

The role Innovation ambidexterity in achieving sustainable competitive advantage: Analytical study of a sample of administrative leaders at the University of Al-Qadisiyah

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Abstract

The current research seeks to determine the role of innovation ingenuity as an independent variable across its dimensions (exploratory creativity, exploitative creativity) in the sustainable competitive advantage with its dimensions (quality, flexible products for service, delivery, flexible volume, cost, environment) for a sample of (72) administrative leaders at the University of Al-Qadisiyah research community and for the purpose of achieving the goal of the research, a questionnaire was adopted to collect data related to the research variables, and the results were reached using the statistical program such as (SPSS.V.25) and the (Amos.V.25) program to analyze the data to reach conclusions, the most prominent of which was the existence of a relationship Correlation and influence between innovation prowess and sustainable competitive advantage based on the conclusions reached, and a set of recommendations were presented.

Key words: Innovation ambidexterity, sustainable competitive advantage

Introduction

Creative ingenuity is considered one of the modern trends in the field of management through which business organizations can withstand and meet contemporary challenges. The organization's efficiency and effectiveness in the short and long term, on the other hand, the sustainable competitive advantage contributes to creating certain values for customers, which makes the organization proactive in achieving its goals and ahead of its competitors in the market, and creative ingenuity in organizations is a major and vital requirement to deal with high-level outputs Of accuracy and organization in modern organizations.

Methodology

First: Research Problem

Based on the observation of the field reality at the University of Al-Qadisiyah, which represented the research community, the researcher conducted an exploratory study whose main objective is to see the capabilities and skills possessed by the university administration in the field of providing creative ingenuity through sustainable competitive advantage, in addition to universities are among the most important organizations that provide services and products to customers At the present time, as universities face the research community, several challenges, including the weak investment of resources and expertise to continuously improve and innovate services in line with the actual market need, which reflects negatively and significantly on those in charge and specialists in the field of the educational process. In light of the foregoing, the current study is trying to bridge the knowledge gap And applied to understand and explain this relationship through the formulation of the following sub-questions:-

- 1- What is the level of awareness of the administrative leaders in the University of Al-Qadisiyah in the research sample of creative ingenuity?
- 2- What is the nature of the relationship between creative ingenuity and sustainable competitive advantage?

Second: Importance Of Research

1- The research derives its importance from presenting treatments and proposals to the administrative leaders at the University of Al-Qadisiyah under study in order to benefit from them and develop the reality of the services provided, as it has become an inevitable necessity and an important sign for modern organizations.

2- Increasing the role it adopts for the administrative leaders at the University of Al-Qadisiyah to make its work successful and to ensure the achievement of social, environmental and economic goals.

3- Contribute to adding new data and information in the field of creative ingenuity and sustainable competitive advantage, through the conclusions and recommendations that the study will reach.

4- Determining the nature and type of the relationship between creative ingenuity and sustainable competitive advantage, which enables future studies to measure the nature and type of this relationship on other samples through which it is possible to identify a set of strategic solutions that in turn represent a treatment for the problems of each sample.

Third: Research objectives

The main objective of the research is to verify the correlation and influence between (creative ingenuity and sustainable competitive advantage), within the framework of the research problem and its importance, and the research objectives can be summarized as follows-:

1- Recognizing the reality of creative ingenuity, and the sustainable competitive advantage of the studied sample.

2- Diagnosing the dimensions of creative ingenuity and the sustainable competitive advantage of administrative leaders at the University of Al-Qadisiyah.

3- Identifying the actual actions taken by the researched university in relation to creative ingenuity.

Fourth: Hypotheses

1- The first main hypothesis: There is a statistically significant correlation between creative ingenuity and sustainable competitive advantage in its dimensions.

2- The second main hypothesis: There is a statistically significant effect between creative ingenuity and sustainable competitive advantage in its dimensions.

Fifth: Society and research sample

The research was applied to a sample of administrative leaders in the College of Education at the University of Al-Qadisiyah, which numbered (105), and the random sampling method was adopted in order to collect the necessary data. 2014: 90-91) The researcher distributed (85) forms to the administrative leaders of the University of Al-Qadisiyah above, and (80) paragraphs were retrieved, and when the forms were sorted and assembled for the purpose of preparing them. The analysis process shows that there are (8) invalid forms for analysis.

Sixthly :Research hypothesis

1-Independent variable: Innovation Ambidexterity

Represents a combination of strategies used by the organization in order to explore and exploit new opportunities in its strategic operations in order to ensure the improvement of its capabilities, activities, internal operations and response to environmental changes, A scale was adopted (Cho et al., 2020:4).

2-Dependent Variable: Competitive Advantage

means the organization's ability to attract customers, build its mental standing as an organization or its products, increase the perceived value of them and achieve their satisfaction. A scale was adopted (Zerang et al., 2018:452)

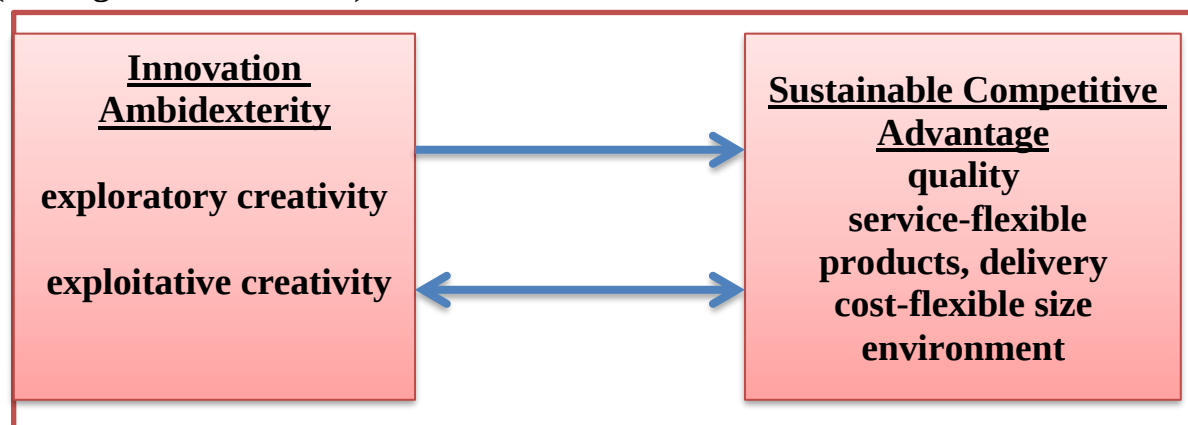


Figure (1) The hypothesis of the research

Literature Review

First: The Concept Innovation ambidexterity

The concept of ambidexterity was first introduced by Duncan in 1976 who was the first to use the term "organizational agility", and then came March 1991 in his landmark article which was cited as a catalyst for the current interest in the concept, to refer to the dual concepts To explore

and exploit in the administrative literature, ingenuity means creativity in work, that is, employers excel in their work, and it is the list of human desire to create in a currency without demand (Raisch&Birkinshaw, 2008: 376).

Creativity represents a basic source for making periodic and radical changes in order to support the capabilities of the organization and improve its performance, and creativity is a dynamic ability that can be achieved through the wise implementation of the organizational processes necessary for product innovation (Forés & Camisón, 2016:831). It is an entrance to motivate organizations to use high-level technology in order to improve their abilities to explore and exploit creativity in the organization in order to achieve a sustainable competitive advantage (O'Reilly & Tushman, 2008: 185). They are also positive behaviors that the organization embodies from achieving organizational success and absorbing the largest possible amount of information (Rose & Manley, 2012: 277). Through the use of exploitative and exploratory creativity. (Rejeb et al., 2019:2) believes that it is the dynamic ability of the organization through which it seeks to achieve short-term returns and invest long-term creative capabilities in order to achieve optimal performance. It is a set of necessary dynamic capabilities that enable the organization to develop its technological capabilities in order to address external threats (Zhang et al., 2020: 1).

Second: Importance Innovation ambidexterity

(Papachroni et al., 2015: 74) indicated that the importance of creative ingenuity emerges in the following points:-

- 1-Source for competitive advantage
- 2- Achieving superior and sustainable performance
- 3- Support the development of strategies necessary to react quickly to the changing nature of internal and environmental conditions.
- 4-Facilitate the transfer of knowledge between different units.
- 5- It facilitates exploration within units, as it makes mutual knowledge and transfer of resources across these borders more difficult.

While both (Kouropalatis et al., 2012:1399) (Liao et al., 2018: 325) see that the importance of creative ingenuity is as follows:-

- 1-Achieving integration by improving the various factors of creativity
- 2-Connecting distinct units to create strategic cohesion.

3-Allocating resources and achieving the reintegration of entrepreneurship units into the mainstream of the organization.

4-Integrative mechanisms reduce the conflict between the competing interests of distinct units.

5-Improving the organization's performance by exploring mechanisms through which it can contribute to developing the organization's capabilities and operations.

6- Improving the organization's ability to make periodic and radical changes.

7- Improving the organization's ability to implement exploratory and exploitative innovation simultaneously.

8- Improving the efficiency and effectiveness of the organization in managing exploratory and exploitative creativity.

Third: The stages of Innovation ambidexterity

The management can apply a set of stages in order to ensure the achievement of creative ingenuity in its folds- :

1-st stage of idea generation

This stage embraces the creative suggestions of others who represent the work group, in order to solve the problem or improve the status quo. There is no doubt that this stage is important in activating the creative process by accepting creative ideas that contribute to solving the problem or lead to the generation of additional ideas, or rejecting those ideas and thus the creative process loses part of its existence (Brem & Voigt, 2009: 360).

2-The stage of accepting ideas

At this stage, the desired creative ideas are adopted and employed, and it is expected at this stage that some modifications will be made to the creative ideas to enable them to be successfully applied (Birkinshaw et al., 2008:831).

3-The stage of realization and implementation of ideas

This stage represents the technical process to determine the value of the new creative management in the organization's environment (ie in a real environment) (Birkinshaw et al., 2008:831).

Fourth: Dimensions of Innovation ambidexterity

Creative ingenuity supports exploratory and exploitative creativity in order to enhance and develop the capabilities of the organization (Batt-

Rawden et al., 2019:1), and thus creative ingenuity can be measured through:

1-exploratory innovation

Exploratory creativity refers to being close to existing customers in order to identify and meet their requirements by developing and building new knowledge and skills specific to the organization (Cho et al., 2020:4). Thus, exploration refers to a group of exploration reinterpreted as a free association, which leads to the achievement of intuitive leaps and links that lead to innovative new groups. Whereas from the perspective of knowledge and learning, exploration can be defined as the pursuit of what can become known. As such, this often involves searches that cut across organizational and technological boundaries. Thus, organizations that seek knowledge outside the industry are likely to generate more valuable innovations, while research within the industry produces incremental change. Exploration allows organizations to create innovative new products, discover previously untapped markets, and develop new resources, capabilities, and efficiencies. It is suggested that exploration benefits organizations in the long run by increasing their effectiveness in terms of market share growth, sales growth and new product introductions. Firms that successfully enter new technological sub-areas are more likely to survive but failed entry attempts exacerbate the current failure (Laplume, 2010: 15-19).

2-exploitative innovation

Exploitative creativity is defined as the proximity of technologies, products, processes and services in order to identify the requirements of customers and work to meet them by expanding the knowledge and skill of the organization (Cho et al., 2020:4). The exploitation of intrinsic capabilities creates a paradox of fundamental inertia that prevents innovation in response to environmental change. Thus the tendency to inertia in the high replacement costs involved in changing the basic capabilities of the enterprise. As the transition from exploitation (which is called static efficiency) to orientation towards exploration (dynamic efficiency) may be curbed by the presence of high costs, opportunity costs, and the need for different types of human resources (Laplume, 2010:15-19).

Fifthly: sustainable competitive advantage

Organizations have a sustainable competitive advantage when existing or potential competitors cannot replicate or be costly to imitate. Organizations' resources must be valuable and oriented toward opportunities/or neutralize threats. These resources must be made scarce. Competitiveness and innovation are able to influence competitive advantage. The capacity and innovation of organizations must be taken into account (2018: 2, Kuncoro & Suriani). (Papula & Volná, 2013:5) believes that achieving sustainable competitive advantage is through continuous development of assets and by creating new organizations' resources and capabilities in response to rapidly changing market conditions. And (Yu et al., 2017:8) defined it as the organization's ability to find something unique and different that distinguishes its products that it offers positively from competitors in the eyes of customers through the organization's performance of its activities in a more efficient and effective manner. It is the ability of the organization to maintain its position in the competitive market, especially small and medium organizations, to survive in front of competitors for a long period of time (Noordin, 2018: 70). It is also the advantage that arises from the development of a set of features and capabilities that cannot be negotiated, imitated, replaced or implemented simultaneously by current and potential (Pratono et al., 2019:3).

Sixth: The importance of sustainable competitive advantage

The importance of sustainable competitive advantage is that it is a criterion for successful organizations to distinguish them by finding unique and distinct models that are difficult to imitate or reproduce their benefits. Its intrinsic ability to adapt to rapidly changing opportunities (Yu et al., 2017:8). The most important goal of any company is to create a sustainable competitive advantage, as most organizations focus on this goal by identifying what customers need and focusing on meeting those needs. When a company achieves a sustainable competitive advantage, it has characteristics that make it successful and superior in performance over its peers. Munyoki, 2016:10). And (Nadarajah, 2013:54) pointed out that sustainable competitive advantage can be considered a mechanism that works to fully maximize the resources of enterprises in exploiting current business opportunities while exploring other resources to ensure the sustainability of their competitive position for

the future on the basis of durability, mobility and repeatability, and then sustainability is a dynamic process. It is not static, but rather requires organizations to adopt change positively.

Seventh: Dimensions of sustainable competitive advantage

1-Quality

Quality is one of the core competitive advantages, and it represents the main objective of the organization's management and its strength, through which it can enhance its competitive position, and quality refers to the extent to which the product in terms of materials used, design and service meet the desires and needs of customers, and that customers are willing to pay higher prices to obtain the product. Or the service if they realize that the organization's product or service is of higher quality than the competing organizations (Shterionov et al., 2018: 219). Quality is the organization's obtaining the expected value that is commensurate with its mission and which requires it to define the expectations and desires of its customers about quality and work to achieve them (Zerang et al., 2018:452).

2-Delivery

It is the best way to deliver the product or service to the customer with speed and accuracy, and this definition indicates the need to adopt accuracy and speed in delivering the product or service to the customer (Luthuli, 2017:2). And (Toshtemirova, 2020:41) defined it as the ability of the organization to reduce the time for product delivery through the difference between receiving the customer's order and fulfilling it. Delivery is one of the most important trends of competition at the present time, through the development and production of products and services and working to deliver them faster than competitors, for example, more than one organization may produce the same product and one of these organizations can deliver it to the customer in two days and other organizations in five days, This speed of delivery will give the first organization an advantage that makes it superior to other organizations (Shobura et al., 2020: 73).

3-Service - Flexible Products

Flexibility in the context of product development refers to the ability of organizations to change or react to changes through a reduction in time, effort, cost or performance, with respect to changes in the business

environment during the period of product development and introduction to the market (Singh, 2004:3). And (Díaz-Garrido et al., 2011:121) indicated that the greater the flexibility, the greater the organization's ability to integrate the required change into the product and its associated processes. It is also becoming increasingly important for organizations operating in a highly dynamic market environment to have a high degree of flexibility in product development to ensure their success in the marketplace.

4-Cost-Size Flexibility

The elasticity of scale refers to the ability to change the overall rate of production quickly and efficiently, as the elasticity of scale should involve a significant change in the performance results (Neele et al., 2014:2). Flexibility in changing size and low cost are considered as the main performance criteria for the organization, as efficiency, reliability, quality and flexibility are among the most important indicators of performance of operational units (Torjai et al., 2015:322).

5- Environment

The environment is considered a competitive priority as it contributes to reducing the repercussions of production activity in the various components of the environment, and this is justified because interest in the environment is increasing and there are multiple repercussions, including social, cultural, economic and political(Liao, 2014: 2). In business, the environment has become a strategic variable because organizations are at the same time causes of environmental problems (consumption of scarce resources, pollution) and part of the solution, as they should and must reconcile patterns of production and consumption (Filatov et al., 2018:107).

Applied Aspect Of Research

description and coding of the research variables and dimensions

First: coding and characterization

It is advisable, before starting to enter the data and subject it to analysis, that it be expressed by a set of expressive symbols in order to create a clear perception for the reader about the variables involved in the analysis, and to clarify the results reached by the research with ease and ease. included in the analysis.

Table (1) characterization and coding of research variables and dimensions

Variables	Dimensions	Number of items	Code
Innovation ambidexterity (ABIN)	Exploratory creativity	4	AIEY
	Exploitative creativity	5	AIEV
sustainable competitive (SVA) advantage	Quality	6	YA
	Delivery	3	YB
	Service - Flexibility of Products	3	YC
	Cost-Size Flexibility	4	YD
	Environment	2	YE

Second: Analysis of the normal distribution of the research data

The normal distribution test is one of the most important tests through which it is recommended to examine the research data included in the analysis before submitting the data to the required tests. Therefore, this matter requires the use of a set of tests to answer this question and extract the necessary results that serve to clarify the nature of the answer to this question, and therefore the tests used and the most common in this regard are the Kolmogorov - Smirnov and Shapiro tests. - Willik (Shapiro - Wilk) who depend on the (P-value), and to be characterized by the acceptance process, the significant value must be higher than (0.05), while if the significant value is less than (0.05), this means that the data are not subject to Normal distribution and parametric tests cannot be used in this regard. It is recommended to use non-parametric tests in order to extract the required results. Table (2) shows the nature of the internal data in the analysis.

Table (2) The normal distribution of the research dimensions and variables

P-value	Sha-Wil	P-value	Kol-Smi	Variable
> 0.05	0.832	> 0.05	0.250	AIEY
> 0.05	0.900	> 0.05	0.166	AIEV
> 0.05	0.872	> 0.05	0.165	YA
> 0.05	0.821	> 0.05	0.234	YB
> 0.05	0.808	> 0.05	0.260	YC
> 0.05	0.752	> 0.05	0.302	YD
> 0.05	0.893	> 0.05	0.203	YE

Third: Descriptive statistics of the research data

1- Descriptive analysis of the Innovation ambidexterity variable

It is noted from the results contained in Table (3) that the general average of the arithmetic means for the variable of Innovation ambidexterity was (3.64), with a standard deviation of (0.913), and a coefficient of variation represented in (25%). (3.66) and a standard deviation of (0.907) and a coefficient of variation equal to (25%), while the dimension of exploitative creativity came in the last rank with an arithmetic mean of (3.62) and a standard deviation of (0.946) and a coefficient of variation amounted to (26%), which indicates the necessity of The directorate should work to develop its capabilities to exploit opportunities in order to excel in its internal operations and support its capabilities in facing threats that prevent its development.

Table (3) Summary of descriptive statistics for the Innovation ambidexterity variable

dimension	mean	standard deviation	Variation coefficient%	importance
Exploratory creativity	3.66	0.907	25%	1
Exploitative creativity	3.62	0.946	26%	2
mean		3.64	standard deviation	0.913
Variation coefficient %				
25%				

2-Descriptive analysis of the sustainable competitive advantage variable

The results contained in Table (4) show that the general average of the arithmetic means for the variable sustainable competitive advantage was (3.8749), with a standard deviation of (.67449), and a coefficient of variation amounted to (26%), and perhaps the dimension that contributed to this is due to the cost - size elasticity with a mean My arithmetic amounted to (3.8894), a standard deviation of (.67590), and a coefficient of variation amounted to (29%), while the dimension of service - product flexibility came in the last rank with an arithmetic mean of (3.9160) and a standard deviation of (.60553) and a coefficient of variation equal to (29%).

Table (4) Summary of descriptive statistics for the sustainable competitive advantage variable

dimension	mean	standard deviation	Variation coefficient%	importance
quality	3.8178	.75871	28%	3
Delivery	3.8638	.75368	29%	4
Service - Flexibility of Products	3.9160	.60553	29%	5
Cost - Flexibility of Size	3.8894	.67590	29%	1
environment	3.8873	.80604	30%	2
mean		3.64	standard deviation	0.913
Variation coefficient %				
25%				

Fourth: Testing the research hypotheses

1- Correlation Hypothesis

This paragraph is concerned with measuring the hypothesis of the correlation between Innovation ambidexterity (an independent variable) with its dimensions (exploratory creativity, exploitative creativity), and sustainable competitive advantage (dependent variable) with its dimensions (quality, delivery, service - product flexibility, cost - size flexibility, environment), and the table shows (5) Correlation Matrix.

Table (5) Correlation Coefficient Matrix

SVA	YE	YD	YC	YB	YA	ABIN	AIEV	AIEY	
.838**	.779**	.873**	.960**	.936**	.935**	.851**	.853**	1	A
.877**	.833**	.897**	.928**	.846**	.811**	.915**	1	.853**	A
.911**	.870**	.926**	.951**	.905**	.863**	1	.915**	.851**	A
.856**	.823**	.863**	.955**	.941**	1	.863**	.811**	.935**	
.883**	.842**	.898**	.971**	1	.941**	.905**	.846**	.936**	
.916**	.870**	.935**	1	.971**	.955**	.951**	.928**	.960**	
.984**	.939**	1	.935**	.898**	.863**	.926**	.897**	.873**	
.985**	1	.939**	.870**	.842**	.823**	.870**	.833**	.779**	
1	.985**	.984**	.916**	.883**	.856**	.911**	.877**	.838**	S
N= 72	Sig. (2-tailed)			**. Correlation is significant at the 0.01 level (2-tailed).					

The results presented in Table (5) show a group of important results about the nature and type of the correlation relationship

1-There is a statistically significant correlation between Innovation ambidexterity and sustainable competitive advantage in its dimensions.

The results contained in Table (5) revealed that there is a statistically significant correlation between Innovation ambidexterity and sustainable competitive advantage, and it reached (911**) and at a level of significance (0.01), meaning that the first main hypothesis is accepted.

2-There is a statistically significant effect between Innovation ambidexterity and sustainable competitive advantage in its dimensions.

The results of Table (6), which represents the structural model of the research that shows the independent variable (Innovation ambidexterity) and the dependent variable (sustainable competitive advantage). The study is according to the approved matching standards, as it can be noted that the chi-square reached (4.903) at a significance level greater than 0.05 as well as the root mean ratio of the residual squares RMSEA, which was found to be less than its own standard of (less than 0.08) as it reached within the tested model (0.075) As for the one-way arrows from the independent variable to the dependent variable, they represent the standard regression coefficients. As for the apparent value at the top of the sustainable competitive advantage variable, it represents the interpretation coefficient (the coefficient of determination) called the standard coefficients (R²), which shows that the creative ingenuity variable is able to explain its percentage. (0.240) of the changes that occur in the variable of sustainable competitive advantage in the studied university, and the remaining percentage (0.670) is attributed to the contributions of other variables not included in the model to study. As shown in Table (6) that increasing the levels of creative ingenuity by one standard deviation will lead to an increase in the levels of sustainable competitive advantage by (0.475) from one standard deviation unit and with a standard error of (0.046) and a critical value equal to (10.304), building On the outputs of the structural model of the influence relationship between the independent variable and the dependent variable, the first main hypothesis of the influence hypotheses is accepted.

Table (6) Standard model estimates for the effect of creative ingenuity on sustainable competitive advantage

المسار			Standard Weight	standard error	critical value	R ²	P
Exploratory creativity	<---	sustainable competitive advantage	0.447	0.046	9.669	0.240	moral
Exploitative creativity	<---		0.408	0.045	9.135		moral
Innovation ambidexterity	<---		0.475	0.046	10.304		moral

Conclusions and Recommendations

First: the conclusions

1-The contribution of optimal exploration of opportunities to improving sustainable competitive advantage has been largely achieved through the search for new opportunities from financial and human resources, the use of new technology and the encouragement of creativity and development

2- The contribution of the optimal exploitation of opportunities to improving the sustainable competitive advantage has been achieved to a large extent through the university's exploitation of all the opportunities available in the internal environment, including the expertise and skills of employees, the technology that exists internally, and the opportunities available in the external environment from financial resources from various sources.

3- The dimensions of creative ingenuity combined have an impact on the sustainable competitive advantage in the university, the research sample by having leaders who are able to compete.

4- The dimension of exploitative creativity came in last place with an arithmetic mean of (3.62) and a standard deviation of (0.946) and a coefficient of variation (26%), which indicates the need for the directorate to develop its capabilities in exploiting opportunities in order to excel in its internal operations and support its capabilities in the face of Threats that stand without its development.

5- Increasing the levels of creative ingenuity by one unit of standard deviations will lead to an increase in the levels of sustainable competitive advantage by (0.475) from one standard deviation unit and with a standard error of (0.046) and a critical value equal to (10.304),

and based on the outputs of the structural model of the influence relationship between the variable The independent and the dependent variable accept the first main hypothesis of the impact hypotheses.

Second: Recommendations

1-The university administration should attract senior leaders who have dynamic and effective capabilities capable of interacting and adapting to changes in technologies, markets and competition, as the challenge faced by managers lies in the integration between internal and external knowledge, not in the balance between investing resources and exploring opportunities.

2-The university should pay attention to providing high quality products compared to competitors in order to push the customer to take an adventure and deal with the university.

3-The need for increased attention to the individuals working in the university, the research sample, in order to put forward new and creative ideas and work on their participation in defining the goals that the university seeks to achieve, as they feel that their participation is effective in achieving success for it.

4-The necessity of holding periodic meetings with the work teams at the university, and this would increase their sense of job stability, fair evaluation of their efforts, and create loyalty to the team and the task it performs, which is reflected in achieving success in the university's performance.

5-Working on paying attention to the results of research that are applied at the university, and benefiting from them in developing work.

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