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The Relationship Between Strategic Management and the Efficiency of Jordanian Maritime Transport (Application to the Port of Aqaba)

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ABSTRACT

This study objectivs to achieve several objectives that contribute to understanding the relationship between strategic management and maritime transport efficiency in the Jordanian port of Aqaba. Thus, the study seeks to understand the nature of the relationship between strategic management and maritime transport efficiency. And to understand the nature of the impact of the strategic management applied by the Jordanian port of Aqaba on the level of maritime transport efficiency in the port in terms of the information system, the number of ships and containers, the movement of goods, and the waiting time in the port. The literature related to strategic management and maritime transport efficiency will be reviewed to determine the relationship between them for the port. A descriptive analytical research approach was adopted for the benefit of the current study. The study was conducted in the Jordanian port of Aqaba, by surveying the opinions of a sample of port pioneers and workers, about the extent of applying strategic management in the port and the extent of its efficiency in Jordanian maritime transport operations. The results revealed the following:
- Strategic management affects the efficiency of maritime transport in the Jordanian port of Aqaba, as it was found that there is a statistically significant relationship between strategic management and improving the efficiency of seaports, with an averageArithmetic (2.53) and standard deviation (0.845) at a significant level (0.05*).
- It is also clear that the averageThe general dimensions reached its value (2.53), the value is high on a Likert scale.
In the first place came the dimension (The port uses information technology to provide various related services High quality) with arithmetic average (2.80) and standard deviation (0.512), In the last order came the dimension (The port provides appropriate security and safety standards for all types of ships She hesitates to him) on averageArithmetic (2.39) and standard deviation (0.865).

1. Introduction.

Ports are the main element in the maritime transport sector, in addition to being considered the main gateway to trade in light of the global prices that drive the flow of capital through them. They are the main artery for activating the country's economic activity and the main crossing point for applying modern technology and the flow of global trade and attracting foreign investments and multinational companies with the objective of Investing in developing and developing the operational capabilities of ports in order to achieve maximum economic benefit. (Al-Baghdadi, 2011(p. 1) The global nature of today's supply chain networks has required container shipping lines to expand their geographic coverage and offer highly efficient and flexible service networks. Within this environment, shipping lines must manage the operational and managerial challenges inherent in providing services that require high levels of fixed cost while providing what many shippers consider a commoditized service.(Cullinane, Khanna, 2000, p181).

Under these difficult circumstances, container shipping com-

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panies strive to achieve high levels of operational and financial efficiency in order to survive, and to generate the required level of shipping capacity with the lowest level of resources. Managers within these companies have a variety of decision-making options available to them to improve efficiencies this requires relying on a strategic system to manage maritime transport operations in the port (LAM, VAN DE, 2011, p705).

Strategic management refers to a continuous process of organizing and implementing current decisions, providing the necessary information, organizing resources and efforts to implement decisions and evaluating results through an integrated and effective information system. This increases the possibility of achieving maritime transport efficiency. Conversely, if the strategic management of the port is negative, this is likely to negatively affect the assessment of the port's maritime transport efficiency. (Panayides et. al., 2011, p681)

Therefore, this study objectives to explore and understand the relationship between strategic management and maritime transport efficiency in seaports. We will focus on analysing the relationship applying strategic management in a port Aqaba and the extent of its impact on the efficiency of maritime transport. We will also study the factors affecting the application of strategic port management and how they affect the assessment of the level of maritime transport efficiency in the port.

2. The Study Problem.

The Jordanian port of Aqaba faces great challenges in achieving strategic management in its quest to ensure the efficiency of maritime transport operations through it (Center the King Faisal for Research and Studies Islamic, 2018, p. 17). It faces the port and the transport and supply chain in Aqaba has several challenges, most notably the decrease in the volume of transit goods that were going to Iraq and some other countries, as a result of fluctuations in maritime traffic that were affected by the geopolitical events taking place in the region since the events of October 7, 2023 (the seizure of a commercial ship in the Red Sea by The Houthi group in Yemen), where These attacks endangered shipping traffic through the Red Sea, forcing an increasing number of major shipping companies to move their ships away from the region, in addition to increasing insurance fees and increasing the cost of transportation through the Red Sea ports and other ports in the region.. The research problem stems from crossing from the theoretical and conceptual aspects of this topic to practical induction and analysis of the impact of strategic management on the Jordanian port of Aqaba.

The possibility of a negative mental image emerging among port pioneers and workers regarding this management system may be reflected in their evaluation of the strategic management system applied in the port, which ultimately leads to a lower level of evaluation of the efficiency of the maritime transport process through the port. Moreover, multiple challenges may arise in managing maritime transport work in the port.

Hence the importance of studying the relationship between strategic management and maritime transport efficiency in the Jordanian port of Aqaba, as this study contributes to enhancing our understanding of the impact of strategic management on ensuring maritime transport efficiency and working to improve the impact of applying strategic management based on practical analyses and conclusions.

By shedding light on this problem, the study will contribute to identifying weaknesses and potential improvements in strategic port management, thus achieving maritime transport efficiency and building positive logistical capabilities for the Jordanian port of Aqaba.

3. Research Importance.

Studying the relationship between strategic management and maritime transport efficiency in the Jordanian port of Aqaba is of great importance, for the following reasons:

Enhancing the efficiency of maritime transport: Efficiency of maritime transport is one of the most important indicators of the success of any port. When port pioneers and workers feel the efficiency of maritime transport resulting from the strategic management applied by the port, their level of satisfaction with the level of transportation services provided by the port increases and their loyalty to the port increases. Hence, the continuous profits and sustainable growth of the port increases.

Improve port reputation: Positive strategic management of the port contributes to building a reputation for the port and enhancing its position in the Jordanian maritime transport market. When port pioneers and workers create a positive perception, it can increase reliability and confidence from shippers, importers, investors and business partners in the port's logistical capabilities.

Enhancing competitiveness: Implementing a strategic management system leads to achieving maritime transport efficiency, which in turn creates a strong competitive advantage for the Jordanian port of Aqaba in the Jordanian market. When port patrons and workers enjoy a positive experience and are satisfied with the logistical services it provides, including loading, unloading, transporting goods, etc., they tend to continue dealing with that port instead of turning to competitors. Thus, the port can achieve a competitive advantage and increase its share in the Jordanian maritime transport market.

Directing improvements and development: By understanding the impact of image on strategic management and maritime transport efficiency, the Jordanian Port of Aqaba can identify weaknesses and improve aspects of service that may negatively affect the image of port patrons and workers. Hence, future improvements and developments can be directed to enhancing strategic management and raising the level of maritime transport efficiency.

In short, understanding and analysing the relationship of strategic management to the level of maritime transport efficiency in the Jordanian port of Aqaba helps to evaluate the efficiency of maritime transport and the extent of the possibility of relying on the strategic management system to enhance the port's competitive ability in the maritime transport market.

4. Research objectives.

The main objective of the current study is understanding the relationship between strategic management and maritime transport efficiency in the Jordanian port of Aqaba. Below are the most important objectives What can be achieved through this study:

1. Analysis of the relationship between the strategic management applied by the Jordanian port of Aqaba and the level of maritime transport efficiency in the port.
2. Understanding how strategic management is applied in the Jordanian port of Aqaba and the extent of its impact on the dimensions of maritime transport efficiency in the port, represented by: (information system, number of ships and containers, movement of goods, and waiting time in the port).
3. Identify factors for improving strategic management Jordanian port of Aqaba.
4. Providing practical and concrete recommendations on how to activate the strategic management system the Jordanian port of Aqaba, based on the results and analyses, improving the port's logistical capabilities and increasing the efficiency of maritime transport from which.

5. Research questions.

The study questions are the following:

1. What is the impact of applying strategic management in the Jordanian port of Aqaba on the assessment of port pioneers and workers of the level of efficiency of maritime transport operations in the port?
2. What is the impact of strategic management on the dimensions of maritime transport efficiency in port, which are: (information system, number of ships and containers, movement of goods, and waiting time in the port)?
3. What are the factors influencing the application of strategic port management in the maritime transport sector in Jordan?
4. Is there a bilateral relationship between strategic management and maritime transport efficiency in the Jordanian port of Aqaba?
5. How can the strategic management be improved and positive logistical capabilities be created for the Jordanian port of Aqaba to enhance maritime transport efficiency?

In light of the questions raised about the research topic and in the hope of achieving the research objectives, a set of **hypotheses** can be determined as follows:

Main hypothesis: There is a significant impact between applying strategic management and achieving maritime transport efficiency in the Jordanian port of Aqaba ($\alpha \leq 0.05$). This includes testing the following sub-hypotheses:

Hypothesis 1. There is a positive relationship between strategic management and maritime transport efficiency in the Jordanian port of Aqaba.

Hypothesis 2. There is a positive relationship between strategic management and dimensions of maritime transport efficiency in the port, represented by: (information system, number of ships and containers, movement of goods, and waiting time in the port) in the Jordanian port of Aqaba.

Hypothesis 3. There is no significant relationship between strategic management and maritime transport efficiency in the Jordanian port of Aqaba.

6. Literature presentation.

1. What is strategic management and the factors affecting its application

The word strategy derives its roots from the Greek word strategos, the concept of which was linked to the plans used in managing battles and the arts of military confrontation, but it later extended to the field of administrative thought and became preferred for use by business organizations and other organizations interested in analysing their environment and achieving initiative and leadership in their field of activity (Wang, Mileski, 2018, p4).

Definition of strategic management: Many writers and researchers have defined strategic management (Bang, Kang, 2012, 653), according to the matrix Ansoff Strategic Management, it is: the organization's perception of the expected relationship between it and its environment, so that this perception explains the type of operations that must be carried out in the long term, the extent to which the organization must go, and the goals that it must achieve.

As for (Wang, Mileski, 2018, p7) he defined strategic management as: drawing the future direction of the organization and stating its long-term goals, choosing the appropriate strategic style to achieve this in light of internal and external environmental factors and variables, then implementing, following up and evaluating the strategy.

And he knew (Abdul Latif, 2014, p. 42) strategic management is defined as: the unified, interactive and comprehensive plan that links the company's strategic advantages to the challenges of the environment. It is designed to ensure that the basic objectives of the organization are achieved through proper implementation of the organization.

As for (Panayides et. al., 2011, p682) he defined strategy as: the model or plan in which the main objectives, policies and procedures are integrated, and their activities are followed up to ensure that complete coherence is achieved.

As he knew (Maciariello, 2016, p10) strategy is: a continuous process of organizing and implementing current decisions, providing the necessary information, organizing resources and efforts to implement decisions and evaluating results through an integrated and effective information system.

Strategic management is also defined as a set of decisions and administrative systems that define the vision and mission of the organization in the long term in light of its competitive advantages and seeks to implement it through studying, following up and evaluating environmental opportunities and threats

and their relationship to organizational strength and weakness and achieving a balance between the interests of different parties and their stages of development, which is planning. Basic financial based on forecasts and strategic planning (in light of external factors). (Wang, Mileski, 2018, p19)

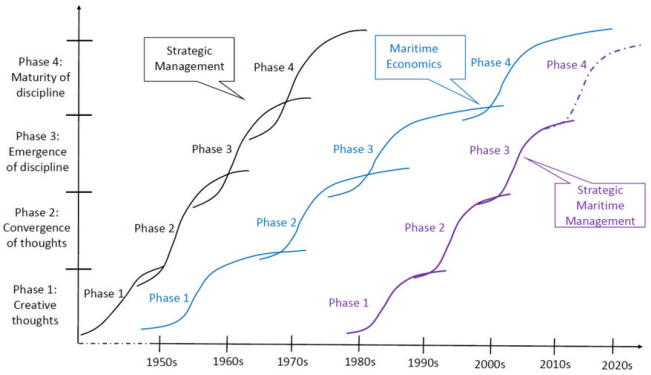
If the port has a good application of the strategic management system, it is likely that there will be a positive impact of the strategic management applied by the Jordanian port of Aqaba on the level of maritime transport efficiency in the port and its dimensions in terms of the information system, number of ships and containers, movement of goods, and waiting time in the port. On the contrary, if the port has an effective implementation of the strategic management system, it is likely that there will be a negative impact of strategic management on the efficiency of maritime transport operations in its dimensions. (Wang, Mileski, 2018, p19)

2. The relationship between strategic management and its various dimensions in the maritime transport sector:

There are three paths to the relationship between strategic management and the maritime transport sector, representing three stages of the management system in seaports: 1) strategic management, 2) maritime economics, and 3) maritime strategic management. Each stage is referred to as a curve, simply to reflect the accumulated learning experience of those managing the seaport facilities and resources in the stage. The curve is derived based on the degree of application of strategic management in the port (Kuhn, 1962, p14), and it can be considered the product of a number of strategic systems that may contribute to the management of vital sectors of the national economy, such as the maritime transport sector. The middle path of strategic management in the maritime transport sector indicates that some topics of strategic management become streams in the maritime economy (in a certain unit of time). Finally, there is the third path that integrates the previous two paths, which is strategic maritime management. Administrators' interest in achieving this path is increasing at this stage, as it predicts a higher level of productivity in maritime transport operations in the port. The interaction between the two paths at this stage indicates that the discipline of the strategic management system will move from a lower stage to a higher stage. The fourth stage of strategic maritime management is depicted as a dotted curve, indicating that this system is still developing at this stage. (Zhang, Lam, 2013, p166)

There are three commonalities between their evolutionary paths. First, the dynamics of the environment (internal or external) push the system into updating phases. New business realities always challenge scholars to consider new ways to explain and predict management behaviors. Second, the three disciplines begin to change their dominant theoretical models during the third phase. The literature suggests that the new paradigm adapted during the third phase is more effective for promoting new research directions. These new directions have high potential to become distinct new research streams. Third, it takes about 20 years or so for strategic port management to become a distinct management stream or prominent theoretical paradigm, according to competitive advantage theory (Porter 1980, p34),

Figure 1: Three paths for the development of strategic management in seaports.



Source: Wang, Mileski, 2018, p19.

and the resource is a theory based on resources, cost and benefit (Barney, 1991, p99), to be the theory of (marine) productivity (Jansson, Shneerson, 1982, p35), and the regional port network (Van Klink, 1998, p143). It is the path of development of the theoretical group to explain the strategic management of seaports (Zhang and Lam 2013), and achieving multi-stakeholder goals in ports based on networked stakeholder theory (Notteboom et al., 2015, p228). This long course reflects the idea of applying a strategic management system in seaports and the maritime transport sector. (Mclaughlin, Fearon, 2013, p278)

The importance of strategic management in achieving maritime transport efficiency cannot be overstated. Highly strategically managed maritime transport services contribute to enhancing the efficiency of maritime transport operations in seaports, and make port pioneers and workers tend to continue dealing with that port instead of turning to competitors. (Wang, Mileski, 2018, p6).

3. Factors affecting strategic management in seaports.

The tiered network structure of strategic management in the maritime field is unique and provides abundant opportunities for maritime strategists in the management of seaports. Strategic management of seaports is a complex construct influenced by a variety of factors. The most important of these factors are the following:

- Strategic capabilities of maritime organizations:

To move towards developing the strategic capabilities of maritime organizations (connected to the network) to support the efficiency of long-term maritime transport operations (Yuen et al., 2016, p62). This is based on a number of strategic capabilities of the administration, namely: innovation (Yang, 2012, p53; Yang, Lu, 2009, p893;), flexibilities (Mileski and Honeycutt 2013), and operations management (Borch, Batalden, 2015, p481), and quality (Progoulaki, Theotokas, 2010, p575), and knowledge management (Lambrou 2016), and integration (Lam, Zhang, 2014, p89). These studies highlight the potential that the capabilities pathway has to enhance strategic maritime management.

- Ability of ports to serve merchandise trade:

Given the importance of maritime trade, developing port capacity to serve merchandise trade is a critical factor in determining the capacity of regions for international trade.1 It is of national strategic importance that capacity is developed in a timely and appropriate manner to avoid overcapacity (leading to congestion) or overcapacity (leading to congestion). leads to wastage of resources) (Meersman, van, 2014, p12)

- Port capacity:

Providing port capacity depends on timely and appropriate port development, which in turn depends on proper management of port operations and infrastructure. Port authorities are often the bodies responsible for strategic port planning and port infrastructure (Vonck, et. al., 2016, p. 308). Therefore, in planning, the investment path must be strategically chosen to ensure that the port has sufficient capacity to match supply and demand in a sustainable and competitive manner. (Bichou, 2014, p21)

- Dynamic environment in the port sector:

The organizational capabilities necessary for ports to operate effectively are relied upon and developed to respond to future planning requirements to determine the investment path (Notteboom, 2006, p29). Especially since ports operating in a dynamic environment to maintain competitiveness must develop adaptive capabilities to respond to external shocks and risks, as well as take advantage of opportunities as they arise.

- Port competitiveness:

Argues (Parola, et. al., 2016, p13) that a port's sustainable competitiveness in a dynamic environment is a function of the port community's ability to develop resources and capabilities over time. When allocating the match between shipping market requirements and the supply of port services, taking into account tangible resources related to physical capabilities, such as quay walls and cranes, and intangible resources, such as organizational capabilities including stakeholder relationship management. Therefore, consideration of future capacity provision, performance (i.e. maintaining an appropriate balance between over- or under-supply) and sustainable value creation are functions of PAs' ability to successfully develop a wide range of resources and capabilities for future port capacity planning.

- Structural changes in the shipping industry:

Competition among ocean shipping companies continues to evolve as a result of structural changes within the industry. Mergers and acquisitions, organic growth and alliance agreements continue to boost the sector as shipping lines are stimulated by the search for economies of scale offered by the deployment of larger vessels. (Cullinane, Khanna, 2000, p181)

- The global nature of supply chains:

The global nature of today's supply chain networks has required container shipping lines to expand their geographic coverage and offer highly efficient and flexible service networks. Within this environment, shipping lines must manage the operational and managerial challenges inherent in providing services that require high levels of fixed cost while providing what many shippers consider a commoditized service. (Bang et. al., 2012, p653)

- Volatility of revenues and cash flows in seaports:

In contrast to the static nature of the service offering, revenues and cash flows in the liner shipping business are relatively volatile due to the long-term business cycle, high seasonal fluctuations, trade imbalances, and highly variable bunker fuel costs. This presents serious financial challenges for ocean shipping companies as they seek to maintain stable levels of profitability. (LAM, VAN, 2011, p705)

All of these factors have prompted most countries to strive to develop and market their ports in response and interaction with these rapid developments in the maritime transport industry in all its technical, scientific and human aspects, in order to reach the highest levels of competition and provide distinguished services.

The maritime transport sector in Jordan is dedicated to meeting the growing demands of the maritime transport market and international trade across international and territorial waters, while maintaining a high level of strategic management. Maritime transport service providers are constantly investing in advanced technologies and infrastructure to enhance their offerings based on the application of strategic management at seaports. (Bang et. al., 2012, 654)

The Jordanian Port of Aqaba has attached great importance to supporting the port's pioneers and workers. The strategic management system emphasizes the importance of immediately addressing the concerns of port patrons and workers, and ensuring that port patrons and workers enjoy a positive experience and are satisfied with the logistical services it provides, including loading, unloading, transporting goods, etc., so that they tend to continue dealing with that port instead. From switching to competitors. Thus, the port can achieve a competitive advantage and increase its share in the local and global transportation market, as a result of the high level of efficiency in managing maritime transportation operations in the port. They strive to solve problems efficiently, provide accurate information, and maintain open lines of communication. (Bang et. al., 2012, 656)

Furthermore, regulatory authorities for ports and maritime transport services in Jordan play a crucial role in ensuring that strategic management standards are met. They establish and implement regulations that promote fair competition, strategic management and ensure efficient maritime transport operations. These regulations contribute to promoting a sustainable and competitive maritime transport sector. Hence, the continuous profits and sustainable growth of the port increases. (Bang et. al., 2012, 654)

In Jordan, the maritime transport sector strives to provide superior logistical services by adopting a strategic management system to manage maritime transport operations in the port. The country's maritime transport sector places great emphasis on providing reliable and efficient logistics solutions. In this

regard, the Jordanian Port of Aqaba gives priority to achieving efficient loading and unloading operations, transporting and receiving goods, to ensure superior service quality and ensure the efficiency of maritime transport operations. (Abdullah, 2012, p. 22)

4. Indicators of maritime transport efficiency in seaports:

There are a number of indicators of the efficiency of maritime transport operations in seaports, which are as follows:

- Productivity index:

The productivity of cargo shipping tonnage and the number of marine units are used as an indicator of the efficiency of maritime transport operations in the port. In order to know the productivity indicators of local ports, the total tonnage (imported and exported), the number of handling platforms, the number of ships arriving and departing in the country's commercial ports, and the size of the tonnage during a certain period are calculated, and the extent of market openness is known. Local impact on global markets, the volume of demand for foreign products, the degree of improvement in depths in front of the berths in the ports, and the number of marine units to operate the berths. (Coto-Milla et. al., 2010, p21)

- Pavement operating capacity index:

This indicator is calculated in order to measure the operating capacity of berths to determine the degree of port efficiency through the ratio of the volume of goods to the length of berths in the ports, considering that each linear meter of berths can serve a thousand metric tons of berths, by calculating the port load, the lengths of berths and the number of berths (Al-Zouka, 2000, p. 7).

- Actual production capacity indicator:

Through it, the proportion of the amount of cargo handled in the port, and the degree of rehabilitation of its berths, are measured. All of this indicates that the local port berths have a low operating capacity if we know that the designed capacity of the local ports is measured by the operational capacity of the local ports, and the degree of conversion of the port berths within the contracts of joint operating companies. And the degree of decrease in drowning degree Water depth. This expresses the efficiency of the berths with increased productivity and the production capacity of one berth, and it is an indicator of the increased efficiency of the performance of local ports. (Abdel-Asadi, Jassim, 2021, p. 56)

- Time indicator:

The extent of the port's progress, development, and efficiency is measured primarily by the time the ship spends inside the port. The faster the loading and unloading, the better for investors and maritime agents who are looking to reduce costs and increase profits. The speed of completing loading and unloading work in local commercial ports varies from one port to another and from one berth to another within the same port. On the other hand, as the total time of ships in the port increases, this will negatively affect the ships by increasing the fees that each ship bears due to the length of its stay in the port. Ports. (Abdel-Asadi, Jassim, 2021, p. 61)

5. Previous relevant studies:

A study (Shawal,2012) in his study to highlight the role of logistics in improving strategic performance rates to raise the economic efficiency of ports in the Tripoli Sea Port. He explained the possibility of increasing the efficiency of the Tripoli Sea Port through the use of modern information technology to manage the port. As Burmila mentioned (2012) in his study on international trade in enriching logistical ports and the possibility of benefiting from it in developing the Tripoli seaport, pointed out the increasing importance of maritime transport via seaports in the world economy in the face of increasing rates of global trade.

A study concluded by Anderson (2017) indicated that there is an impact of logistical activities from the (transportation - Supply - Storage) on the quality of services provided in ports. A study agreed with her (Baker, 2015) in achieving competitive advantage. The study also found (Cooper, 2014) that maritime transport as one of the logistical activities occupies primary importance It has the ability to improve performance, and a study agreed with it (Eriksson, Wisterberg, 2012) in that capabilities Logistics has three dimensions: practical ability, flexibility ability information integration ability and that ability. The process is the most important influencing performance improvement. While a study found (Vonck, Notteboom, 2016) Due to the importance of creating integration between the vertical and horizontal functional linkage between the levels and types of logistical centers with their various functions and roles in forming a logistics system at the national and regional levels by application to the port of Damietta.

Researched study (Parola et. al., 2015) on the impact of corporate strategies on the profitability of maritime companies by applying a general theoretical framework for strategy performance in the context of maritime logistics companies. She explained (Pallis, Parola, 2018Through the theoretical lens of international business and strategic management, market entry strategies for international (container) terminal operators and private cruise terminal operators are linked to the presence of port options within a maritime network or strategic alliance.

A study was applied (Yuen et. al., 2018) Resource-based view theory of strategic management to investigate a variety of resource and capability issues in the context of the maritime logistics industry.

7. Data Analysis and Results.

First: Psychometric characteristics of the study:

The psychometric properties of the scale were verified by calculating validity and reliability, as follows:

1- Internal consistency validity:

Researcher used Pearson correlation coefficient to verify the internal consistency of the scale, by calculating correlation coefficients between the scores of the sub-dimensions and the total score of the scale.

Table 1: Pearson correlation coefficients between Subdimensions. The total score of the scale.

Dimensions	Number of paragraphs	Correlation coefficient	Sage
Impact on the port's information system	4	0.708	**
The impact on the number of ships and their insurance	4	.0755	**
The impact on the number of containers and the movement of goods	6	.0744	**
The impact on the waiting time of ships and containers in the port	3	0.870	**

**The correlation is significant at the 0.01 level (two-tailed).

Source: Authors.

It is clear from the previous table that:

The coefficient values are high, which reflects the relationship between the different dimensions and the extent to which they represent the scale. This is greatly reflected in the degree of credibility of these dimensions, as they achieved statistically significant correlation coefficients. The total score of the scale ranged between (0.708 to 0.870),This confirms that the scale has a high degree of validity.

2- Scope reliability:

The scale's reliability was calculated using Cronbach's alpha reliability coefficient, as shown in the following table:

Table 2: Reliability coefficients for Cronbach's alpha.

Dimensions	Number of paragraphs	Cronbach's alpha coefficient
Impact on the port's information system	4	.0538
The impact on the number of ships and their insurance	4	.0714
The impact on the number of containers and the movement of goods	6	.0789
The impact on the waiting time of ships and containers in the port	3	.0796
the total	**17**	.0892

Source: Authors.

It is clear from the previous table that:

The Cronbach's alpha reliability coefficient for the total scale was reached (0.892),Which indicates the high reliability of the scale, and the values of the Cronbach's alpha coefficient confirmed the stability of these dimensions significantly, and the values of the reliability coefficient (dimensions ranged between 0.536 to 0.796), which reflects a high degree of stability of the tool used to express the dimensions of the scale.

1- Descriptive analysis of the dimension elements. Impact on the port's information system:

The researcher used statistical methods (frequencies, percentages, arithmetic mean, and standard deviation) for each paragraph of the dimension to arrange them according to their importance and extracted the following results:

Table 3: Arranging paragraphs after "The impact on the port's information system" According to its importance.

Paragraphs	n	Average	Standard deviation (Sigma square)	Rank
The port uses information technology to provide various related services High quality		2.80	0.517	1
The process of information flow between companies and the port is based on systems Modern electronic		2.42	0.883	4
The port uses information technology in various operations within the port		2.61	0.767	2
The port seeks to make continuous improvements to the information technology system to increase the efficiency of the operations provided		2.50	0.841	3
Average General		**2.58**		

Source: Authors.

It is clear from the previous table that:

- In first place (The port uses information technology to provide various related services High quality) With an arithmetic average (2.80) and standard deviation (0.517). And in the last order (The process of information flow between companies and the port is based on systems Modern electronic.), with an arithmetic average (2.42) and standard deviation (0.841).

- It is also clear that the average. The general dimension has reached its value (2.58), the value is high On a Likert scale.

2- Descriptive analysis of the dimension elements. The impact on the number of ships and their insurance:

Researcher used Statistical methods (frequencies, percentages, arithmetic mean, and standard deviation) for each paragraph of the dimension to arrange it according to its importance and extract the following results:

Table 4: Arranging the paragraphs of the dimension "Impact on the number of ships and their security" According to its importance.

Paragraphs	n	Average	Standard deviation (Sigma square)	Rank
The port provides appropriate security and safety standards for all types of ships She hesitates to him		2.39	0.865	4
The port provides the necessary facilities and services for the goods handling process, including berths and equipment		2.59	0.751	2
The number of ships handled is in line with the port's capabilities and services provided		2.59	0.734	2
The number of ships handled is in line with the global average ports and global trade volume		2.64	0.687	1
General average		**2.55**		

Source: Authors.

It is clear from the previous table:

- In first place (The number of ships handled is in line with the global average ports and global trade volume) with arithmetic average (2.64) and the deviation standard (0.687), In the last order (The port provides appropriate security and safety standards for all types of ships She hesitates to him) on average arithmetic (2.39) and standard deviation (0.865).

- It is also clear that the average. The general dimension has reached its value (2.55), the value is high On a Likert scale.

3- Descriptive analysis of the dimension elements. The impact on the number of containers and the movement of goods:

The researcher used statistical methods (frequencies, percentages, arithmetic mean, and standard deviation) for each paragraph of the dimension to arrange them according to their importance and extracted the following results:

Table 5: Arrangement of dimension paragraphs ?The impact on the number of containers and the movement of goods". According to its importance.

Paragraphs	n	Average	Standard deviation (Sigma square)	Rank
There is continuous monitoring and monitoring of the movement of ships and goods within the port		2.45	.807	4
Infrastructure facilities are developed to suit the number of containers in circulation		2.46	.855	3
The necessary land areas are available for port activities and maintaining the presence of lands Backup for future expansion		2.49	.825	2
The port works to provide all necessary means of maintenance for capital assets and facilities, including berths, navigational aids, and others, to increase the efficiency of the movement of goods		2.49	.808	2
Ships arriving at the port are handled with high efficiency, especially cargo handling operations (ship loading and unloading).		2.54	.791	1
Administrative, technical and workforce cadres are available with a high level of training and competence and the outstanding performance of managing and directing container handling movement within the port		2.44	.839	5
General average		**2.47**		

Source: Authors.

It is clear from the previous table that:

- In first place (Ships arriving at the port are handled with high efficiency, especially cargo handling operations (ship loading and unloading)) with arithmetic average (2.54) and standard deviation (0.791). In the last order (Administrative, technical and workforce cadres are available with a high level of training and competence and the outstanding performance of managing and directing container handling movement within the port) on average arithmetic (2.44) and standard deviation (0.839).

- It is also clear that the average. The general dimension reached its value (2.47), the value is high On a Likert scale.

4- Descriptive analysis of the dimension elements.The impact on the waiting time of ships and containers in the port:

Researcher used Statistical methods (frequencies, percentages, arithmetic mean, and standard deviation) for each paragraph of the dimension to arrange it according to its importance and extract the following results:

Table 6: Arranging the paragraphs of the dimension of the impact on the waiting time of ships and containers in the port according to its importance.

Paragraphs	n	Average	Standard deviation (Sigma square)	Rank
Navigational aids are available to ensure safe navigation when ships are approaching or waiting outside the port		2.51	0.808	2
Marine beacons, coastal lighthouses and radio communication stations are all available and guidance		2.43	0.869	3
There is internal guidance from the waiting areas on the ramps to the platforms or vice versa		2.64	0.687	1
General average		**2.52**		

Source: Authors.

It is clear from the previous table that:

- In first place (There is internal guidance from the waiting areas on the ramps to the platforms or vice versa) with arithmetic average (2,64) and standard deviation (0.687). In the last order (Marine beacons, coastal lighthouses and radio communication stations are all available and guidance) on average arithmetic (2.43) and standard deviation (0.869).

- It is also clear that the average. The general dimension reached its value (2.52), the value is high On a Likert scale.

8. Discussion & Results:

8.1. Discussion.

Through a case study of the Jordanian port of Aqaba, it was shown that:

- **Comment on Hypothesis 1**: Data analysis showed a positive relationship Between strategic management and maritime transport efficiency in the Jordanian port of Aqaba. This indicates that, with improvements in strategic management, decision making may be linked to better implementation of maritime transport efficiency in the Jordanian port of Aqaba. As for the degree of connection, it is considered a connection The indicator indicates that strategic management is one of the most important factors that may affect the efficiency of maritime transport in the Jordanian port of Aqaba.

- **Comment on Hypothesis 2**: Data analysis showed a positive relationship Between strategic management and dimensions of maritime transport efficiency in the port, represented by: (information system, number of ships and containers, movement of goods, and waiting time in the port) in the Jordanian port of Aqaba. This indicates that the port has an advanced strategic management system. As for the degree of connection, it is considered a connection that the four dimensions of maritime transport efficiency in the port, represented by (Information system, number of ships and containers, movement of goods, and waiting time at the port) have been affected Positively Implementing the strategic management system in the Jordanian port of Aqaba.

- **Importance strategic management:** In today's business environment, especially in the maritime transport sector, so seaports must go beyond strategies seaports management and pioneers' services has in the usual manner, to implement port and facility management strategies to stand out and build a good reputation. It achieves competitiveness in the maritime transport sector. May be for strategic management That improved dramatically Efficiency of maritime transport operations in sea ports.

- **Continuous improvement in the efficiency of maritime transportation:** The dedication can be seen in system application strategic management through regular evaluation and improvement to transport goods and containers and improve services provided to ships in the port As well

as facilitatingActions based on inputStrategic management. This iterative process improves and enhancesEfficiency of maritime transportation operations Sea ports.

Below are the most important results, Conclusion and recommendations reached by the research:

8.2. Results:

Although researchers in the field administration, maritime transport and logistics, recently they have focused more on effectsVarious management systems for managing the work of seaports and the maritime transport sector. However, it would be interesting for future studies to continue to expand the scope of the current research. Therefore, this research points to several topics to deepen the literature related toThe impact of the strategic management system on the efficiency of maritime transport operations in seaports.

Produced a school of scholars administration proponents of strategic management have abundant research findings. However, it is still unclear whether the research stream on strategic issues in the maritime logistics industry is ready to be labelled as an academic discipline or merely an application of existing strategic management theories and constructs in the maritime domain. This study was prepared to clarify this concern.

The Jordanian Port of Aqaba attaches great importance to supporting port pioneers and workers. The strategic management system emphasizes the importance of immediately addressing the concerns of port patrons and workers, and ensuring that port patrons and workers enjoy a positive experience and are satisfied with the logistical services it provides, including loading, unloading, transporting goods, etc., so that they tend to continue dealing with that port instead. From switching to competitors. Thus, the port can achieve a competitive advantage and increase its share in the local and global transportation market, as a result of the high level of efficiency in managing maritime transportation operations in the port. They strive to solve problems efficiently, provide accurate information, and maintain open lines of communication.

Conclusions and Recommendations.

Conclusion.

The objective of this research is to provide new data related With the expected effect To apply the strategic management system to the efficiency of maritime transport operations - by application to the Jordanian port of Aqaba - which is what you ask for understand the nature of the relationship between strategic management and maritime transport efficiency, and understanding the nature of the impact of the strategic management applied by the Jordanian port of Aqaba on the level of maritime transport efficiency in the port in terms of (Information system, number of ships and containers, movement of goods, and waiting time in port). This research also highlights some management recommendations designed to encourage implementing a strategic management system in seaports and the maritime transport sector, with the objective of increasing their efficiency.

Recommendations.

The research recommends that Jordanian ports should adopt performance indicators in order to evaluate their work and develop a plan for developing it in the future.And to work on-Improving the efficiency of port performance to increase the volume of international trade, attract foreign investments, and increase job opportunities. As should continuation of work Strategic management system in the maritime transport sector, in view of a positive indicators efficiency of maritime transportation operations In the Jordanian port of Aqaba after this experience entered Jordanian ports.

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Table 7: Appendix: Questionnaire Statements.

Agree	I don't know	Not agree	Paragraphs	X
The first dimension: The impact on the port's information system				
			The port uses information technology to provide various related services high quality	1
			The process of information flow between companies and the port is based on systems modern electronic	2
			The port uses information technology in various operations within the port	3
			The port seeks to make continuous improvements to the information technology system to increase the efficiency of the operations provided	4
The second dimension: the impact on the number of ships and secure it				
			The port provides appropriate security and safety standards for all types of ships she hesitates to him	1
			The port provides the necessary facilities and services for the goods handling process, including berths and equipment	2
			The number of ships handled is in line with the port's capabilities and services provided	3
			The number of ships handled is in line with the global average ports and global trade volume	4
The third dimension: The impact on the number of containers and the movement of goods				
			There is continuous monitoring and monitoring of the movement of ships and goods within the port	1
			Infrastructure facilities are developed to suit the number of containers in circulation	2
			The necessary land areas are available for port activities and maintaining the presence of lands backup for future expansion	3
			The port works to provide all necessary means of maintenance for capital assets and facilities, including berths, navigational aids, and others, to increase the efficiency of the movement of goods	4
			Ships arriving at the port are handled with high efficiency, especially cargo handling operations (ship loading and unloading).	5
			Administrative, technical and workforce cadres are available with a high level of training and competence and the outstanding performance of managing and directing container handling movement within the port	6
Fourth dimension: The impact on the waiting time of ships and containers in the port				
			Navigational aids are available to ensure safe navigation when ships are approaching or waiting outside the port	1
			Marine beacons, coastal lighthouses and radio communication stations are all available and guidance	2
			There is internal guidance from the waiting areas on the ramps to the platforms or vice versa	3

Source: Authors.

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