

-RESEARCH ARTICLE-

## DO SUPPLY CHAIN COMPANIES SEE MANAGEMENT OF FACILITIES, HUMAN RESOURCES, INFORMATION MANAGEMENT SYSTEMS, AND CARGO MANAGEMENT AS MODIATORS?

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### —Abstract—

The objective of this study is to examine the various factors that impact the operational efficiency of supply chains. The primary focus of this study centres on several key areas, namely Facility Management, Human Resources Management, Systems for Managing, and the complex moderating effect of Cargo Management. The current study utilised a descriptive research methodology to examine and evaluate the formulated hypotheses. Data collection will be conducted using a standardised questionnaire that has undergone pilot testing. A random sampling method will be employed to select a sample of 500 managers. The analysis in this study utilises the quantitative research methodology known as SmartPLS. The utilisation of cross-sectional methodology is employed to analyse the operational performance of supply chains across various industrial sectors in the country of Jordan. A study has revealed a noteworthy association between the administration of cargo, human resources, management systems, and the operational performance of supply chains. The findings of the study indicate that there is no statistically significant relationship between Facility Management and Operational Performance. The research findings indicate that cargo management plays a moderating role in the relationship between systems for managing, human resource management, and operational performance in the supply chain.

**Keywords:** Operational Performance of Supply Chains, Facility Management, Systems, HRM, Cargo Management

## 1. INTRODUCTION

In the contemporary dynamic and highly competitive business environment, it is imperative to possess a comprehensive understanding of the multifaceted intricacies

involved in supply chain management (Ali, 2022; Hajar, 2016). The core functions encompass Facility Management, which focuses on optimising the utilisation of physical assets, and Human Resources Management, which focuses on strategies related to personnel. Moreover, in the contemporary era of technology, the effective deployment of Activity Management Systems holds significant importance. The moderating effect of Cargo Management on these correlations introduces a heightened level of complexity, necessitating further investigation (Hatamlah et al., 2023).

It is important to have a deep understanding of the basic ideas in supply chain management (SCM) and facilities management (FM) before you can have a serious conversation about how innovative SCM is in FM. Effectively cultivating and sustaining buyer-supplier partnerships in a service-oriented business, such as facility management, poses a notable challenge owing to the inherent disparities between services and the product or manufacturing sector (Binsaddig et al., 2023). Services stand out for their heterogeneity and necessitate ongoing communication between buyers and suppliers. The primary emphasis of supply management lies in the interplay and dynamics between the purchaser and the supplier.

To cultivate a resilient buyer-supplier relationship, it is imperative to acknowledge the substantial influence that suppliers possess in terms of cost, quality, and timeliness throughout the entirety of the buyer-supplier interaction process (Nazali Mohd Noor & Pitt, 2009). This requires the identification of eight fundamental components. Organisations opt for strategic procurement as a means of safeguarding their market position amidst a swiftly evolving competitive landscape. The authors emphasise that this approach bears similarity to the existing body of literature on general strategy, as it underscores the importance of maintaining a long-term perspective and implementing proactive measures.

Strategic purchasing offers support for various facets of relationship management, encompassing interactions between buyers and suppliers, as well as the contribution of purchasing in augmenting organisational performance (Kim & Chai, 2017). The domain of enhancing operational performance has garnered significant scholarly interest from researchers worldwide (Jahmani et al., 2023; Jawabreh et al., 2023; Shniekat et al., 2022). Supply chain management (SCM) has gained significant attention as organisations engage in competitive interactions across their supply networks (Al-Rawashdeh et al., 2023; Ali, 2022; Hatamlah et al., 2023). Supply chain management (SCM) procedures are widely regarded as a fundamental basis for operational performance (OP) improvements that can be further developed (Jawabreh et al., 2023; Saleh et al., 2023; Salhab et al., 2023).

The integration of supply chain management is a critical element within contemporary global enterprises, as it ensures operational efficiency, competitive advantage, and customer satisfaction (Al-Rawashdeh et al., 2023; Hatamlah et al., 2023). Within this

particular context, our study delves into the intricate network of logistical operations within the manufacturing sector of Jordan. The objective of our research is to analyse the factors that influence the operational performance of supply chains. We will specifically examine Facility Management, Human Resources Management, Systems for Managing, and the moderating effect of Cargo Management. The objective of our study is to disentangle the complex relationships between FM, HRM, SM, and CM.

Specifically, we aim to identify the unique contributions of each of these factors and examine how CM moderates these relationships. The objective of our study is to provide comprehensive and detailed insights into the field of supply chain management through the utilisation of a rigorous research methodology and analysis based on empirical data. These insights have the potential to assist decision-makers in making strategic choices. The observations made in Jordan's industrial sectors have the potential to yield benefits for businesses operating within this context. Moreover, these observations hold valuable lessons that can be applied to businesses worldwide. This study significantly contributes to the field of supply chain management by offering valuable insights that have the potential to impact and shape best practices, regulatory decisions, and foster innovation across various industries globally.

## **2. LITERATURE REVIEW**

The field is presently undergoing continuous development, and the associated responsibilities are allocated among multiple individuals who possess limited expertise in the domain. Facilities managers are frequently assigned the responsibility of supervising the administration of buildings and services that offer assistance to corporations and organisations. The study conducted by [Asamoah et al. \(2022\)](#) aims to examine the influence of corporate security culture on the enhancement of supply chain security (SCS), with a specific emphasis on information management security, facilities management security, and HR security.

Moreover, the study examined the mitigation of supply chain disruption through the implementation of supply chain sustainability (SCS) practises. The study employed the dynamic capacities theory and utilised the Smart PLS technique to construct and examine a study framework. The data was obtained from a representative sample of 110 industrial and service enterprises situated in Ghana. The study's results demonstrate a robust and statistically significant correlation between the security culture within an organisation and the levels of security in information management, facilities management, and human resource management, as initially hypothesised. Moreover, it was observed that the integration of security measures in facility management had a significant effect on mitigating the occurrence of supply chain disruptions, which is consistent with the original hypothesis. Nevertheless, the findings did not provide support for the effectiveness of information management security and human resource security in mitigating such disruptions.

The study conducted by [Shahzadi et al. \(2013\)](#) aimed to investigate the factors that influence supply chain performance and propose a comprehensive framework that organisations can adopt to ensure their sustained success. The research employs a qualitative methodology. During the initial stage, the researchers extensively reviewed the academic literature to gather relevant information pertaining to the factors that influence the efficiency of supply chains. The second phase of the research involved the consolidation of data from various global studies into a cohesive framework for effectively managing the factors influencing supply chain performance. The findings of the study suggest that there are six factors identified in the literature that influence supply chain performance. These factors require efficient management in order to enhance overall organisational performance.

The drivers that contribute to the operation of a system encompass various factors such as facilities, inventory management, transportation, information management, sources, and price. The drivers in question exhibit a robust interdependence and wield a notable impact on the overall operational efficacy of the organisation. In a study conducted by [Jonsen \(2016\)](#), the researcher examined the effects of supply chain security practices on operational efficiency within the logistics service provider industry. Additionally, the study explored the relationship between supply chain and security policies and their influence on operational performance. The study conducted an analysis of the supply chain from a resource-based perspective within the organisation. This study examines the survey data collected from a sample of 100 individuals employed in logistics provider organisations in Malaysia, specifically focusing on individuals holding positions at the director level or above.

The statistical analysis involved the utilisation of regression analysis and equation modelling, facilitated by the SPSS software, in order to obtain the findings. The effects of supply chain security practises on operational efficiency within the logistics service provider industry were examined in a study conducted by [Jonsen \(2016\)](#). Furthermore, the research investigated the correlation between supply chain and security policies and their impact on operational performance. The study undertook an analysis of the supply chain within the organisation, adopting a resource-based perspective. The present study investigates survey data obtained from a sample of 100 individuals who are employed in logistics provider organisations in Malaysia. The study specifically focuses on individuals occupying positions at the director level or higher. The statistical analysis in this study employed regression analysis and equation modelling techniques, with the assistance of the SPSS software, to derive the results.

[Scupola \(2012\)](#) asserts that the comprehensive viewpoints on facilities management within the corporate sector do not encompass this specific perspective. Efficient facilities management (FM) involves the seamless integration of resources, the incorporation of multiple disciplines and activities, and serves as a crucial element in

attaining organisational success. The implementation of facility management (FM) at the organisational level can serve as a valuable tool for achieving strategic and operational objectives on a daily basis. The main goal of this initiative is to promote social cohesion and create a productive workspace (Kim et al., 2012). The adoption of a social constructionist perspective in the field of facilities management (FM) challenges the criticism of FM literature that leans towards environmental determinism. This criticism argues that instead of emphasising complex structural functional models of building service supply, strategic FM should prioritise the socially constructed aspects of organisations and their resulting outcomes.

Supporters of FM argue that its ability to initiate diverse discussions is backed by evidence-based examples, indicating that FM may have a societal origin. Effective leadership plays a crucial role in the creation of high-quality patient environments in hospitals. This is primarily achieved through context-specific discussions. Leadership is not solely determined by structural factors like having an integrated FM Directorate, choosing between in-house or outsourced services, or implementing specific business processes. The criticism of FM approaches stems from the ongoing challenge faced by FMs in establishing a cohesive strategic identity. Chotipanich and Nutt (2008) examine the alignment of facilities management (FM) support arrangements with the changing needs and expectations of organisations and their customers, considering shifting priorities and business conditions.

The research seeks to enhance understanding of the role and function of FM. By integrating case studies from diverse sectors and organisations, a comprehensive framework is established to aid facility managers in decision-making. This framework enables the efficient identification of critical concerns, the implementation of a comprehensive information-gathering methodology, and the promotion of a thorough and discerning evaluation of alternative facilities management arrangements prior to their adoption. Based on the aforementioned past investigations, this study aims to formulate the following hypothesis.

**H1:** There is significant relationship between Facility Management and Supply Chain Operational Performance.

**H2:** There is significant relationship between Management of Human Resources and Supply Chain Operational Performance.

**H3:** There is significant relationship between Systems for managing and Supply Chain Operational Performance.

**H4:** Cargo management positively moderates the relationship between Facility Management and Supply Chain Operational Performance.

**H5:** Cargo management positively moderates the relationship between Management of Human Resources and Supply Chain Operational Performance.

**H6:** Cargo management positively moderates the relationship between Systems for managing and Supply Chain Operational Performance.

### **3. METHOD OF THE STUDY**

This study employed a descriptive research approach to assess hypotheses derived from prior investigations, in order to establish an explanatory framework for a specific phenomenon. To effectively complete this task, it is crucial to gather sufficient data. This study investigates the influence of facilities management on human resource management. This study investigates the management systems utilised for handling information related to Supply Chain Operational Performance, specifically emphasising the moderating impact of Cargo management. This investigation utilises SmartPLS, a software that implements Structural Equation Modelling (SEM), as the quantitative research methodology. This study employs a cross-sectional methodology to investigate the influence of facilities management, human resources management, information systems, and cargo management on the operational performance of supply chains in Jordanian industrial sectors.

A sample of 500 managers from various industries in Jordan will be randomly selected to participate in a study on supply chain management. Participants who meet the inclusion criteria will be required to provide informed consent. Data will be collected using a standardised questionnaire that has undergone pilot testing. The Likert scale is used in the questionnaire to rate facilities management, human resource management, information systems, cargo management, and supply chain operational performance. The chosen managers will receive surveys along with an explanation of the study's objectives and a prepaid return envelope.

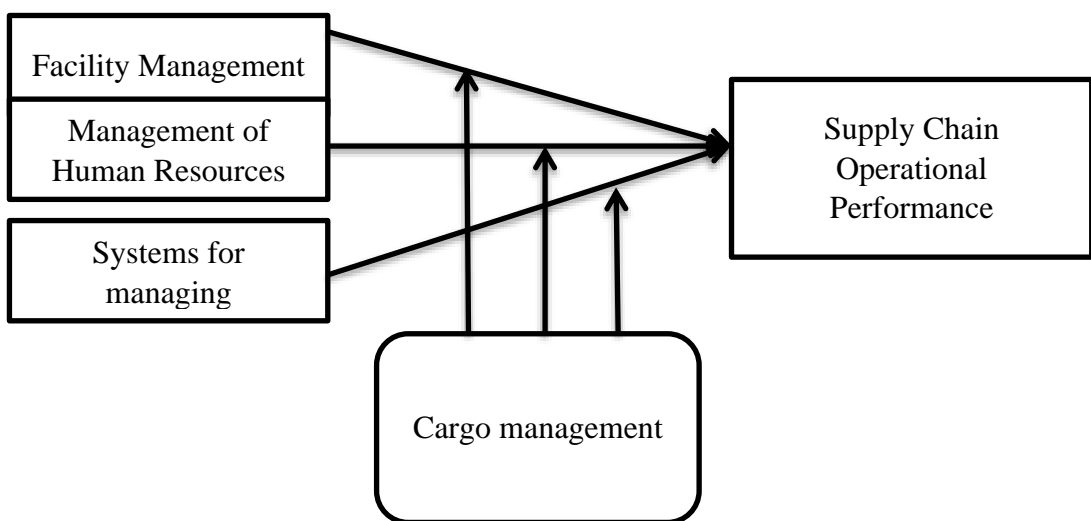
SmartPLS will be utilised for structural equation modelling (SEM) analysis due to its ability to effectively handle complex models and limited data. The study's structural equation modelling framework will represent facilities management, human resource management, information systems, cargo management, and supply chain operational performance as latent constructs. In this study, we will assess the reliability and validity of the measurement model by analysing factor loadings, composite reliability, and average variance extracted (AVE) values. The study will involve calculating path coefficients and evaluating the overall fit of the structural model. We will employ SmartPLS's built-in moderation analysis to examine the impact of cargo management on the relationships between variables.

**Table 1. Items of Survey**

No:	Variable:	No of items:	Reference:
1	Facilities Management	5	(Asamoah et al., 2022; Jonsen, 2016)
2	Management of Human Resources	5	(AL-Qudah et al., 2014; Asamoah et al., 2022; Nazali Mohd Noor & Pitt, 2009)
3	Systems for Managing Information	4	(Al Tarawneh, 2023)
4	Supply Chain Operational Performance	5	(Al-Rawashdeh et al., 2023; Hatamlah et al., 2023; Kim et al., 2012)
5	Cargo Management	4	(Salhab et al., 2023)

## FRAMEWORK OF THE STUDY

The conceptual framework depicted in [Figure 1](#) presents the relationship between facilities management, human resource management, information management systems, supply chain operational performance, and the moderating influence of cargo management.



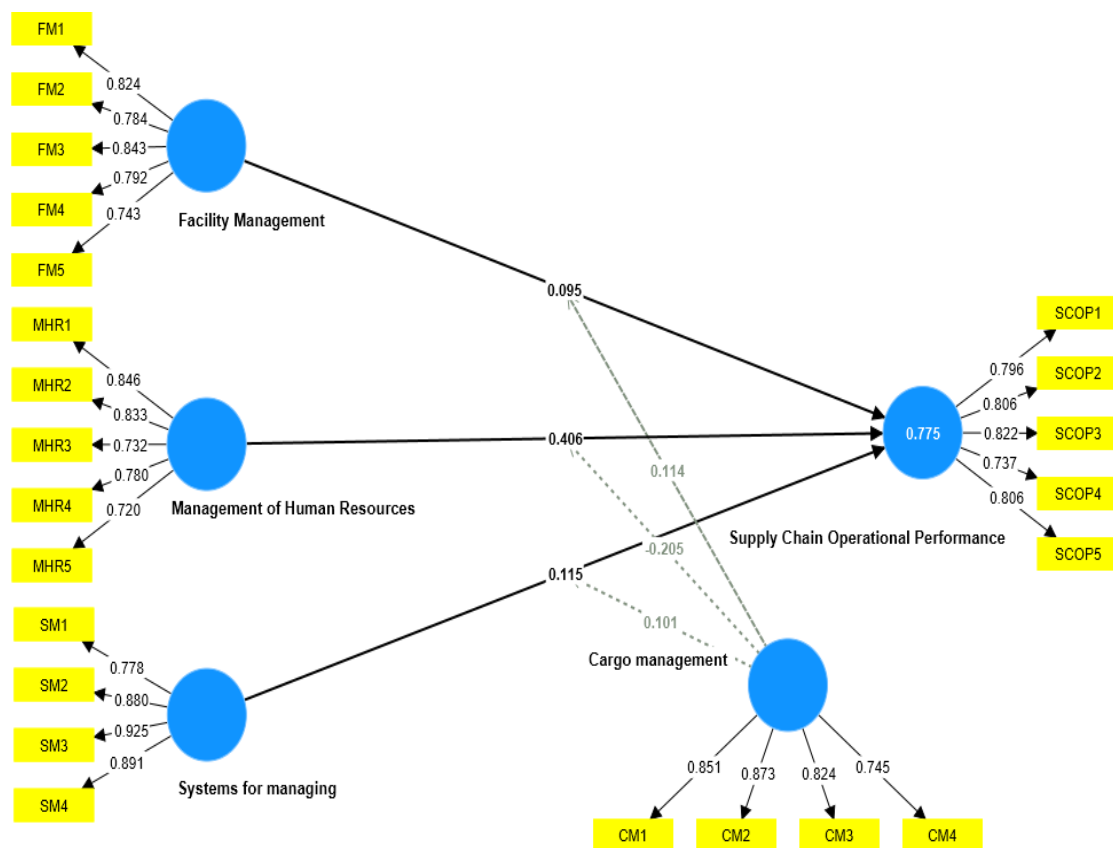
**Figure 1.** Theoretical Framework

## 4. DATA ANALYSIS

Partial Least Squares (PLS) is a statistical method that is commonly used in multivariate analysis. Structural Equation Modelling (SEM) refers to a statistical technique known as "Structural Equation Modelling." SEM encompasses two distinct models, namely the measurement model and the structural model. The first aspect pertains to evaluating the reliability and validity of the conceptual model, while the second aspect focuses on



examining the relationships and magnitudes of the path coefficients among the latent variables. Presently, we find ourselves situated within the intermediate phase of the study, encompassing all preceding phases. The measurement framework of the research is depicted in Figure 2, whereas the measuring model of the research is depicted in Figure 3.



**Figure 2.** Measurement framework of the study:

## 4.1 Outer Loadings

Hair Jr et al. (2020) state that outer loadings in PLS-SEM refer to the relationship between a latent construct and its observable indicators. The factor loadings of each indicator on their respective constructs are represented in a route diagram using SmartPLS software. The outer loading value of each indicator represents the strength of the relationship between the indicator and its underlying construct. Values exceeding 0.7 are considered preferable. Table 1 presents the outer loadings, which provide significant insights into the relationships between the observable indicators and the corresponding latent variables. The observed loadings serve as evidence for the reliability of the measurement model, as they indicate the magnitude and direction of the correlations.

**Table 1** displays the outer loadings of the items that pertain to each latent construct investigated in the study, including Cargo Management (CM), Facility Management (FM), Management of Human Resources (MHR), Supply Chain Operational Performance (SCOP), and Systems for Managing (SM).

The items CM1, CM2, CM3, and CM4 exhibit substantial positive loadings, indicating a robust association with Cargo Management. The items labelled FM1 to FM5 demonstrate significant positive loadings, suggesting a reliable representation of the concept of Facility Management. The items labelled MHR1 to MHR5 exhibit noteworthy positive loadings, suggesting a strong association with the construct of Management of Human Resources. The items labelled as SCOP1 to SCOP5 exhibit noteworthy positive loadings, suggesting a robust correlation with Supply Chain Operational Performance (SCOP). The observed loadings of SM1 to SM4 exhibit a noteworthy positive correlation, indicating a strong relationship with Systems for Managing. In summary, it can be concluded that all items demonstrate strong and positive relationships with their respective latent constructs, thereby confirming their reliability and suitability as indicators within the context of our research framework.

**Table 2. Outer loadings**

	<b>Cargo management</b>	<b>Facility Management</b>	<b>Management of Human Resources</b>	<b>Supply Chain Operational Performance</b>	<b>Systems for managing</b>
CM1	0.851				
CM2	0.873				
CM3	0.824				
CM4	0.745				
FM1		0.824			
FM2		0.784			
FM3		0.843			
FM4		0.792			
FM5		0.743			
MHR1			0.846		
MHR2			0.833		
MHR3			0.732		
MHR4			0.780		
MHR5			0.720		
SCOP1				0.796	
SCOP2				0.806	
SCOP3				0.822	
SCOP4				0.737	
SCOP5				0.806	
SM1					0.778
SM2					0.880
SM3					0.925
SM4					0.891

## 4.2 Construct Reliability and Validity

Table 3 presents the internal consistency and reliability metrics pertaining to each latent construct investigated in the study, specifically Cargo Management, Facility Management, Management of Human Resources, Supply Chain Operational Performance, and Systems for Managing. Cronbach's Alpha is a statistical metric employed to assess the internal consistency of items pertaining to a specific concept. The constructs, including Cargo Management (0.841), Facility Management (0.857), Management of Human Resources (0.852), Supply Chain Operational Performance (0.853), and Systems for Managing (0.891), exhibit significant levels of internal consistency. The recorded values, exceeding the recommended threshold of 0.7, indicate a significant degree of reliability for the constructs.

Composite dependability refers to the extent to which the indicators of a particular construct exhibit reliability in accurately representing that construct. Both the values of rho\_a and rho\_c exceed the acceptable threshold of 0.7, indicating a substantial level of dependability (Fornell & Larcker, 1981).

When considering composite dependability, Facility Management exhibits the highest value (rho\_c = 0.863), with Systems for Managing closely trailing behind (rho\_c = 0.895).

The Average Variation Extracted (AVE) is a metric used to quantify the proportion of variation accounted for by the indicators in relation to the total variance. When the Average Variation Extracted (AVE) values exceed 0.5, it signifies that the construct is accountable for explaining over 50% of the variation observed in its indicators (Fornell & Larcker, 1981). All constructs, with average variance extracted (AVE) values ranging from 0.615 (Management of Human Resources) to 0.757 (Systems for Managing), exceed this threshold, thereby indicating strong convergent validity (Fornell & Larcker, 1981). In summary, the results presented in Table 2 demonstrate that all constructs analysed in the study exhibit significant levels of internal consistency, reliability, and convergent validity. The findings presented in this study offer substantial evidence that supports the reliability and validity of the measurement model employed.

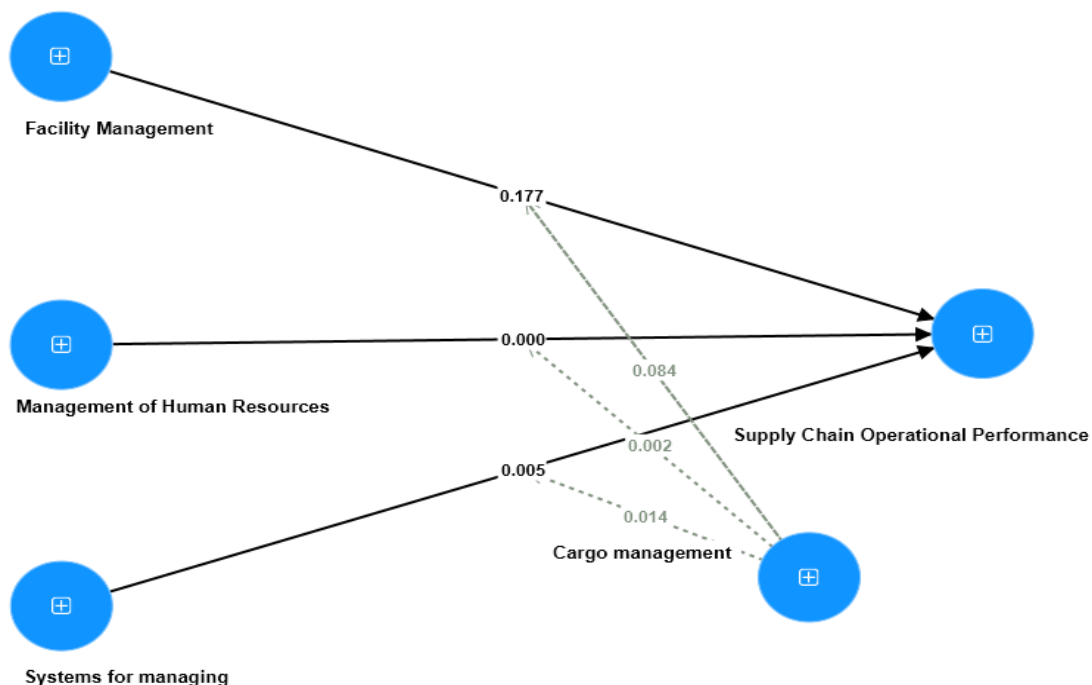
**Table 3. Alpha-Cronbach**

	<b>Alpha-Cronbach:</b>	<b>Composite reliability</b>	<b>Extracted average variance</b>
Cargo management	0.841	0.841	0.680
Facility Management	0.857	0.863	0.636
Management of Human Resources	0.852	0.907	0.615
Supply Chain Operational Performance	0.853	0.853	0.630
Systems for managing	0.891	0.895	0.757

### 4.3 Structural Model Analysis

The investigation utilised the SmartPLS 4 software tool for conducting SEM analysis. Structural equation modelling (SEM) with the partial least squares (PLS) approach allows for the examination of interrelationships among variables within a complex model. The structural model comprises three independent variables: Facility Management, Management of Human Resources, and Systems for Managing. Various factors impact the operational performance of supply chains. This study focuses on the role of Cargo Management as a moderator, influencing and refining the aforementioned connections. The significance of this factor is crucial, as it can either improve or reduce the impact of Facility Management, Human Resource Management, and Systems for Managing on the operational performance of the supply chain.

The existing model in the supply chain field is based on established theories and empirical evidence. It offers a comprehensive framework for understanding the intricate interactions among various elements. The directional arrows depicted in the image represent the impact exerted by different factors. Furthermore, the interaction lines involving Cargo Management illustrate its function as a mediator in these interactions, thereby improving our understanding of the complex dynamics that impact the functioning of the supply chain. [Hair Jr et al. \(2020\)](#) state that SmartPLS 4 offers advanced analytical features for model assessment and interpretation.



**Figure 3.** Structure Model by Smart PLS

## 4.4 Validity for Discrimination

Table 4 presents the results of a discriminant validity assessment using the Fornell-Larcker criterion. This criterion is commonly used in structural equation modelling. The diagonal elements of the matrix represent the square roots of the average values for all builds. This value represents the proportion of variability in the construct that can be accounted for by its indicators. The non-diagonal parts of the diagram represent the relationships between different ideas. The diagonal components of a matrix represent the average values of constructs. Values greater than 0.5 indicate distinct constructs, suggesting a significant proportion of the variance in the construct's components can be accounted for. Lower off-diagonal values indicate distinct constructs, implying discriminant validity. This is because these constructs have less shared variation with other constructs compared to their own variance.

The table below provides evidence of the strong discriminant validity of the constructs used in the study. Accurate and distinct measurement of each build is essential for maintaining integrity within the supply chain.

**Table 4. Discriminant validity (Fornell-Larcker criterion)**

	Cargo management	Facility Management	Management of Human Resources	Supply Chain Operational Performance	Systems for managing
Cargo management	0.824				
Facility Management	0.527	0.798			
Management of Human Resources	0.381	0.584	0.784		
Supply Chain Operational Performance	0.768	0.647	0.580	0.794	
Systems for managing	0.473	0.634	0.427	0.573	0.870

## 4.5 Path Coefficients

Table 5 proposes an overall overview of the statistical significance of the regression coefficients, shedding light on the interrelationships between the variables and the moderating effects of Cargo Management. The next part provides a thorough analysis of how well the findings fit the established hypotheses.

Hypothesis 1 suggests that there is a notable correlation between facility management and the operational performance of the supply chain. The path coefficient linking Facility Management and Supply Chain Operational Performance is 0.095, with a corresponding p-value of 0.177. Based on the p-value obtained, which exceeds the conventional threshold of 0.05, it can be concluded that there is insufficient statistically significant evidence to establish a connection between facility management and Supply

Chain Operational Performance. Consequently, the existing data is insufficient to support the hypothesis H1 (Dusitin, 2017).

Hypothesis 2 claims that there is a substantial correlation between human resource management and the operational performance of the supply chain. The association between the variables of Management of Human Resources and Supply Chain Operational Performance is indicated by a path coefficient of 0.406, which is accompanied by a statistically significant p-value of 0.000. The data presented demonstrates a noteworthy and statistically significant positive correlation, thereby providing support for Hypothesis 2 (Jonsen, 2016).

Hypothesis 3 posits that there is a statistically significant relationship between the management systems employed and the operational performance of supply networks. The path coefficient between Systems for Managing and Supply Chain Operational Performance was observed to be 0.115 ( $p = 0.005$ ), suggesting a statistically significant and positive association. This discovery presents empirical substantiation in favour of Hypothesis 3 (Jonsen, 2016).

Hypothesis 4 states that Cargo Management functions as a moderating factor in the association between Facility Management. The interaction effect (0.101,  $p = 0.014$ ) observed in this study provides support for the idea that Cargo Management has a positive influence on the relationship between Facilities Management and Supply Chain Operational Performance. This finding confirms the validity of Hypothesis 4.

Hypothesis 5 explores the potential moderating influence of Cargo Management on the Management of Human Resources. The findings of the study reveal a statistically significant interaction effect ( $-0.205$ ,  $p = 0.002$ ). This implies that Cargo Management plays a crucial role in regulating the relationship between Management of HR and Supply Chain Operational Performance. Surprisingly, this finding contradicts the initial premise.

Hypothesis 6 asserts that Cargo Management serves as a moderating variable for Systems for Managing. The findings of the study indicate that there exists a statistically significant interaction effect ( $\beta = 0.101$ ,  $p = 0.014$ ) between Cargo Management and Systems for Managing in relation to Supply Chain Operational Performance. The results of this study offer empirical evidence in favour of Hypothesis 6, which suggests that Cargo Management has a beneficial moderating effect on the association between Systems for Managing and Supply Chain Operational Performance.

In summary, it can be shown that Facility Management does not have a direct impact on the operational performance of the Supply Chain. However, the proficient administration of Human Resources and the execution of Systems for Managing exhibit significant positive correlations with the aforementioned performance. Additionally, Cargo Management functions as an intermediary, exerting its impact on the interrelationships between Facilities Management and Systems for Managing in the context of enhancing Supply Chain

Operational Performance. The findings presented above provide useful insights into the complex dynamics of supply chain management within the investigated context.

**Table 5. Presents the path coefficients and the results of hypothesis testing.**

	Original sample (O)	Sample mean	Standard deviation	T statistics	P values
Cargo management -> Supply Chain Operational Performance	0.442	0.437	0.058	7.658	0.000
Facility Management -> Supply Chain Operational Performance	0.095	0.083	0.071	1.349	0.177
Management of Human Resources -> Supply Chain Operational Performance	0.406	0.426	0.094	4.332	0.000
Systems for managing -> Supply Chain Operational Performance	0.115	0.111	0.041	2.822	0.005
Cargo management x Systems for managing -> Supply Chain Operational Performance	0.101	0.102	0.041	2.457	0.014
Cargo management x Management of Human Resources -> Supply Chain Operational Performance	-0.205	-0.214	0.065	3.173	0.002
Cargo management x Facility Management -> Supply Chain Operational Performance	0.114	0.118	0.066	1.729	0.084

#### 4.6 R-Squared

The analysis of [Table 6](#) reveals that the R-squared values indicate a substantial proportion of the observed variance in Supply Chain Operational Performance can be accounted for by the selected independent variables, namely Facility Management, Management of Human Resources, and Systems for Managing, in conjunction with the moderating variable, Cargo Management. Specifically, the data suggests that approximately 77.5% of the observed variance in Supply Chain Operational Performance can be explained by these variables. The model's effectiveness is further supported by the adjusted R-squared value of 0.769, as it takes into account the impact of the predictors. The findings underscore the significant influence of the chosen variables in elucidating fluctuations in supply chain performance.

**Table 6. Values for R-Squared**

	R-square	R-square adjusted
Supply Chain Operational Performance	0.775	0.769

## 5. CONCLUSION AND DISCUSSION

This study investigated the intricate dynamics of supply chain management in the industrial sectors of Jordan. The data presented numerous noteworthy findings. At the outset, it is observed that Facility Management does not exert a direct influence on the operational performance of the Supply Chain. Nevertheless, it is important to highlight



that there exists a strong positive correlation between Human Resource Management and Management Systems with supply chain performance. This statement underscores the importance of human resource strategies and efficient processes in enhancing operational results. Additionally, the research emphasized the crucial role of Cargo Management as a moderator. The interaction between Facility Management and Systems for Managing Supply Chain Operational Performance yielded favourable outcomes.

The findings of the study revealed that cargo management had a detrimental effect on the relationship between human resource management (HRM) and supply chain operational performance (SCoOP), contrary to the initial hypothesis. This unexpected discovery underscores the importance of utilising a comprehensive methodology when evaluating the moderating impact of Cargo Management on different connections within the supply chain. This study sheds light on the various dimensions of supply chain management. The importance of strategic human resource planning and effective system implementation cannot be overstated, as empirical research has demonstrated a positive relationship between these variables and the operational performance of supply chains. The moderating role of cargo management presents intriguing research opportunities within the realm of supply chain analysis, despite its inherent intricacy.

The findings have profound ramifications for business and government. Supply chain operations might benefit greatly from improved human resource management methods and optimized operational systems. Cargo Management has far-reaching implications for the whole supply chain; thus, a sophisticated approach is required.

Future research has the ability to deepen our comprehension of supply chain dynamics by delving into the nuanced impacts of Facility Management and the myriad of factors that affect Cargo Management's moderating role. In sum, this research lays a solid groundwork for future studies and provides useful insights for enhancing supply chain management strategies throughout Jordan's industrial sectors.

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