

The extent of the impact of changing the mechanical structure to the organic one on the administrative effectiveness of the institution Sonelgaz**DELLOUL safa**¹ Change Management Laboratory at the Algerian Foundation, Algiers 3 University (Algeria),
delloul.safa@univ-alger3.dz**Received:** 25/08/2024**Accepted:** 25/04/2025**Published:** 25/05/2025**Abstract:**

This Study aims to analyze the transformation of institutional structures from mechanical organizational structures to modern organic structures. The Study seeks to clarify the impact of the transformation of institutions' performance and the possibility of adaptation and innovation in the market, which is characterized by rapid and advanced changes. The results of the Study show that organic structures help institutions be flexible. And administrative adaptation, as it enables it to interact quickly with the surrounding environment and communicate with its departments. The results also show that organic structures contribute to creativity and innovation and improve response to market changes and customer needs, making them more capable of growth and continuity in the modern economic environment.

Keywords: organizational structure, organizational transformations, mechanical structures, organic structures, organizational flexibility

JEL classification code : Q10, Q13, Q16.

1. Introduction:

Organizational structure is one factor in organizations' success and their ability to adapt to rapid changes in the surrounding environment. It is not only a tool for distributing tasks, responsibilities, and powers but also a reflection of the institution's leadership and management philosophy. For this reason, the shift from mechanical to organic organizational structures is an important topic, given the urgent need for innovation and flexibility in the face of contemporary challenges.

Mechanistic organizational structures are characterized by Stability and formality, where roles and responsibilities are defined, and decisions are strictly implemented. Although this approach has proven effective in stable environments, it needs help adapting to rapid changes and market requirements, as organic organizational structures allow for greater flexibility and better interaction with the external environment, enhancing innovation and cooperation within the business. Difference.

Therefore, it is necessary to focus on achieving a balance between efficiency and Stability on the one hand and flexibility and innovation on the other. We look forward to providing new insights that contribute to a deeper understanding of the importance of designing the organizational structure in line with institutional strategies and future challenges.

1.1 The study problem

With the rapid and successive changes taking place in institutions' environments, there is an urgent need for organizational structures that enable them to adapt effectively to these changes and respond to challenges. The organizational structure is considered one of the essential elements that directly affect the institution's ability to achieve its strategic goals.

Many organizations have relied on mechanical organizational structures, where roles and responsibilities are distributed hierarchically, and processes and procedures are precisely defined. It needs help in modern business environments with high complexity and dynamism. In contrast, organic organizational structures are a flexible and adaptable alternative, as they encourage cooperation. And innovation, and allows greater freedom in exchanging information and making decisions.

The following questions can be asked:

How can organizations balance efficiency and flexibility by choosing the most appropriate organizational structure?

Is there a statistically significant relationship at a significance level of 0.05 between the mechanical organizational structure and the efficiency of operational processes in a stable work environment?

Is there a statistically significant relationship between organic organizational structure and the ability to adapt to environmental changes?

Is there a relationship between the organic organizational structure and innovation in institutions?

Is there a statistically significant effect of the shift from mechanical to organic structure on organizational performance in dynamic business environments?

1-2- Study hypotheses:

There is a statistically significant relationship at a significance level of 0.05 between the mechanical organizational structure and the efficiency of operational processes in a stable work environment.

A statistically significant relationship exists between the organic organizational structure and the ability to adapt to environmental changes.

A positive relationship exists between organic organizational structure and innovation in organizations at a significance level of 0.05.

The shift from mechanical to organic structure has no statistically significant effect on organizational performance in dynamic business environments.

1-3- Study objectives

- Discussing the essential characteristics of mechanical and organic organizational structures, represented by the functions, advantages, and disadvantages of each type of organizational structure, and their impact on the organization's performance.

- Knowing the impact of the stable and dynamic environment on institutional performance that depends on both mechanical and organic organizational structures.

- Analyze the impact of the type of organizational structure on the organization's ability to innovate and create.

- Study the impact of leadership styles on the effectiveness of implementing different organizational structures.

1-4- The importance of the Study

They are trying to understand how to design organizational structures that foster efficiency and innovation, helping organizations improve their performance and adapt better.

The Study provides an analytical framework that organizations can use to evaluate the effectiveness of their current organizational structures, make informed decisions about necessary adjustments, and support innovation and strategic direction.

1-5- Previous studies:**1.5.1 Study of organizational structure and company performance:**

Pugh, D. S., Hickson, D. J., & Hinings, C. R. study entitled: "The Impact of Organizational Structure on Corporate Performance."

The Study aims to analyze the relationship between organizational structure and the performance of various institutions. It explained that mechanical structures are suitable for a static environment, while organic structures are suitable for a dynamic environment. This Study concluded that institutions that adopt organic structures perform better in innovation, creativity, and adaptation to environmental changes.

1-5-2- Study of mechanical versus organic structures:

Burns, T., & Stalker, G.M. study: Mechanistic vs. Organic Organizational Structures: How Effective Are They?

This classic Study distinguished itself by analyzing the difference between mechanical and organic structures. It also concluded that mechanical structures are characterized by hierarchy and clarity in the division of tasks, which enhances efficiency in a stable

environment. In contrast, organic structures provide more flexibility and support innovation in a changing climate.

1-5-3- The impact of organizational structures on innovation:

A study by Damanpour, F. & Evan, W. M: "The Role of Organizational Structure in Innovation Performance"

The Study shows the impact of the quality of the organizational structure on innovation and creativity in institutions. Its results make it clear that institutions that adopt organic structures adapt to continuous changes and develop products and services quickly compared to institutions with mechanical structures.

1-5-4 Effect of transformation from mechanical to organic structure:

Lawrence, P. R., & Lorsch, J. W. monograph: Transitioning from Mechanistic to Organic Structures: Implications for Organizational Change

For this Study, I focused on analyzing the impact of the transformation of institutions from mechanical structures to organic structures. The results showed that this transformation can improve the institution's performance, especially in an unstable environment. Still, it may face challenges, including resistance to change and employee training that aligns with the institutions' development. New and diverse working methods

Study Terminology:

2. Definition of the organizational structure

The concept of organization: It is the process of arranging individuals and resources to achieve goals. This includes defining activities and delegating powers to achieve goals through dividing work among individuals or work teams and coordinating those activities to ensure their effective and efficient implementation (Daft, 2016, p. 10)

Organization is defined as identifying and coordinating the activities, tasks, and human and material resources necessary to achieve the organization's goals. This includes dividing work, defining tasks, powers, and responsibilities, and coordinating efforts between individuals and teams to ensure integration and efficiency in achieving the set goals (Kalika, 2000, p. 25).)

The concept of organizational structure is the method of dividing roles within the organization and coordinating tasks to achieve organizational goals. It consists of a group of different functions organized hierarchically, facilitating the distribution and coordination of tasks and responsibilities among individuals and work teams (Mintzberg, 1979, pp. 2-3).

It is defined as a set of formal relationships between individuals and work teams within the organization organized hierarchically, determining how to distribute resources and tasks and coordinate efforts to achieve goals. The organizational structure also includes formal rules and procedures that ensure the efficient implementation of activities (Kalika, 2000, p. 45).

It is defined as the system through which activities and tasks are distributed within an organization, including the division of functions and the coordination of efforts between individuals and teams to achieve organizational goals (Robbins, 2018, p. 440)

It is also defined as the optimal and formal arrangement of functions and managing relationships within the organization. It also determines how to distribute authority,

responsibilities, and procedures to coordinate activities to achieve organizational goals. (Kincaid & Ross, 2023, p. 80)

3. Dimensions of the organizational structure:

Job Specialization: It shows the extent to which tasks are divided into specific jobs. As specialization increases, tasks become more specific and repetitive (Mintzberg, 1979, pp. 19-20).

Standardization: Defining activities and processes based on formal rules and procedures, standardizing work, results, skills, and responsibilities (Mintzberg, 1979, pp. 21-22)

Coordination: Methods used to coordinate activities between individuals and departments, such as mutual standardization, direct control, and standards (Mintzberg, 1979, pp. 23-24)

Decentralization: The distribution of authority and responsibilities across various organizational levels. Decentralization may be vertical (between levels) or horizontal (between departments) (Mintzberg, 1979, p. 25)

Hierarchy: (Hierarchy of Authority) clarifies the levels of the organizational structure and defines the lines of authority and hierarchy between individuals in the organization (Mintzberg, 1979, pp. 24-25)

4. Types of organizational structures:

Mechanical organizational structure is characterized by high formality in the division of labor and management of available resources. This type of structure is suitable for a stable environment, as it does not support adaptation and flexibility (Jones, 2013, p. 102)

It is defined as a type of organizational structure characterized by a high degree of formality and centralization in decision-making, as it clearly defines roles, responsibilities, tasks, and powers, formal vertical communication channels, and robust central control. This type of structure is suitable for stable environments that focus on efficiency. And effectiveness in operational processes (Judge & Robbins, 2024, p. 311)

Main characteristics of mechanical structure:

Clear division of tasks: (Clear Division of Labor) precisely defines responsibilities and roles, allowing each individual to know the functions and powers assigned according to his specialization and experience (Gibson, Ivancevich, Donnelly, & Konopaske, 2012, p. 190)

Routine and Formal Procedures: The organizational structure relies on laws and studied and detailed procedures to ensure that tasks are carried out in a uniform, repetitive, and routine manner (Jones, 2013, p. 103).

Centralized Decision-Making: Decisions are made at the senior management level, where power is concentrated vertically from top to bottom (Jones, 2013, p. 104)

Formal Communication: Communication through formal and organized channels between individuals and work teams, where transparency and consistency of information prevail (Gibson, Ivancevich, Donnelly, & Konopaske, 2012, p. 192)

Strict Hierarchy: The organization is based on a hierarchy, with administrative levels ensuring effective control and oversight (Burns, 1961, p. 122)

Organic organizational structure: It is a type of organizational structure characterized by adaptation to environmental changes, high flexibility, and decentralization. This structure allows individuals to interact and communicate in informal ways, which enhances

innovation and overcomes challenges (Daft, 2016, pp. 157-159)

It is defined as a type of organizational structure characterized by flexibility. This structure is characterized by informal communication networks, a wide distribution of authority, and the encouragement of innovation and cooperation among employees. This type of structure is characterized by the absence of strict hierarchical levels, which allows for more accessible interaction between different functional levels (George & Jones, 2020, p. 270)

5. Characteristics of organic structure:

Flexible Division of Labor: Tasks and responsibilities are not defined, allowing individuals to adopt diverse tasks, as their roles are aligned according to the organization's requirements (Daft, 2016, p. 158)

Horizontal Communication: Communication takes place in an informal, horizontal manner, which supports interaction and cooperation between individuals and work teams (Daft, 2016, p. 158)

Decentralized decision-making: It allows departments to make decisions comfortably and with a great deal of independence, which contributes to responding to changes (Daft, 2016, p. 159)

Adaptability: The organic structure is enhanced by a flexible mechanism that enables it to quickly adapt to environmental changes and challenges, as well as keep pace with accelerated development (Daft, 2016, p. 159)

Collaboration and Innovation: The organic structure supports a collaborative work environment and encourages innovation and the exchange of ideas (Daft, 2016, p. 159)

6. Advantages and disadvantages of mechanical and organic structure:

Organizational Structure	Advantages	Disadvantages
Mechanical	Clear tasks and responsibilities Performance efficiency Centralized decisions	Lack of creativity and innovation Resisting change Difficulty adapting to rapid environmental changes
Organic	Fixed procedures and a stable system Supports horizontal networking Improved performance and speed of adaptation Promotes creativity and innovation Decentralizing decisions and delegating powers	Limited formal communication between levels Lack of central control Lack of clarity of tasks and responsibilities Complexity in organization and implementation Less efficient at performing routine tasks

Source: (Child, 2005, pp. 87-89)/ (Morgan, 2006, pp. 115-116-118-119)/ (Lawrence & Lorsch, 1967, pp. 45-46,48-49)

Flexible organizational structure (octopus): A type of organizational structure that seeks to adapt to environmental changes quickly. It is characterized by a wide distribution of powers, where independent units or departments coordinate and integrate to achieve the

organization's goals. This type of structure encourages innovation and rapid interaction between administrative branches (Jones G. R., 2024, p. 281)

Features of the Octopus organizational structure:

High flexibility: the ability to quickly adapt to changes in the external environment

Multiple independent units: The presence of independent work teams that consistently interact with each other.

Distribution of powers and responsibilities: Authority is distributed in a balanced manner, which facilitates the local decision-making process.

Promoting innovation: The collaborative and interactive environment encourages innovation and creativity at the administrative level. (Jones G.R., 2024, p. 281)

7. Applied part: Transformation from mechanical to organic structure

The organizational structure is one of the aspects that affect institutions' efficiency, profitability, and performance. This questionnaire aims to study the relationship between the organizational structure (whether mechanical or organic) and various aspects of institutional performance.

Study method:

In the StudyStudy, we relied on the descriptive analytical approach

7-1 The study population and its sample:

We tried to determine the sample of this Study so that it would be more representative of the original community. We could also obtain results that allow them to be relatively generalized and then come up with results that are consistent with the truth and give a realistic picture of the field studied. Our research sample included some workers of the Sonelgaz Company, Jijel Distribution Directorate, whose number is estimated at 40. factor. Since all Sonelgaz branches are affiliated with the same general directorate, the Algerian Electricity and Gas Distribution Company, all the laws and regulations governing the branches' activities are the same. Therefore, our choice of the Jijel state branch was justified by subjective reasons, namely, the possibility of direct contact with the branch's administrators.

7-2 Study results:

7-2-1 Testing the validity and reliability of the study tool.

7-2-1-1 Stability:

Table No. (01) Cronbach's alpha coefficient for the dimensions of the study questionnaire

sequence	Dimensions	α
[5-1]	Efficient operational processes and mechanical organizational structure	0.613
[10-6]	The ability of the organic organization structure to adapt to environmental changes	0.611
[15-11]	The impact of organic organization structure on innovation in institutions	0.644
[19-16]	Improving institutional performance thanks to the transformation to an organic structure	0.712

[19-1]

All (19 phrases).

0.855

It turns out that the value of the Cronbach's alpha coefficient for all dimensions and fields of StudyStudy was acceptable, ranging between (0.611 and 0.712), while for the questionnaire as a whole with all its axes, the value of the Cronbach's alpha coefficient was 0.85 is an acceptable reliability percentage compared to 0.70, the most significant value. This indicates that the questionnaire's axes are characterized by internal consistency and high reliability, which makes it suitable for Study, Analysis, and conclusions.

7-2-1-2 Testing the validity of the tool:

Table No. (02): Correlation between the score of each axis and the total score of the questionnaire.

Axes	Rp	sig
Efficient operational processes and mechanical organizational structure	0.532	0.00
The ability of the organic organization structure to adapt to environmental changes	0.509	0.00
The impact of organic organization structure on innovation in organizations	0.635	0.00
Improving institutional performance thanks to the shift to an organic structure	0.613	0.00

Note from the table above that most of the Study's axes are related to each other. The Rp value for all axes ranges between 0.193 and 0.281, and the significance value is less than the significance level of 0.01 in all axes. This means there is a moral correlation, and from this, the Study's axes are considered characterized by validity that allows us to apply it.

7-2-2 Analysis of the Study's Axes: Before presenting and analyzing the results related to the transition from the mechanical to the organic structure, it is necessary to analyze and interpret the axes that formed the StudyStudy, which are the efficiency of operational processes and the mechanical organizational structure, the ability of the organic organization structure to adapt to environmental changes, The impact of the organic organization structure on innovation in institutions, improving institutional performance thanks to the transition to an organic structure.

7-2-2-1 analysis of the respondents' answers regarding the statements of the first axis

Table No. (03): Trends in the sample members' answers regarding statements following the efficiency of operational processes and the mechanical organizational structure.

	efficiency of operational processes and mechanical organizational structure	M	S	D.A.
01	Evaluate the efficiency of your organization's operational processes	3.99	0.563	High
02	A mechanical organizational structure negatively affects the efficiency of your organization's operational processes	3.95	0.578	High
03	A mechanical organizational structure	3.99	0.714	High

	makes responding to environmental changes more difficult			
04	A mechanical organizational structure increases the complexity of procedures and records in your organization	3.96	0.553	High
05	There is a need to improve the organizational structure to increase the efficiency of operational processes	3.96	0.796	High
General trend		3.79	0.63	High

We note that all the expressions' saturations through the arithmetic means and standard deviations were high, as they all belong to the high range [3.41 - 4.2], where the arithmetic means for the first axis ranged between [3.95-3.99].

We note that the highest percentage of agreement was for the first statement, "Assessing the efficiency of operational processes in your organization," with a mean of 3.99 and a standard deviation of 0.563, which indicates a high degree of agreement. Therefore, the statements of the first axis were high, making it the starting point in defining the organization's structure, which helps in understanding and analyzing its procedures and operations. The effects of this axis are not only limited to improving productivity and economic efficiency but also extend to raising individuals' morale and achieving their satisfaction.

It also allows the organizational structure to be designed to encourage effective participation among organization members, which enhances their cooperation and improves their desire to work and innovate. Activating organizational performance and determining activities and relationships within the organization creates a kind of independence for members, which enhances their sense of responsibility. Individuals constitute an essential and influential part of the organization's performance, as success in achieving goals depends on their behavior within the organizational structure, which gives the organization a unique personality and form.

As for the tendencies of the sample members' answers on the dimension of operational process efficiency and mechanical organizational structure, they tended toward high agreement, with an arithmetic mean of 3.97 and a standard deviation of 0.63.

7-2-2-2 Analyzing the respondents' answers regarding the phrases of the second axis

Table No. (04): Trends in the sample members' answers regarding statements following the ability of the organic organization structure to adapt to environmental changes.

	The ability of the organic organization structure to adapt to environmental changes.	M	S	D.A.
01	An organic organization structure facilitates adaptation to environmental changes in your organization	4.60	0.16	High
02	Structure Organic organization contributes	4.01	0.64	High

	to enhancing innovation in your organization			
03	Organic organization structure leads to improved coordination between departments and individuals in an organization	3.81	0.64	High
04	Structure Organic organization makes decision-making processes more flexible and rapid	4.17	0.59	High
05	There is a need to strengthen the organic organization structure in your organization	4.60	0.58	High
General trend		4.02	0.62	High

Through the table above and looking at the arithmetic means and standard deviations extracted from the responses of the sample members to each of the statements of the second axis, the ability of the organic organizational structure to adapt to environmental changes, where we note that all the statements in their saturation through arithmetic means and standard deviations were high, so they all belong To the high range [3.41 - 4.2], where the arithmetic means for the second axis ranged between [3.81 - 4.17].

We note that the fourth statement, "The organic organizational structure makes decision-making processes more flexible and rapid," received the highest percentage of agreement, with an arithmetic mean of 4.17 and a standard deviation of 0.596, corresponding to a high degree of agreement.

Therefore, it can be said that the statements of the first axis were high, meaning that the sample members agree that the ability of the organic organization structure to adapt to environmental changes is that it avoids the use of all formal structural devices, is characterized by a small administrative hierarchy, and uses the minimum of training, planning and communication tools, and is considered... It is simple and does not contain a technical structure (technostructure) that needs to be more present. It adapts to the changing dynamic environment. Coordination is done through direct supervision and verbal and informal communication methods. Decisional authority is centralized in the hands of the CEO and, thus, the top. The strategy (the strategic apex) emerges as the central part, centers the organization's decisions, and dictates what must be done.

As for the trends in the sample members' answers on the dimension of the ability of the organic organizational structure to adapt to environmental changes, the arithmetic mean is 4.02 with a standard deviation of 0.6276.

7-2-2-3 analysis of the respondents' answers regarding the statements of the third axis

Table No. (05): Trends in the sample members' answers regarding statements after the impact of the organic organization structure on innovation in institutions

	The impact of organic organization structure on innovation in organizations	M	S	D.A.
01	Structure Organic organization encourages innovation in your organization	4.05	0.85	High
02	Structure Organic organization stimulates creative thinking and new solutions	3.54	0.97	High
03	Organic organization structure contributes to providing a supportive environment for the development of new ideas	4.82	0.73	High
04	Organic organization structure contributes to increasing the team's participation in innovation processes	3.54	0.98	High
05	There is a need to enhance the organic organization structure to improve innovation in your organization	3.89	0.83	High
General trend		3.97	0.87	High

Through the table above and looking at the arithmetic means and standard deviations extracted from the responses of the sample members to each of the statements of the third axis, the Effect of the organic organization structure on innovation in institutions, we note that all the statements in their saturation through the arithmetic means. Standard deviations were high, as they all belong to the field Very high [3.41 - 5], as the arithmetic means for the third axis ranged between [3.54 - 4.82].

We note that the third statement, "The organic organizational structure contributes to providing a supportive environment for the development of new ideas," received the highest percentage of agreement, with a mean of 4.06 and a standard deviation of 0.609, corresponding to a high degree of agreement.

Therefore, the statements of the third axis were high, that is, the impact of the organic organizational structure on innovation in institutions because of its characteristics opposite to mechanical organizational structures. This means that the decision is not built from the top of the company - the manager- but is participatory to some extent. It works better in complex, changing environments so that the communication and decision-making process is participatory. It also allows tasks to be accomplished in more streamlined and flexible ways. The rules are usually less than the characteristics of these structures, and the functions in them are of a general and distributed nature. The scope of control is broader, meaning that a more significant number of people are working directly under the command of managers. Examples of fields with organic organizational structures include advanced technology, computers, space, and communications, which must deal with rapid changes with flexibility and resilience. Contemporary institutions and companies operating in turbulent, rapidly

changing environments with high competition have become accustomed to adopting organic organizational structures as their organizational basis.

As for the trends in the responses of the sample members on the dimension of the impact of the organic organizational structure on innovation in institutions, with an arithmetic mean of 3.97 and a standard deviation of 0.87

7-2-2-4 Analyzing the respondents' answers regarding the phrases of the fourth axis

Table No. (06): Trends in the sample members' answers regarding statements after improving institutional performance thanks to the shift to an organic structure

	Improving institutional performance thanks to the shift to an organic structure.	M	S	D.A.
01	Have you noticed your organization's performance improvement after switching to an organic organizational structure?	4.00	0.65	High
02	The organic organization structure contributes to improving the communication of work teams within the organization	3.94	0.56	High
03	Organic organization structure contributes to better achieving the organization's goals	4.03	0.67	High
04	There is a need to strengthen the organic organization structure to improve institutional performance in your organization	3.91	0.54	High
General trend		3.97	0.60	High

Through the table above and looking at the arithmetic means and standard deviations extracted from the responses of the sample members to each of the statements of the fourth axis, the Effect of the organic organizational structure on innovation in institutions, we note that all the statements in their saturation through the arithmetic means. Standard deviations were high, as they all belong to the field Very high [3.41 - 5], as the arithmetic means for the third axis ranged between [3.54 - 4.82].

We note that the third statement, "The organic organizational structure contributes to providing a supportive environment for the development of new ideas," received the highest percentage of agreement, with a mean of 4.06 and a standard deviation of 0.609, corresponding to a high degree of agreement.

Therefore, it can be said that the statements of the fourth axis were high, that is, the impact of the organic organization structure on innovation in institutions, as the sequence of information to individuals at various levels ensures good communication between members of the institution, which reflects positive performance that is useful in providing the distribution and dissemination of knowledge within the walls of institutions to a great extent as Which contributes to achieving the organization's goals and achieving the strategies and

objectives set by senior management.

As for the trends in the responses of the sample members regarding the impact of the organic organizational structure on innovation in institutions, they tended towards high agreement, with an arithmetic mean of 3.97 and a standard deviation of 609830.

7-2-3 Testing hypotheses

The nature of the problem posed by our research requires us not to be satisfied with estimating the population parameter by giving it a specific value or building a particular confidence interval. Instead, we need to verify the validity or incorrectness of the hypotheses presented at our Study's beginning study. Therefore, we must conduct a field study in addition to theoretical analysis. Because every research project requires field confirmation, we were prompted to test hypotheses related to community parameters.

7-2-3-1 Normal distribution test

This test is based on nonparametric statistical tests to determine the normality of the data.

Table No. (07): Normal distribution test

Transformation from mechanical organic structure	Kolmogorov-Smirnov			Shapiro-Wilk		
	stat	D.F.	sig	stat	DF	sig
to	0.097	40	0.200	0.979	40	0.653

Through the table above, and since the sample size is less than 50 individuals, the Shapiro-Wilk test is relied upon, where we notice the results of the significance value of the Kolmogorov-Smirnov test, "Shapiro-Wilk," reaching 0.653, i.e., 20%, which is a value greater than the approved level of significance. 0.05, i.e. 05%. Therefore, we reject the alternative hypothesis H1 and accept the null hypothesis H0, which states that "the data follows a normal distribution." Since the variable data is usually distributed, parametric statistical methods can be used to address the hypotheses of the current Study.

7-2-3-2 Testing the first hypothesis

H0: There is no statistically significant correlation between the mechanical organizational structure and the efficiency of operational processes in a stable work environment at a significance level of $\alpha=0.05$;

Table No. (08): Shows the results of the Pearson correlation test between the mechanical organizational structure and the efficiency of operational processes in a stable work environment

Efficiency of operational processes in a stable work environment		
Mechanical organizational structure	Rp	0.532
	sig	0.000
	DF	40

We note that the value of the Pearson correlation coefficient was estimated at = 0.532. This means that there is a positive and strong correlation between the mechanical organizational structure and the efficiency of operational processes in a stable work environment, which means that the mechanical organizational structure explained 52.3% of the variance occurring in the efficiency of operational processes in the work environment. When the significance value reached 0.000, which is less than the approved significance level of 0.05, we, therefore, reject the null hypothesis H_0 and accept the alternative hypothesis H_1 , which states, "There is a statistically significant correlation between the mechanical organizational structure and the efficiency of operational processes in the stable work environment at a significance level of $\alpha = 0.05$ ".

7-2-3-3 Testing the second hypothesis

H_1 , a statistically significant correlation exists between the organic organizational structure and the ability to adapt to environmental changes at a significance level of $\alpha = 0.05$.

Table No. (09): Shows the results of the Pearson correlation test between the organic organizational structure and the ability to adapt to environmental changes

		Organic organizational structure	Making decisions within the economic institution
Organic organizational structure	Rp	1	0.509
	sig		0.000
	DF	40	40
Ability to adapt to environmental changes	Rp	0.509	1
	sig	0.000	
	DF	40	40

From the table above, we notice that the value of the Pearson correlation coefficient was estimated at = 0.509. This means that there is a positive and strong correlation between the organic organizational structure and the ability to adapt to environmental changes, which means that the organic organizational structure explained 50.9% of the variance occurring in the ability to adapt to environmental changes. The ecological changes took place when the significance value reached 0.000, which is less than the approved significance level of 0.05; we, therefore, reject the null hypothesis H_0 and accept the alternative hypothesis H_1 , which states: "There is a statistically significant correlation between the organic organizational structure and the ability to adapt to environmental changes at a significance level of $\alpha = 0.05$ ". "

7-2-3-4 Testing the third hypothesis

There is no statistically significant correlation between organic organizational structure and innovation in institutions at a significance level of $\alpha = 0.05$;

Table No. (10): Shows the results of the Pearson correlation test between the organic organizational structure and innovation in institutions.

Innovation in institutions		
Organic organizational structure	Rp	0.635
	sig	0.000
	DF	40

We note that the value of the Pearson correlation coefficient was estimated at = 0.635. This means that there is a positive and strong correlation between the organic organizational structure and innovation in institutions, which means that the organic organizational structure explains 63.5% of the variance occurring in innovation in institutions. When the moral value reaches 0.000, it is less Than the approved significance level of 0.05; we, therefore, reject the null hypothesis H0 and accept the alternative hypothesis H1, which states, "There is a statistically significant correlation between the organic organizational structure and innovation in institutions at a significance level of $\alpha=0.05$."

7-2-3-5 Testing the fourth hypothesis

H1: There is a statistically significant effect of the shift from mechanical structure to organic structure on improving organizational performance in dynamic work environments at a significance level of $\alpha = 0.05$.

Table No. (11): Shows the results of the simple regression test between the transition from the mechanical structure to the organic structure

Independent variable: mechanical structure			
Dependent variable: organic structure	R	R2	Coefficient of determination Debugger
	0.613	0.776	0.359

We note that the value of the correlation coefficient is 0, 613R = This means that there is a strong positive correlation between the shift from the mechanical structure to the organic structure, which means that the change from the mechanical to the organic structure explained 61.3% of the variation occurring in organizational performance in dynamic work environments.

Table No. (12): The Anova analysis of variance model shows the transition from mechanical to organic structure

Model	Sum of squares	D.F.	Mean squares	F	Sig
Regression	2.306	1	2.306	22.88	0.000
Residual	3.829	39	0.101		
Total	6.153	40			

We find that the value of the tabular F reached 22.887, which is statistically significant, so we conclude that the model is essential from an overall perspective, given the value of significance, which is equal to 0.000, which is less than the approved level of significance of 0.05, and thus accepting the model for studying the Effect of changing from mechanical structure to organic structure to improve Organizational performance in dynamic business environments.

Table No. (13): Shows the coefficients of the simple regression equation

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig
	B	Std. Error	Beta		
(Constant)	1.983	0.44		4.505	0.000
Organizational performance in dynamic business environments	0.510	0.107	0.613	4.78	0.000

We notice a significant effect of the shift from the mechanical to the organic structure on organizational performance, as the value of BETA reached 0.613. This means that the change from the mechanical to the organic structure affects institutional performance by 3.61% in dynamic work environments. Given that the sig value is equal to 0.000, it is less than the level of significance of 0.005, and this indicates that the Effect is statistically significant. Therefore, this prompts us to reject the null hypothesis and accept the alternative hypothesis, which states that there is a statistically significant effect of the shift from the mechanical structure to the organic structure to improving institutional performance in work environments—dynamics at a significance level of $\alpha = 0.05$.

From the above table, the simple linear regression equation can be deduced as follows:

$y = 1, 0.938, 510$ so that:

Y: Transformation from mechanical to organic structure.

: Organizational performance in dynamic business environments.

Constant value: 1.938

conclusion

According to the results of the obtained hypotheses, statistical evidence indicates a relationship between the shift from a mechanistic organizational structure to an organic structure and improving institutional performance in a dynamic work environment. These results reflect the importance of adapting to environmental changes and the flexibility of the organic organizational structure in enhancing innovation and the operational efficiency of institutions. Organizations need to shift towards an organic structure that enhances their ability to adapt and respond effectively to changing environmental competitive challenges, enhancing long-term growth and sustainability opportunities. Therefore, the organic organizational structure is an important strategic option that can contribute significantly to Achieving institutional goals and strengthening the organization's position in its local and global markets.

By analyzing the data and statistics extracted from the questionnaire, we can conclude that there is a statistically significant impact of the shift from the mechanical organizational structure to the organic structure on institutional performance in dynamic work environments. The value of the BETA coefficient was 0.613, which indicates that the transition to an organic structure affects institutional performance by 3.61%. Given a sig value of 0.000, less than the 0.05 significance level, we can confirm that this Effect is statistically significant. Based on these results, we reject the null hypothesis (H0) and accept the alternative hypothesis (H1), which states that there is a statistically significant effect of shifting from a mechanical structure to an organic structure in improving organizational performance in dynamic business environments. The following recommendations can be made:

- Enterprises should strengthen their organic organizational structure to increase their ability to adapt to environmental changes. An organic structure provides greater flexibility and rapid adaptation to new challenges and opportunities.

The organic structure supports innovation within the organization. Therefore, it should be encouraged and adopted to motivate employees to suggest new ideas and creative initiatives.

- The organic structure enhances horizontal and vertical communication within the organization, improving information flow and more effective decision-making.

- Leadership skills that align with the organic structure's requirements, such as negotiating, resolving conflicts, and motivating teams, must be developed.

- Shifting from a mechanical structure to an organic structure must be carefully managed to ensure employees accept this change and reduce internal resistance.

The effectiveness of the organic organizational structure should be evaluated periodically to ensure continuous improvement of institutional performance and adaptation to environmental changes.

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