



**organizational capabilities and their role in enhancing of the  
organizational immune system  
Analytical study in the Iraqi insurance company**

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**ABSTRACT**

**Purpose of study:** The effectiveness of organizational capabilities as a method for enhancing the functioning of the organizational immune system was investigated in this research.

**Methodology:** A field research was carried out at an Iraqi insurance business with (150) personnel. This study was utilized to evaluate and answer all of the research questions using a quantitative method. Then, using hierarchical regression analysis with SPSS as an analysis tool, hypotheses for direct effects are tested (127) surveys valid for analysis.

**Result:** According to the findings, there is a link between organizational capabilities and organizational immune system functions in the research community.

**Recommendations:** The management of the Iraqi insurance company should pay attention to increasing employee training programs through training workshops related to the topics of the organization and organizational behavior, including organizational capabilities and the functions of the organizational immune system.

**Novelty/originality:** The novelty of this study is the use of organizational capabilities as a technique designed to enhance the functions of the organizational immune system which is very rarely done in Insurance companies, especially in Iraqi insurance company.

**Keywords:** organizational capabilities, functions of the organizational immune system, Iraqi insurance company.

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Received: 28/10/2021

Accepted: 27/1/2022

published: 31/3/2022

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## Introduction

Our contemporary world is witnessing tremendous developments in various fields, especially the field of economy and business. These developments reflect many challenges faced by business organizations, as business organizations have become more complex and diversified, All this made these organizations search for what would enable them to survive, succeed and continuity, so the concept of organizational capabilities emerged to indicate that it is a coherent group to use the organization's resources in accomplishing the tasks and roles assigned to it to meet environmental challenges(Lee, 2020). Because few organizations are immune to these threats, today's organizations must embrace the philosophy of establishing a sound health system for the company, which is represented by organizational immunity, which refers to the company's flexibility in its ability to defend itself, whether by preventing or overcoming weaknesses and threats to eliminate them through Preventing Irrational Behavior. Farncombe (2014, Farncombe). In the absence of studies that combined organizational capabilities and organizational immunity according to the researcher's knowledge and informed her of what she was able to obtain from previous studies that studied the two variables of the study, the importance

of this study appeared at the level of the Iraqi insurance company as it was a field of study, where it was the starting point towards determining the importance and objectives of research and building Theoretical framework and hypothesis scheme based on the formulation of two basic hypotheses. Based on the foregoing, the current research was divided into a group of axes, the axis dealt with the theoretical foundations and philosophical premises of the research variables. As for the third topic, it contained descriptive and inferential statistics analysis of the answers of the research community, and finally it was a discussion of the results and recommendations that the researcher reached on both the theoretical and applied levels.

### First: Organizational Capabilities:

Many administrative academics have tried to define organizational ability because of its significance in organizational success. (Dave Ulrich & Lake, 1990) described it as the capacity to manage people to achieve a competitive advantage (Teece, 2014: 330), and (Grant, 1996) defined it as the integration of knowledge (Teece, 2014: 330). (Kadefors, 2020: 3). (Rehman et al., 2019: 6). In the study's figure (1), (Grant, 2002) shows that this is the case (Tuan & Yoshi, 2010: 3).

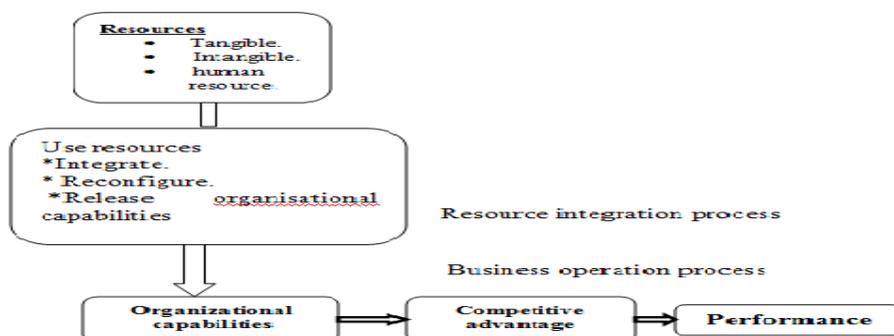


Figure 1. Relationships among resources, capabilities, and competitive advantage

– Source : Tuan& Yoshi, 2010: 3. based on Grant (2002).

While (Helfat & Peteraf, 2003) defined it as the performance of a coordinated group to use the resources of the organization in accomplishing the tasks and roles assigned to it (Lee, 2020: 48). (Loasby, 2006) provided a definition that indicates that organizational capabilities are based on the knowledge and skills of individuals (Mishra et al., 2018:5). (Teece, 2012:1396) agrees with (Eisenhardt & Martin, 2000) in emphasizing that organizational susceptibility is dynamic capabilities to integrate, build and reconfigure internal and external resources/competencies that must be addressed to form rapidly changing work environments. As for (Eggers & Kaplan, 2013: 297), they indicated in their study that organizational capabilities lie in managerial knowledge. While both (Koufteros et al., 2014; Rehman et al., 2019) emphasized that organizational capabilities are the unification of the ability of stakeholders with strategic management and operational capacity to enhance resources and organizational performance.

Based on the foregoing, the concept of organizational capabilities can be defined as the organization's ability to improve the performance of its tasks and activities through the use of its tangible and intangible resources to achieve success in implementing the set goals.

### **Theoretical Review**

This study was based on four theories, namely the Resource Based theory of the firm, the Dynamic Capability theory, knowledge based capability theory, Adaptive structuration theory and Organization learning theory:

#### **Resource Based View Theory of the Firm**

Penrose (1959) coined a resource-based view of the company's theory (Panda, 2017: 15). RBV views the company as a diverse package of resources and skills across companies that remain ongoing throughout time (Ambrosine & Bowman, 2009: 31). Resource-based perspective theory was used with a focus on the impact of corporate

resources and knowledge growth on performance (Kamyabi& Devi, 2012: 63). It presupposes that the company needs to enhance its resources to gain competitive advantage. Others who broadened the idea (Helfat& Martin,2015: 85). As the source of competitive advantage, RBV stressed resources and capability..

#### **Dynamic Capabilities Theory**

Dynamic capability has surpassed the ability to generate and understand the implications of market knowledge. A company needs dynamic skills to coordinate inter-functional strategy responses that help it maintain a competitive edge in the marketplace (Jaworski& Kohli, 2013: 53). Individual behaviors or routines may establish a standard for anticipated behaviors throughout the business when seen as dynamic capabilities, enhancing knowledge of competitive value management from a dynamic capabilities viewpoint (Wong& Ahmed, 2007: 34).

#### **Knowledge Based Capability Theory**

The knowledge-based approach assumes that better access to and integration of specialized information results in resource and capability-based advantages (Grant, 2006: 377). Individuals generate and hold knowledge, but when organizational procedures and routines are repeated over time, knowledge may become entrenched inside the organization (Conner & Prahalad, 1996: 478). Individual and societal skills and information are turned into useful goods and services by these organizations, which may be called social communities (Kogut & Zander, 2013, 177).

#### **Adaptive Structuration Theory**

This idea is concerned with how people behave in a bank while using technology (such as computers). The behavioral school, on the other hand, refers to how individuals respond to their surroundings; for example, how people behave influences how knowledge is handled. Because

organizations, such as those in the banking sector, increasingly depend significantly on sophisticated information technology for communication and information relay, the their over-reliance on IT. However, adaptive structuration theory focuses on communication utilizing information technology, emphasizing the ideas of appropriation and structuration (Sedera & Zakaria, 2008: 179).

### **Organization learning theory**

Organizational learning is seen as a continuous process that arises from individual social interactions and behaviors. The behavioral school is a community of practice model in which there is constant learning and informal interaction, which is aided by the availability of information held and accessible both inside and outside the business. Individuals are exposed to fresh information and expertise thanks to interactive communication tools such as wikis, blogs, Facebook, and Twitter, to mention a few (Taylor & Todd, 2011: 603; Skyrme & Amidon, 2013, 29).

In terms of organizational capability dimensions, the (OLKM) scale, which consists of two dimensions, as shown below, was utilized in the research of (Lee, 2007) and others:

- 1- **Organizational learning ability:** Organizational learning is described as the acquisition of new information and concepts that may be used to affect behavior (Guta, 2013: 548). Which causes various changes in human behavior depending on the kind of learning sought by the person, but at the organizational level, learning gives the company an edge in terms of human capital, making it unique (Abdulrahman, 2014: 56). (Lee et al., 2007: 680) defines organizational learning capacities as a system made up of three parts: training availability, technical competence, and knowledge level.

theory also relates to the nature of group-computer interaction. Many companies and people have come to think that knowledge is IT as a result of

- 2- **The ability to manage knowledge:**

This capability is described as an organization's capacity to gather, organize, and absorb major sources of information (Chinchang, 2015: 37). The three processes of knowledge management are knowledge acquisition, application, and dissemination (Lee et al., 2007: 681). Which may provide the company a competitive edge and help it enhance its operations in a long-term manner? (Salama, 2017: 72).

### **Second: organizational immune system.**

The regulatory immune system functions similarly to the physiological function of the immune system in the human body, which determines the endogenous and non-endogenous components of the biodiversity of products with a diversity in the ability of antibodies to adapt and prevent secretions from the harmful environment (Mahmood & Al-Jader, 2021: 3964). OI is described as a company's capacity to protect and defend itself, whether by preventing or overcoming vulnerabilities and threats, removing and avoiding them by preventing their development or halting their effect, or removing and avoiding them by preventing their impact (Farncombe, 2014: 16; Simmons, 2013: 1131). OI models differ depending on the researchers, their intellectual mindsets, and their practical objectives. Leadership, integration, adaptability, involvement, problem-solving culture, empathy, power distribution, and learning are among the OI criteria (Abdul-Majeed, 2016: 33). It is found in: monitoring and oversight committees, compliance with regulations, risk management systems, incentives and rewards, according to (Simmons, 2013: 1132). and in accordance with Huang

(2013), p. 232. It focuses on: natural organizational immunity, as represented by competitive position and organizational DNA, and natural acquired immunity, as represented by immune cells, benchmarking, and organizational memory, whereas (Brown, 1997, 176) stated that it is based on: organizational learning, organizational memory, and organizational knowledge. (DeGeus, 1997: 23) returned to its origins, which are represented in the mentioned, my research has got to choose the (Organizational immune system functions) that were repeated more than others due to the existence of a relative agreement on them, as follows (Mahmood& Al-Jader, 2021: 3965; Wang et al, 2006: 134; Lv, P& Wang, H. 2007: 154; Liu et al, 2020: 4):

**1- Regulatory immune cognition:**

It is the function of focusing on known intruders (such as illegal acts motivated by greed), outsiders and future intruders.

**2- Regulatory immune defense:**

This function indicates the organization's defense against external threats, risks and damages to play a preventive role from external crises. This function consists of:

- **cloning** which refers to repetition, training, learning and concentration among the factors associated with the regulatory immune system.
- **Change:** appropriate transformation and renewal such as improvement of personal capacity and restructuring of human resources.
- **Choice:** The ability to quickly and accurately select the best organizational system or response programs.
- **Coordination:** Balance action steps and strengths of behavior to avoid bottlenecks.

**3- Regulatory immune memory:**

organizational structure, information flow, power distribution culture, decision-making authority, and incentive and reward systems. The three components of the organizational immune system are organizational learning, organizational memory, and organizational DNA (Persyn, 2014: 12; Smith& Chris,2013; Watkins, 2007: 8). As a result of the variation and difference of the above

It is the function of recording, collecting, preserving, and disseminating the actions and effects of controlling organizational immunity and immune defense in order to compare the subjective reality of the organization and other things on a continuous basis in order to collect this information in the data bank in order to know what actions are coming from outside.

**4- Stabilization function:**

The capacity of the organization's immune system to recognize and eliminate backward and unsuitable elements inside the organization in order to preserve activity, balance, and coordination in the institution's internal control is indicated by the stability function.

**5- Monitoring function:**

Because they influence the functioning of institutions, the immune system's monitoring role in the organization involves monitoring fast changes and crises both within and outside the organization.

**Third: The relationship between (OC) and (OIS)**

Organizational behavior focuses on measurable capabilities and openness toward developing more effective work performance management to quickly adapt to external conditions, which has a positive

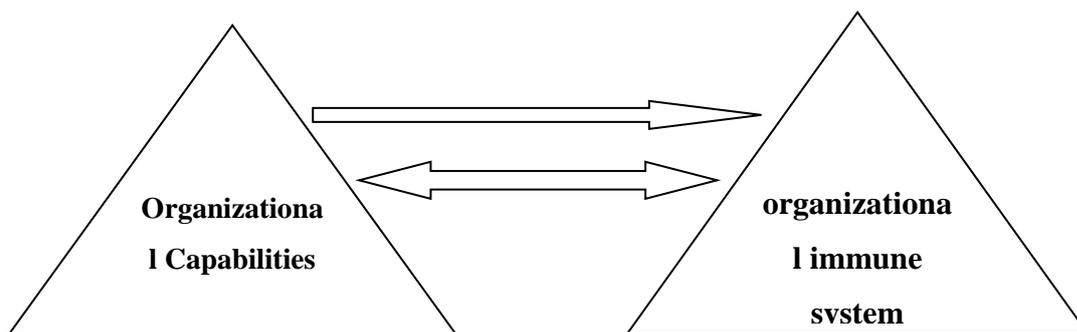
impact on the profitability of organizations by increasing productivity and other resources owned by the organization (Ouakouak & Mbengue, 2018: 10). Which (Rehman et al., 2019) took into account in his examination of modern concepts that have emerged in the field of business administration, particularly the field of organizational behavior, which focuses on organizational variables that can be directed positively in improving organizational performance. When these skills are enhanced inside an organization, it may produce significant work results. All of this supports the current study's hypothesis, which considers organizational capabilities as an indicator for strengthening the organizational immune system through the

dimensions of organizational learning and knowledge management, which are included in the organizational immunity concept, which focuses on developing the two mentioned dimensions. This remark supports the findings of a research performed by (Wang & Zeng, 2017), which found that organizational skills have a significant effect on the organization's success. Thus, as depicted by (Mahmood & Al-Jader, 2021), the organizational immune system is a key factor in protecting the organization from risks and rapid changes through the interaction of working individuals with the organization's policies and procedures in order to keep the organization from being affected by external changes.

### **Research Model and Research hypotheses**

Based on the cause-and-effect connection between (OC) and (OIS), a hypothetical research model was created (Figure 1). This model assumes the following sequence: The organizational immune system's activities are predicted and defined by the interactions generated by OC: The more the organization's (OC) capability improves from weak to medium to strong, the more it can do (OIS).

- H1 In the scientific community, a statistically significant connection between OC and OIS is anticipated at ( $\alpha = 0.05$ ).
- H2 In the scientific community, a statistically significant impact of OC is anticipated in FOIS at ( $\alpha = 0.05$ ).



**Figure 2**  
**Effects and relationships between OC and OIS**

### **research procedures**

#### **A. Research community.**

The research included a comprehensive inventory method for all service providers in the Iraqi insurance company, as (150) questionnaire forms were retrieved (132) forms, and after

sorting the forms it became clear that (5) forms for statistical analysis were invalid, and therefore statistical analysis was conducted on (127) forms Valid (85%) of the number of distributed forms. According to the following table:

**Table (1) describes the personal characteristics of the research community**

variable	Category	number	percentage
social type	Male	56	44%
	Femal	71	56%
Age	18-25	19	15%
	26-33	29	23%
	34-41	23	18%
	42-49	25	20%
	50-	31	24%
Academic achievement	middle school	36	28%
	diploma	32	25%
	Bachelor	52	41%
	Higher Diploma	4	03%
	M.A.	2	02%
	PhD	1	01%
Social status	Unmarried	38	30%
	Married	76	60%
	Other	13	10%
Number of years of service	less than one year	2	02%
	1-5	33	26%
	6-10	13	10%
	11-15	22	17%
	16-20	23	18%
	21 and over	34	27%

The percentage of females from the research community (56%) and males (44%), while in terms of age, the highest percentage was for the age group (50-), reaching (24%) compared to the rest of the age groups, which indicates the presence of work experience compatible with The largest category for the number of years of service (21 or more), which reached (27%). As for academic achievement, the number of holders of a bachelor's degree was (52) people with the highest academic achievement in the research community with a percentage of (41%).

### B. Tool for Data Collection

A questionnaire was created to gather data from the research community, and it consisted of seven sub-variables that were specified and assessed by the research questionnaire's (37) questions. Two dimensions were used to distribute the

variables: OI and FOIS. To enable respondents to express their opinions on the questionnaire questions, a Likert scale was employed, with measurements ranging from 5 points (Totally Agree) to 1 point (Disagree) (Totally Disagree). The questionnaire's reliability was confirmed by

presenting it to experts for feedback on the harmony and consistency of the items' content with the goal to be achieved, as well as statistical reliability by calculating Spearman Brown Reliability factors between the outcome of each item and the questionnaire's total scores (37 questions).

The correlation coefficients ranged from 0.378 to 0.624, which is a (0.05) level function. Similarly, the square root of the stability coefficient was used to calculate a Content Validity test, with the results showing the questionnaire's validity in assessing what was given for it. The Cronbach Alpha was used to check the questionnaire's stability for both the combined and individual research variables (measurement accuracy). The study variables' stability coefficients rose and surpassed the necessary minimum limit, according to the findings. The factory Kolmogorov (K-s) test was used to verify

that the data was distributed normally, The results showed that the data was naturally distributed and that the P-Values of all variables were greater (= 0.05). Bougie and Sekaran are a couple (2016).

**C. Descriptive statistics test for research variables.**

The descriptive statistics results in the table (2) for the sub-dimensions of the independent variable refer to the arithmetic means, standard deviations, and coefficients of variation related to the viewpoint of the researched sample regarding this variable. (3.51) Degrees for the Likert scale consisting of (5) degrees, and the general standard deviation and the coefficient of variation around them were (0.67) (0.13), and this confirms the availability of this ability among the members of the research sample.

**Table (2) Descriptive statistics for the sub-dimensions and the total independent variable**

Arithme tic mean	standard deviation	Variation coefficient	sub-dimensions	
3.83	0.54	0.15	Organizational learning ability	1
3.20	0.80	0.12	The ability to manage knowledge	2
3.51	0.67	0.13	<b>total independent variable</b>	

As for the dependent variable , it was measured with five functions, as Table (3) indicates a general arithmetic mean for the dependent variable, which is (3.97) degrees, which is above the standard mean of (3.45) degrees for the Likert scale of (5) degrees.

The general standard deviation and the coefficient of variation around it (0.49) (0.12) and this confirms the availability of organizational excellence within the research community.

**Table (3) Descriptive statistics for the sub-dimensions and the total dependent variable**

Arithmeti c mean	standard deviation	Variation coefficient	sub-dimensions	
3.92	0.50	0.16	<b>Regulatory immune</b>	1

			<b>cognition</b>	
3.11	0.48	0.13	<b>Regulatory immune defense</b>	2
4.09	0.54	0.11	<b>Regulatory immune memory</b>	3
3.11	0.49	0.10	<b>Stabilization function</b>	4
3.02	0.44	0.12	<b>Monitoring function</b>	5
3.45	0.49	0.12	<b>total dependent variable</b>	

**D.Hypotheses Test**

**H1 test (Correlation)**

This hypothesis is explained by the inferential analysis findings. The OC variables demonstrated agreement in the number of its connections and the degree of their spirits at both the micro and macro levels. (Organizational learning capabilities and organizational immune defense) had the greatest correlation value (0.84), while knowledge management capabilities and Monitor function had the lowest correlation coefficient (0.78). The correlation coefficient between OC and FOIS was (0.81) at the aggregate level, with a significance level of (0.01), and all linkages between OC and FOIS variables were significant at (0.01), accounting for

100% of the total relationships, which is a strong result for using H2.

**H2 test (Effect)**

Table 2 shows that the study hypothesis is correct and that (OC) and (OIS) have statistically significant impacts in terms of R2calculated for the model at hand (0. 659). Comparing the calculated (t) values of OC variables with their tabular values at a degree of freedom (371.2) at a significant level (0.05) of (2.30), and comparing the calculated (t) values of OC variables with their tabular values at a degree of freedom (371.2) at a significant level (0.05) of (2.30), the model is statistically accepted (2.30). Except for organizational memory, all OC factors (Table 2) clearly influence FOIS.

**Table 4** effect of (OC) and (OIS)

<b>Variables</b>	<b>Regression coefficients</b>	<b>Arithmetic mean</b>	<b>Standard deviation</b>	<b>R2</b>	<b>t- Calculated</b>
<b>organizational learning capabilities</b>	B1	3.41	0.29	0.581	12.52
<b>knowledge management capabilities</b>	B2	3	0.40	0.501	11.22
<b>R2 = 659; fixed limit B0 = 2.511; F- Calculated = 5.12</b>					

**RESULTS AND RECOMMENATIONS**

**Results**

- 1- Organizational capabilities are a state expressed in a group of encouraging dimensions to improve the atmosphere and relations within any organization, represented by (organizational learning and knowledge management).
- 2- The theoretical aspect of a number of previous studies confirmed that

the organizational immunity system consists of five basic functions as mentioned previously, through which it is possible to know the positive reflection of organizational immunity within the work to improve the level of organizational output.

- 3- The descriptive statistics results showed the research community's

keenness to use the organizational capabilities of the highest level of quality to create a strong organizational immune system around the policies and procedures for providing service with the intention of development.

- 4- It was found that the functions of the organizational immune system became clear and widespread among the working circles in the organization in question.
- 5- The positive and moral correlations for each of the dimensions of organizational capabilities with the dimensions of the dependent variable at the level of main and sub-variables reflect the importance of the close interrelationship between them. It means that increasing the levels of the above two dimensions contributes positively to achieving the functions of the organizational immune system in the workplace.
- 6- The results of the positive and highly significant regression analysis of the two dimensions of organizational capabilities in the organizational immune system caused a high positive change, as the presence hypothesis (H1) was proven for the second main hypothesis, and this calls for enhancing the chances of the existence and absorption of the research variables in the researched organization.

### **Recommendations**

- 1- Since the organizational immunity system is achieved through reliance on organizational capabilities in the first place, focusing on this aspect is an urgent necessity to achieve it through the establishment of advanced training courses to have more control over the course of work and move from one job to another in a quick time without obstacles.

- 2- Develop an integrated plan for the culture of the organization on the application and practice of organizational capabilities on the one hand, and attention to the organizational immunity system on the other hand, to urge working individuals to practice better behavior towards their work, taking into account their progress in work and giving them better opportunities to develop their skills and experience.
- 3- Work to conduct a periodic evaluation of the administrative body and those dealing with it to ensure the availability of self-preparedness to work and loyalty to the goals and the public interest and their willingness to obey the official laws of that administrative body.
- 4- Providing the appropriate organizational climate for work, and eliminating routine and monotony so that the employee does not feel bored, and thus his interest in work decreases and this negatively affects his morale, then resorts to idleness and indifference through attention to organizational learning and knowledge management as well as focusing on the functions of the organizational immune system.

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**appendix**  
**organizational capabilities scale (Lee, 2007).**

Dimensions	OC	Scale				
	Statements	1	2	3	4	5
Organizational learning ability	My organization considers training people an investment, not an expense					
	My organization provided extensive training in technology					
	Information systems personnel are highly knowledgeable about technological issues					
	Our organization has great technical experience					
	Our organization has a high level of knowledge in the field of technology					
	My organization employs people with high experience or knowledge in the field of technology					
	Our organization cares that people have a good understanding with modern technology					
The ability to manage knowledge	Our organization has cognitive processes to .obtain knowledge from its workers					
	Our organization has processes to generate new knowledge based on existing knowledge					
	Our organization has cognitive processes to get customer knowledge					
	Our organization has processes to acquire knowledge in order to develop our services					
	Our organization has processes to distribute knowledge throughout the organization					
	Processes are designed to facilitate knowledge exchange across functional boundaries					
	Our organization has processes to apply knowledge to solve new problems					
	The knowledge that pertains to our field is filtered					
	Organizational knowledge is transferred from publications and staff meetings					
	Our organization has the ability to integrate different sources and types of knowledge					

**functions of the organizational immune system scale**

Dimensions	FOIS	scale				
	Statements	1	2	3	4	5
Organizational immune cognition	The organization is aware of the negative external influences harmful to it					
	The organization senses harmful internal factors while working					
	The organization clearly understands the factors and symptoms of the organizational hierarchy					
	The Public Relations Unit plays an important role in defining and publicizing the interests of the organization					
Organizational immune defense	The organization can resist internal and external factors					
	Urging workers to voluntarily defend when defense is needed					
	Organizational work teams play a self-protective role against common threats					
	There is preventive coordination between the organization's departments and units against any danger					
Organizational immune memory	There is documentation of oversight processes about any threat to the organization to benefit from in the future					
	The immune memory distinguishes between the privacy of the organization and the behavior of outside intruders					
	The organization benefits from previous events in the face of emergency conditions					
	Regulatory immune memory provides the effort to counter repetitive or similar situations					
Stabilization function	The immune system works to remove harmful factors in order to stabilize the organization					
	Workers counter harmful activities for smooth workflow					
	The organization has internal control systems					
	The legal advisor audits the activities of the organization to create a state of balance and harmony with government instructions and laws					
Monitor function	The control systems in the organization contribute to raising the level of the organization's performance and employee behavior					
	The internal control body exercises the legitimacy of transactions and discovers errors					
	The internal control system matches the standards with the actual performance of fault diagnosis					
	The organization relies on the philosophy of total quality management to ensure the quality of service delivery					