The Role of the Six Thinking Hats in Enhancing Strategic Ambidexterity-A Field Study in Kirkuk Cement Factory

Modaffer Ahmed Hussein¹, Ahmed Abdullah Danook², Mohammed Hussein Jharbi³

¹Northern Technical University, Technical Institute – Hawija, Iraq. Email: mudafer1975@yahoo.com ²Northern Technical University/ Technical Institute - Hawija, Iraq.Email: ahmed.aldanok@yahoo.com ³Northern Technical University/ Technical Institute - Hawija, Iraq.Email: alkarbi2001@yahoo.com

Abstract The study aims to provide an integrated framework for the six thinking hats and strategic ambidexterity, which is one of the most important topics for business organizations to achieve the best in their performance, and to work on measuring the basic dimensions available to the organization. Therefore, Kirkuk Cement Factory was chosen as one of the important organizations in Iraq and which has a major role to raise the level of national industry, from here the problem of the study started, which was formulated with a set of questions aimed at identifying the most appropriate methods of exploiting the six hats to reach strategic ambidexterity. And determine the relationship and impact between the study variables, and to achieve this hypotheses were formulated, and an intentional sample consisting of a group of working individuals was selected, as their number reached (46) individuals, and the questionnaire form was used as a main tool to obtain basic information from the field side, and among the most important conclusions that the study found it is the great interest shown by the management of the organization concerned with the study in the dimensions of the six thinking hats and the dimensions of strategic ambidexterity to achieve a better competitive position.

Keywords: Six Thinking Hats, Strategic Ambidexterity, financial companies

1. Introduction

Strategic thinking has proven beyond any doubt that the field of management has the ability to develop its concepts, methods, methods, and interference in a highly competitive and rapidly changing environment, and perhaps strategic management as a renewed, developed and theoretical field of knowledge, in which there are many trends, perspectives and visions, as it is a wide and spreading field, which It gives clear evidence of the vitality of this field of knowledge, especially after the environment has become high in content.

The Six Hats approach is considered one of the most important modern and relatively advanced alternatives in the field of modern strategic thinking to achieve sustainable competitive advantages. Where the study came within several topics, the first topic dealt with the methodology of the study, and the second topic dealt with the intellectual framework of the study, while the third topic dealt with the field frame of the study. The study was concluded in the fourth section with conclusions and proposals.

International Journal of Supply Chain Management IJSCM, ISSN: 2050-7399 (Online), 2051-3771 (Print)

Copyright © ExcelingTech Pub, UK (<u>http://excelingtech.co.uk/</u>)

2. Methodology

2.1. The research problem

Despite the competition between organizations seeking to excel and improve performance in light of the changing environment, and working within modern directions in order to achieve strategic ambidexterity, our local organizations still suffer greatly from their inability to invest the six thinking hats available to them to increase their effectiveness and performance to reach the degree of strategic ambidexterity. What is required to be achieved, and this is because it relies on traditional strategies that are reflected in the low level of strategic ambidexterity in these organizations, so their success depends basically, it measures its ability to optimally utilize the six thinking hats available to it to achieve strategic ambidexterity in basic aspects that make it more capable of achieving its goals, so this study came to identify these six thinking hats to reflect its role in achieving strategic ambidexterity, and in line with the above The research problem arises through the following questions:

• Do employees realize the dimensions of the six thinking hats in the researched organization?

• Do the six thinking hats have a role in achieving the strategic ambidexterity of the researched organization?

• Does the impact of the Six Thinking Hats dimensions differ on the strategic ambidexterity of the researched organization?

2.2. The importance of research

The importance of the study lies in its handling of a vital issue that organizations, especially Iraqi, need in light of the troubled environmental conditions that they are currently experiencing, in order to know what is available to them in light of the limited capabilities and increase the ability and perception of the individuals researched to identify the six thinking hats and support the available six thinking hats to achieve strategic ambidexterity In order to gain excellence and leadership.

2.3. Research objectives:

The study aims to achieve the following:

• Measuring the contribution of the six thinking hats to the researched organization to achieve strategic ambidexterity in its products at the local and international level.

• Presenting a set of proposals based on the results of the study that would achieve the exploitation of the six thinking hats and achieve strategic ambidexterity at the macro level in the researched organization.

2.4. Research model

The hypothetical model was designed, and the scheme is represented by two dimensions (the independent

dimension represented by the six thinking hats and the second adopted dimension represented by the requirements of strategic ambidexterity) and Figure (1) illustrates the study model:

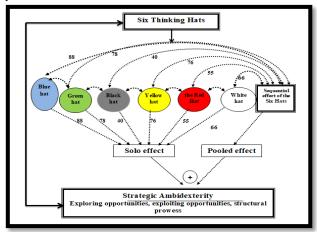


Figure (1) the hypothesis study model

2.5. Research hypotheses

First main hypothesis: (There is a significant correlation between the six thinking hats and enhancing the requirements for strategic ambidexterity in the researched organizations) and the following sub-hypotheses are branched out from it:

1- There is a significant correlation between the white hat and enhancing the requirements of strategic ambidexterity in the researched organizations.

2- There is a significant correlation between the red hat and the enhancement of the requirements for strategic ambidexterity in the researched organizations.

3- There is a significant correlation between the black hat and enhancing the requirements of strategic ambidexterity in the researched organizations.

4- There is a significant correlation between the yellow hat and enhancing the requirements for strategic ambidexterity in the researched organizations.

5- There is a significant correlation between the green hat and enhancing the requirements for strategic ambidexterity in the researched organizations.

6- There is a significant correlation between the blue hat and the enhancement of the strategic ambidexterity requirements of the researched organizations.

Second main hypothesis: (There is a significant effect between the six thinking hats and enhancing the requirements for strategic ambidexterity in the researched organizations) and the following sub-hypotheses are branched out from it:

1- There is a significant influence relationship between the white hat and the enhancement of the requirements for strategic ambidexterity in the researched organizations.

2- There is a significant impact relationship between the red hat and the enhancement of the requirements for strategic ambidexterity in the researched organizations.

3- There is a significant impact relationship between the black hat and the enhancement of the requirements for strategic ambidexterity in the researched organizations.

4- There is a significant influence relationship between the yellow hat and the enhancement of the requirements for strategic ambidexterity in the researched organizations. 5- There is a significant influence relationship between the green hat and enhancing the requirements for strategic ambidexterity in the researched organizations.

6- There is a significant influence relationship between the blue hat and the enhancement of the requirements for strategic ambidexterity in the researched organizations.

Third main hypothesis: (The impact of the Six Thinking Hats varies in enhancing the requirements for strategic ambidexterity in the researched organizations.)

2.6. Data collection methods

A- The intellectual framework: faithfully, we have relied on the descriptive and analytical method for the most important books, studies, publications and periodicals that are mentioned in the Arabic and foreign references, related to the literature of the study.

B- Field framework: faithfully, we relied on the method of the survey, as a questionnaire was designed that was distributed to the sample of the study, and the method of personal interview was also relied on to ensure the correctness of the information contained in this questionnaire after its collection and to obtain useful information about the study sample.

2.7. Research method

a. Descriptive methodology: through the literature related to its topic, including university letters and treatises, periodicals, books and articles that contributed to building the theoretical framework for research.

B. Existing research and normative analysis: The study relied on this approach, which is considered one of the approaches that require the use of such a study for justifications related to the nature of the study and the method of dealing with its exclusion.

2.8. Study limits

A- Time limits: The duration of the study was set from 9/1/2020-20/11/2020, for the purpose of obtaining the necessary data.

B- Spatial boundaries: represented in the Kirkuk cement plant.

2.9. Research tool

The questionnaire was prepared in light of the scientific vision achieved through a survey on the available sources based on (Barhoum, 2013) [1] in the independent variable of the Six Thinking Hats, and was based mainly on what the researchers reported (Al-Karawi, , 2016) [2], (Chen, 2017) [3] In the approved variable, which is the requirements for strategic ambidexterity, because what they presented was a scientific referee, in addition to that the questionnaire was distributed to a number of experts in order to benefit from their experiences on measuring the dimensions of the study and in a manner consistent with the privacy of the researched organizations as productive organizations.

2.10. Statistical analysis tools

In order to come up with accurate indicators, the program (SPSS Ver 19) has been relied upon to perform the required statistical analysis. These tools are as follows:

a. Frequencies, percentages, arithmetic means, and standard deviations to describe and diagnose research variables.

B. Correlation coefficient (Spearman): To determine the nature of the relationship of the independent variables with the dependent variable.

Vol. 9, No. 5, October 2020

C. Simple Regression Coefficient: It is used to determine the effect of one independent variable on one dependent variable.

Dr.. Multiple and gradient regression: to measure the effect between a number of independent variables in a dependent variable, and to measure the variance of the effect.

e. The use of (t) test to determine the significant differences between the research variables, as well as the use of (f) test to determine the influential relationship between the research variables.

2.11. Description of the investigated organization and individuals

a. Description of the researched organization: Kirkuk cement plant, which has been operating since 1984, consists of two production lines with a design capacity of one million tons for each line. The plant produces ordinary Portland cement by the dry method. There are more than (15) departments and a number of divisions and units in the plant. 1200 employees and employees, and there was a good demand for the purchase of cement produced from this factory, as its specifications are high and conform to the Iraqi and international standard specifications, and the laboratory obtained a certificate of quality mark from the Iraqi Central Organization for Standardization and Quality Control as well as the International Quality Certificate (ISO 9001: 2008) from British Accreditation Authority. UKAS.

B. Description of the individuals surveyed: A deliberate sample of working individuals was selected and it was represented in the various specializations that accurately represent the study population and include (observed, director, head of the department, associate director, senior engineer) and as shown in Table (1)

	Table (1) Distribution of the resea	rch sample.		
Variable	Categories	Number	Ratio	
Age	Less than 35 years old	1	2.17%	
-	36-45	1	2.17%	
	46-55	10	21.74%	
	More than 55	34	73.92%	
	Total	46	100%	
Qualification	Middle school	17	36.95	
	Diploma	10	21.74	
	Bachelor Degree	19	41.31	
	Total	46	100%	
Number of years of Job	Less than 15 years old	1	2.17%	
	16-20	13	28.26%	
	21-25	10	21.74%	
	More than 25	22	47.83%	
	Total	46	100%	
Administrative position	Observed	7	15.21%	
	Director	20	43.47%	
	Head of the Department	13	28.26%	
	Associate director	3	6.53%	
	Senior Engineer	3	6.53%	
	Total	46	100%	

Table (1) Dist	ribution of the	research sample	e
----------------	-----------------	-----------------	---

2.12. Reasons for choosing the researched organization

a. The choice of the researched organization came as a scope for the study, as it is one of the important public organizations with global specifications and achieves a lot of profits, so it needs continuous studies to develop its performance in the best way.

B. The reason for the conditions that Iraq is going through, which have a great impact on the work and production of the researched organization and the suspension for long periods. Therefore, this study was presented to reach positive results through which the employees achieve greater interest in the available core capabilities to achieve excellence at the macro level when required.

3. Theoretical Framework 3.1. Six Hats

3.1.1. The Six Thinking Hats Concept

The process of translating the idea of the six hats of thinking goes back to the British doctor and thinker (Eduardo Bono), and he succeeded in dividing the thinking patterns of a person into six types called the six hats, so that each pattern of thinking symbolizes a specific color according to his way of thinking, as he confirmed that the program of learning modern thinking he developed British doctor De Bono (De Bono), through studying and analyzing the thinking process, and the thinking patterns of man, in order to organize and divide it so that it can be dealt with, and among the most prominent results are the six hats in thinking [4]. With the aim of reaching a balanced result from the thinking process, the idea of hats is the division of thinking into six patterns, each pattern as a hat that a person wears or takes off according to his thinking method at that

moment and this method is distinguished by that it gives the individual in a very short time a great ability to be superior and successful In scientific and personal situations, and that it transforms static attitudes into creative ones, it is also a method that teaches us how to coordinate various factors to reach creativity [5]The Six Hats is a method based on developing creativity and improving thinking and allowing the transition from one mode of thinking to another, so that the thinking pattern is determined according to the color of the hat, while he stressed that de Bono's choice of hats was based on an idea that (usually the hat does not stay long on the head because we quickly change it by changing circumstances, and so are the ideas, we may admire an idea at a certain time, and abandon it at another time, like a hat that we cannot wear for a long time, and the idea should not live long in us, if it is subject to change according to the time of need for it [4].

Within the framework of the foregoing, it can be said that the Six Thinking Hats is a set of procedures and activities that, if used in a correct way, would have us quickly choose the appropriate style of thinking, and use it at the right time, so it provides us with several alternatives of thinking, and according to De Bono's opinion (White Hat, Red Hat, Black Hat, Yellow Hat, Green Hat, Blue Hat).

3.1.2. The six types of hats and their characteristics

A. The white hat: Symbolizes neutral thinking, and this thinking is based on inquiry in order to obtain facts and figures. Among its characteristics, it is special to think about facts, information and data about an issue. When asked to wear a white hat, this means leaving the discussion and controversy aside, and thinking about data and information through several questions What are the available data? What is missing data? What data is needed and how to obtain it? The best time to use this hat is at the information gathering stage on an issue, in order to encourage the parties to listen to each other about new information[6]

B- The red hat: symbolizes emotional thinking, that is, it is the opposite of neutral thinking that is characterized by objectivity, as it is based on what lies in the depth of emotions and feelings, and this thinking is based on feeling and feeling that there may not be words to express. Among her characteristics, his mother always shows his feelings and emotions, with or without reason. It is concerned with feelings even supported by facts and information. He tends to the human or emotional side and his opinions and thinking be on an emotional basis, not logical. [7]

C- The black hat: It symbolizes negative thinking that leads to caution, pessimism, criticism, and thinking about risks and losses, and this thing is not required when making decisions. Among its characteristics are pessimism and lack of optimism about the prospects for success. Focus on the possibility of failure. It focuses on obstacles and failed experiences, and is its captive. [8]

D. The yellow hat: It refers to positive thinking, and it is taken from the color of the sun, the symbol of growth and the source of energy. When wearing the yellow hat, you think about the positive aspects of the idea, how this idea increases our income, for example, or how it improves the conditions of work and life. Among its characteristics is the interest in the available opportunities and the eagerness to exploit them. And an invitation to the valuable benefit or the desired feasibility that can be obtained. And reduce the possibility of failure. And encouraging the love of production and achievement. [9]

E- The green hat: symbolizes creative thinking, and de Bono chose green to be a symbol of creativity, that it is like the growth of a large plant from a small planting that it is growth, that it is thinking and out of old ideas, and the importance of creative thinking is more than jealousy of thinking, so when we proceed to This thought on purpose, we are extracting ideas that go beyond the thinking that normally exists. Among its characteristics is the eagerness to provide new ideas, opinions, concepts, experiences and means. And trying to develop new ideas. Willingness to take risks and explore the new.[10]

F. The blue hat: This hat symbolizes holistic thinking that it is general view thinking, and the reason for choosing the blue color is due to: The color of the sky is blue and it covers everything and includes everything under it. And because the blue color implies the awareness and strength and direct the thinking necessary to reach the best result, which is the result of controlling thinking, evaluation and perception of things in a constructive window, and the blue hat is (the thinking agenda hat). Among its characteristics, it programs and arranges its steps in an accurate manner that is characterized by comprehensiveness and management in most matters. And he accepts all opinions, analyzes them, and then is convinced of them. And he can see the hats of others and respect them and distinguish them.[11]

3.1.3. The application of the Six Thinking Hats

There is flexibility in wearing hats and moving between them, and this reflects the ease of using these hats and arranging them, and there are multiple steps for using the six hats, commensurate with the nature of the topics and the logical sequence of presenting their content, and include the following [12]:

A. Start with a white hat to gather related information.

B- Finishing with the blue hat to control thinking and correct the work of the previous hats.

Therefore, people's minds are uneven, and each person has a certain volume of thinking, and it is correct that minds are one and all the difference and disparity is in thinking, and the scientist (Edward Bono) put six colored hats that people wear each according to his thinking, and the six hats have two basic uses in general, they are [13]:

1- Individual use of hats: a single individual hat is used for a limited period of time to adopt a specific thinking pattern, for the purposes of writing a report or conducting a business, meeting, conversation, position or giving a lecture.

2- Sequential and sequential use of hats: Here hats are used one after the other, with the aim of researching or exploring a specific topic, for example the white hat, then the red hat, and we use this method when time is short and thinking is random and not directed, and there are different, divergent and converging beliefs and ideas, and we mention that there is no One correct sequence, and it is not necessary to use all the caps in the whole sequence, and accordingly the sequence can be divided to use thinking hats according to the following different figure (2):

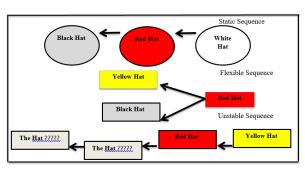


Figure (2) Methods for using hats accordingly

It can be said that the six hats have many benefits that appear when they are used, including [14], [1]

• Its contribution to building quality systems.

Reducing conflicts, disagreements and disputes.

• Its contribution to building effective ways of working.

It makes meetings and discussions more effective.

• It encourages creativity.

• It improves the quality of thinking, performance and efficiency.

• Easy to learn and use.

• It gives time for effort and creative ideas.

3.2. Strategic Ambidexterity

3.2.1. The concept of strategic ambidexterity

Successful adept organizations are those that are characterized by the synergy between exploring and exploiting opportunities supported by integrated structural prowess. [15] is defined as strategic ambidexterity as the dynamic ability of the organizations level to accommodate the interpretation of knowledge from its various sources to order Promoting strategic thinking for the future of the organization, meaning that whenever there is a diversity of information the more space is opened for these organizations to enhance their ability to explore opportunities, exploit them and restructure them as required. [16] That strategic ambidexterity is the ability of organizations to discover opportunities And investing it before competitors, especially with regard to advanced technology, discovering new markets and meeting their needs in a timely manner. [17] It was also emphasized that strategic ambidexterity is that feature through which organizations can explore opportunities and invest them at the same time in order to achieve efficiency, control and continuous improvement [18]. In light of this, organizations achieve harmonization between the dimensions of strategic ambidexterity (exploring opportunities, exploiting opportunities, structural prowess) to provide the appropriate work environment through market requirements and relying on high quality and technology that affects the organization's long-term performance, and this allows organizations to deal with market variables That is, the ability to respond to customer demands and market needs at the lowest costs and in a timely fashion [19].

Strategic ambidexterity means the organization's ability to perform various competing strategic activities and actions in a manner that applies the current strategy while developing the future strategy at the same time. [20] The term strategic ambidexterity lies in the ability of strategic leaders in the organization to make strategic choices in the face of intermittent changes as well as the ability of strategic ambidexterity in the organizations 'sense of identifying and assessing opportunities and threats, and utilizing all material and human resources to meet competitors' challenges [21]. The strategic ambidexterity represents the interaction and overlap in the capabilities of the system to harmonize between (avoiding organizational chaos) and (avoiding organizational deficiency) carried out by the organization at the same time to enhance the two elements of innovation and activity [22]

In line with the above, types of strategic ambidexterity can be illustrated through the matrix that presented by [23] which shows us that there are four types that organizations take into consideration, namely:

- Regular proficiency means exploring and seizing opportunities at the same time.

- Conservative dexterity emphasizes exploring or exploiting opportunities.

- Cyclical prowess means exploring and exploiting opportunities but not simultaneously.

- Abnormal ingenuity means exploring and exploring opportunities but switching between more than one.

3.2.2. The importance of strategic ambidexterity

Most writers and researchers agree that strategic ambidexterity is of great importance Through it, organizations can deal with environment data intelligently and knowingly through the optimal utilization of available resources in the internal environment and exploring opportunities in the external environment. The importance of strategic prowess is as follows: [24] [25] [26]

A. Achieving long-term success for organizations through a balance between exploring and exploiting opportunities this reflects positively on the performance indicators.

B. Business organizations are given a range of options for generating significant results about managing contradictions

And the tensions in the current and future dealings to achieve perfection and creativity.

C. Enabling business organizations to diversify their skills by combining current opportunities and future visions under conditions characterized by a high degree of environmental uncertainty.

D. Helping the organization develop its capabilities to shift towards new opportunities and how to create them in the short term

In order to achieve the value that is the basic condition for the success of organizations

E. Its importance is emerging as a means of new activities and pathways that help in change and organizational excellence to match it environmental developments in light of market competition.

3.2.3. Dimensions of strategic ambidexterity

Researchers describe strategic ambidexterity through a range of dimensions it came after analyzing and interpreting the aspects related to it to give an objective, realistic picture considering that these dimensions represent the focal point for organizations to achieve excellence and distinction, the two researchers agree determine the dimensions of strategic ambidexterity with what was brought by both [27] [3], [2] that:

A- Exploring opportunities: This strategy leads to product development and the search for markets new and prospective clients, and the achievement of expansion in creativity and maturity of modern ideas, also represents an approach a strategy to explore opportunities to adapt and prepare for market changes and form new distribution channels therefore, the organizations resort to the external environment to explore the opportunities surrounding them, which ensure improvement and development of products, when organizations are able to identify the opportunities and suitable areas for them, they must take into account the strength of the competing organizations and the organization is supposed to be able to invest all opportunities and accuracy of work through the possession of material and human resources that enable them through available technology to deal with it and create the desire to reduce any adventure that accompanies the opportunity seizure[2]

B- Exploiting opportunities: this strategy represents the optimum utilization of the organization's capabilities to improve its activities and works to ensure the creation of value for those activities in the short term, where these are focused the strategy is to meet the needs and desires of current and potential customers in the markets and seeks to expanding the current knowledge and skills of the organization to ensure the expansion of the current products with the increase of the distribution outlets, and all this comes through a programmed investment of the available opportunities derived from the chain of expectations and forecasts to identify and see the areas under the influence of the organization's capabilities, as the opportunity an essential factor for adopting and implementing the strategy [28]. The essence of this strategy is achieving competitive advantage by identifying customers' needs and expanding services to them before most of the competitors are in the market, that is, they follow an innovative, exploitative strategy that is considered in the first place on exploiting the opportunities surrounding it in the external environment such as improvement, selection, efficiency and implementation, and that thinking and focusing on the strategy of exploiting opportunities can be [3]:

- Marketing of existing products into new markets and sectors (market development strategy)

- Development of existing products in existing markets and sectors (product development strategy)

- Follow a vertical integration policy to introduce new products to customers (diversification strategy)

- Follow the strategy of horizontal integration of products (controlling or merging with the competitor)

- Exploiting opportunities through a diversification strategy focused on increasing sales

C- Structural prowess: This dimension is based on the organization separating coherent activities such as research and development by creating separate structures for each group of activities as they are different and cannot be they coexist effectively, as some researchers argue that work teams should be adept at their use of strategies and their ability to improve work performance, and many studies indicated that structural prowess is not just about structures, it includes building ingenious systems, processes and facilities that require establishing independent structures, each with its own strategy (Structures, systems, cultures, incentives) Therefore, the concepts of dividing structures have its roots in the literature of organizational design to

achieve compatibility between visions the joint team working in the senior management, which in turn enhances the market position of the organization in competitive markets [29].

4. Results

Hypothesis testing: In preparation for measuring the effect and correlation between the study variables and its dimensions, the researchers used the correlation coefficient (Spearman), as follows:

4.1. Test the first main hypothesis

It is evident through the results presented in Table (2) that there is a positive significant correlation between the six thinking hats and the requirements of strategic ambidexterity, as the correlation coefficient of the overall index between them reached (0.773 **), which is a positive and significant relationship. This result supports what the researchers assumed in the first hypothesis and a justification for accepting it.

Table (2) Results of analyzing the correlation between the six thinking hats and enhancing the requirements for strategic ambidexterity in the researched organization

Independent variable Dependent variable	Six Thinking Hats
Strategic Ambidexterity	0.773**
Dependent variable	

0.773** Strategic Ambidexterity

The table was prepared by researchers based on electronic computer results .*P $\leq 0.01~$ N=40

4.2. Test the sub-hypotheses of the first main hypothesis

The results of the analysis in Table (3) show that there is a significant correlation between the six individual thinking hats and the requirements for strategic ambidexterity, as the value of the correlation coefficient between the white hat and the requirements of strategic ambidexterity amounted to (0.535 *) and this indicates On acceptance of the first sub-hypothesis, the value of the correlation coefficient between the red hat and the requirements of strategic ambidexterity was (0.415 *), which proves the validity and acceptance of the second subhypothesis, and the value of the correlation coefficient between the black hat and the requirements of strategic ambidexterity was (0.272), which is a negative result Denotes the rejection of the third sub-hypothesis and acceptance of the null hypothesis, As for the value of the correlation coefficient between the yellow hat and the requirements of strategic ambidexterity, it reached (0.765 **), which is a positive result indicating the acceptance of the fourth sub-hypothesis, and the value of the correlation coefficient between the green hat and the requirements of strategic ambidexterity amounted to (0.822 **) and this indicates acceptance of the hypothesis The fifth subset, and the value of the correlation coefficient between the blue hat and the requirements of strategic ambidexterity was (0.852 **), which is a result that proves the validity and acceptance of the sixth sub-hypothesis.

Table (3) Results of the correlation analysis between the six individual thinking hats and the requirements for strategic ambidexterity of the researched organization

Independent variable Dependent variable	Six Thinking Hats						
Requirements Strategic	Blue hat	Green hat	Yellow hat	Black hat	the Red Hat	White hat	
Ambidexterity Exploring opportunities, exploiting opportunities, structural prowess	0.852*	0.822**	0.765**	0.272	0.415*	0.535*	

4.3 Testing the second main hypothesis

The results of Table (4) indicate the effect of the six thinking hats combined in enhancing the strategic ambidexterity requirements in the researched organization, through the impact factor (R2) of (0.63), and this means that 63.0% of the impact is due to the six thinking hats combined, while the rest of The effect ratio refers to random variables that are not included in the study model, and the value of (F) calculated (* 40.05) is greater than its tabular

value of (4.16) at two degrees of freedom (1.38) and with a significant level (0.01), and this indicates that the regression model is acceptable In his interpretation of the relationship, and by following the beta coefficients, it becomes clear that (1) is (1.518), which is a significant value in terms of (t) computed of (* 9.32), which is greater than its tabular value of (4.16) at a significant level (0.01), These indicators prove acceptance of the second hypothesis.

Table (4) The effect of the six thinking hats combined in enhancing the requirements for strategic ambidexterity of the researched organization

Independent variable Dependent variable	Six Thinking Hats				
	β_1	R ²	F Calculated	T Calculated	
Requirements Strategic Ambidexterity	1.518	0.63	*40.05	9.32	

4.4. Testing the sub-hypotheses of the second main hypothesis

The results of the regression analysis shown in Table (5) indicate that there is a significant effect of each of the six thinking hats alone in enhancing the strategic ambidexterity requirements in the researched organization, where the effect of the white hat in enhancing the strategic ambidexterity requirements was achieved through the value of the impact factor (R2) of (0.432), and it indicates the percentage of the effect of the white hat in enhancing the requirements of strategic ambidexterity in the researched organization is (43.2%), while the complement of the ratio is due to random variables that are not included in the study model and cannot be controlled, and the calculated value of (F) is (11.22) It is greater than its tabular value of (3.45) at two degrees of freedom (1.38) and with a significant level (0.01). Since the calculated value of (F) is greater than the tabular, this indicates that the white hat has a positive and significant effect in enhancing the requirements of the hypothesis in the researched organization. t) The computed amount (10.55), which is greater than its tabular value of (4.33) at a significant level (0.01). These indicators help to accept the first sub-hypothesis.

The effect of the red hat in enhancing the strategic ambidexterity requirements in the researched organization is also noted through the value of the impact factor (R2) of (0.355), and it indicates the percentage of the effect of the red hat in enhancing the strategic ambidexterity requirements in the researched organization which is ((35.5%). It refers to random variables that are not included in the study model and cannot be controlled, and the value of (F) calculated (9.44) is greater than its tabular value of (3.45) at two degrees of freedom (1.38) and with a significant level (0.01), and since the value of (F) The calculated is greater than the tabular, this indicates that the red hat has a positive and moral impact on enhancing the requirements of strategic ambidexterity in the researched organization. By following the beta coefficients, it becomes clear that (1) is (0.643), which is a significant value in terms of (t) computed of (8.46), which is greater than its tabular value of (4.33) at a significant level (0.01). These indicators help to accept the second sub-hypothesis.

The effect of the black hat in enhancing the requirements of the distinguished performance in the researched organization is also noted through the value of the impact factor (R2) of (0.198), and it indicates the percentage of the effect of the black hat in enhancing the strategic ambidexterity requirements of the researched organization which is (1.98%), while the complementary ratio It refers to random variables that are not included in the study model and cannot be controlled, and the value of (F) calculated (1.88) is smaller than its tabular value of (3.45) at two degrees of freedom (1.38) and with a significant level (0.01), and since the value of (F) The calculated is smaller than the tabular, this indicates that the black hat affects the enhancement of the strategic ambidexterity requirements in the researched organization negatively, and through the follow-up of beta transactions. It turns out that (1) is (0.130), which is a significant value in terms of (t) computed of (2.01), and it is smaller than its tabular value of (4.33) at the level of significance (0.01). These indicators indicate the rejection of the third subhypothesis and acceptance of the null hypothesis.

The effect of the yellow hat in enhancing the strategic ambidexterity requirements in the researched organization is also noted through the value of the impact factor (R2) of (0.620), and it indicates the percentage of the effect of the yellow hat in enhancing the strategic ambidexterity requirements in the researched organization which is (62.0%). It refers to random variables that are not included in the study model and cannot be controlled, and the value of (F) calculated (30.32) is greater than its tabular value of (3.45) at two degrees of freedom (1.38) and with a significant level (0.01), and since the value of (F) The calculated is greater than the tabular, this indicates that the yellow hat affects the enhancement of the strategic ambidexterity requirements in the researched organization positively and morally. By following the beta coefficients, it becomes clear that (1) reaches (0.801), which is a significant value in terms of (t) calculated of (14.19), and it is greater than its tabular value of (4.33) at a significant level (0.01). These indicators help to accept the hypothesis. Fourth sub.

The effect of the green hat in enhancing the strategic ambidexterity requirements in the researched organization is also noted through the value of the impact factor (R2) of (0.698), and it indicates the percentage of the effect of the green hat in enhancing the strategic ambidexterity requirements of the researched organization which is (69.8%), while the complementary ratio It refers to random variables that are not included in the study model and cannot be controlled, and the value of (F) calculated (55.62) is greater than its tabular value of (3.45) at two degrees of freedom (1.38) and with a significant level (0.01). Since the calculated value of (F) is greater than the tabular, this indicates that the green hat affects the enhancement of the strategic ambidexterity requirements in the researched organization positively and morally. t) the computed amount (19.36), which is greater than its tabular value of (4.33) at a significant level (0.01). These indicators help to accept the fifth sub-hypothesis.

The effect of the blue hat in enhancing the strategic ambidexterity requirements of the researched organization is also noted through the value of the impact factor (R2) of (0.770), and it indicates the percentage of the effect of the blue hat in enhancing the strategic ambidexterity requirements in the researched organization which is (77.0%), while the complementary ratio is) It refers to random variables that are not included in the study model and cannot be controlled, and the value of (F) calculated (78.74) is greater than its tabular value of (3.45) at two degrees of freedom (1.38) and with a significant level (0.01),

Since the calculated value of (F) is greater than the tabular, this indicates that the blue hat affects the enhancement of the strategic ambidexterity requirements in the researched organization positively and morally. t) the computed amount (20.88), which is greater than its tabular value of (4.33) at a significant level (0.01). These indicators help to accept the sixth sub-hypothesis.

Table (5) The effect of the six individual thinking hats to enhance the requirements for strategic ambidexterity in the
researched organization

Dependent variable	Requirements Strategic Ambidexterity						
Independent variables	β_1	R ²	βο	T Calculated	F Calculated	F tabular	
White hat	0.722	0.432	0.510	10.55	11.22		
Red Hat	0.643	0.355	0.421	8.46	9.44	3.45	
Black hat	0.130	0.198	0.651	2.01	1.88		
Yellow hat	0.801	0.620	0.224	14.19	30.32		
Green hat	0.927	0.698	0.200	19.36	55.62		
Blue hat	0.955	0.770	0.471	20.88	78.74		

4.5. Testing the third main hypothesis

The content of this analysis reflects the testing of the hypothesis of the third main study, and it will be verified using gradient regression analysis and at the general level of the investigated organization, as Stepwise Regression analysis is an effective tool to clarify the variance of the effect between the independent variables in the dependent variable, as well as the arrangement according to the priority or importance of that effect. The gradient regression of the Six Thinking Hats variance test will be analyzed in terms of the size of the impact and its importance in enhancing the strategic ambidexterity requirements. As it is evident from the tables (6) the variation in the effect of each of the six thinking hats in enhancing the requirements of strategic ambidexterity, in terms of the importance of the effect and its size, and through many stages we notice the change of the amount of the effect in terms of R2, as it reached in the first stage an amount of (67.5%) with all the variables In the second stage, (the red hat and the black hat) were excluded, and R2 reached (75%). This means that (the white hat, the yellow hat, the green hat, and the blue hat) has an impact of 75%) in enhancing the strategic ambidexterity requirements. This is an indicator of the variation of the effect, which is helpful for accepting the third hypothesis, and in the third stage (the red hat, the black hat, and the white hat) was excluded, so R2 reached an amount (81.2%), and this means that (the yellow hat, the green hat, and the blue hat) constitutes Its effect (81.2%) in enhancing the requirements of strategic ambidexterity. These indicators show the extent of the variation in the effect, which supports and confirms the acceptance of the third main hypothesis.

Vol. 9, No. 5, October 2020

*30.122

3.45

The third

terms of mil	boltance and influence in enhancing the strategic antoidexterity	requirei	ients of the	Tesearched orga	amzation	
	Statistical indicators	R ²	β_1	F		
Stage	Variables included in the model	K	PI	Calculated	Tabular	
First	White Hat, Red Hat, Black Hat, Yellow Hat, Green Hat, Blue Hat	0.675	0.421 *(2.633)	*23.112	2.45	
the second	White Hat, Yellow Hat, Green Hat, Blue Hat	0.750	0.301 *(2.012)	*26.446	3.45	

Yellow Hat, Green Hat, Blue Hat

Table (6) The results of a graded regression analysis to show the variation in the impact of the six thinking hats grouped in terms of importance and influence in enhancing the strategic ambidexterity requirements of the researched organization

5. Conclusions and proposals

1- The results of the analysis found a significant correlation between the six thinking hats and the requirements for strategic ambidexterity in the researched organization, at a rate of (0.773%).

2- The results of the statistical analysis and the T-test showed that there is a positive role for the six thinking hats in enhancing the strategic ambidexterity requirements for a better competitive position in providing products in the researched organization.

3- The analysis indicated that there was a significant effect of the six thinking hats combined in enhancing the strategic ambidexterity requirements in the researched organization, where the impact percentage reached (63%).

4- The results of the analysis show that each of the six thinking hats has a significant effect on enhancing the strategic ambidexterity requirements of the researched organization, with the exception of the black hat.

5- The results of the analysis showed that there is a variation in the impact of the six thinking hats in enhancing the strategic ambidexterity requirements of the researched organization.

5.1. The proposals

1- Working to increase support for all material and moral resources in order to be able to employ the six thinking hats and work with them in the research organization to achieve the highest levels of strategic ambidexterity.

2- Focusing on preparing training programs to develop the intellectual capabilities of department heads, as it is an imperative to teach intellectual skills and provide them with the necessary experiences in the research organization.

3- Working to encourage the use of creative thinking as a successful strategy that can be adopted to achieve the strategic ambidexterity of the researched organization.

4- Focusing on using the Six Thinking Hats in the immediate and future decision-making process and improving the level of performance of the researched organization.

5- Working at the strategic prowess approach requires making changes in specific skills and attitudes through training and development, by determining the extent to which the organization needs to use expertise that has multiple thinking styles to obtain positive and tangible results.

References

[1] Barhoum, Khamis Jumaa (2013) The effect of using the Six Thinking Hats strategy on developing creative thinking and technology decision-making skills among tenth grade students, Master Thesis, College of Education, Islamic University Gaza, Palestine.

0.231

*(1.985)

0.812

- [2] Al-Karawi, Muhammad Thabet, (2016) The role of strategic prowess pillars in enhancing and building a reputation Higher Education: An Applied Study of a Sample of Professors from Private Universities in Al-Najaf, Journal of Administration and Economics, Volume (5) Issue (20), P26.
- [3] Chen Yan, (2017), Dynamic ambidexterity: How innovators manage exploration and
- exploitation, School of Business, Stevens institute of technology castle point on Hudson, Hoboken, NJ, No.70, U.S.A.p.85
- [4] Mary, P & Joanes, W (2004), BeDONO Six Thinging, nats as an approach, to ethical dilemmas in pharmacy, American jornal of pharmaceutical education 68, N, 2, ARTICLS54.p.34
- [5] Kenny, I, (2003), using Edward de bonos six hats game to aid critical thinging& reflection in palliative care in ternational journal of palliative uursing 9.p.200
- [6] Al-Thabit, Ziad (2010), De Bono and the Six Thinking Hats, The Mischief of Education, Issue (1), Volume (25), p. 11
- [7] Pal. P (2004), Six thinking hats, retieved, oct3, from/ www.geocities co. p.19.
- [8] Robert, Marzano, and others (2004), Dimensions of thinking, a framework for curriculum and teaching methods, second edition, Dar Al-Furqan, Amman, p. 14.
- [9] Al-Suwaidan, Tariq, and Al-Adlouni, Muhammad (2002), The Principles of Creativity, Al-Ibdaa Company, Kuwait. Economic and Management, Volume 3, Issue 15. p. 1
- [10] Al-Madhoun, Hanan (2012), The Effect of Using the Thinking Hats Program on the Development of Creative Thinking Skills in the Study of Human Rights among Sixth Grade Students in Gaza, Master Thesis, Unpublished, College of Education, Al-Azhar University, Gaza, and Palestine, p. 48
- [11] Hecerian, B. S. (2004), The EFFECTS of Six thinking Method on effective Learning in biology the fifth international, conference on creative thinking, university of malta. P.55
- [12] Radwan, S (2012), The effect of using the thinking hats strategy on developing scientific concepts and decision-making skills among female eighth grade female students in Gaza, Master's thesis, College of Education, Islamic University, Gaza, Palestine. P. 98

- [13] De Bono Edward (2006), The Six Thinking Hats, translated by Sherine Mohsen, The Renaissance of Egypt, Cairo, p. 66
- [14] Al-Ashawi, H Abdullah (2008), Teaching cognitive and metacognitive thinking skills and strategies for the ordinary and backward, Dar Al-Ashawi, Riyadh, p. 17.
- [15] Judge William Q., Blocker Christ, Pher P., (2008), Organizational Capacity for change and Strategic Ambidexterity Flying the Plan with rewiring it European, Journal of Marketing Vol. 42, No 10.p.18
- [16] Baharati Pratyush, Kui Du., Chandhary Abuja., and Agranal W., (2015), Enabling Organizational Ideation with Cognitive Dexterity using Social Media: An Exploratory Study, Proceedings of the Twenty first Americas conference on information system, Vol.10, No.6, August.p.2
- [17] Tushman Michael L., (2013), Organizational Ambidexterity: Past, Present and Future, Academy of Management Perspective in press.p.3
- [18] Alabadi Hashim F. & Hayder Abdullah A., & Mohammed Hussam S., (2018), Impact of Strategic Ambidexterity on Organizational Success: Strategic Scenario as Moderating Variable International Journal of Academe Research in Business and Sciences, Vol.8, No.5, May.p.19
- [19] Vankatesh Join, (2012), RFID Technology Deployment and Organizational Dexterity, A journal of Radix International Educational and Research Consortium.p.9
- [20] Simsek Zeki., (2009), A Typology for Aligning Organizational Ambidexterity,
- Conceptualizations Antecedents, and outcomes, University of Connecticut, Journal of
- Management Studies, Vol.5, No.46, July.p.865
- [21] Ramukumba Ndivhuwo, (2017), Building an Organizational self-disruption capability for a competitive advantage: an investigation for the organizational antecedents.p.2
- [22] Tuan L., Trong, (2016), Organizational Ambidexterity, Enter Preneuial Organization, and Deals: The Moderating Role of CSR, journal of Business Ethics, Vol.6, No.35.p.146
- [23] Andre Laqume, (2010), Heuristics for strategic Ambidexterity: Balancing exploration and exploitation over time in varying environments department of Business Administration, As per School of Business University of Manitoba Winnipeg.p.11
- [24] Owais, Mamdouh Zaki Ahmed, (2015) The role of human resource management practices in building proficiency The regulatory and its impact on organizational performance: an applied study in small and medium industrial companies In the Kingdom of Saudi Arabia, College of Public Administration, Volume (55) 33 Issue (2) p. 242
- [25] Al-Baghdadi, Adel Hadi, and Al-Jabouri, Haydar Jasim Abd, (2015) The Impact of Organizational Prowess in an Investigation Strategic Flexibility: A comparative field study between the two telecommunications companies (Zain and Asiacell) for Communications in Iraq, Al-Qadisiyah Journal of Administrative and Economic Sciences, Volume (17) Issue (1) pg. 22
- [26] Ali, Ari Muhammad, and Shirvani, Dalman Khoshvi Ramadan, (2017) The Impact of Organizational

Prowess on Improving the Dimensions of Hotel Service Quality: An exploratory study of managers 'opinions of a sample of the four institutions The Five Stars in the governorates of Duhok and Erbil, Innovation and Marketing Magazine, Issue (4), P.15

- [27] Carmel Abraham & Halevi Meyrav, (2009), How Top Management Team Behavioral Integration and Behavioral Complexity Enable Organizational Ambidexterity: The Moderating Role of Contextual Ambidexterity U.S.A, Journal of Leadership Quarterly20.p.214
- [28] Jawad, Shawqi Naji, (2010) Integrated Reference in Strategy Management, First Edition, Al-Hamed Publishing and Distribution House, Amman, Jordan. Pp. 206
- [29] Boonton Cotalin & Csiszar Akon, (2017), optimal design of parallel structure used as haptic interface, mechanism and machine Theory, journal home page: www.cisevier.com p.69