistics models. *International Journal of Physical Distribution and Logistics Management*, 48(3), 308–332. <https://doi.org/10.1108/IJPDLM-02-2017-0081>

Loice, K. (2015). Effect of Buyer-Supplier Relationships on Procurement Performance : *European Scientific Journal*.

Mahmoud, M. H., Othman, R., & Taher Mahmoud, M. Al. (2020). Performance Management System of Jordanian Public Sector Organizations: Greater Amman Municipality's (GAM) Experience. *International Journal of Human Resource Studies*, 10(2), 308. <https://doi.org/10.5296/ijhrs.v10i2.16915>

Martin Christopher. (2016). *Christopher, Logistics & Supply Chain Management, 5th Edition / Pearson*. FT Publishing International.

Muhaisen, O. Al. (2020). An Empirical Investigation the Use of Information , Communication Technologies to English Language Acquisition: A Case Study from the Jordan TECHNOLOGIES TO ENGLISH LANGUAGE ACQUISITION : A CASE STUDY FROM. *International Journal of Innovations in Engineering and Science*, 7(5), 261–269.

Nowicka, K. (2018). Trust in Digital Supply Chain Management. *Logistics and Transport*, 39(3), 59–64. <https://doi.org/10.26411/83-1734-2015-3-39-3-18>

Osibanjo, O. A., & Adeniji, A. (2017). Human resource management: theory and practice. *Human Resource Management: Theory and Practice*, August. <https://doi.org/10.12737/1711-1>

Parveen, F., Jaafar, N. I., & Ainin, S. (2016). Social media's impact on organizational performance and entrepreneurial orientation in organizations. *Management Decision*. <https://doi.org/10.1108/MD-08-2015-0336>

Paulraj, A., & Blome, C. (2017). Plurality in environmental supply chain mechanisms: Differential effects on triple bottom line outcomes. *International Journal of Operations and Production Management*, 37(8), 1010–1030. <https://doi.org/10.1108/IJOPM-11-2015-0722>

Pellathy, D. A., In, J., Mollenkopf, D. A., & Stank, T. P. (2018). Middle-range theorizing on logistics customer service. *International Journal of Physical Distribution and Logistics Management*, 48(1), 2–18. <https://doi.org/10.1108/IJPDLM-10-2017-0329>

Pham, N. T., Tučková, Z., & Chiappetta Jabbour, C. J. (2019). Greening the hospitality industry: How do green human resource management practices influence organizational citizenship behavior in hotels? A mixed-methods study. *Tourism Management*, 72(December 2018), 386–399. <https://doi.org/10.1016/j.tourman.2018.12.008>

Rahi, S., Alghizzawi, M., Ahmad, S., Munawar Khan, M., & Ngah, A. H. (2021). Does employee readiness to change impact organization change implementation? Empirical evidence from emerging economy. *International Journal of Ethics and Systems*, ahead-of-p(ahead-of-print). <https://doi.org/10.1108/IJOES-06-2021-0137>

- Rahi, S., Mansour, M. M. O., Alghizzawi, M., & Alnaser, F. M. (2019). Integration of UTAUT model in internet banking adoption context. *Journal of Research in Interactive Marketing*.
- Ramírez-Correa, P. E., Arenas-Gaitán, J., & Rondán-Cataluña, F. J. (2015). Gender and acceptance of E-learning: A multi-group analysis based on a structural equation model among college students in Chile and Spain. *PloS One*, *10*(10), e0140460. <https://doi.org/10.1371/journal.pone.0140460>
- Rivera, M., Gregory, A., & Cobos, L. (2015). Mobile application for the timeshare industry: The influence of technology experience, usefulness, and attitude on behavioral intentions. *Journal of Hospitality and Tourism Technology*, *6*(3), 242–257.
- Roehrich, J. K., Hoejmose, S. U., & Overland, V. (2017). Driving green supply chain management performance through supplier selection and value internalisation. *International Journal of Operations & Production Management*.
- Sakas, D. P., Kamperos, I. D. G., & Reklitis, P. (2021). Estimating risk perception effects on courier companies' online customer behavior during a crisis, using crowdsourced data. *Sustainability (Switzerland)*, *13*(22). <https://doi.org/10.3390/su132212725>
- Saleh, F., & Ryan, C. (1991). Analysing service quality in the hospitality industry using the SERVQUAL model. *Service Industries Journal*, *11*(3), 324–345.
- Salloum, S. A., Al-Emran, M., Khalaf, R., Habes, M., & Shaalan, K. (2019). An Innovative Study of E-Payment Systems Adoption in Higher Education: Theoretical Constructs and Empirical Analysis. *International Journal of Interactive Mobile Technologies*, *13*(6).
- Sarrab, M., Elbasir, M., & Elgamel, L. (2013). The technical, non-technical issues and the challenges of migration to free and open source software. *International Journal of Computer Science Issues*, *10*(2), 464–469.
- Shamina, L., & Borisova, I. (2018). Time-based management concept on the basis of the organizational-managerial innovations in a logistic company. *MATEC Web of Conferences*, *239*. <https://doi.org/10.1051/mateconf/201823903012>
- Shqairat, A., & Sundarakani, B. (2018). An empirical study of oil and gas value chain agility in the UAE. *Benchmarking*, *25*(9), 3541–3569. <https://doi.org/10.1108/BIJ-05-2017-0090>
- Siamagka, N. T., Christodoulides, G., Michaelidou, N., & Valvi, A. (2015). Determinants of social media adoption by B2B organizations. *Industrial Marketing Management*, *51*, 89–99. <https://doi.org/10.1016/j.indmarman.2015.05.005>
- Soh, K. L., Chin, S. H., & Wong, W. P. (2015). A theoretical model to investigate customer loyalty on logistics service providers for sustainable business performance. *International Journal of Business Performance and Supply Chain Modelling*, *7*(3), 212–232. <https://doi.org/10.1504/IJBPSM.2015.071609>
- Suriyankietkaew, S., & Petison, P. (2020). A retrospective and foresight: Bibliometric review of international research on strategic management for sustainability, 1991-2019. In *Sustainability (Switzerland)*. <https://doi.org/10.3390/SU12010091>

- Tahat, D. N., Elareshi, M., Tahat, K., Al Jwaniat, M. A., Habes, M., & Ziani, A. (2022). News Media and Political Participation in the Middle East: Jordan as an example. *2022 International Arab Conference on Information Technology (ACIT)*, 1–8.
- Tahat, K. M., Al-Sarayrah, W., Salloum, S. A., Habes, M., & Ali, S. (2022). The Influence of YouTube Videos on the Learning Experience of Disabled People During the COVID-19 Outbreak. In *Advances in Data Science and Intelligent Data Communication Technologies for COVID-19* (pp. 239–252). Springer.
- THUN, J. (2010). Angles of integration: an empirical analysis of the alignment of internet-based information technology and global supply chain integration. *Journal of Supply Chain Management*, 46(2), 30–44.
- Tian, H., Iqbal, S., Akhtar, S., Qalati, S. A., Anwar, F., & Khan, M. A. S. (2020). The Impact of Transformational Leadership on Employee Retention: Mediation and Moderation Through Organizational Citizenship Behavior and Communication. *Frontiers in Psychology*, 11(March), 1–11. <https://doi.org/10.3389/fpsyg.2020.00314>
- Truong, H. Q., Sameiro, M., Fernandes, A. C., Sampaio, P., Duong, B. A. T., Duong, H. H., & Vilhenac, E. (2017). Supply chain management practices and firms' operational performance. *International Journal of Quality & Reliability Management*.
- Um, J. (2017). Improving supply chain flexibility and agility through variety management. *International Journal of Logistics Management*. <https://doi.org/10.1108/IJLM-07-2015-0113>
- United Nations Economic Commission for Europe. (2017). Innovation in the Public Sector: Country Experiences and Policy Recommendation. In *United Nations* (pp. 1–179). <http://ir.obihiro.ac.jp/dspace/handle/10322/3933>
- Wang, S., Ibrahiem, M. H., & Li, M. (2022). Motivations Influencing Alipay Users to Participate in the Ant Forest Campaign: An Empirical Study. *International Journal of Environmental Research and Public Health*, 19(24), 17034.
- Weber, A. N., & Badenhorst-Weiss, J. A. (2016). Time-based competition as a competitive strategy for online grocery retailers. *Journal of Contemporary Management DHET*, 13, 433–460.