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INVESTIGATING THE MODERATING ROLE OF TEAMWORK CULTURE ON STRATEGIC INTELLIGENCE AND OPERATIONAL PERFORMANCE

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Abstract

This study aimed at identifying the effect of strategic intelligence on operational performance as well as detecting the moderating role of the teamwork culture in the relationship between strategic intelligence and operational performance in Jordanian public shareholding industrial companies. The study population was limited only to employees in the production lines, and the questionnaire was used as a data collection tool, taking a simple random sample composed of 266 individuals with analyzing 200 questionnaires. The results of this study emphasized that there is a statistically significant effect of the dimensions of strategic intelligence (foresight, future vision, and partnership) on operational performance, while there is no statistically significant effect of the dimensions of strategic intelligence (systemic thinking, motivation) on operational performance in Jordanian public shareholding industrial companies. The results of this study also showed that there is a statistically significant effect on the teamwork culture as a moderating variable in the relationship between strategic intelligence and operational performance.

Keywords: *Strategic Intelligence, Operational Processes, Teamwork Culture*.
JEL Codes: *M11*

1. Introduction

Organizations' strength has been measured by the level at which their leaders possess strategic intelligence, which is key to the organizations to succeed in the current century. According to researchers, strategic intelligence is a broad and diverse concept, without a firm and certain definition (Maccoby and Scudder, 2011; Coccia, 2010; Tessaleno, 2010). Its usage is important because we live in a rapidly changing world that needs to make events more smartly and creatively. Some decisions need to be made and problems require a solution continuously (Stamevska & Stamevski, 2020). Many new and intrinsic topics have

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emerged in the area of contemporary managerial thought that will address the challenges faced by organizations in the changing business environment. One of these modern topics is strategic intelligence (Zeidan, 2020), which is an urgent necessity for organizations operating in an environment characterized by large and rapid changes, and the intensity of untraditional competition in their markets. Organizations' existence depends on their ability to stand out from competitors by increasing their operational performance and enhancing capabilities and intrinsic efficiency; i.e. the ability to quickly follow to achieve precedence over competitors. Strategic intelligence has become a means of reaching high levels of performance to achieve customer satisfaction.

As the business environment of the organizations expands, the teamwork is used to carry out their operational activities (O'Neill and Salas, 2018). Many contemporary organizations continue to build and develop their strategic intelligence by seeking of help from specialists and experts in this field to provide the basic analyses that are the base for senior management decisions on key issues such as integration with other organizations or the development of new products (Xu, 2007). Both Tham and Kim (2002) have shown that strategic intelligence represents the organization's knowledge of its business environment in terms of activities, resources, customers, markets, products, services, and prices. This is to enable the organization to conceptualize its current processes, anticipate, and manage changes in preparation for the future, design appropriate strategies for creating value for customers, and improve profitability in existing and new markets. It is an administrative tool used to make decisions on important and cross-cutting issues (McDowell, 2008).

Strategic intelligence has gained the attention of many researchers and academics because of its role in keeping organizations against competitors under the threats they face, resulting from changes in the internal and external environment of the organization (Xu, 2007; Brouard, 2002; McDowell, 2008). Strategic intelligence is a preparation for the future and is used to find and analyze problems that the organization will face, and make appropriate, strategic decisions to address them, by generating reliable organizational knowledge for strategic decision-making, thereby creating a competitive advantage (Pellissier & Kruger, 2011). Gordon, 2007; Liebowitz, 2006; McDowell, 2008 emphasized the importance of strategic intelligence in strategic decision-making because it gives the organization a complete image of the business environment. On the other hand, the study of strategic intelligence was not limited to large organizations. Hawes (2010) has shown the role of strategic intelligence in the success of small and medium-sized businesses to meet competitive pressures.

Strategic intelligence thus provides a better opportunity for different kinds of organizations to analyze and infer what is going on in the internal and external environment

in which the organization operates. This helps to anticipate and manage future changes, develop appropriate strategies for adapting their operational processes to these changes, and fully be prepared for any sudden change that may occur (Brouard, 2002; McDawell, 2009; Xu, 2007).

Therefore, many researchers and academics have pointed out the importance of strategic intelligence in the organization's decision-making (Gordon, 2007; Liebowitz, 2006; McDowell, 2008; Xu, 2007). Strategic intelligence provides managers with a broader understanding of the operational environment, helping them to make decisions. Strategic intelligence is also used to estimate production costs (Witcher, 2019) and enables managers, and teamwork leaders to use appropriate communication methods to communicate their guidance to employees (Connors, 2019). Thus, managers must practise strategic intelligence at all levels of administration. It is an approach that addresses all issues that affect the organization in the medium and long term. Through strategic intelligence, opportunities to exploit them and threats to be addressed can be identified by creating the internal organization environment for dealing with current and future markets and sectors (Levine et al., 2017; Service, 2006).

Strategic intelligence plays a major role in each area of management, and organization decisions on plans in the future. It provides support for operational objectives by forecasting future challenges (Lehane, 2011). Tham & Kim (2002) defined strategic intelligence that what the organization needs to know about its business environment (activities, resources, customers, markets, products, prices) to conceptualize its current processes, anticipate, and manage changes in preparation for the future, design appropriate strategies for creating value for customers, and improve profitability in existing and new markets. Macadam & Bailie (2002) have emphasized the importance of aligning the business strategy with business performance, as most companies fail to turn strategy toward effective actions to increase the performance of their operational processes. Therefore, there must be consistency between the organization's strategy and its operational performance (Bourne, et al., 2000; Dale, 2007; Dixon et al., 1990; Franklin, 1996; MacAdam & Bailie, 2002).

In the light of the above, the study identified a strategic intelligence concept that is appropriate to the current study's aim and that is based on the intelligence that the organization's leaders enjoy and its elements are (foresight, systemic thinking, future vision, motivation (staff- motivation), and partnership) and it enables them to take advantage of the information available to make the right decisions, formulate plans, policies, and strategies to increase their operational performance in preparation for future changes.

Therefore, the study was to highlight the effect of strategic intelligence on operational performance in Jordanian public shareholding industrial companies as well as detecting the moderating role of the teamwork culture in the relationship between strategic intelligence and operational performance of these companies.

2. The Study Problem:

Strategic intelligence is one of the types of intelligence that successful leaders should have, to achieve the goals of the organization, and to discover ways to adapt to the surrounding environment, especially in the context of the accelerated trend toward using teamwork in implementing the processes of contemporary companies as a means of increasing the operational performance in Jordanian public shareholding industrial companies. They have a vital role in the Jordanian economy which requires a high level of operational performance. This has prompted the initiation of studying the strategic intelligence level in Jordanian public shareholding industrial companies and the development of a supportive culture for teamwork and the effect of this on improving the operational performance of these companies. Therefore, the study problem can be formulated through the following main question:

What is the role of strategic intelligence in operational performance in the context of the accelerated trend toward using teamwork in Jordanian public shareholding industrial companies?

The following sub-questions arise from the main question:

1) What is the effect of strategic intelligence on the operational performance of these companies?

2) Does teamwork culture play a role in improving the relationship between strategic intelligence and the operational performance of these companies?

3. The Importance of the Study:

This study is important as it is one of the few studies that dealt with strategic intelligence and operational performance in the Jordanian business environment. The importance of the current study is reflected in the following themes:

1) Examines the role of strategic intelligence in responding to changes in the current and future environment, planning, and forecasting results in a manner that reflects positively on operational performance.

2) The scarcity of studies that dealt with the subject matter of strategic intelligence in the Arab world in general and in Jordan in particular. Despite the importance of the subject matter, this study is unique in the Jordanian business environment in particular as it addresses a topic that researchers have not given sufficient attention to in the field of

managerial work as well as the importance resulting from the possibility of carrying out other similar studies in different business environments.

3) The importance of the study is reflected in the importance of its application in a developing country (Jordan) and the public sector of joint-stock companies listed in the Amman Financial Market, which is a vital source of the Jordanian national economy.

4) Alerting companies and their leaders to raise and pay attention to strategic intelligence levels, which contributes to the operational performance of these companies through the findings and recommendations of the study.

4. The Study Objectives:

The current study aims mainly to demonstrate the role of strategic intelligence in the operational performance of the public industrial companies listed in the Amman Financial Market by achieving the following objectives:

1) Identify the role of strategic intelligence in the operational performance of these companies.

2) Identify the modified role of the teamwork culture in the relationship between strategic intelligence and the operational performance of these companies.

3) Make recommendations to decision-makers that will contribute to the development of strategic intelligence and highlight the importance of the moderating role of the teamwork culture in increasing the level of the operational performance of these companies.

5. The Study Hypotheses:

The hypotheses of this study have been constructed after reviewing the literature and previous studies related to the subject matter of the study so that the study can achieve the required objectives and answer the questions that were developed while formulating the study problem as follows:

The First Main Hypothesis (Ho1): There is no statistically significant effect of the dimensions of strategic intelligence (foresight, systemic thinking, future vision, motivation, and partnership) on operational performance in Jordanian public shareholding industrial companies listed in the Amman Financial Market. The following sub-hypotheses arise from the main hypothesis:

- Ho1-1: There is no statistically significant effect of foresight on the operational performance in Jordanian public shareholding industrial companies listed in the Amman Financial Market.

- Ho1-2: There is no statistically significant effect of systemic thinking on the operational performance in Jordanian public shareholding industrial companies listed in the Amman Financial Market.
- Ho1-3: There is no statistically significant effect of future vision on the operational performance in Jordanian public shareholding industrial companies listed in the Amman Financial Market.
- Ho1-4: There is no statistically significant effect of motivation on the operational performance in Jordanian public shareholding industrial companies listed in the Amman Financial Market.
- Ho1-5: There is no statistically significant effect of partnership on the operational performance in Jordanian public shareholding industrial companies listed in the Amman Financial Market.

The Second Main Hypothesis (Ho2): There is no statistically significant effect of strategic intelligence on operational performance by the existence of the teamwork culture as a moderating variable in Jordanian public shareholding industrial companies.

6. Theoretical Framework:

6.1 Strategic Intelligence Dimensions

Many researchers have been interested in identifying the dimensions or elements of strategic intelligence, as Tregoe & Zimmerman (1980) referred to in their book entitled "Top Management Strategy". A set of (yes/no) questions was adopted and was addressed to the employees of top management of the company. Based on the answer, the availability of strategic intelligence is determined. Passas et al. (2006) have adopted a model composed of four dimensions: foresight, economic intelligence, knowledge management, and benchmarking. Georghiou (2006) has used a model to measure strategic intelligence, consisting of the following dimensions: evaluation, foresight, and technology assessment. Service (2006) has indicated that strategic intelligence is the ability to develop appropriate strategies to address future environmental impacts and that its elements are: talent, understanding, knowledge, flexibility, and broad imagination. Kuhlmann (2005) referred to four principles of effective strategic intelligence: the principle of participation, the principle of objectivity, the principle of mediation and organization, and finally, the principle of decision support.

Maccoby, who is considered one of the most prominent researchers in the field of strategic intelligence, has shown that strategic intelligence includes dimensions: foresight, systemic thinking, future vision, partnership, and staff- motivation (Maccoby, 2001; Maccoby, 2004; Maccoby & Scudder, 2011). This study was based on identifying the

dimensions of strategic intelligence on the dimensions in the Maccoby model with some change. Many studies used the strategic intelligence dimensions in the Maccoby model and these studies are (Pellissier & Kruger, 2011; Liang, 2004; Cui et al., 2011).

It should be noted that the interconnectedness and inseparability of the elements of strategic intelligence help leaders identify opportunities and threats facing the organization, prepare for the future, motivate the organization's staff, and thus achieve great positive results for the organization (Maccoby & Scudder, 2011). This study will be based on using strategic intelligence dimensions mentioned in the (Maccoby & Scudder, 2011) model and these dimensions will be addressed as follows:

Firstly, Foresight: It means that organizations should be efficient in anticipating the future. Organizations need to develop their capacity and ability to think in terms of future aspects, and to explore several ways in which organizations can look at the future (Wootton & Horne, 2010; Stamevska et al., 2019). Causal thinking based on current events or trends enables the organization to anticipate its future. (Willson,1992) pointed out that anticipating the future requires continuing to move toward the goal, estimating and preparing for all possibilities, clarifying the image of the desired future, and identifying the objective and the ultimate goal of the organization's activities. The leader who sets goals and objectives will be loyal to all categories of the organization's clients and thus achieve its goals, success, profit, and prosperity. In this context, Maccoby (2004) pointed out that foresight means a set of purposes that are broad, comprehensive, and thought-oriented to describe the discovery of the future and the desired situation in a harmonious and coordinated manner, very attractive and able to give an approach about the future. Leaders with foresight can then distinguish what can be avoided, and control it, and adopt the expectation in managing environmental changes in a calm and orderly manner, thereby enabling leaders to adopt appropriate scenarios that are consistent with future environmental changes.

Secondly, Systemic Thinking: Systemic thinking means synthesizing and merging elements rather than separating them into parts, then analyzing them, studying parts concerning the whole, knowing how they interact with each other, and then evaluating them in a way that serves the organization's operations. It can be said that it is the ability to synthesize and integrate a set of variables related to each other and then to analyze them clearly in a more well-defined manner (Maccoby, 2004). Systemic thinking seeks to provide the possibility of secure, judicious solutions that are both sustainable and parallel to the development of projects and business. It is also a well-integrated approach to thinking, learning and innovative analysis to address the potential consequences or unexpected consequences of adopting such solutions or methods. Ultimately, it relies on

the general principles and bases of all aspects of life, which are easily discovered once they are identified (Haines, 2007).

Thirdly, Future Vision: Future Vision means the ability to see developments before they occur and this is the strategic management core. The leader must be able to examine the situation, anticipate potential changes, take risks, and build confidence. Therefore, the vision assesses the intuition, which is not just a direct and sudden perception, but it is the result of the interaction between experiments and many experiences that the creative person lives with during the creative process. Vision is a description of a future image that the organization looks forward to, and surpasses its current situation in one or more aspects (Wheelen & Hunger, 2017). The vision as one of the dimensions of strategic intelligence is related to seeking help from foresight, and systemic thinking to design an optimal model or situation that the organization seeks to reach as it's the roadmap for employees (Maccoby, 2004).

Fourthly, Motivation: Motivation means the ability of managers to drive and motivate individuals to implement the insights and perceptions they have set, and guide them toward a specific goal to enhance the strategic objectives of the organization. Motivation reflects the ability of an intelligent leader to motivate employees (Stamevska & Stamevski, 2017) to implement the insights and perceptions they have set (Maccoby, 2004). It can be said that motivation as one of the dimensions of strategic intelligence is the extent of the leaders' ability to push individuals and empower them to believe in a general goal that brings them together based on the insights and perceptions that should be implemented. Maccoby (2010) has shown that employees' incentives represented in 4R's, which are Rewards, Responsibilities, Reasons, and Relationships.

Fifthly, Partnership: Partnership means the ability to establish strategic alliances and define their role in enhancing the organization's capabilities as one of the trends of contemporary organization, one of the mechanisms for adaptation to the competitive environment, and a framework for collaborative action among companies. Therefore, strategic leaders tend to form partnerships and alliances to achieve common goals. Joint teamwork, customer proximity, mutual trust among partners, and information exchange are key elements of a successful partnership. In this regard, Maccoby (2004) has indicated that intelligent leaders understand that they cannot achieve the vision set alone and that they will be stronger with the people or organizations that will help them succeed and achieve goals.

6.2 The Relationship between Strategic Intelligence and Operational Performance

Generally, the study of organizational performance has faced many challenges, including the concept variation and its measurement indicators, and the diversity of researchers' objectives when studying it. However, most researchers and academic scholars have agreed that performance represents the ultimate outcome that the organization seeks to achieve, and reflects its ability to use its material and human resources efficiently and effectively (Fan et al., 2017, Eccles, 1991, Daft, 2009, Miller & Leiblein, 1996; Wheelen & Hunger, 2017). In other words, performance is the result of the organization's processes by harmonizing the business environment and the resources of the organization (Johnson & Scholes, 1993).

This prompted several researchers and academics to study operational performance (Dilwarth, 1996; Noori & Radford, 1995; Hatten & Hatten, 1997, Evans, 1997, Slack et al. 2016, Krajewiski et al., 2018, Davies et al., 2003). Slack et al. (2016) has linked the organization's performance to the ability of its operations to meet operational objectives of quality, cost, reliability, flexibility, and speed as indicators of overall performance.

Since the practice of strategic intelligence makes the organization able to deal with current and future challenges with opportunities to enhance the organization's processes and success (Liebowitz, 2006; Maccoby & Scudder, 2011). Strategic intelligence provides appropriate means of support to achieve operational objectives (Lehane, 2011). Strategic intelligence also contributes to building and growing an organization and managing its operations efficiently and effectively (Reigle, 2008).

In addition, the practice of strategic intelligence promotes teamwork culture, sharing information, and enables employees to achieve the organization's goals by involving them in decision-making (Tham & Kim, 2002). Brouard (2002) has shown the role of strategic intelligence in developing the organization's capacity for collective learning, developing innovation in all of the organization's processes, and shifting employees' attention from a focus on unsystematic operational processes in business performance to a focus on more structured operational processes. Successful management of strategic intelligence seeks to make employees benefit from the use of information and knowledge about customers, products, markets, and all elements of the organization's internal and external environment, and to encourage employees to feel the change, and how this change will affect the organization's processes (Yuleva, 2019; Xu, 2007; Liang, 2004). Strategic decisions that are consistent with the change required in the internal environment in harmony with the external environment create a positive impact on the performance of the organization's operational processes. Turner & Grawfred (1994) pointed out that the organization's

outstanding performance required the organization to effectively manage its dominant processes, and the organization's ability to change its operations according to its constantly changing future needs in accordance with its strategies.

6.3 Teamwork Culture

Cabana and Kaptein (2019) confirmed that many scholars and researchers have shown teamwork culture is one of the main levels of analysis as teamwork culture refers to the cultural differences and similarities at the team level. The organization's culture is also multi-level as follows: individual, team, organizational, and national (Glick, 1985; Chao, 2000). Schein (2007) has confirmed that different cultures can be created within the organization because of differentiation, work division, and specialization that creates smaller units such as teams. These teams begin an independent process of forming the team's culture with their leaders. Cabana and Kaptein (2019); Castka et al. (2003) emphasized the importance of developing a teamwork culture for its positive links to the organizational unit operations' outputs (Liden et al., 2014). Teamwork culture is also essential for succeeding in applying total quality management (TQM) (Adebanjo and Kehoe, 2001), in which teamwork culture is a key component (Guimaraes, 1997). Teamwork culture is also linked to individual performance outcomes such as job satisfaction, organizational commitment, and labor turnover which will reflect on the operational performance of the organization (Jiang et al., 2019; Glisson and James, 2002). Team culture includes values, assumptions, and behaviors that individuals share as they work with each other daily within the same sub organizational unit (Cabana and Kaptein, 2019).

Therefore, the importance of teamwork culture is highlighted as the weak teamwork can damage the organization through the non-professional conduct of individuals, as well as generate frustration and depression in cooperative individuals (Rehder et al., 2020). Teamwork culture is also linked to innovation, occupational safety, lack of errors, and saving lives (O'Neill and Salas, 2018; Hughes et al., 2016; Hülsheger et al., 2009). Thus, to develop teamwork culture, the organization's management must provide means of professional safety, encourage teamwork through training (Rehder et al., 2020), remove communication barriers among members of teamwork (Connors, 2019), recognize achievement and rewards, and provide facilitation for teamwork to avoid poor operational performance in business (Adebanjo and Kehoe, 2001).

The practice of strategic intelligence also requires the promotion of a teamwork culture, sharing information, and empowering workers to contribute their perceptions about the future of the organization through their involvement in decision-making (Zeidan, 2020, Tham & Kim, 2002). Therefore, most organizations seek to establish teamwork culture

within their goals to achieve high performance that reflects positively on their operational performance, especially as modern industries are directed to using teamwork (O'Neill and Salas, 2018; Cross et al., 2016; Salas et al., 2015; Castka et al., 2003).

7. The Study Methodology:

In this study, the descriptive analytical approach was used. The previous literature relevant to the subject matter of the study and its variables has been used as a secondary source to develop and build the theoretical framework. The questionnaire was also used as a primary source for addressing the analytical aspects of the subject matter of the study. The study tool, a questionnaire was developed to collect data on study variables, which included some items that reflected the study objectives and questions, which participants answered. The quinary Likert scale (1-strongly disagree, 2-disagree, 3-neutral, 4-agree, 5-strongly agree) was used.

Appropriate statistical methods for data analysis have been used for such studies, especially descriptive statistics measures such as mean and standard deviations. Analytical statistics measures have also been used like multiple regression to find out the effect of each dimension of strategic intelligence on operational performance and also to find out the modified role of the teamwork culture in the relationship between strategic intelligence and operational performance in Jordanian public shareholding industrial companies.

7.1 The Study Population and Sample:

The study population is the employees in operating lines of Jordanian public shareholding industrial companies listed in the Amman Stock Exchange. A simple random sample was used. 266 questionnaires have been distributed to employees in these companies and 200 questionnaires have been recovered with a recovery rate of 75.1%. Table (1) shows the demographic characteristics of the study sample by (gender, age, work at the factory, and educational level).

Table 1: Demographic Characteristics of the Study Sample

Variable	Category	Frequency	Percentage
Gender	Male	104	%52
	Female	96	%48
Age	Less than 30	104	%52
	30-39 years old	40	%20
	40-49 years old	40	%20
	50 years and over	16	%8
	Technical work	136	%68

Work at the Factory	Managerial work	64	%32
Educational Level	Diploma or less	24	%12
	Bachelor's degree	128	%64
	Postgraduate Studies	48	%24
Total		**200**	**%100**

7.2 The Study Tool:

A questionnaire was developed as a tool for the study and data collection. The tool was presented to a group of researchers for arbitration and its items were modified to suit their observations. The questionnaire included four main parts. The first part included demographic characteristics. The second part included paragraphs and questions of the independent variable (strategic intelligence) with its dimensions (foresight, systemic thinking, future vision, motivation, and partnership) and the paragraphs of this variable were adopted based on several previous studies (Maccoby & Scudder, 2011; Pellissier & Kruger, 2011; Liang, 2004; Cui et al., 2011). The third part of the questionnaire included the modified variable (teamwork culture) questions and these paragraphs of the study were adopted from Castka et al. (2003) study. The fourth part included paragraphs and questions of the dependent variable (operational performance) with its dimensions (quality, cost, reliability, flexibility, and speed) and the paragraphs of this dimension have been adopted in the questionnaire based on studies (Macadam & Bailie, 2002; Bourne, et al., 2000).

7.4 The Study Tool Reliability:

The Alpha Cronbach method was used to measure internal consistency and reliability among questionnaire items distributed to the study sample. All values were above the threshold (0.60) and these values are statistically acceptable according to Sekaran and Bougie (2016). Table (2) shows these values.

Table 2: Results of Alpha Cronbach Scale for Internal Consistency and Reliability

Variable	Alpha Cronbach Value	Number of Items
Foresight Dimension	0.709	6
Systemic Thinking Dimension	0.900	7
Future Vision Dimension	0.861	4
Motivation Dimension	0.821	5
Partnership Dimension	0.897	5

Operational Performance Dimension	0.612	5
Teamwork Culture Dimension	0.794	5

7.5 Statistical Analysis:

Multicollinearity Test and Normal Distribution

Verification of the assumptions and conditions of statistical testing is one of the most important steps before conducting any statistical test. Pre-testing is important in avoiding misleading or biased results. Therefore, before starting the study hypotheses testing, it is important to ensure that the pre-tests confirm that the study data is appropriate for statistical analysis and does not have statistical problems. Therefore, the two researchers have performed multicollinearity test and normal distribution test, which are one of the conditions for multiple linear regression tests.

The multicollinearity test is a test that must be done before testing the hypotheses to ensure that there is no overlap between the independent variables. The variance inflation factor values must be less than 10. The results from Table (3) indicate that the obtained variance inflation factor (VIF) values range from (1.014-1.135), which are less than 10. Therefore, these variables do not have the problem of multicollinearity.

Table 3: The Variance Inflation Factor Values and Tolerance

Variable	Variance Inflation Factor (VIF)	Tolerance
Strategic Intelligence Variables		
Foresight Dimension	1.014	0.986
Systemic Thinking Dimension	1.130	0.885
Future Vision Dimension	1.135	0.881
Motivation Dimension	1.778	0.563
Partnership Dimension	2.202	0.454

To verify that the data follows the normal distribution, the Skewness Coefficient was calculated. If the coefficient of skewness value was less than (1) and (1-), this means that the data follow the normal distribution. All values were less than (1). As shown in Table (4), the data follow the normal distribution.

Table 4: The Values of Skewness Coefficient

Variable	Skewness Coefficient
Foresight Dimension	-0.245
Systemic Thinking Dimension	-0.556
Future Vision Dimension	-0.922
Motivation Dimension	-0.311
Partnership Dimension	-0.045
Operational Performance Dimension	0.201
Teamwork Culture Dimension	-0.957

Descriptive Statistical Analysis:

Table (5) shows descriptive statistics of the variables and dimensions of the study. The higher dimension in terms of mean was operational performance dimension and also teamwork culture dimension with arithmetic mean (4.04) and a standard deviation (0.590) for operational performance and (0.734) for teamwork culture and a high level of importance. However, the lower dimension in terms of mean was the foresight dimension of (3.29) with a standard deviation of (0.547) and a medium level of importance.

Table 5: The Arithmetic Mean, Standard Deviations, and Levels of Importance for the Study Variables

N	Variable	Arithmetic Mean	Standard Deviation	Level of Importance
1	Foresight Dimension	3.29	0.547	Medium
2	Systemic Thinking Dimension	3.49	0.831	Medium
3	Future Vision Dimension	3.30	0.740	Medium
4	Motivation Dimension	3.34	0.681	Medium
5	Partnership Dimension	3.13	0.817	Medium
6	Operational Performance Dimension	4.04	0.590	High
7	Teamwork Culture Dimension	4.04	0.734	High

Testing of the Study Hypotheses:

To test the study hypotheses, simple and multiple linear regression tests were used. The hierarchical multiple linear regression analysis was used to detect the moderating role of the teamwork culture in the relationship between strategic intelligence and operational performance in Jordanian public shareholding industrial companies.

First: Testing of the First Main Hypothesis

Ho1: There is no statistically significant effect of the dimensions of strategic intelligence (foresight, systemic thinking, future vision, motivation, and partnership) on operational performance in Jordanian public shareholding industrial companies listed in the Amman Financial Market.

Table 6: Results of the Analysis of the Multiple Linear Regression Test of the Strategic Intelligence Dimensions on Operational Performance

Coefficient of Correlation (R) 0.363		**Coefficient of Determination (R^2)**	**F**	**Sig**
		0.132	**5.891**	**0.000**
Strategic Intelligence Dimensions	**Beta (B)**	**Standard Error**	**T**	**Sig**
Foresight Dimension	0.277	0.107	2.586	0.010
Systemic Thinking Dimension	-0.006	0.063	-0.094	0.925
Future Vision Dimension	0.281	0.102	2.756	0.006
Motivation Dimension	-0.121	0.131	-0.921	0.358
Partnership Dimension	0.252	0.120	2.105	0.037

The multiple linear regression results of the first main hypothesis in Table (6) indicate that the correlation value between the independent variables and the dependent variable has been (0.363) and this value indicates the existence of a relationship of medium strength. The value of the coefficient of determination has been (0.132), which means that (13.2%) of the change in the dependent variable is caused by independent variables and that the remaining value is attributable to other factors that this study doesn't address. Concerning the statistical significance of the model, the calculated value of **F** is (5.891) and this value is greater than the tabular value at the level of significance (0.000), which is less than the significance level at (0.05), so the regression model is statistically significant.

Concerning the effect of the strategic intelligence dimensions, the beta value of the foresight dimension is (0.277) and the calculated **T** value is (2.586), which is greater than

the tabular value (1.96) at the level of significance (0.000), which is less than the level of statistical significance at (0.05). Thus, there is a statistically significant effect of foresight on the operational performance in Jordanian industrial companies. The beta value of the systemic thinking dimension is (-0.006), and the calculated **T** value is (-0.094), which is less than the tabular value (1.96) and the significance level (0.925), which is greater than the statistical significance level at (0.05), which means that there is no statistically significant effect of systemic thinking on operational performance. Also, there is no statistically significant effect of motivation on the operational performance in Jordanian industrial companies as the beta value is (-0.121) and **T** value is (-0.921), which is less than the tabular value (1.96) and the statistical significance level (0.358), which is greater than the statistical significance level at (0.05). The results of the analysis of the multiple linear regression indicated that the dimensions of future vision and partnership have a statistical effect on the operational performance as the beta value for future vision is (0.281) and for partnership is (0.252). The calculated **T** values of these two dimensions are greater than (1.96) and the statistical significance level is less than (0.05). Thus, there is a statistically significant effect of the dimensions of future vision and partnership on the operational performance in Jordanian industrial companies.

Second: Testing of the Second Main Hypothesis

Ho2: There is no statistically significant effect of strategic intelligence on operational performance by the existence of the teamwork culture as a moderating variable in Jordanian public shareholding industrial companies.

Table 7: The Hierarchical Regression Testing to Test the Moderating Role of Teamwork Culture between Strategic Intelligence and Operational Performance

Independent Variables	The First Step			The Second Step		
	B	t	Sig.	B	t	Sig.
Strategic Intelligence	0.431	5.451	0.000	0.515	6.256	0.000
Teamwork Culture	0.272	3.449	0.001	0.263	3.396	0.001
Strategic Intelligence × Teamwork Culture			-	0.135	3.014	0.003
R	0.657			0.676		
R2	0.432			0.449		
Δ R2			-	0.025		

F	74.818		54.952	
Sig F		0.000		0.000

The hierarchal multiple linear regression test results in Table (7) indicate the second study hypothesis testing. The study variables entered into two models. In the first model, strategic intelligence and teamwork culture entered as independent variables and the operational performance as a dependent variable. Then, the interaction between strategic intelligence and teamwork culture entered into the dependent variable, operational performance to detect the moderating role of the teamwork culture and how the teamwork culture contributes as a moderating variable in the relationship between strategic intelligence and operational performance.

In the first model, the calculated **F** value is (74.818), which is statistically significant at (0.05). Thus, the first model is statistically significant. The correlation value has been (0.657), which indicates the existence of a relationship of medium strength among the study variables. The value of the coefficient of determination has been (0.432), which means that (43.2%) of the change in the dependent variable is caused by the two independent variables. The beta value of strategic intelligence is (0.431), and the beta value of teamwork culture is (0.515) and the calculated **T** values for the two values are greater than the tabular value (1.96), and the statistical significance level is less than the level (0.05). Therefore, strategic intelligence and teamwork culture have a statistically significant effect on the operational performance.

While the second model, which detects the statistical significance of the moderating role, the calculated **F** value is (54.952), which is statistically significant at (0.05). Therefore, the second model is statistically significant. The correlation value has been (0.676) and the value of the coefficient of determination has been (0.457), which means that (45.7%) of the variance in operational performance is caused by the interaction between the two variables, strategic intelligence, and teamwork culture. The difference between the two coefficients of determination in the two models is (0.025), which indicates that teamwork culture contributes as a moderating variable in the relationship between strategic intelligence and operational performance in Jordanian industrial companies. This is confirmed by the beta value of the interaction between strategic intelligence and teamwork culture, which is (0.135). This value is statistically significant at (0.05). Therefore, teamwork culture plays a modified role in the relationship between strategic intelligence and operational performance in Jordanian industrial companies.

8. Conclusion

The current study was accompanied by many determinants as it was conducted in one geographical environment, namely, the Jordanian business environment (Jordanian public shareholding industrial companies), one of the Middle East countries, which requires taking it into account in studying its results. Therefore, the study suggests conducting similar studies in other geographical environments to confirm and compare the results with the results of this study.

The results of this study emphasized that there is a statistically significant effect of the dimensions of strategic intelligence (foresight, future vision, and partnership) on operational performance, while there is no statistically significant effect of the dimensions of strategic intelligence (systemic thinking, and motivation) on operational performance in Jordanian public shareholding industrial companies. The results of this study also showed that there is a statistically significant effect on the teamwork culture as a modified variable in the relationship between strategic intelligence and operational performance in Jordanian industrial companies. In light of these findings, the study recommends that all the practices of the dimensions of strategic intelligence among managers and employees in Jordanian public shareholding industrial companies must be deepened through holding training courses, seminars, and workshops. This contributes to a deeper strategic vision and creates motivation for the company to think more comprehensively that will lead to the company's success in achieving its future directions. In addition, it helps develop information systems to anticipate the future clearly and to reduce the risk of decision-making when guiding those in charge of operational processes in those companies. Moreover, companies should encourage teamwork culture to improve the positive effect of strategic intelligence on operational performance. The study also highlighted the importance of changing the evaluation systems and incentives in those companies from individual to the group, so that work systems are developed that support teamwork and account for its results, thereby enhancing the teamwork spirit of the staff and increasing the performance of the company's operational processes.

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