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THE COMBINED EFFECT OF CAPABILITIES AND COGNITIVE FLEXIBILITY IN ACHIEVING CUSTOMER AGILITY-AN ANALYTICAL STUDY OF THE VIEWS OF A SAMPLE FROM MANAGERS AND EMPLOYEES OF ZAIN TELECOM COMPANY IN AL-DIWANIYA

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ABSTRACT

The present study aims to examines the correlation and influence Cognitive Capability and Cognitive Flexibility in customer agility , The study defines two main hypothesis that there is a positive correlation and impact between the Cognitive capability and Cognitive Flexibility in customer agility , Then the the Zain Telecom Company in AL-Diwaniya was selected as a community to study because of its vital importance in the telecommunications sector, the data was collected through a questionnaire, Data were collected through a questionnaire form prepared for this purpose, and distributed 95 questionnaires to Managers and employees , were retrieved valid for statistical analysis with a retrieval rate of 100% , SPSS vr software was used. 24 AMOS vr. 24 and Excel 2010, To extract correlation and impact results and test hypotheses, It was found that the hypotheses are correct in the light of the results of statistical analysis and reached a number of recommendations, Developing cognitive capability and flexibility in order to sense current and renewable customer needs.

COGNITION CAPABILITY

What is meant by capabilities is the experience that an individual or organization acquires through practicing a specific activity, and the ability to perform this activity again in the future may be better, especially early in the development of the ability (Zollo and Winter, 2002). This definition of a capability in terms of the capacity to perform an activity accords with standard

dictionary definitions of the word ‘capability’. For example, Merriam Webster (2009) defines a capability as “the quality or state of being capable,” where the word ‘capable’ is defined as “having attributes (as physical or mental power) required for performance or accomplishment.” As this definition indicates, capabilities and their associated activities can be mental as well as physical. Both the dictionary definition of ‘capability’ and its definition in the strategic management literature indicate that the capacity of individuals to perform mental activities is a Cognitive capabilities can improve through practice, a phenomenon that similarly characterizes the development of capabilities studied in strategic management. For example, Ericsson and Lehman (1996: 290) note that observational and laboratory studies show that memory performance improves through practice and training. Neuroimaging studies also reveal that brain structure depends on experience. Posner et al. (1997: 267), for example, find that “practice may change the size or number of brain areas involved and alter pathways used” in the performance of ‘cognitive skills’ (e.g., reading) requiring attention. Findings such as these suggest that if some individuals practice a particular mental activity more frequently than other individuals (e.g., frequent use of short-term memory by waiters), they are likely to develop better cognitive capabilities of this sort, which further practice is likely to reinforce. In this way, path dependence in the development of cognitive capabilities may contribute to heterogeneity in both potential and actual performance of mental activities.

The dimensions of cognitive capability (Ghasemy, 2017:370)

A- Diagnosing unexpected incidents accurately, identifying the true dimensions of human as well as technical and administrative issues, determining the value of addressing an emerged problem in detail, and taking necessary actions in order to solve the identified problems are the fundamentals of cognitive capability of leaders which can also be referred to as contingent intelligence (Scott et al., 2008). Ramsden (1998a) in a study focusing on effective leadership also identified some other cognitive attributes including:

- Thinking strategically and nonlinearly. This is consistent with encouraging innovative thinking (Yukl et al., 2002) and having creative attitude (Arvonen, 2008; Ekvall & Arvonen, 1991) as two changeoriented leadership dimensions.
- Recognizing achievable and possible outcomes. Envisioning exciting new possibilities for the organization (Arvonen, 2008; Ekvall & Arvonen, 1991; Yukl, 2013) as a change-oriented behavior is also in line with this cognitive attribute.
- Vision building and goal setting. This attribute is also consistent with another change-oriented behavior which is developing innovative strategies linked to core competencies (Yukl, 2013).
- Planning programs ahead and avoid reactiveness. Giving and sharing thoughts and plans about future (Arvonen, 2008; Ekvall & Arvonen, 1991), as

one of change-oriented behaviors, is also consonant with this cognitive capability.

In summary three subscales construct cognitive capability aspect of leadership capabilities in academic settings which are diagnosis, strategy, and flexibility and responsiveness (Fullan & Scott, 2009; Scott et al., 2008; Scott & McKellar, 2012). diagnosis. In terms of the diagnosis, one main behavior of leaders is to determine the exact cause of problems as well as to evaluate the significance of problems. This entails the process of scanning the environment thoroughly (Scott et al., 2008) which is consistent with “monitoring the environment” behavior to detect threats and opportunities (Yukl, 2013), as one of the change-oriented behaviors.

Regarding diagnosis capability of academic leaders, Scott et al. (2008) identified some behaviors which may be regarded as the basis for this kind of capability including the capacity to identify the causes of problems and addressing them through taking necessary actions, the ability to recognize the relations between seemingly unconnected actions and tasks, being able to recognize the existing patterns in a complicated setting, and having the ability to identify the main issues from a mass of information in different contexts.

Strategy

Strategizing is an art and science of survival and sustainability and HEIs should adopt the strategic development model in order to obtain the competitive advantage to be at the frontline of the progress both at national and international levels (Hussin & Ismail, 2009). This capability in HE context and especially at department level has been thoroughly studied in some recent studies (Ambrose et al., 2005; Benoit & Graham, 2005; Gordon & Stockard, 1991; Stark, Briggs, & Rowland-Poplowski, 2002; Trocchia & Andrus, 2003). In addition, in another study focusing on successful deans (Scott & Kemmis, 1996), some behaviors which are in line with a part of change-oriented leadership behaviors (Arvonnen, 2008; Ekvall & Arvonnen, 1991; Yukl, 1999, 2012, 2013; Yukl et al., 2002) were identified as being key elements in this category namely promoting contingently thinking, vision building for the faculties, promoting prioritization, and establishing a flexible talent identification system.

The elements of strategy, as another subscale of cognitive capability of academic leaders include (Scott et al., 2008), include the ability to see and take required actions regarding new opportunities for a new direction, being able to trace out and evaluate the possible outcomes of different actions and activities, having the ability to figure out and solve the problems which might happen in the future based on previous relevant experience, being able to think out of the box and creatively, having an achievable and realistic vision in the area of responsibility, the ability to respond to a confusing situation effectively, and the capacity to set and promote daily work priorities.

Flexibility and responsiveness

Flexibility and responsiveness of academic leaders is to a great extent associated with their ability in contingent thinking (Scott et al., 2008). In terms of “contingent thinking” and based on one of the recent studies, it was concluded that adopting different leadership styles to fit changing situations as well as the ability to make decisions under uncertainty are two of the main capabilities of leaders (Aziz et al., 2005). It may be noted that these findings align with having creative attitudes (Arvonen, 2008; Ekvall & Arvonen, 1991) and encouraging and facilitating innovation and entrepreneurship in the organization (Yukl, 2013) as two change-oriented behaviors.

Additionally regarding envisioning, Wolverton and Gmelch (2002) in their analysis of deans spoke of “setting directions” to meet future needs which again is consonant with envisioning a better future for the organization (Arvonen, 2008; Ekvall & Arvonen, 1991; Yukl, 1999, 2004, 2012, 2013; Yukl et al., 2002). In academic settings, flexibility and responsiveness of academic leaders have been operationalized by three behaviors (Scott et al., 2008) including the ability to fine-tune a set of plans of actions in response to the problems emerged during the implementation phase, the ability to understand errors and learn from them, and understanding that no fixed set of steps existed to solve problems emerged in workplaces.

COGNITIVE FLEXIBILITY

Another variable of recent interest to scientific studies is cognitive flexibility. The concept of cognitive flexibility was first defined by Spiro & Jeng (1990) as "an individual's ability to reconstruct his/her knowledge on being able to give suitable reaction to the demands caused by changing situations". The same variable was collectively defined by Martin & Rubin (1995), Martin & Anderson (1998), and Martin, Anderson, & Thweatt (1998) as "an individual's being aware of the fact that there are suitable options and accessible alternatives for every given situation, being willing to be flexible and feeling competent about adapting the situation and being able to be flexible".

Although flexibility refers to an individual's capacity to adapt to various situations (Payne, Bettman, & Johnson, 1933), adaptation may not always happen. If a person with the ability to act flexibly to deal with a certain change fails to do so this person can still be said to have cognitive flexibility. According to Martin, Anderson, & Thweatt (1998), individuals who show flexibility in their daily lives are commonly flexible not only in certain situations or at a single time, which speaks to the fact that cognitive flexibility can be a general condition. According to Spiro & Jehng (1990), people who have previously faced multiple tasks at once can be more flexible in terms of effectively evaluating conditional situations. Such individuals commonly have the ability to reconstruct their knowledge easily, and thus they can change their reactions radically in the presence of conditional demands. According to Martin & Anderson (1994; 1996; 1998), cognitively flexible individuals are precipitous, responsible, and can make sense of what they experience. In addition, cognitively flexible individuals feel safe about communicating in different situations (Martin & Anderson, 1998). Cognitive flexibility also

increases individuals' trust in others through the ability to act competently, as well as makes individuals more flexible in certain matters (Martin, Anderson, & Thweatt, 1998). Individuals who consider themselves cognitively flexible are also stated to be incredibly selfconfident, good at repartee, careful, and understanding (Martin & Anderson, 1996, 1998). These individuals also have higher beliefs in their own self-efficacy and self-observation skills than individuals who have low cognitive flexibility (Martin & Rubin, 1995).

Previous studies have propounded that cognitive flexibility is positively related to non-aggressiveness and toleration, belief in social self-efficacy and problem-solving skills (Bilgin, 2009b), coping with problem-solving oriented stress (Dennis & Vaner Val, 2010), and decision-making (Dunleavy and Martin, 2006). However, cognitive flexibility has been found to have a significant negative relation with depression (Merrill et al., 2005) and verbal aggression (Martin & Anderson, 1998). It has also been related to many cognitive skills (Carlson & Moses, 2001; Müller, Zelazo & Imrisek, 2005), such as language skills (Jacques & Zelazo, 2005) and arithmetical skills (Bull & Scerif, 2001). When these studies are taken together, it appears that cognitive flexibility shows positive relations with positive psychological features and negative relations with negative psychological features.

CUSTOMER AGILITY

Customer agility is defined as the degree to which a firm is able to sense and respond quickly to customer-based opportunities for innovation and competitive action. Customer-based opportunities originate from (1) individual customers, (2) discussions among customers or (3) interactions between customers and a representative of the focal firm. For example, highly motivated and innovative individuals have contributed to radical advances in medical imaging technology (Lettl et al. 2006). Firms have also developed product innovations originating from customer interactions in virtual communities (Jeppesen & Frederiksen 2006). We divide customer agility into two components: customer sensing capability and customer responding capability.

Customer agility is the degree to which a firm is able to sense and respond quickly to customer-based opportunities for innovation and competitive action. Our definition includes key elements of agility identified earlier, including capability, sense and respond, and speed. Customer sensing is the degree to which a firm is able to sense customer-based opportunities for innovation and competitive action, Customer responded the degree to which a firm is able to respond quickly to customer-based opportunities for innovation and competitive action. (Slater and Narver 2000). Customerbased is opportunities which originate from (1) individual customers, (2) discussions among customers, or (3) interactions between customers and a representative of the focal firm (Melhem,2016:38-39).

The dimensions of customer agility: (Roberts, 2009:140-141)

A-Customer Sensing Capability Customer sensing capability is defined as the degree to which a firm is able to sense customer-based opportunities for innovation and competitive action. Our measure of customer sensing capability is derived from Narver et al. (2004) and Slater and Narver (2000).

B-Customer Responding Capability Customer responding capability is defined as the degree to which a firm is able to respond quickly to customer-based opportunities for innovation and competitive action. Our measure of customer responding capability is derived from three sources (Homburg et al. 2007; Jayachandran et al. 2004; Kohli et al. 1993).

RESEARCH METHODOLOGY

The research problem

Through field interviews with many managers and workers at Zain Telecom in Al- Diwaniya, the researchers found that there is a weakness in the cognitive and knowledge of a sample and the research community of the research variables, despite their importance to contemporary organizations. Search by the following Questions:

1. To what extent does the research sample understand the importance of the researched variables and the extent of their application in practice?
2. What is the nature of the relationship between cognitive abilities and customer agility?
3. What is the nature of the relationship between cognitive abilities, cognitive flexibility, and customer agility?
4. What are the effects of cognitive faculties and cognitive flexibility on customer agility in a sample and research community?

The importance of the research

The researchers addressed three variables characterized by modernity and exclusivity in the vital communications sector represented by Zain communications Company in Al- Diwaniyah, the researchers sought to verify the objectivity of the relationship between cognitive abilities and cognitive flexibility and try to add objective and cognitive efforts and strive to define an impact in customer agility and try to gain research Objective and cognitive fingerprints.

RESEARCH OBJECTIVES

The aim of the current research is mainly to determine the effect of cognitive capabilities and cognitive flexibility on customer agility in Zain Telecom Company in Diwaniyah and a set of sub-objectives emerges from it as follows:

1. Analysis of the level of knowledge capabilities and cognitive flexibility at Zain Telecom in AL- Diwaniya.
2. Determine the level of customer agility towards the services of Zain Telecom in AL-Diwaniya.
3. Determine the impact of cognitive capabilities and cognitive flexibility on customer agility for a sample and research community at Zain Telecom in AL-Diwaniya.

RESEARCH HYPOTHESES

To complement the research requirements, and in order to answer the questions, a set of hypotheses have been formulated:

The first main hypothesis:

(There is a statistically positive correlation and effect between knowledge capabilities and customer agility)

From which the following sub-hypotheses are derived

1. The first sub-hypothesis: (There is a statistically positive correlation and effect between diagnosis and customer agility).
2. The second sub-hypothesis: (There is a statistically positive correlation and impact between strategy and customer agility).
3. The third sub-hypothesis: (There is a positive correlation and impact between flexibility, response and customer agility).

The second main hypothesis:

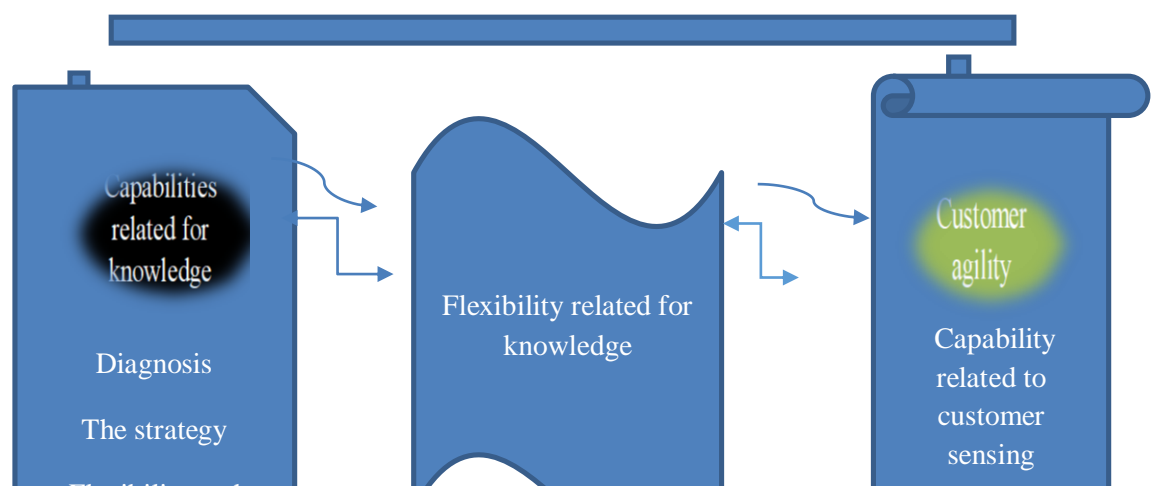
(There is a statistically positive correlation relationship between cognitive flexibility and customer agility)

From which the following sub-hypotheses are derived

1. There is a statistically positive correlation and influence between cognitive flexibility and customer sensitivity.
- There is a statistically positive correlation relationship with cognitive flexibility and customer responsiveness.

The hypothetical model of research

In the light of the research problem and its goals, a hypothesis model has been built for the research, which represents a group of main and sub-hypotheses, which were developed according to the ability to measure each of the variables of the research variables. This model is comprehensive and possible to test.



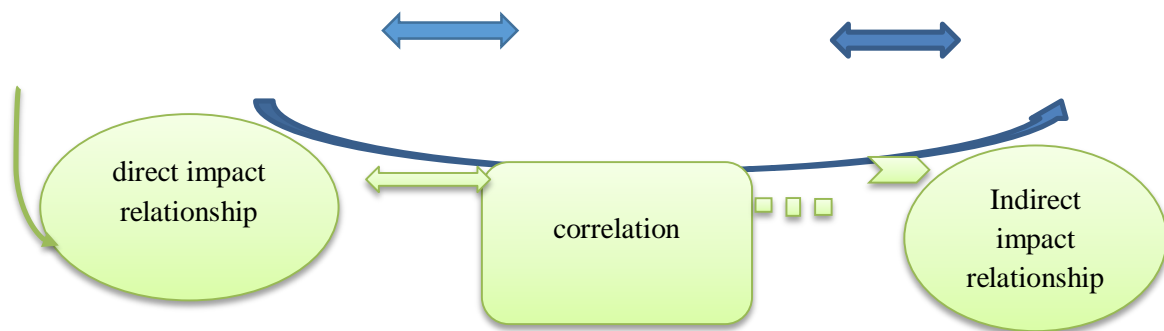


Figure (1) The hypothetical model of research

The practical side of the study

Coding the topics and paragraphs of the research

In order to analyze and interpret statistical results, and in order to facilitate the process of statistical analysis, the variables included in the research were compensated with a set of symbols and abbreviations shown in the table below.

Table (1) Description of the questionnaire tool

The axes	Variables	Dimensions	The paragraphs	code
The first axis	Cognitive capabilities (CCA)	To diagnose	2	CCD
		The strategy	7	CCS
		Flexibility and responsiveness	3	CCF
	Cognitive flexibility	Unidimensional	12	CFS
The second axis	Customer agility	Customer sensing capabilities	6	CGS
		Customer response capabilities	6	CGR

Analysis of the normal distribution

Analysis of the normal distribution is one of the important pillars that the researcher has to rely on to show the nature of the data and whether or not it follows the normal distribution. In order to demonstrate this, the Kolmogorov - Smirnov and Shapiro - Wilk tests are used. By which to measure the nature of data orientation. Table (2) shows the normal distribution tests.

Table (2) tests the normal distribution of search variables

	Kolmogorov-Smirnov^a	Shapiro-Wilk
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	Statistic	df	Sig.	Statistic	df	Sig.
CCD	.310	95	P>0.05	.802	95	P>0.05
CCS	.145	95	P>0.05	.920	95	P>0.05
CCF	.163	95	P>0.05	.878	95	P>0.05
CCA	.164	95	P>0.05	.902	95	P>0.05
CFS	.194	95	P>0.05	.878	95	P>0.05
CGS	.189	95	P>0.05	.850	95	P>0.05
CGR	.185	95	P>0.05	.946	95	P>0.05
CAG	.222	95	P>0.05	.887	95	P>0.05

The results of the above table yielded that the drawn data follow the natural distribution, since the moral value of the two research tests is higher than (0.05), which can be said that the pulled data follow the natural distribution, and this matter contributes to showing that the results that the study produces can be generalized to the community.

The stability and reliability of the measuring instrument

This paragraph shows the consistency of the measuring instrument, through which the alpha-kronbach coefficient test can be used in order to indicate the stability of the measurement instrument and its compatibility and reliability with the studied sample, and the lower table shows the alpha-kronbach coefficients, which show that the transactions are higher than (0.60), which can be said that The measuring instrument is relatively stable.

Table (3) Kronbach's alpha parameters for study dimensions and variables

Variables	Cronbach Alpha for the variant	Dimensions	The paragraphs	Cronbach Alpha dimension s	Cronbach Alpha to study
Cognitive capabilities	0.926	The diagnosis	2	0.955	0.944
		The strategy	7	0.935	
		Flexibility and responsive ness	3	0.936	
Flexibility Cognitive flexibility	0.930	Unidimensi onal	12	0.930	
Customer agility (CAG)	0.931	Customer sensing capabilities	6	0.938	
		Customer responsive capabilities	6	0.942	

Third: - Statistical description of the research variables: - This paragraph deals with determining the arithmetic mean and the standard deviations for each variable in the research.

- Cognitive capabilities variable

The results presented in Table (4) indicated that the general mean of the arithmetic mean for the variable of cognitive capabilities is (3.98) and with a standard deviation equal to (0.546). Perhaps the dimension that contributed to this is due to the flexibility and response dimension (CCF) with an average of (4.02) and a standard deviation of (0.733), while the CCS strategy came second with an average of (3.99) and a standard deviation of (0.677), and in turn The diagnostic dimension (CCD) came last, with an average mean of (3.92) and a standard deviation of (0.607).

From the foregoing, it can be said that the studied sample should contribute to enhancing its capabilities in diagnosing and identifying weaknesses in order to contribute to the development of strategies through which the cognitive capabilities of its potential and its internal processes can be strengthened.

Table (4) Statistical Description of Paragraphs and Dimensions of Cognitive Capabilities

The sequence	Arithmet mean	standa rd deviati on	Order of importa nce	The sequenc e	Arithm etic mean	standard deviation	Order of importance
CCF1	4.24	1.028	1	CCD1	4.08	0.93	1
CCF2	4.11	0.962	2	CCD 2	3.76	0.782	2
CCF3	3.71	0.874	3	CCD	3.92	0.607	the third
CCF	4.02	0.733	the first	CCS1	3.83	0.93	7
CCA	3.98	0.546	***	CCS2	3.95	0.949	4
				CCS3	4.35	0.835	1
				CCS4	4.02	0.922	2
				CCS5	3.86	1.145	6
				CCS6	3.97	0.994	3
				CCS7	3.94	0.92	5
				CCS	0.677	3.99	The second

Cognitive flexibility variable

The results in the table below show that the general average for the arithmetic mean of cognitive elasticity (CFS) was (3.86) and with a standard deviation of (0.654). Perhaps the paragraph that contributed to this is the eleventh

paragraph (CFS11) with a somewhat high arithmetic mean of (4.44) With a standard deviation of (0.872), while the ninth paragraph (CFS9) came last, with an average mean of (3.51) and a standard deviation of (1.061).

From the foregoing, it can be said that the studied sample should contribute to enhancing its capabilities to keep pace with change by enhancing its ability to adapt to changes of various kinds.

Table (5) Statistical Description of Paragraphs and Dimensions of Cognitive Flexibility

The sequence	Arithmetic mean	standard deviation	Order of importance	The sequence	Arithmetic mean	standard deviation	Order of importance
CFS8	3.64	0.824	10	CFS1	4.07	0.894	4
CFS9	3.51	1.0613	12	CFS2	3.83	0.964	6
CFS10	4.08	0.953	3	CFS3	3.66	1.027	8
CFS11	4.44	0.872	1	CFS4	4.13	0.925	2
CFS12	3.99	0.881	5	CFS5	3.55	1.227	11
<u>CFS</u>	<u>3.86</u>	<u>0.654</u>	<u>***</u>	CFS6	3.66	1.419	9
				CFS7	3.74	1.231	7

Customer agility variable

The results presented in Table (6) indicate that the general mean of the arithmetic mean of the customer agility variable was (3.91) and a standard deviation of (0.484), and the dimension that contributed to this is the dimension of customer response capabilities with an arithmetic average of (3.97) and a standard deviation of (0.392)), While the customer sensors dimension came last, with an average of (3.85) and a standard deviation of (0.722).

From the foregoing, it can be said that the studied sample has to enhance its capabilities to respond to customer requirements by enhancing its capabilities to contribute to knowing customer tastes and determining them with high accuracy in order to sense customer satisfaction and achieve its various requirements .

Table (6) Statistical Description of Customer agility Paragraphs and Dimensions

The	Arithmetic	standard	Order of	The	Arithmetic	standard	Order of
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sequence	mean	deviation	importance	sequence	mean	deviation	importance
CGR2	4.13	0.802	2	CGS1	3.650	0.998	5
CGR3	3.61	1.094	6	CGS2	4.31	0.759	1
CGR4	4.46	0.681	1	CGS3	3.63	0.9	6
CGR5	3.82	0.967	5	CGS4	4.05	0.892	2
CGR6	3.93	0.841	3	CGS5	3.68	0.841	4
CGR	3.97	0.392	the first	CGS6	3.77	0.939	3
CAG	3.91	0.484	***	CGS	3.85	0.722	The second
				CGR1	3.87	0.925	4

The correlation and influence between research variables

Measuring the correlation

This paragraph is concerned with measuring the correlation between research variables, by testing the main research hypotheses and their sub-hypotheses, using statistical methods according to the program (SPSS.V.24), while Table (7) shows the correlation matrix.

Table (7) correlation matrix

	CCD	CCS	CCF	CCA	CFS	CGS	CGR	AG
CCD	1	.338**	.330**	.658**	.466**	.620**	.400**	.476**
CCS	.338**	1	.752**	.875**	.864**	.743**	.623**	.836**
CCF	.330**	.752**	1	.881**	.774**	.638**	.859**	.870**
CCA	.658**	.875**	.881**	1	.876**	.823**	.791**	.912**
CFS	.466**	.864**	.774**	.876**	1	.719**	.696**	.957**
CGS	.620**	.743**	.638**	.823**	.719**	1	.557**	.711**
CGR	.400**	.623**	.859**	.791**	.696**	.557**	1	.874**
CAG	.476**	.836**	.870**	.912**	.957**	.711**	.874**	1
**. Correlation is significant at the 0.01 level (2-tailed)					Sig. (2-tailed)=0.000		N=95	

The results of the above table indicate the existence of a significant correlation relationship at (0.01). This relationship can be shown between variables and dimensions of the study as follows:

- 1) There is a statistically significant correlation between CCA and CFS, and with a correlation strength of (0.876).
- 2) There is a statistically significant correlation between CCA and customer agility (AG), and a correlation of (0.912). While the correlation between cognitive capabilities (AG) and agility dimensions (AG) was that it ranged strongly from (0.791) for the customer response capabilities dimension (CGR) to (0.823) for the customer sensitivity dimension (CGS).

3) There is a statistically significant correlation between cognitive flexibility (CFS) and customer agility (AG), and a correlation relationship of (0.957). Whereas, the correlation relationship between cognitive flexibility (CFS) and the dimension of customer agility (AG) centered in that it ranged strongly from (0.696) for the customer response capabilities dimension (CGR) to (0.719) for the customer sensitivity dimension (CGS).

4) There is a statistically significant correlation between the diagnostic dimension (CCD) and customer agility (CAG), and a correlation relationship crystallized in (0.476). While the correlation between the diagnostic dimension (CCD) and the dimension of customer agility (CAG) centered, it ranged strongly from (0.400) for the customer response capabilities dimension (CGR) to (0.620) for the customer sensitivity dimension (CGS).

5) There is a statistically significant correlation between the strategy dimension (CCS) and customer agility (CAG), and a correlation relationship represented (0.836). While the correlation between the strategic dimension (CCS) and the dimension of customer agility (CAG) revolved around, it ranged strongly from (0.623) for the customer response capabilities dimension (CGR) to (0.743) for the customer sensitivity dimension (CGS).

6) There is a statistically significant correlation between the flexibility and response dimension (CCF) and the agile customer response (CAG), and a correlation relationship of (0.870). Whereas, the correlation relationship between the flexibility and response dimension (CCF) and the customer's agile response dimensions (CAG) revolved in that it ranged strongly from (0.628) for the customer sensitivity dimension (CGS) to (0.859) for the customer response capabilities (CGR) dimension.

The effect relationship between the search variables

The objective of this paragraph is to measure the effect of cognitive capabilities, their dimensions, and cognitive flexibility on customer agility and Figure 2 illustrates this relationship.

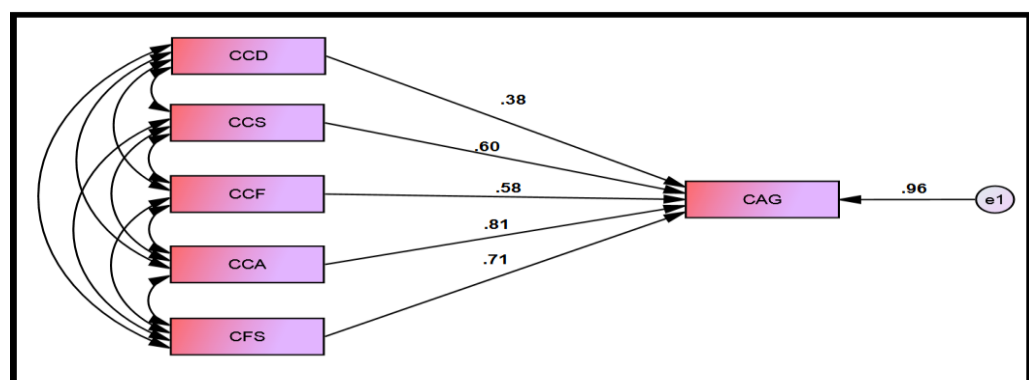


Figure 2: Relationships of the effect of cognitive Capabilities, dimensions, and cognitive flexibility on customer agility

Table (8) Standard Implications for the Relationship of the Impact of Cognitive Capabilities, Dimensions and Cognitive Flexibility on Customer Agility

المسار			Estimate	S.E.	C.R.	R ²	P
CAG	<---	CCD	0.380	0.073	5.2055	0.961	***
CAG	<---	CCS	0.597	0.041	14.561		***
CAG	<---	CCF	0.575	0.034	16.912		***
CAG	<---	CFA	0.809	0.038	21.289		***
CAG	<---	CFS	0.708	0.022	32.182		***

We notice from the results mentioned in the above table and the figure above the following points

- 1) The presence of the effect of cognitive capabilities (CCA) on customer agility (CAG), as increasing cognitive capabilities by one standard weight leads to an increase in customer agility by (0.809), and with a standard error equal to (0.038) and with a critical value of (21.289).
- 2) There is an effect of the diagnostic dimension (CCD) on customer agility (CAG), as increasing the diagnostic dimension by one standard weight leads to an increase in customer agility by (0.380), and with a standard error of (0.073) and a critical value of (5.2055).
- 3) There is an effect of the CCS dimension on customer agility (CAG), as increasing the strategy dimension by one standard weight leads to an increase in customer agility of (0.597), and with a standard error of 0.041 and a critical value of (14.561).
- 4) The effect of the flexibility and response dimension (CCF) on customer agility (CAG), as increasing the flexibility and response dimension by one standard weight leads to an increase in customer agility by (0.575), and with a standard error of (0.034) and a critical value of (16.912).
- 5) The presence of the effect of cognitive flexibility (CFS) on customer agility (CAG), as increasing cognitive flexibility by one unit leads to an increase in customer agility by (0.708) and with a standard error equal to (0.022) and a critical value of (32.182).
- 6) The variables included in the analysis explain about (0.961) of the variables and events that prevent the development and agility of the customer, while the remaining value falls outside the limits of the study.

CONCLUSIONS AND RECOMMENDATIONS

The conclusions

1. The existence of a correlation and impact relationship between the capabilities and the cognitive flexibility, which leads to finding encouraging results through which the studied sample can be exploited in order to improve the customer's agility and spread his needs and desires in the best way.
2. It was found that the studied sample focuses on the flexibility and response dimension and then after the strategy in enhancing its cognitive capabilities, while it is noticeable that the studied sample is interested in the dimension of diagnosis to improve its internal capabilities and operations.
3. It was found that there is clear and prominent interest by the studied sample to develop cognitive flexibility through its ability to adapt to variables of various kinds.
4. The studied sample showed a focus on the responsiveness of the customer through a relentless pursuit to find tastes and define them with high accuracy in order to sense customer satisfaction and achieve their requirements.
5. It was clear that the studied sample was not interested in diagnosing the main causes of the problems and that no appropriate treatments and procedures were identified for these problems.
6. The studied sample was not focused on continuing to discover additional needs of customers, which they have not yet realized.

Recommendations

1. The necessity of continuing to train and improve the capabilities of the studied sample in order to increase their ability to deal with the company's customers to achieve customer agility and achieve the optimum satisfaction for their needs and desires.
2. Focusing on adopting systematic scientific methods in identifying and diagnosing the main causes of problems the company is exposed to, setting appropriate treatments for these problems, resorting to scientific laboratories and research and development centers such as universities and institutes, and seeking the help of experts and researchers to find appropriate mechanisms for these obstacles and problems.
3. Directing the continuity of the studied sample in response to the customer through a constant quest to know the customers tastes and define them accurately in order to sense the satisfaction of the customers and achieve their requirements.
4. Encouraging the continuation of improving cognitive flexibility and ensuring adaptation to external and internal variables in order to support the company's various capabilities.
5. Prompting the studied sample to confirm the disclosure of additional needs of customers that they have not yet realized, by adopting various methods such as surveys and market research, or determining the additional needs of customers through the corresponding companies.

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Questionnaire form

Cognitive Capability Scale (Ghasemy, 2017:370)

the sequence	Phrase	Low	Low to medium	medium	Medium to high	high
Diagnosis						
1-	There is a diagnosis of the root causes of the problem, and appropriate measures are taken to address it					
2-	Learn how to connect seemingly unconnected activities.					
Strategy						

3-	A vision is defined by the organization and then an opportunity for a new direction is worked out					
4-	Track and evaluate potential outcomes of alternative work cycles.					
5-	Use past experience to see what happens when a current situation takes an unexpected turn.					
6-	Creative and lateral thinking.					
7-	A clear, justified and achievable direction in my area of responsibility.					
8-	Seeing is the best way to respond to a confusing situation.					
9-	Setting and justifying priorities for my daily work					
Flexibility and Responsiveness						
10-	A adjust the action plan in response to the problems identified during implementation.					
11-	Feeling logical					

	and learning from experience.					
12-	There is never a fixed set of steps for solving workplace problems.					
2. Cognitive Flexibility Scale (Çelikkaleli,2014)						
the sequence	Phrase	Low	Low to medium	medium	Medium to high	high
13	I can communicate any idea in different ways.					
14	I avoid new and unusual situations.					
15	I feel ill prepared to make decisions.					
16	In whatever situation it imposes, I am able to act appropriately.					
17	I can find practical solutions to seemingly unsolvable problems					
18	I rarely have options to choose from when deciding how to act.					
19	I am ready to work to find innovative solutions to problems					
20	My behavior is the result of conscious					

	decisions that I make					
21	I have many possible ways to act in any situation it poses.					
22	I find it difficult to use my knowledge on a specific topic in real life situations					
23	I am willing to listen and consider alternatives to address a problem.					
24	I have the self-confidence necessary to try different ways of behavior					
3. customer agility scale(Roberts,2009:177)						
the sequence	Phrase	Low	Low to medium	medium	Medium to high	high
Customer Sensing Capability						
25	We are constantly trying to discover additional needs of our customers that they are not yet aware of					
26	We work closely with key users who try to identify customers' needs months or even years later before most markets					

	know them.					
27	We review key trends to gain insight into what users in the current market will need in the future.					
28	We constantly try to anticipate our customers' needs even before they realize it.					
29	We try to develop new ways of looking at customers and their needs.					
30	We feel our customers' needs even before they know it.					
Customer Responding Capability						
31	We respond quickly if something important happens regarding our customers					
32	We quickly carry out our planned client activities.					
33	We react quickly to fundamental changes regarding our customers					
34	When we find that customers want to modify a product or service, our					

	organization makes a concerted effort to do so					
35	When we identify a new customer need, we quickly respond to it.					
36	We are quick to respond to changes in our customers' needs for products or services.					