

The Role of Organizational Ambidexterity in Product Quality

Haeder Jaleel Jabbar¹, Mohammed Yasin Rahim²

Student¹, Teacher Dr²

07709717785

Jaleel.haeder@gmail.com

A Thesis Submitted To the Council of the College of the Administration and Economics Baghdad University, In Partial Fulfillment of the Requirement for the Degree of Master in Public Administration Sciences

Article History: Received: 10 January 2021; Revised: 12 February 2021; Accepted: 27 March 2021; Published online: 28 April 2021

Abstract

The research aims to indicate the relationship between the main variables (Organizational Ambidexterity and product quality) of the research organization (Center Refineries Company) and to know that relationship, the research was applied to a sample of the research community (senior and middle management) of general managers and department managers and the research sample was (100) employees where the researcher used the descriptive-analytical method.

The researcher used a questionnaire as a key tool in the process of collecting and analyzing the data obtained and specialized in research variables, where the research sample was tested through the assumptions of research and used several statistical means to show the relationship between the two variables of research (Organizational Ambidexterity and product quality) and to know the answers to questions raised at the intellectual and applied levels and to indicate the level of correlation and impact relationship and benefit from them by circulating the results to the research field (Center Refineries Company)

The research reached a series of results, the most prominent of which was that the company exercises Organizational Ambidexterity at a high level and this indicates the strength of the link very high, as well as reached that the quality of the product was at a high level with the conclusion of a positive moral effect of statistical significance of the change of Organizational Ambidexterity in its dimensions on the quality of the product in the field of research .

Through the results achieved, we show great interest from senior management in Organizational Ambidexterity and product quality.

Keywords: Cleaning prowess, exploitation, exploration, product quality, middle refinery company (public company)

Introduction

Contemporary organizations are characterized by the main factor of their success, which lies in having Organizational Ambidexterity and providing valuable creations for the organization and society, and there is no doubt that this proposition is not different two, because organizational ingenuity is the basis of the development of organizations and the progress of contemporary organizations, and accomplished organizations have the willingness and tendency to exploit the opportunities available to them in the working environment and at the same time explore new ones, and since achieving the quality of the product is an important goal for all organizations and also foundations for their success and strengthens their position and thus increase the confidence of

customers in the organization and the products it offers, Therefore, they need to be better than their competitors in delivering products, which requires them to constantly improve and change themselves, i.e. they always need to be proficient and work to exploit the opportunities available to them, and to look for new opportunities, in a way that helps them adapt to the environment in which they work in order to stay in their target market and achieve their goals. The one you're looking for, Therefore, we emphasize the importance of adopting regulatory prowess to reduce the likelihood of a decline in the quality of products, and this is what was addressed from its concepts in a theoretical way, so crystallized the idea of the study, which focused on studying the impact of Organizational Ambidexterity in achieving the quality of the product, which is considered the first in linking the variables together and the selection of the company of middle refineries (public company) field of the application side of the study in the belief of the researcher that its management can raise the level of the company to the level of skilled organizations The study included two main hypotheses in addition to the sub-hypotheses, all of which were subjected to numerous tests to ascertain their validity, and the questionnaire was mainly relied upon in the collection of data and information as well as the researcher's determined efforts that enabled him to obtain data and information through field experience and interviews with first-line managers, officials and decision-makers in the company study community.

Chapter 1

Research methodology

First: Search problem

The problem of research comes through the coexistence carried out by the researcher in the company refineries center/refinery cycle and was noted the existence of a major problem represented by (the obsolescence of production units) and the weakness of the procedures for the development of production capacities of the units and this affects and leaves an impression of the weakness of the procedures for the development of production capacity and provided the applicable technology and therefore the lack of demand for the purchase of these products and their lack of competition in the market. Sub-(optimal exploitation of opportunities, exploration of opportunities) as an independent variable and its impact on product quality as a response variable in its sub-dimensions (performance, special features, dependent, conformity, portability, durability, perceived quality) as an attempt to enhance efforts and thus place a great responsibility on the refinery to improve the quality of mixtures and accelerate the upgrading of the quality of oil products and provide the best products, quality, and competition for foreign products, Through this, the refinery management must make some adjustments and procedures in making the transformations based on the most important efficient elements and materials that will achieve them to improve their products in the future, and among those resources was their possession of outstanding, efficient and capable capabilities and high Organizational Ambidexterity, by creating good opportunities and dealing with renewable and advanced technologies. Therefore, several questions must be asked, such as:

- a. What is the degree to which the research sample is directed towards Organizational Ambidexterity and product quality?
- b. Does Organizational Ambidexterity have an impact on product quality?

- c. What is the level of awareness of the officials of the research company of the concept of Organizational Ambidexterity and the quality of the product?
- d. What is the level of Organizational Ambidexterity of the research company and what are its trends? Is it about exploiting or exploring opportunities?
- e. How can the Organizational Ambidexterity of the researched company achieve the quality of the product under theoretical proposals and the results of the applied aspect?

Second: Research objectives

The main objective of the research is to diagnose the nature of the relationship between Organizational Ambidexterity and product quality and to recognize the role of Organizational Ambidexterity in achieving the highest quality of products provided by the company to customers and we can identify the research objectives in the following way :

1. The research seeks to indicate the nature of the relationship between the main research variables (Organizational Ambidexterity and product quality) and its dimensions by tracking the theoretical paths of specialized literature and rooting the knowledge it contains, as well as providing a conceptual framework that describes the interpretive trends of these topics and categorizes the views of theorists on them.
2. Identify the reality of the organization's research sample according to its current performance and then determine the requirements to upgrade the level at which it is best in terms of performance, service, and continuity.
3. Provide those concerned and interested with practical and theoretical information explaining the nature of the research variables, their sources, and causes, the extent of their implications for the research sample, and the extent to which the research company is interested in its dimensions.
4. Testing the correlation and impact relationship, expected between the dimensions of Organizational Ambidexterity (optimal use of opportunities, opportunity exploration,) and dimensions of product quality (performance, special features, dependents, conformity, portability, durability, perceived quality)

Third: The importance of research

The importance of research lies in the importance of its variables, topics, and research elements that he sought to study, and the results and effects it produces on the research organization. We can determine the importance of research by:

1. Scientific importance: The importance of scientific research stems from its variables as organizations today face great challenges aimed at achieving and delivering the best products, forced to adopt new methods, patterns, processes, and programs by trying to reach a high level of exploration and exploitation of opportunities to give them the ability to provide the best products to customers
2. Practical importance: The practical importance of research is manifested in:
 - a. That The importance of the sample, which included the level of leadership working in the company researched at its important levels in the production process and the fact that it represents the main class in the process of making decisions about the quality of products.

- b. The research was conducted on the company refineries al-Wasat (general company) of the Iraqi Ministry of Oil and this company is important by providing oil products of all kinds, as well as the presence of an integrated plant for the production of plastic cans to play those products without going back to the markets to buy them, as it can reflect the research positively not only on the scope of the research community but can benefit from the results of research across the oil sector production companies in general.

Fourth: Search plan

The hypothetical chart of the research aims to clarify the relationships between the main or sub-variables related, and the dimensions of the variables were chosen based on what resulted in the review of the literature of Organizational Ambidexterity and the quality of the product.

1. Independent variable :(Organizational Ambidexterity) consists of sub dimensions (optimal use of opportunities, exploration of opportunities).
2. Variable responder :(Product quality) consists of sub-dimensions (performance, special features, dependent, matching, serviceability, durability, perceived quality)

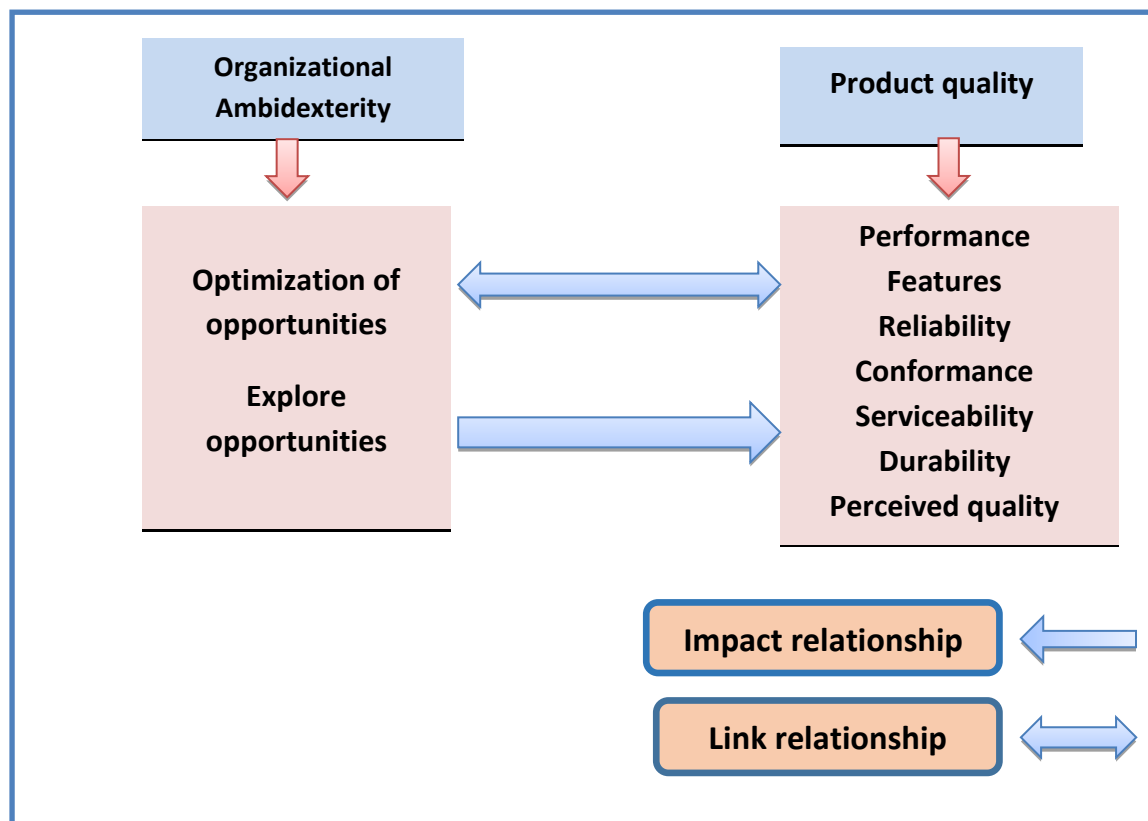


Figure 1: The hypothetical chart of the search

Fifth:

Search

hypotheses

To complete the search requirements and to answer the questions raised in the search problem and test its hypothesis chart, the research adopted a set of hypotheses as follows:

- ❖ The first main hypothesis: there is a morally significant correlation between Organizational Ambidexterity and product quality

This hypothesis stems from the current sub-hypotheses:

- a. There is a morally significant correlation between the optimal exploitation of opportunities and the quality of the product in its dimensions.
 - b. There is a morally significant correlation between exploring opportunities and the quality of the product in its dimensions.
- ❖ The second main hypothesis: there is a morally significant impact relationship between Organizational Ambidexterity and product quality
- The subsequent sub-hypotheses are branched out:
- a. There is a morally significant impact relationship between the optimal exploitation of opportunities and the quality of the product in its dimensions.
 - b. There is a morally significant impact relationship between exploring opportunities and the quality of the product in its dimensions.

☒ **Stability test**

The researcher used Cronbach alpha labs to obtain transaction values as shown in the following table

Variables	Dimensions	Cronbach's alpha- dimensional coefficient	Cronbach's alpha coefficient of variables	Cronbach's alpha coefficient. Scale
Organizational Ambidexterity	Optimization of opportunities	0.876	0.941	0.956
	Explore opportunities	0.916		
Product quality	Performance	0.729	0.917	
	Features	0.717		
	Reliability	0.678		
	Conformance	0.830		
	Serviceability	0.675		
	Durability	0.718		
	Perceived quality	0.743		

Table (2) Factories (Alpha Cronbach)

It is noted from the table above that the value of Alpha Cronbach for the variables of the study and its dimensions was greater than (0.67), as well as the value of Alpha Cronbach for the scale as a whole amounted to (0.956), which is greater than (0.67), i.e. indicates that the research resolution by its measures, variables and dimensions is highly stable, and the researcher can adapt them for different times for the same members of the sample so that it gives the same results .

Chapter 2

The first research: theoretical framework Organizational Ambidexterity

First: the concept and definition of Organizational Ambidexterity:

The roots of the word (ambidexterity) go back to 1976 and it is a Latin word, and the first to invent this term in the literature of management is (Duncan), who indicated that successful organizations need to consider dual structures, different structures that help implement innovation, and he pointed out that Dexterity requires exchange and trade-offs between current capabilities and exploring new opportunities in response to environmental changes (O'Reilly & Tushman, 2008: 193), and ingenuity means in the dictionary (Oxford, 1980: 22) "the power to use both hands at the same time and with equal skill". Thus, skilled organizations seek to achieve a balanced level between the optimal exploitation of opportunities and the search for new opportunities (Simsek, 2009: 597) , and in light of previous studies carried out by several researchers such as Thompson, 1967) (Burns & Stalker, 1961)), which emphasized the need for Organizations to adopt multiple organizational structures to implement current innovations and evaluate innovations (Rasheed and Jaber, 2014, 13). Hence, successful organizations sought to search for new opportunities and have the ability to invest current resources and uncover new potentials, that is, organizations should not have Its goal is defined by future foresight, creativity that is not continuous, targeting customers, but focusing on current customers, additional innovations and evolutionary change. (Siadat & Chaharmahali, 2010: 6).

Cooper & Tarba, 2012:1-2 states that it represents the ability to sustain both progressive creativity, radical creativity and dealing with conflicting activities simultaneously, and emphasizes that the challenge of ingenuity lies in suiting the organization's strategy with its resources of resource practices. Humanity, leadership, team exploration and investment learning, management, and formation of strategic alliances, market agility, manufacturing flexibility, personal interaction with CEO, strategic flexibility, and corporate performance) researchers and writers highlighted the need for organizations to achieve Organizational Ambidexterity, as a capability to enable them From simultaneously pursuing and synchronizing exploratory and exploitative innovation, for better financial performance and long-term survival (Li, 2013: 876). Ingenuity has therefore become an urgent necessity for organizations in light of the momentum of competition in the business environment, contributing to improving the performance of (Elizandra, Vieira & Galdamez, 2018) by increasing their efficiency and flexibility (Xiuxia, Fangwei & Mouxuan, 2018) and thus maintaining their permanence (Mardi et al., 2018 .56).

From the above, it is clear that the concept of organizational ingenuity is manifested in three directions :

Direction 1: Organizational Ambidexterity shows the organization's ability to perform different work simultaneously.

Direction 2: Organizational Ambidexterity is a tool in the hands of the organization to manage contradictions and tensions in current and future dealings.

Direction 3: Organizational Ambidexterity controls both alignment and adaptation, which is one of its characteristics, and this is what Birkinshaw 2008 and Gibson went to.

The procedural definition of the concept of Ambidexterity can therefore be that they are multiple organizational methods that represent the organization's ability to pursue two integrated activities simultaneously, and to manage contradictions and tensions in current and future dealings in all activities and at all organizational levels.

Second: dimensions of Organizational Ambidexterity

A: Optimal exploitation of opportunities

That optimal investment opportunity refers to choice, production, efficiency, application. Exploitation units are greater centrally, operations, and activities related to the organization. It is exploited by continuous change and maximizing efficiency and control of ideal sites (Huang, 2010: 10). PAI, 2007: 24.25) The optimal exploitation of opportunities represents the Organization's ability to improve activities to create value in the near term, designing to meet the needs of existing customers in the current markets and seeks to expand current knowledge and skills and expand current products and services with increased distribution channels Current too. He added (Miles & Darroch, 2006: 496) There are opportunities outside the Organization's strategy or not related to the current strategy, but the evaluation of outside the strategy is active based on opportunities that may tend to identify future opportunities, as they increase the strategic resources of the Organization with Objectives and move towards the direction of complex strategic expansion and integration initiatives.

B: Exploring opportunities

Exploration refers to research activities, first variation, risk, experimentation, maneuvering, flexibility, and discovery. Creativity and the essence of exploration is experimentation with new alternatives whose returns are uncertain, far away and often negative (March,1991:71,85) where exploration includes creativity, fundamental research, invention, risk-taking, building new possibilities, entering new areas of work, investments in the organization's capacity (Koza& Lewin,1998:256), exploration is associated with experimentation of technologies, ideas, models and knowledge, and strategies that try to find new solutions to old problems (Flier,2003:6)

The second topic

Product quality

First: The concept and definition of quality

The word quality is mentioned in English as a translation of the word QUALITY, which is a translation of the Greek word (ποιωτες) created by Plato, and the meaning of quality changes over time but still means the ability of the product or service to meet needs (Balla, 2001;1)

Quality is a difficult concept to define, as it was described (Pfeffer & Coote) in 1991 as a multi-faceted concept (no it contains a variety of meanings, a word that means different things to different people (Sallis, 2005:11)

1. **Product quality:** - The quality of the product is seen as a result, through the quality of the products obtained by the customer, and can be evidenced by the quality by a set of characteristics of our own on the needs and expectations of customers.

2. **The quality of the process:** - The quality of the product depends on the quality of the basic process, as the quality of the process focuses on continuous examination and improvement by focusing on the main variables of the process that have the greatest impact on the product.
3. **Quality of organization:** - The quality of the process depends on the quality of the organization, as the appropriate environment helps to communicate between managers and employees.
From the above, quality can be defined as (generally means many intangible things, but it is a clear fact that reflects the customer's wishes, preferences, product capacity and control over production processes).

Second - Quality Dimensions

Researchers determine the dimensions of product quality as follows:

1. **Performance:** These are the basic operational characteristics of the product or how the function is performed and its features of the product such as color, accuracy, and TV image, this is one of the main characteristics of the product.
2. **Features:** The tangible and additional characteristics of the product are complementary to the basic characteristics, including objective and measurable characteristics, such as the addition of a remote control device to the TV (Gravin, 1987:101)
3. **Reliability:** The product is likely to work properly over a specified period within certain operational conditions. One of the most common measures of reliability is the average time for the first malfunction, the average time between holidays, and the rate of breakdowns occurring over a specified period. (Tyrrel, 2004:7)
4. **Conformance:** It means that the product conforms to the specified criteria in the sense of the extent to which the product conforms to the requirements of the original design under the contract or by the customer. (Burnett et-al, 1993: 46)
5. **Durability:** Is the practical life rate of the product before consuming or replacing the product, and includes economic and technical dimensions. The technical dimension is the amount of benefit the customer receives from the product before it is consumed, but the economic dimension is the amount of benefit that the customer receives from the product before the holiday (Kuhn, 2004:2)
6. **Serviceability:** It is easily and quickly performing maintenance and repairs at a low cost. Consumers are interested Not only does the product malfunction, but also about the time before the service is returned, the time at which service appointments are kept, the nature of transactions with service members, the repetition with which service requests or repairs fail, and after-sales services and their effectiveness. In cases where problems are not resolved directly, the company's complaints processing procedures tend to affect customers' assessment of the quality of the product. (Dilworth, 1992:610)
7. **Perceived Quality:** This dimension represents an indirect assessment of quality and is intended to visualize and impression the customer towards the product generated through the organization's reputation, brand name, brand and other factors. And there's such a Circumstances where conclusions about the quality of reality itself can be very important.

Chapter 3

Practical aspect

Analysis of correlations and impact relationships between research variables

1. Analysis of link relationships between search variables

<div>Variable Independent Variable Adopted</div>		Dimensions of variable Organizational Ambidexterity		Organizational Ambidexterity
		Optimizing opportunities	Explore opportunities	
Dimensions variable product quality	Performance	**0.625	**0.694	**0.704
	Features	**0.631	**0.650	**0.673
	Reliability	**0.408	**0.425	**0.433
	Conformance	**0.622	**0.650	**0.677
	Serviceability	**0.526	**0.576	**0.600
	Durability	**0.503	**0.421	**0.484
	Perceived quality	**0.565	**0.565	**0.610
Product quality		**0.697	**0.715	**0.751
*Correlation was significant at significance level (0.05).				
**Correlation significant at significance level (0.01)				

Table (2) matrix of correlation between Organizational Ambidexterity and product quality

Through the above results, the acceptance of the first main hypothesis that contained "there is a significant correlation relationship between organizational excellence and product quality" appears, and this is what the Spearman ranks correlation coefficient shows for the relationship between the variable, Organizational Ambidexterity, and the variable, product quality (0.751) at the level of significance (0.01).), Which is a strong correlation that is significant and positive in the sense that the increase in the organizational skill variable is matched by an increase in the same direction in the variable product quality.

The Spearman ranks correlation coefficient of the relationship between the dimension of the optimal exploitation of opportunities and the variable product quality (0.697) at a level of significance (0.01), which is a strong correlation and a significant and positive significance in the sense that the increase in the dimension of the optimal exploitation of opportunities is matched by an increase in the same direction in the variable product quality And from the above results, it is evident to accept the first sub-hypothesis of the first main hypothesis in which there is a significant correlation relationship between the dimension of the optimal exploration of opportunities and the variable product quality.

Whereas, the Spearman ranks correlation coefficient of the relationship between the opportunity dimension and the product quality variable (0.715 **) at a significance level (0.01), and it is a

strong correlation and a significant and positive significance in the sense that the increase in the opportunity dimension is matched by an increase in the same direction in the variable product quality. And from the above results, it is evident to accept the second sub-hypothesis from the first main hypothesis that "there is a significant correlation relationship between the opportunity dimension and the product quality variable."

2. Analysis of influence relationships between research variables

Variable Independent Variable Adopted		Optimizing opportunities		Organizational Ambidexterity	
Dimensions of the independent variable	Performance	0.443	77.999	0.535	112.580
		0.666	0.000	0.731	0.000
	Features	0.395	63.932	0.454	81.329
		0.628	0.000	0.673	0.000
	Reliability	0.227	28.826	0.226	28.599
		0.477	0.000	0.475	0.000
	Conformance	0.422	71.454	0.470	86.905
		0.649	0.000	0.686	0.000
	Serviceability	0.265	35.367	0.470	86.905
		0.515	0.000	0.686	0.000
	Durability	0.266	35.509	0.305	42.907
		0.516	0.000	0.552	0.000
	Perceived quality	0.314	44.774	0.238	30.553
		0.560	0.000	0.488	0.000
Product quality		0.530	110.391	0.345	51.583
		0.728	0.000	0.587	0.000
R Square		Value F	value β	moral P	

Table (3) Impact matrix for Organizational Ambidexterity and its first dimension and product quality

It is clear from Table 3 that the variable Organizational Ambidexterity explained the amount (0.345) of the variation in product quality, that the amount (0.655) is an unexplained variation by other factors that did not enter the regression model, and that the moral test at a moral level (0.01)

means that there is an impact of the change of Organizational Ambidexterity in the variable quality of the product, and indicates that the slope curve describes the relationship between them. The above findings show that the second main hypothesis is accepted: "There is a morally significant impact relationship between Organizational Ambidexterity and product quality".

After the optimal exploitation of opportunities, the amount (0.530) of the variation in the variable explained the quality of the product, and that the amount (0.470) is an unexplained variation by other factors that did not enter the regression model, and that the test is moral at a moral level (0.01). In the sense of having an impact after the optimal exploitation of opportunities in the quality of the product, and indicates that the slope curve describes the relationship between them, and the above results show the acceptance of the first sub-hypothesis of the second main hypothesis that it "there is a relationship of moral significance between the dimension of optimal exploitation For opportunities and variable product quality," he said.

Chapter 4

First: Conclusions

Based on the results of the statistical analysis obtained through the test of hypotheses, the research reached a set of conclusions as follows:

1. Increase the interest of Al Wasat Refineries Company (Public Company) in developing its knowledge, which was reflected in the effective development of its products, through the use of previous experiences and experiences in addition to the use of the expertise of international companies in this field.
2. There is support for the company's efforts to develop petroleum products, through the development of infrastructure and technology in such a way that it can absorb environmental changes and quickly deal with them through the presence of an effective human element.
3. The Organizational Ambidexterity in question is available to the respondents with a good degree of agreement, which indicates their positive aspirations as well as the embodiment of the future vision that they hold regarding the challenges that hinder their work.
4. The results showed a significant and positive correlation between the study variables and good levels in the research sample, which confirms the existence of a correlation state between the variable of Organizational Ambidexterity and the variable of product quality dimensions, which leads the researcher to say that increasing the focus on Organizational Ambidexterity by the researched company contributes to raising the levels of The quality of the products provided by it.
5. Based on the results obtained on the existence of a positive, statistically significant effect of the Organizational Ambidexterity on the product quality, the Wasat Refineries Company should strengthen its efforts and continue its orientations towards achieving excellence.

Second: Recommendations

1. Implementing the plans set out in the feasibility study prepared by the Central Refineries Company / Dora Refinery Company for developing its products by providing the funds allocated to these projects or operating the participation of the private sector through long-term investment contracts that are in the interest of the company and achieve its vision in the development process.
2. Trying to take advantage of the academic capabilities available in educational institutions such as universities, represented by scientific expertise (university professors), and research and studies that focus on the problems and obstacles they face to find many solutions and tools.

3. The necessity for the study sample to take into account when carrying out the process of improving the presented product quality dimensions, the ordinal importance of those dimensions.
4. Maintaining a high level of skills and knowledge and increasing the expertise of the higher management of the company, the study sample, in a way that gives it a competitive advantage resulting from its exploratory and investment creative capabilities for the available and future environmental opportunities.
5. Work to provide the requirements to facilitate the process of organizational excellence, such as developing product quality that supports the organizational excellence process, encouraging creativity and innovation processes, and adopting clear visions.

Sources

1. O'Reilly, Charles A., and Tuchman, Michael L. (2008), "Ambidexterity as a dynamic capability: Resolving the innovator's dilemma", Research in Organizational Behavior, Vol. 28, pp. 185-206.
2. Simsek, Zeki (2009), "Organizational Ambidexterity: Towards a Multilevel Understanding", Journal of Management Studies, Vol. 46.
3. Burns, T., & Stalker, G.M. (1961). The management of innovation. London: Tavistock.
4. Rashid and Jabir, Salah Abdul Reza, Najah, (2014), "The Role of Behavioral Integration of the Senior Management Team in Achieving Contextual Prowess", Al-Qadissiya Journal of Administrative and Economic Sciences, Volume (16), Issue (4)
5. Sadat &Chaharmahali S.M., (2010)," Achieving Organizational Ambidexterity :Understanding and explaining ambidextrous organizations " , Master Thesis , Linkoping University .
6. Cooper C. &Tarba S., (2012) ," Ambidexterity in Human Resource Management " .
7. Li, Ci-Rong (2013), "**How top management team diversity fosters organizational ambidexterity- The role of social capital among top executives**", Journal of Organizational Change Management, Vol. 26, No. 5, pp. 874-896
8. Elizandra, S., Vieira, V. A., Galdamez, E. V. C. (2018). The indirect effects of performance measurement system and organizational ambidexterity on performance. Business Process Management Journal, 24 (5), 1176-1199.
9. Xiuxia, S., Fangwei, Z., and Mouxuan, S. (2018). How to solve the dilemma of balancing between efficiency Organizations. Unpublished master dissertation, Blekinge Institute of Technology School of Management: USA.
10. Gibson, B & Birkinshaw, J. (2008). "The Antecedents, Consequences, and Mediating Role of Organizational Ambidexterity". Academy of Management Journal, 47 (2): 209-226
11. Huang, Pei-Wen (2010) "Why and How to be Ambidextrous? The Relationship between Environmental Factors, Innovation Strategy and Organizational Capabilities" University, Kaohsiung , Taiwan bm.csu.edu.tw/tssystem/personal.php%3F
12. Pai, Ashwin(2007)" Overcoming the Innovator's Dilemma through Organizational Ambidexterity within the Indian Pharmaceutical Industry" University of Nottingham.
13. Miles ‘Morgan&Darroch ‘Jenny (2006)" **Large Firms, Entrepreneurial Marketing Processes ‘and the cycle of Competitive advantage**" Journal of European of Marketing
14. March, J. G. (1991), "Exploration and Exploitation in Organizational Learning", Organization Science, Vol. 2 No. 1, pp. 71-87.

15. Koza, Mitchell P., & Lewin, Arie Y., (1998), The Co-evolution of Strategic Alliances, *Organization Science*, Vol. 9. No. 3., pp. 255-264.
16. Lisai, Dan, (2007), —**Choosing and Implementing a Quality Management System at Statistics Sweden**, thesis in Mathematical Statistics, Department of Mathematics, College of Technology at Linköping University
17. Garvin, David A., Competing on the Eight Dimensions of Quality H.B.R. vol. 65. Issue 6 (no - Dec), 1987.
18. Turner, Neil, Swart, Juani, and Maylor, Harvey (2012), "Mechanisms for Managing Ambidexterity: A Review and Research Agenda", *International Journal of Management Reviews*.
19. Kumar S. Anil & Suresh N., (2008), —**Production & Operation Management** Published By New Age International (P) Ltd, New Delhi.
20. -Dilworth, James B. (1992). *Operations Management: Design, Planning & Control For Manufacturing & Services*. McGraw-Hill, New York.