



The Impact of Strategic Awareness on Enhancing Organizational Immunity System: An Applied Study on Jordanian Food Manufacturing Companies

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ABSTRACT

This study aimed at identifying the impact of strategic awareness on enhancing the regulatory immune system, an applied study on Jordanian food processing companies. For the purpose of achieving the objectives of the study, the researcher used the descriptive and analytical approach, the researcher developed a questionnaire to collect data related to the study variables. (160) questionnaires were distributed on an intentional sample consisting of (13) food processing companies. The questionnaire targeted managers and workers in the directorates of production, quality, and planning in the searched companies. The number of retrieved questionnaires reached (150) questionnaires are suitable for analysis, the researcher used multiple regression analysis through the Statistical Package in Social Sciences (SPSSv.19) to test the study hypotheses, and the study reached results, the most important results are: That the study sample individuals' perceptions of the strategic awareness in the researched companies were of a high level, and the study sample's perceptions of the organizational immune system in the researched companies were of a high level. The study recommends the need to strengthen the supporting culture to the concept of organizational immunity between senior management and employees, the need to work with strategic awareness because of its great impact on strengthening the regulatory immune system and its ability to convert knowledge into applied practices, in addition to following an interest in strategic awareness in its various dimensions, development and enhancing it among Jordanian food processing companies.

Keywords: Strategic Awareness, Regulatory Immune System, Jordanian Food Processing Companies

JEL Classifications: L1, L66

1. THE STUDY BACKGROUND AND PROBLEM

1.1. Introduction

Strategic awareness represents one of the contemporary strategic concepts for its important role in helping the organization in understanding its internal and external environment to explore opportunities and exploit them, avoid threats posed by external environment factors, and reduce their negative effects on the organization within the framework of the competitive environment in which it operates to ensure its continuity, and achieve competitive advantage. The importance of strategic awareness

has increased in recent times due to the nature of the dynamic and rapidly changing environment with its various factors, which imposed on contemporary organizations to build and develop a set of skills, especially at the higher administrative levels, as they are the party responsible for determining the future direction of the organization and achieving its strategic goals, as strategic awareness represents an intellectual approach characterized by modernity and entrepreneurship and the ability to increase the competitiveness of the organization and develop its performance through its processes and operations.

The organization takes many forms, either governmental, service, industrial, or commercial ... etc. The rapid development that

we are witnessing in all aspects of life has led to the creation of new systems to counter the negative impact of these changes and to preserve their entity and internal environment through the regulatory immune system, as the concept of the regulatory immune system is one of the terms recently spread in management science, it is a biological term based on the idea of the immune system in the human body.

It forms an immune barrier to prevent negative external effects on the organization, or it is a group of organizational forces designed to confront external threats and risks in order to protect the organization and maintain the permanence and continuity of work, and whatever advantages the organization has. Which came due to the large number of risks facing organizations of all kinds in an environment that was stable or unstable or due to conditions of certainty or environmental uncertainty as a result of fluctuations of the components of the general or special environment.

1.2. The Study Problem and its Questions

The problem of the study is crystallized by answering the following main question: What is the impact of strategic awareness in enhancing organizational immunity? an applied study on Jordanian food processing companies:

This question is divided into the following sub-questions

1. What is the level of workers' perceptions of strategic awareness in the Jordanian food processing companies?
2. What is the level of employee perceptions of enhancing regulatory immunity in Jordanian food processing companies?

1.3. The Importance of Studying

Scientific importance: This study seeks to study the field of strategic awareness and its impact on strengthening the regulatory immune system, and to work on enriching the knowledge dimension in this aspect in a way that serves academics and students in the field of administration, in addition to providing the Arab library with knowledge related to the study variables as the variable related to the regulatory immune system is one of the modern concepts in the Arab environment, which needs to expand and enrich this concept among academic researchers and students in Jordanian public and private institutions in particular, and Arab institutions in general.

Practical importance: This importance is clear by the results of the study that are helpful to decision-makers in Jordanian food processing companies, in a way that enhances their vision and identifies weaknesses to avoid them in the future, with an indication of the strengths of the regulatory immune system of Jordanian food manufacturers, in addition to defining the company officials of the importance of the regulatory immune system and its dimensions, and the focus on strategic awareness, and an attempt to harness it in strengthening the regulatory immune system at the level of Jordanian food manufacturers.

1.4. Objectives of the Study

The research seeks to achieve the following objectives:

1. Discussing and analyzing theoretical concepts related to strategic awareness and strengthening the organizational immune system.

2. Define and describe the impact of strategic awareness dimensions on enhancing the regulatory immune system.
3. Determine the level of implementation of strategic awareness and strengthening of the regulatory immune system in Jordanian food processing companies.
4. Presenting a number of recommendations based on the results of the study, and making use of them.

1.5. Hypotheses Development

Al-Rababaa (2020) study entitled: "The Impact of Strategic Awareness on Job Performance through Empowerment as a Mediating Variable: An Empirical Study on the Arab Potash Company Operating in the Hashemite Kingdom of Jordan, the study concluded with a set of results, the most important are: The existence of a statistically significant impact of strategic awareness on job performance at Arab Potash Company (APC) with empowerment as an intermediate variable, A study of (Al-Asoufi, 2020) entitled: "The Impact of Human Resources Management Strategies on Strengthening the organizational Immune System An Empirical Study on the Aqaba Special Economic Zone Authority The results of the study showed that there is a partial impact of human resource management strategies in strengthening the regulatory immune system. It was found that there is no impact of compensation, training, recruitment, and selection in some dimensions of the regulatory immune system in the Aqaba Special Economic Zone Authority, Aboudi, (2019) study entitled: "Strategic renewal as an entry point to strengthen the organizational immune system" An analytical study of the views of a sample of administrative leaders at the Northern Technical University and the University of Mosul, The study concluded that there are correlational relationships and a significant impact between the studied variables, Pankom, (2019) study entitled Strategic Entrepreneurial Awareness and Business Performance Empirical Evidence from Small and Medium-sized Enterprises in Thailand, The study found a statistically significant impact of the entrepreneurial strategic awareness of its dimensions (risk-taking, anticipation) on the business performance of small and medium-sized companies in Thailand, A study of (Qinghua, 2019) entitled "How Does Environmental Awareness Affect Technological Innovation," The study found a statistically significant impact of environmental awareness on technological innovation in Chinese industrial companies listed in the China Financial Market, A study of (Abbas, 2019) entitled: "Prevent administrative and financial corruption behaviors by activating the functions of the organizational immunity system,"

Based on the above discussion, the researcher suggests the following main hypothesis:

- H₁: There is a statistically significant effect of strategic awareness of its dimensions (awareness of the external environment, awareness of the internal environment, awareness of strategic objectives) on strengthening the regulatory immune system in Jordanian food processing companies.

The following sub-hypotheses are branched from this hypothesis:

H_{1a}: There is a statistically significant effect of awareness of the external environment as a dimension of strategic awareness in strengthening the immune regulatory system in Jordanian food processing companies.

H_{1b}: There is a statistically significant effect of awareness of the internal environment as a dimension of strategic awareness in strengthening the immune regulatory system in Jordanian food processing companies.

H_{1c}: There is a statistically significant effect of awareness of strategic objectives as a dimension of strategic awareness in strengthening the immune system of regulatory in Jordanian food processing companies.

2. THEORETICAL FRAMEWORK AND PREVIOUS STUDIES STRATEGIC AWARENESS

2.1. The Concept of Strategic Awareness

The literature of studies has included many definitions of strategic awareness, some of them defined it as a (ability), and then it is necessary to have administrative leaderships for it, or (a method of perception) and this requires expanding the perceptions of those leaders, a package of activities, an understanding of strategies, or (skill) that need Mechanisms are suitable for their development and utilization (Ibrahim, 2020).

(Fehr and Huck, 2013) defined it as that is weaker than rationality and related to rule understanding. We say that subjects have strategic awareness if they understand that they are, in fact, playing a game, that is, that they realize that reasoning about how to play the game requires reasoning about others. Notice that rule understanding does not necessarily imply strategic awareness. In principle, subjects might be able to enumerate all payoff consequences of all sequences of actions and yet fail to understand that, in order to play the game well, they have to think about what others will do (Eccles, 2007) pointed out that strategic awareness means: the administrative process according to which the internal and available resources of the organization and their sources are examined, and how all regulations and instructions are perceived.

Effective strategy implementation is predicated on the assumption that organizational members have a clear, common understanding, or awareness, of the content of the organization's current strategies (Berthon et al., 1996; George, 1990; Mintzberg and Waters, 1985).

From the above, the researcher defines strategic awareness as the ability of the decision-maker within the organization to be fully aware and conscious of everything related to the organization and what is going on in its external environment to avoid risks and seize opportunities, awareness of the internal environment in terms of knowledge and understanding of the current human organization's resources, Therefore, the strategic awareness is a holistic concept that includes all elements of the organization and its divisions to reach the achievement of the goals of the organization.

2.2. The Importance of Strategic Awareness

Strategic awareness in its various dimensions is important to the organization as it helps it to know the internal and external environment surrounding it, identify its strengths and weaknesses, seize the opportunities that arise from these variables, identify threats and work to avoid them.

The importance of strategic awareness is highlighted by contributing to the rationalization of decisions and providing decision-makers with all the information that helps them to make a sound and rational decision in order to achieve the goals of the organization. In addition, strategic awareness supports the organization with a complete information system through analysis of environmental factors, with the presence of a strategic information system on all environmental events by providing information related to competitors and defining their policies and strategies in the markets, this information is collected in an organized and systematic manner for easy access when needed (Davis, 2012).

Strategic awareness is an important and effective element to achieve distinguished and superior performance, which is the main goal of any organization, where leaders can learn about the experiences of others from all over the world and exchange experience.

Numerous studies have shown that there is a positive impact of strategic awareness on the application of an effective control system, which contributes to preserving resources and better utilizing them in a way that achieves the goals of the organization, especially that the internal awareness of the organization's resources and its processes contributes to achieving an effective control system and identifying deviations and working to identify them, strategic awareness in all its internal and external dimensions enables workers to know everything that is going on in the orbit of the organization and outside it, thus this knowledge facilitates the process of controlling resources and improves the quality of outputs in a way that ensures optimal use to achieve the goals of the organization (Joanna, 2017).

2.3. Objectives of Strategic Awareness

Organizations seek to apply strategic awareness in order to improve their competitive positions and adapt to various environmental variables to control the environment, exploit opportunities and avoid threats, with the aim of creating business opportunities and reducing the risks of environmental uncertainty.

The control objective represented by identifying and monitoring developments in product supply in markets and technology developments is one of the important goals of strategic awareness, which enables the organization to provide products distinct from others and of high quality that meet market needs and changing customer requirements and thus achieve competitive advantage.

Strategic awareness increases the organization's capabilities to obtain the necessary information, anticipate changes and anticipate them through strategic information systems, which avoids the organization from the risks of uncertainties and contributes

to increasing the quality of decisions taken based on accurate information, and strategic awareness aims to monitor, analyze and know the current situation of competitors and know their strategy and moves, especially in view of the intense competition adopted by the local and international markets (Dixon, 2010).

Keeping pace with economic globalization is one of the goals of strategic awareness, which has been accompanied by an increase in competition. Thus, the organization finds itself obliged to keep pace with these global developments to serve its customers by providing high-quality products at competitive prices that meet the needs of its customers. Keeping up with these developments requires awareness of all stages and events in the internal and external environment and following up on technological developments, especially in the field of communications and the internet, which introduced new concepts in the world of marketing and contributed to changing consumer tastes.

Which contributes to gaining a stronger position in the market that enables it to offer its products easily and gain a greater market share from competitors, thus achieving many competitive advantages, preserving the organization's survival and the continuity of its work in the competitive market. The strategic awareness aims to provide administrative competencies capable of strategic planning through intuitive and creative strategic thinking that is based on rebuilding strategies and using all practical methods to support the decision in order to enhance the competitive position of the organization and contribute to its continuation and achievement of its goals and help it prepare for the future in a better way by analyzing the current reality of the organization, since strategic awareness is considered a basis for creativity and dealing with all major issues and opportunities by directing the energies and capabilities of workers to achieve the goals of the organization (Menon, 2001).

2.4. Strategic Awareness of the External Environment

Organizations are highly dependent on the surrounding environment, as no organization operates in a vacuum, so the External strategic awareness competitive, social, political and economic characteristics of the context, which have consequences for the strategic work of the organization (environmental awareness) (Pencarelli, 2008), in the external environment, there are many different environments in which organizations operate, and business organizations participate in the same basic activity.

The external environment of the organization consists of a set of external factors that fall outside the scope and control of the organization, such as: customers, competitors, government agencies, suppliers, workers, and financial companies related to the operations of the institutions, it also includes the elements outside the borders of the organization such as political, economic, social and technological factors that have the ability to influence the organization (Johnson, 2021).

2.5. Strategic Awareness of the Internal Environment

It includes a set of elements and factors that represent the overall internal activity of the organization, which mainly relate to organizational objectives, financial resources, administrative skills,

strengths and weaknesses, and includes all functions and activities of the organization's marketing, production, financial, and human resources (Read, 2009).

The elements of the internal environment include the human factors, which are represented by the experiences, qualifications, capabilities, trends and the level of qualification of workers, especially since the human element is one of the important and decisive factors in achieving the goals of the organization.

2.6. Strategic Awareness of Strategic Goals

Strategic objectives are the levels of performance and results that the organization seeks to achieve, they serve as a tool for measuring the final results as the outputs that contribute to strengthening the competitive position of the organization (Posen, 2018).

The strategic objective is the one that is directly related to the mission of the organization and its elements, to be aware of the organization's strategic goal, the question must be answered what the organization seeks to accomplish in the long, medium and short term. Defining strategic objectives is the pillar through which the decision-maker expands and develops the organization's activities in a better way than competitors (Trigeorgis, 2017).

2.7. Organizational Immune System

The organizational immune system is one of the systems produced by the theory of self-social production, which indicates that the system carries in its internal components mechanisms, and processes that help it produce and reproduce itself (Al-Saadi, 2016). The origin of the organizational immune system is the theory of organizational adaptation, as organizations seek to find a means to cope with external and internal threats, the bankruptcy of many organizations and the development of other organizations and their maturity in the world of competition have led to interest in the organization's internal systems, environmental monitoring and innovation of treatments (solutions) for the external environmental virus that threatens the organization (Simmons, 2013).

2.8. The Concept of the Organizational Immune System

The organizational immune system is a network of policies and cultures within the organizational structure that works in a similar way to the human immune system to prevent bad thoughts from entering and causing harm to the organization (Watkins, 2007), meaning that the organizational immune system is comparable to immunity in human systems due to the presence of similarities and significantly between these two systems, the organizational immune system is the delicate and complex groups of interconnected tasks and employees that protect the organization from changes by establishing a strong barrier that is represented by the employees working in the organization, policies, procedures, processes and culture that all interact to prevent change and external threats (Gilley et al., 2009).

Farncombe (2014) states that the organizational immune systems maintain the company's values and vision and perpetuate its continuity in maintaining the required level of performance, indicating that this system is either a blessing that must be adhered

to or a curse that must be undermined, as the organizational immune system is a blessing in case they were dynamic systems that responded positively to change, these systems are considered a curse when they are dysfunctional by rejecting any change process that takes place within the organization.

Al-Taie and Al-Janabi (2016) indicate that the organizational immune system is a system of organizational processes carried out by all parts and functions of the organization with the aim of protecting it from external threats, as this immune system works by identifying the factors causing the threat and identifying them properly, then working to eliminate them, thus the natural organizational immune system is formed, or it can be outsourced, such as organizations operating in the same industrial sector, or through strategic alliances and partnerships, or by purchasing advice, expertise, or learning and training to eliminate the threat, hence, this type of immunity is called the acquired organizational immune system.

2.9. The Objectives of the Organizational Immune System

The objectives of the organizational immune system appear, as indicated by (Lefta, 2014) in a number of benefits represented in protecting the administrative entity from all external factors and elements that may lead to its affliction with a crisis, which is protection ranging from the existence of basic, alternative and subsidiary systems or the existence of systems multiple and double protection, as well as protection of the administrative entity from all internal factors and elements that may cause a crisis to the organization, especially from the occurrence of lack of coordination between departments and levels of the organization's society. Finally, the organizational immune system acts as the first line of defense against wrongdoing and misconduct by managers within the organization.

2.10. Benefits of the Organizational Immune System

Reflecting each of the benefits and the importance that was mentioned about the organizational immune system, the benefits of the organizational immune system, as indicated by (Simmons, 2013) stand out in terms of preventing the effects of internal errors in the organization by enhancing flexibility and looking for new solutions, the creation of mechanisms to predict the external environment and confront its threats, while providing balance within the company and preventing hasty decisions that may conflict with the company's internal standards, motivating the required behavior of workers even in the absence of legal responsibility. and assisting managers in the early identification of risky and fraudulent business strategies, as well as strengthening self-reporting mechanisms.

2.11. Previous Studies

Al-Rababa'a (2020) study entitled: "The Impact of Strategic Awareness on Job Performance through Empowerment as a Mediating Variable: An Empirical Study on the Arab Potash Company Operating in the Hashemite Kingdom of Jordan." The study relied on the descriptive and analytical approach using a number of statistical methods to answer the study questions and test its hypotheses, such as the Statistical Package for Social

Sciences (SPSS, Ver.20), and the Amos Ver.25 program. The study population, which consisted of (220) individuals, included all employees and supervisors in the upper and middle departments of the Arab Potash Company using a comprehensive survey method, the study concluded with a set of results, the most important are: The existence of a statistically significant impact of strategic awareness on job performance at Arab Potash Company (APC) with empowerment as an intermediate variable. The study also presented a number of recommendations, the most important are: Following-up the interest in strategic awareness in its various dimensions with the Arab Potash Company, by showing interest in analyzing the company's external environment and awareness of the changing environmental factors to explore opportunities and exploit them for the benefit of the company, as well as the importance of awareness of the company's strengths and weaknesses and the exploitation of material resources and non-material to achieve its strategic goals.

A study of (Al-Asoufi, 2020) entitled: "The Impact of Human Resources Management Strategies on Strengthening the organizational Immune System An Empirical Study on the Aqaba Special Economic Zone Authority" The study population is drawn from the Aqaba Special Economic Zone Authority and its departments and divisions. The study sample was considered representative of its community, as the comprehensive survey sample was approved for all directors, their deputies, their assistants, and heads of departments in the Aqaba Special Economic Zone Authority. The data were collected through the questionnaire that was developed based on previous studies and through the arbitrators then distributed to the study population of (190) members, the valid ones for analysis were (120) questionnaires. After the normal distribution, validity, reliability, and factor analysis were tested, descriptive statistics were used to describe the study sample. Then the hypotheses were tested using multiple regression analysis and gradient regression.

The results of the study showed that there is a partial impact of human resource management strategies in strengthening the regulatory immune system. It was found that there is no impact of compensation, training, recruitment, and selection in some dimensions of the regulatory immune system in the Aqaba Special Economic Zone Authority. The study recommended the necessity of working to enhance recruitment, performance, evaluation, and compensation strategies and pay more attention to the performance evaluation, compensation, and training strategies. It also recommended that similar studies be conducted on other industries to examine the possibility of generalizing the results to other directorates and departments.

Aboudi, (2019) study entitled: "Strategic renewal as an entry point to strengthen the organizational immune system" An analytical study of the views of a sample of administrative leaders at the Northern Technical University and the University of Mosul. The study aimed at uncovering the impact of the strategic renewal activities represented by its dimensions (exploratory activities, investment activities) on strengthening the organizational immune system across its dimensions (natural organizational immune system, acquired organizational immune system).

The study adopted the descriptive and analytical approach, the study population consisted of the Technical University and the University of Mosul, a random sample representative of the study community was drawn from the administrative leadership that consisted of (218) elements that included faculty deans, their assistants and department heads. The study concluded that there are correlational relationships and a significant impact between the studied variables, the study recommended that the management of the researched colleges should formulate an integrated strategy on establishing a culture about the organizational immune system, whether natural or acquired, in addition to the need to pay attention to and enhance the strategic investment and exploration renewal activities in the researched faculties in order to build a distinguished strategic center as an immune system to confront environmental hazards and develop appropriate solutions.

A study of (Qinghua, 2019) entitled “How Does Environmental Awareness Affect Technological Innovation.”

The study aimed at identifying the extent of the impact of environmental awareness on technological innovation. The study adopted the descriptive and analytical approach to achieve the study objectives and answer its questions. The study population consisted of Chinese industrial companies listed on the China Financial Market during the period from 2003 to 2018. The study sample consisted of executives of the companies who were selected using a simple random sample of (360) managers. The study used descriptive and inferential statistical methods to answer the study's questions and test its hypotheses. The study found a statistically significant impact of environmental awareness on technological innovation in Chinese industrial companies listed in the China Financial Market.

Pankom (2019) study entitled Strategic Entrepreneurial Awareness and Business Performance Empirical Evidence from Small and Medium-sized Enterprises in Thailand”.

This study aimed at identifying the role of the pioneering strategic awareness in the business performance of small and medium-sized companies in Thailand. The study population consisted of managers working in the middle and upper management of small and medium-sized companies, the study sample consisted of (387) managers who were selected by the intentional sample method. The study used a descriptive and analytical approach to achieve the objectives of the study and to answer its questions using the inferential descriptive statistics methods, the Statistical Package for Social Sciences (Spss) program were used. The study found a statistically significant impact of the entrepreneurial strategic awareness of its dimensions (risk-taking, anticipation) on the business performance of small and medium-sized companies in Thailand.

A study of (bbas, 2019) entitled: “Prevent administrative and financial corruption behaviors by activating the functions of the organizational immunity system.”

The study aimed at testing the relationship between the functions of the organizational immune system in its dimensions (acquired

immunity and natural immunity) and prevent administrative and financial corruption in Iraq. The study also aimed at clarifying how to activate the functions of the organizational immune system and strengthen it in order to be able to face organizational risks. The study population was formed in the Directorate of Education in the Karbala region, Iraq. The study relied on drawing a simple random sample with a population of (161) individuals.

3. METHODOLOGY AND DESIGN

3.1. Method of the Study

The study is based on the descriptive and analytical approach that includes conducting a desk survey by referring to references and sources to build the theoretical framework for the study, and a field survey to collect data using the study tool (questionnaire), which was developed and distributed to the sample members and statistically analyzed.

3.2. Study Population and Sample

The study population consisted of food processing companies in the Hashemite Kingdom of Jordan registered with the Jordan Food and Drug Administration (JFDA). An intentional sample consisting of thirteen companies out of the population of the study was chosen, as these companies are the largest in terms of production, number of production lines, the volume of exports and imports, according to the annual report issued by the Companies Control Department for the year (2019). While inspection and analysis unit included general managers, directors, and workers in production directorates, strategic planning directorates, and quality directorates.

A total of (160) questionnaires were distributed, and a percentage (95%) of the total distributed questionnaires were recovered. The number of retrieved questionnaires reached (150), all of which are valid for statistical analysis.

3.2.1. Description of the characteristics of the study sample

This part includes a description of the personal data related to the members of the study sample, namely: (gender, educational qualification, job level, job experience).

The following Table 1 shows the results of the descriptive statistics of the characteristics of the study sample.

The results presented in Table 1 indicate that the percentage of males was (63.9%), while the percentage of females was about (36.1%) of the total number of respondents.

The results mentioned in Table 1 regarding academic qualification show that (2.0%) fall within the category below high school, and that (13.3%) fall within the diploma category, while the percentage of respondents within the bachelor category is (80.7%), finally the percentage of respondents within the postgraduate category was 4.0%.

With regard to the job level, the results presented in Table 1 indicated that (0.6%) of the respondents fall into the category of General Manager, while the percentage of respondents falls within

Table 1: Description the characteristics of the study sample

Variable	Category	Frequencies	Percentage
Gender	Male	100	63.9
	Female	50	36.1
Qualification	High school and below	3	2.0
	Diploma	20	13.3
	Bachelor of	121	80.7
	Postgraduate	6	4.0
Career level variable	Director general	1	0.6
	Deputy General Manager	1	0.6
	Director	11	7.4
	Director of Directorate	22	14.7
	Head of the Department	32	21.3
Experience	<1 year	12	8.0
	1 year-<5 years	46	30.6
	6 years-<10 years	24	22.7
	More than 10 years	58	38.7
	Total	150	100

the category of Deputy General Manager was (0.6%), the results indicated that the percentage (7.4%) of the respondents fall into the category of director, and (14.7%) of the respondents fall under the category of the director of the directorate. As for the number of respondents within the category of head of department reached (21.3%), while the percentage of respondents from the employees are approximately (55.4%).

Finally, the results mentioned in Table 1 related to years of experience indicated that (8.0%) of the number of respondents fall into the category of <1 year, while the percentage of respondents who fall into the category of 1 year-<5 years reached about (30.6). As for the percentage of respondents who fall into the category of 5-<10 years, it was (22.7%), while the percentage of respondents who fall into the category of more than 10 years was approximately (38.7%).

Study tool and methods of collecting data and information:

A questionnaire was developed based on Likert’s five-choice scale, consisting of five options, ranging from completely agree to never agree, with a relative weight (1-5), it includes a set of items related to three main axes of the independent variable (strategic awareness), which are: awareness of the external environment, awareness of the internal environment, and awareness of strategic objectives. It will also include a number of items covering the dependent variable (strengthening organizational immunity).

3.3. Tool Reliability

The reliability coefficient was extracted according to the Cronbach alpha equation to ensure the internal consistency in its final form for each variable in all its dimensions, the reliability values were high and indicated the reliability and consistency between the instrument’s items, the following Table 2 shows the values of the reliability coefficient.

3.4. Statistical Treatment

The study relied on the statistical package (spss.19) using the statistical methods in order to describe the characteristics of the sample based on the frequencies and percentages to answer

Table 2: The values of the reliability coefficients and internal consistency of the study variables

Item No.	Dimension name	Reliability coefficient (Cronbach alpha)
1-4	Awareness of the external environment	0.869
5-8	Awareness of the internal environment	0.874
9-12	Awareness of strategic goals	0.926
1-12	Independent variable (strategic awareness)	0.857
13-21	Dependent variable (organizational immunity)	0.0890

the study questions. The arithmetic means, standard deviations, correlation coefficient matrix, regression analysis, and one-way analysis of variance (ANOVA) were adopted.

4. PRESENTATION AND DISCUSSION OF FINDINGS AND RECOMMENDATIONS

The following is a presentation of the descriptive statistics of the data, which is the value of the arithmetic means and standard deviations of the study dimensions and the items that make up each dimension.

4.1. Answer the Study Questions

The answer to the first question: What is the level of the respondents’ perceptions about the strategic awareness of its dimensions (awareness of the external environment, awareness of the internal environment, awareness of strategic objectives) from the viewpoint of workers in Jordanian food processing companies?

The statistical data in Table 3 indicate that the dimensions of the independent variable (strategic awareness) were high with an arithmetic mean of (3.99), awareness of the external environment dimension ranked first with an arithmetic mean (4.12), followed by awareness of the internal environment with a mean (4.03) in the last place came the dimension of awareness of strategic goals, with an average (3.82). The results indicate that the dimensions of the strategic awareness variable were found in the researched companies at a high degree.

The following is a detailed overview of the level of each of these dimensions:

First: Perceptions of the study sample of the dimension of awareness of the external environment:

Table 4 indicates that the study sample’s perceptions of the dimension of awareness of the external environment were high, with the mean of (4.16) and a standard deviation of (0.645). The table also indicates that item (1) which states: “Our company is aware of the opportunities and threats when Doing its business” came first with a mean amounted (4.40) and a standard deviation equal to (0.597), while item (3) which states “Our company seeks to use preconceived scenarios to adapt to its environmental conditions” ranked last with a mean (4.04) and a standard deviation (0.844).

Table 3: Arithmetic means and standard deviations of the study sample’s perceptions of strategic awareness

The sequence of items	Strategic awareness	Mean	SD	Rank	Level in relation to the arithmetic mean
1-4	Awareness of the external environment	4.12	0.645	1	High
5-8	Awareness of the internal environment	4.03	0.714	2	High
9-12	Awareness of strategic goals	3.82	0.937	3	High
1-12	Overall average	3.99	0.735	-	High

Table 4: Arithmetic means and standard deviations of the study sample’s perceptions of the dimension of awareness of the external environment

Item No.	Items	Mean	SD	Rank	Level
1	Our company is aware of the opportunities and threats in conducting its business.	4.40	0.597	1	High
2	Our company has clear mechanisms for analyzing the external environment.	4.15	0.815	2	High
3	Our company seeks to use preconceived scenarios to adapt to its environmental conditions.	4.04	0.844	4	High
4	Our company understands the importance of taking into account legal, economic and technological environmental factors when designing its strategies	4.08	0.824	3	High
	Overall average	4.16	0.645	-	High

Second: Perceptions of the study sample of the dimension of awareness of the internal environment.

Table 5 indicates that the level of perception of the study sample regarding the items of the internal environment awareness variable was high, as the mean was (4.12) and the standard deviation (0.727). The table also indicates that item (8) which states: The importance of non-financial resources in achieving its strategic goals “came in first place with a mean (4.19) and a standard deviation (0.812), while item (5) which states” Our company is aware of its strengths and weaknesses ranked last with a mean equal to (4.06) and a standard deviation of (0.942).

Third: Perceptions of the study sample of the dimension of awareness of the strategic objectives

Table 5: Means and standard deviations of the study sample’s perceptions of the dimension of awareness of the internal environment

Item No.	Strategic awareness	Mean	SD	Rank	Level in relation to the arithmetic mean
5	Awareness of the external environment	4.06	0.942	4	High
6	Awareness of the internal environment	4.08	0.907	3	High
8	Awareness of strategic goals	4.15	0.882	2	High
8		4.19	0.812	1	High
5-8	Overall average	4.12	0.727	-	High

Table 6: The means and standard deviations of the perceptions of the study sample for the dimension of awareness of the strategic objectives

Item No.	Items	Mean	SD	Rank	Level
9	Our company understands the importance of setting strategic objectives stemming from its accurate understanding of environmental factors.	4.19	0.759	1	High
10	Our company takes into account determining appropriate mechanisms to achieve its strategic goals.	3.86	0.990	4	High
11	Our company directs its resources in a way that allows achieving its strategic objectives.	3.96	0.916	3	High
12	Our company understands that its growth and development is part of its strategic objectives.	4.09	0.802	2	High
9-12	Overall average	4.02	0.715	-	High

Table 6 shows that the level of perception of the study sample regarding the items of the variable awareness of the strategic objectives was high, with a mean of (4.02) and a standard deviation (0.715). Item No. (9) occupied the importance of setting strategic goals stemming from Its accurate understanding of environmental factors “ranked first with a mean of (4.19), while item No. (10)” Our company takes into account identifying appropriate mechanisms to achieve its strategic objectives ranked last among the items of this dimension, with a mean of (3.86).

The answer to the second question: What is the level of respondents’ perceptions about the concept of organizational immune systems, from the viewpoint of workers in Jordanian food processing companies?

Table 7 indicates that the perceptions of the study sample about the level of organizational immune systems in the Jordanian food

Table 7: Means and standard deviations of the study sample individuals' perceptions of organizational immune systems

Item No.	Items	Mean	SD	Rank	Level
13	Our company benefits from previous experiences.	4.39	0.874	5	High
14	Our company analyzes the methods of competing companies to benefit from their expertise.	4.45	0.657	3	High
15	Our company holds brainstorming sessions to identify deviations in performance as an educational method for managers.	4.36	0.765	7	High
16	Our company has the ability to retrieve information about previous cases that you were exposed to, to benefit from them.	4.17	0.759	9	High
17	Our company relies on information storage and provisioning systems based on previous experiential learning.	4.51	0.668	2	High
18	It has a typical organizational memory includes various information needed to identify future threats and develop strategies to confront them	4.52	0.641	1	High
19	Our company adopts a flexible organizational structure.	4.45	0.691	4	High
20	Our company instills a culture of self-control among employees.	4.32	0.809	8	High
21	Our company adopts management by exception approach as a preventive method.	4.39	0.762	6	High
-	General arithmetic mean	4.40	0.524	-	High

processing companies were high, with a mean of (4.40) and a standard deviation equal to (0.524). As for the items level, the perceptions of the study sample were high.

The table also indicates that item (18), which states that "It has a typical organizational memory includes various information needed to identify future threats and develop strategies to confront them." It ranked first with a mean of (4.52) and a standard deviation (0.641), while item (16) which states, "Our company has the ability to retrieve information about previous cases that it was exposed to in order to benefit from it" ranked last with a mean of (4.17) and a standard deviation (0.759).

4.2. Test Hypotheses of the Study

Before starting the application of regression analysis to test the study hypotheses, some tests were performed, in order to ensure

Table 8: Test variance inflation factor, tolerance, and skewness

Dimensions of the independent variable	VIF	Tolerance	Skewness
Awareness of the external environment	2.132	0.469	-0.279
Awareness of the internal environment	2.536	0.394	-0.665
Awareness of strategic goals	2.540	0.394	-0.805

that the data fit the assumptions of the regression analysis, as follows: It was confirmed that there is no high correlation between the independent variables (Multicollinearity) by using the test of Variance Inflation Factory (VIF) and the Tolerance test for each variable of the study, taking into account that the factor of variance inflation (VIF) does not exceed the value of (10) and the value of the Tolerance test is greater than (0.05). The data was confirmed to follow the normal distribution by calculating the skewness coefficient, taking into account that the data follow the normal distribution if the value of the skewness coefficient is less than (1). Table 8 shows the results of these tests.

In order to verify the assumption of a normal distribution of the data, it was based on the calculation of the value of the skewness coefficient of the variables, as Table 8 indicates, the value of the skewness coefficient for all the study variables was less than (1) therefore it can be said that there is no real problem related to the normal distribution of the study data.

Results of the main hypothesis test:

Main hypothesis: There is no statistically significant impact at the level of significance ($\alpha \leq 0.05$) of strategic awareness of its dimensions (awareness of the external environment, awareness of the internal environment, awareness of strategic goals) in strengthening the organizational immune system in Jordanian food processing companies.

Table 9 shows the validity of the model for testing the study hypotheses, given the high value of (F) computed over its tabular value at the level of significance ($\alpha \leq 0.05$) and degrees of freedom (20.868), as the dimensions of strategic awareness explain (38%) of the variance in the dimension (organizational immune system), and accordingly, we can test the hypotheses of the study as follows:

1. H_{01} : There is no statistically significant impact at the level of significance ($\alpha \leq 0.05$) for awareness of the external environment as a dimension of strategic awareness in strengthening the organizational immune system in Jordanian food processing companies.

The statistical data in Table 10 indicate that there is a statistically significant impact of the variable (awareness of the external environment), on the variable (the organizational immune system in Jordanian food manufacturers), based on the calculated value of (t) of (28.38), and the level of Significance ($0.05 \geq \alpha$), which

is statistically significant at a level of significance ($0.05 \geq \alpha$), which requires the rejection of the null hypothesis of this variable, which states that there is no statistically significant impact of the variable (awareness of the external environment), on the variable (the immune organizational system in Jordanian food processing companies).

Acceptance of the alternative hypothesis which states that there is a statistically significant impact of a variable (awareness of the external environment), on the dependent variable (organizational immune system in Jordanian food processing companies).

2. H_{01} : There is no statistically significant impact at ($\alpha \leq 0.05$) level of awareness of the internal environment as a dimension of strategic awareness in strengthening the organizational immune system in Jordanian food processing companies.

The statistical data in Table 11 indicate that there is a statistically significant impact of the variable (awareness of the internal environment), on the variable (strengthening the organizational immune system in Jordanian food processing companies), based on the calculated value of (t) of (25.160), at the level of significance ($\alpha \leq 0.05$), which requires the rejection of the null hypothesis of this variable, which states that there is no statistically significant impact of the variable (awareness of the internal environment), on the variable (strengthening the regulatory immune system in Jordanian food processing companies), and acceptance of the alternative hypothesis which states that there is a statistically significant impact of a variable (awareness of the internal environment), on the variable (strengthening the regulatory immune system in Jordanian food processing companies).

1. H_{01} : There is no statistically significant effect at the ($\alpha \leq 0.05$) level of awareness of the external environment as a dimension of strategic awareness in strengthening the immune regulatory system in Jordanian food processing companies.

The statistical data in Table 12 indicate that there is a statistically significant impact of the variable (awareness of strategic goals), on the variable (strengthening the organizational immune system in Jordanian food manufacturers), based on the calculated value of (t) of (19,384), at the level of significance ($\alpha \leq 0.05$), which requires the rejection of the null hypothesis of this variable, which states that there is no statistically significant impact of the variable (awareness of strategic goals), on the variable (strengthening the organizational immune system in Jordanian food processing companies), and acceptance of the alternative hypothesis which states that there is a statistically significant impact of the variable (awareness of strategic goals), on the variable (strengthening the organizational immune system in Jordanian food processing companies).

5. DISCUSSION OF THE FINDINGS OF THE STUDY

1. The results indicated that the perceptions of the study sample of the level of strategic awareness in the Jordanian food processing companies are of a high level, due to the development efforts of Jordanian food processing companies in realizing the importance of applying strategic awareness in all its dimensions. This result also indicates the awareness of the importance of analyzing the strengths of the company and working to strengthen it by exploiting its material and non-material resources, identifying its weaknesses, and working to avoid them.

Table 9: Results of analysis of variance to confirm the validity of the model to test the first main hypothesis

Source	Coefficient of R2	Sum of squares	Degrees of freedom	Average of squares	F value calculated	(F) Level of significance
Regression		18.299	5	3.660		
Error	0.380	29.813	170	0.175*	20.868	0.000
Total		48.112	175			

*Statistically significant at ($0.05 \geq \alpha$) significance level

Table 10: Results of multiple regression analysis to test the impact of the dimension of awareness of the external environment as one of the dimensions of strategic awareness in the organizational immune system

Independent variable	B	Standard error	Beta	Calculated (t) value	The significance level of (t)
Awareness of the external environment	0.67	72	0.82	28.38*	0.000

Statistically significant at ($\alpha \leq 0.05$)

Table 11: Results of multiple regression analysis to test the impact of the dimension of awareness of the internal environment as one of the dimensions of strategic awareness in the organizational immune system

Independent variable	B	Standard error	Beta	Calculated (t) value	The significance level of (t)
Awareness of the internal environment	0.1500	0.0690	0.2080	*25.160	0.0320

*Statistically significant at ($\alpha \leq 0.05$) level

Table 12: Results of multiple regression analysis to test the impact of the dimension of awareness of strategic goals as one of the dimensions of strategic awareness in the regulatory immune system

Independent variable	B	Standard error	Beta	Calculated (t) value	The significance level of (t)
Awareness of strategic goals	0.0980	0.0710	0.1330	19.384	0.1680

*Statistically significant at ($\alpha \leq 0.05$) level

2. The results indicated that the perceptions of the study sample of the level of the organizational immune system in the Jordanian food processing companies are of a high level.
 3. The results indicated that the degrees of the correlation between the dimensions of strategic awareness and the organizational immune system in a dimensionally individual and societal manner, where the values of correlational coefficients were significant and positive, this indicates the extent of the strong direct relationship between the independent total variable and the total dependent variable.
 4. The results indicated that there is a statistically significant impact of the variable (awareness of the external environment), on the variable (the organizational immune system in Jordanian food processing companies), this result shows the ability of Jordanian food processing companies to perceive their external environment by exploiting the available opportunities.
 5. The results show that there is a statistically significant impact of the variable (awareness of the internal environment), on the variable (the regulatory immune system in the Jordanian food processing companies), this result shows the ability of Jordanian food processing companies to perceive their internal environment by enhancing strengths and improving and developing of her weaknesses.
 6. There is a statistically significant impact of the independent variable (awareness of strategic goals), on the dependent variable (organizational immunity system in Jordanian food processing companies), this result is due to the keenness of Jordanian food manufacturers to focus on defining their strategic goals accurately and realistically. This contributed directly to strengthening and achieving the organizational immune system, meaning that the more strategic awareness of Jordanian food processing companies, the more it strengthened the organizational immune system.
4. The need to enhance the culture supportive of the concept of organizational immunity between senior management and employees.
 5. Emphasis on conducting more scientific studies on the subject of the current study to include other organizations and samples in order to circulate their results and make recommendations regarding them.

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6. RECOMMENDATIONS

Based on the previous results, the current study offers the following recommendations:

1. Pursuing attention to, developing, and strengthening strategic awareness in its various dimensions with Jordanian food processing companies, by paying attention to analyzing the external environment of the company and awareness of changing environmental factors to explore opportunities and exploiting them for the benefit of the company, as well as the importance of awareness of the strengths and weaknesses of the company and the exploitation of material and non-material resources to achieve its strategic goals.
2. Promoting attention in particular to awareness of strategic goals, being one of the most influential dimensions of strategic awareness of the regulatory immunity system, through interest in setting realistic strategic goals stemming from a comprehensive study of the external environment, and the formulation of goals consistent with the development and growth of companies.
3. The need to work with strategic awareness because of its great impact on strengthening the organizational immune system and the ability to transfer knowledge into applied practices.

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