Analyzing Competitive advantage indicators among telecom operators in Algeria: A comparative study

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Abstract:

This study aims to measure the differences of competitive advantage indicators between telecom operators in Algeria. On the basis of three approaches; the descriptive, inductive and comparative approach, we tried to answer the main question and carry out the empirical study. For data collection, we use the questionnaire of sample of 153 employees and some short interviews with managers, as well as some reports about telecoms market published by ARPCE. To test the hypothesis, we use the one-way ANOVA test. Finally, we have found that there are no significant differences between telecom operators about competitive advantage indicators, according to the studied sample.

Keywords : Cost; Quality and performance; Flexibility; Creativity ; innovation..

JEL classification codes : M1; M2; L96..

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تحليل مؤشرات الميزة التنافسية بين متعاملي الهاتف النقال في الجزائر: دراسة مقارنة

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الملخص:

نهدف من خلال هذه الدراسة إلى قياس مدى وجود فروقات في مؤشرات الميزة التنافسية بين متعاملي الهاتف النقال في الجزائر. بالاستناد لثلاثة مداخل رئيسية من أجل الإجابة على الإشكالية الدراسة، وبالاعتماد على المنهج الوصفي والاستقرائي والمقارن، تم جمع البيانات بالاعتماد على أسلوب الاستبيان، موجه لعينة عشوائية متكونة من 153 موظفًا وبعض المقابلات القصيرة مع مديري متعاملي الهاتف النقال في الجزائر، وكذلك بعض التقارير حول سوق الاتصالات في الجزائر المنشورة من طرف سلطة ضبط البريد والاتصالات الالكترونية ARPCE، وتوصلنا في آخر الدراسة لعدم وجود فروقات ذات دلالة إحصائية بين متعاملي الهاتف النقال في الجزائر تعزى لمؤشرات الميزة التنافسية وفقًا للعينة المدروسة.

الكلمات المفتاحية: تكلفة؛ جودة وأداء؛ مرونة؛ إبداع، إبتكار.

رموز تصنيف JEL: M1; M2; L96.

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Introduction

Researchers 'perception differs in interpreting the ability to make the difference according to each of their perception of competitive advantage. Some researchers focus on the external factors of the competitive environment that the business organization has to keep up with, while others focus on internal factors that the business organization can design and implement the appropriate strategy to occupy or defend its competitive position in the marketplace. It seeks to add value to the customer and thus achieve differentiation.

Today, competition has become the main goal in this time and its importance of individuals, organizations, and even countries, as it is the motivation that controls the job and tasks of all market agents and motivates them to work for more giving, creativity and innovation, and to achieve a more competitive advantage or superiority and differentiation in order to achieve the highest levels of return or profitability.

Intangible resources have an important role in the growth and creating of competitive advantage with all its factors and approaches. In light of the tendency of business organizations to focus on knowledge, technology, speed in time, knowing how to do business and others. The ability of the organization does not lie in producing products in an efficient manner according to international standards only, rather, achieving a greater competitive advantage that includes all the activities through the development of technological, marketing and management skills.

The Main Question

Telecom operators in Algeria must define precisely and flexibly their competition strategy in order to control the market variables and components, where the main goal is to acquire an important competitive advantage that provides hard protection against all the competition forces, by differentiation at the technical, Commercial or organizational level, which enables them to achieve better competitive advantage for a longer period of time.

In order for the competitive advantage to be effective, it must be decisive and give priority and superiority over competitors, also defensible and sustainable over time. In this context, our question can be asked as follows:

Are there significant differences between telecom operators in Algeria to achieve competitive advantage from the point of view of the managers and employees?

There are no significant differences between telecom operators in Algeria in competitive advantage indicators, as it lies in the same sector and is regulated by the same laws and regulations.

Our purpose through this study is to know the individual features of each operator in the telecommunications sector in Algeria, about the indicators of control cost and time that improve flexibility, quality, performance, creativity and innovation.

The telecommunications market in Algeria is a dynamic market, thus understanding its structure helps identify the appropriate strategy in order to confront the challenges it faces. Given that the mobile phone sector in Algeria is one of the important sectors, as it is one of the most successful Economic sectors due to its rapid development and growth, especially after reforms, which had a significant impact on competitiveness, quality and prices of services.

The population of this study is represented by the employee's opinion of telecom operators in Algeria with their agencies and commercial spaces, which are estimated 320 units, and the sample represents 153 employees from more than 10%, i.e. 33 agencies and commercial spaces.

In this study we adopted three approaches, which are the descriptive, inductive and comparative approaches. By using one-way ANOVA test.

Literature Review

Competitive Advantage

According to the existing literature, recruiting individuals who demonstrate environmental knowledge and motivation is valuable to improve environmental efficiency, as the latter affects a firm's competitive advantage. Several researchers have underlined the importance of leadership, as well as top management commitment, organizational culture, corporate environmental strategy and employee's environmental involvement on the firm environmental performance.

Environmental training for employees is based on an environmental sustainability approach that aims to improve employees' skills, motivation, involvement, and participation in the firm's environmental goals. Organizations are working to achieve market excellence by different methods and approaches in order to achieve its strategic goals, specifically at the big axes level, with a focus on the pivot points that represent the internal and external organization compounds.

Over the past two decades, the language and concepts of business-level competitive strategy have grown in both complexity and adoption by practitioners, as demonstrated by the extensive influence of schemes such as generic strategy.

Usually, this comes from large-scale organizations developing efficiency due to their repetitive experience of the tasks involved or using their power to capitalize on lower costs. The other two ways to competitive advantage relate to the value seen by customers who either see specific attractive elements in the offer (differentiation) or feel that all their needs are being met in the best way by that competitor's offer (focus). Indeed, the meaning of innovation varies. It can range from the first commercial use of an invention to the introduction of a new or improved product or process.

Competitive Advantage Dimensions

The basic dimensions of competitive advantage are the following factors: cost, quality and performance, speed, flexibility and creativity & innovation.

1. Cost

Generally, most organizations want to reduce overall costs by decreasing fixed costs and employee wage rates, maintaining raw material control, and increasing productivity (Bulankulama & Khatibi, 2014). Although few firms lose money as a result of losing specialization in production, Aveni and Ravenscraft (1994) empirically demonstrated that by

vertically integrating the firm's business process as a whole, the overall administrative cost, R & D cost, and media advertising cost are reduced (Monsur & Yoshi, 2012).

2. Quality and Performance

The consumer expects a certain quality from a product or service (Ghouchani & Miri, 2018). 1996, for Adam and Ebert: Quality can be achieved in two ways: adapting product design to its function, and ensuring operational consistency, which refers to the ability of an organization to transform inputs into conformable outputs, or outputs in accordance to the specific design characteristics, and the emphasis on quality will be reflected in competitive advantage and profitability of the organization (Bulankulama & Khatibi, 2014). Since the firm can deal with automated processes, vertical integration helps the firm to standardize, automate, and simplify the process. As a result, the product quality increases (Monsur & Yoshi, 2012). When a company is able to deliver product quality and output that adds value to its customers (Bratić, 2011).

3. Speed

Organizations may use the factor of time to compete among each other's. According to Stonebrake and Leong (1994), delivery time can be a source of competitive advantage as organizations attempt to minimize the time between receiving and accepting customer orders and the delivery of goods or services to customers. According to Evans (1993), the speed of product development often refers to the time factor; that is, the time period between the generation of a product idea generation and the completion of the final design or output (Bulankulama & Khatibi, 2014). An organization will introduce new products faster than its main competitors (Bratić, 2011). Clothing companies have developed new skills in rapid learning and communication by using information technology and rapid response. QR codes have enabled savvy designers to quickly reproduce or even develop new designs (Monsur & Yoshi, 2012).

4. Flexibility

According to Evans (1993), flexibility often refers to the ability to adjust production capacity in response to changes in the environment or consumer demands. Flexibility further defined as an organization's ability to detect changes in customers' needs, preferences, and expectations and, as a result, make product design changes (Bulankulama & Khatibi, 2014). Where manufacturing flexibility can be of two types: volume flexibility and feature flexibility. Vertical integration gives the firm more volume flexibility and feature flexibility (Monsur & Yoshi, 2012).

5. Creativity and Innovation

In today's business environment, seeking to improve one's ability to innovate is becoming a challenge (Xiao & Gang, 2017). A company with high levels of creativity can develop innovation capability (Chen, 2017). According to researchers, knowledge sharing practices have been shown to increase employee innovation (Aulawi, Sudirman, Suryadi, & Govindara, 2008), since knowledge sharing will inspire employees to think critically, allowing them to eventually generate new knowledge useful to the firm (Aulawi, Sudirman, Suryadi, & Govindara, 2008). Efficient information sharing may also take place in an informal situation, such as one encouraged by group practice in the business. Employees can now access the documents and information they need by an enterprise knowledge portal (Aulawi, Sudirman, Suryadi, & Govindara, 2008).

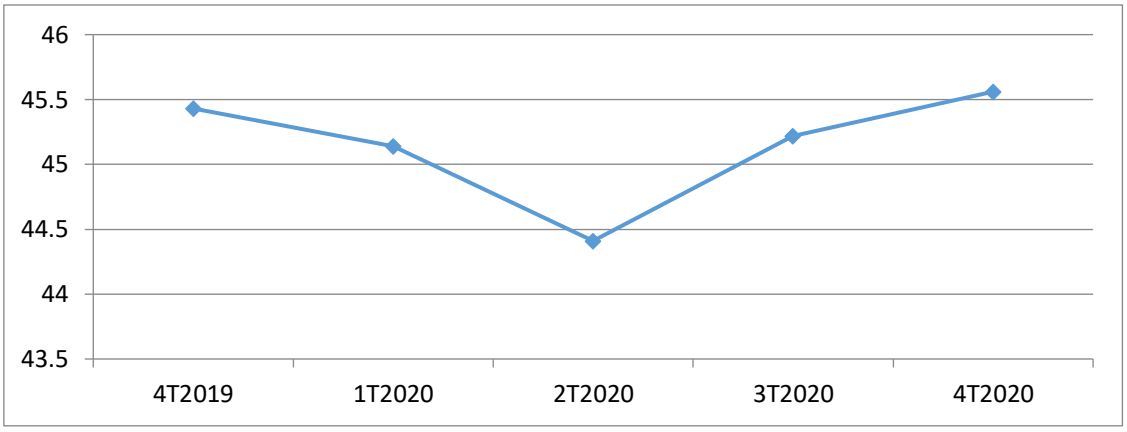
Empirical Study

Cell Phone Market

The following Statistics indicate that the number of mobile phone subscriptions in Algeria has significantly improved from 2000 to 2019. In 2019, the number of mobile phone subscriptions in Algeria reached 47.08 million. For more explanations, we show the following (Figure 1).

Figure N° 1

The evolution of the total subscribers



Source: ARPCE, Observatory on the Mobile Phone Market in Algeria, the fourth trimester 2020, Algeria, p. 4

The mobile phone registered (GSM, third generation, and fourth generation) a slight increase of 0.74%, as it moved from 45,222 million subscribers in the third quarter of 2020 to 45,556 million subscribers in the fourth quarter of 2020. (Figure1) (Table 1)

Table N°1
The Overall Market Position of the Mobile Phone

	4TH Trim 2019	3 d Trim 2020	2 d Trim 2020	1 st Trim 2020	4TH Trim 2020
AT	18 633 371	18 874 336	18 654 330	18 757 780	18 974 678
OTA	14 707 625	14 224 144	13 952 347	14 473 544	14 363 102
WTA	12 084 537	12 044 478	11 805 053	11 990 227	12 217 893
Total	**45 425 533**	**45 142 958**	**44 411 730**	**45 221 551**	**45 555 673**

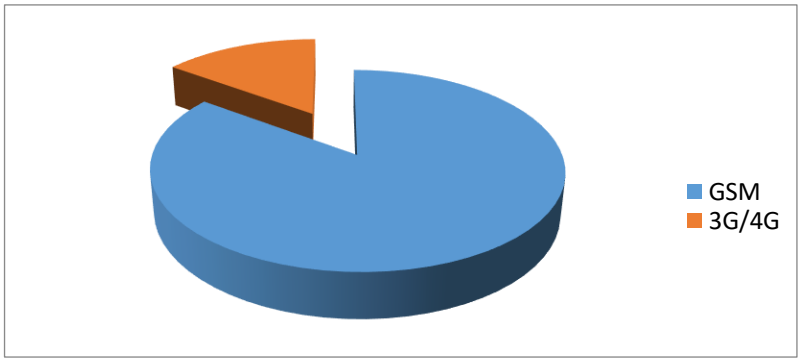
Development rate (4TH Trimester2019 - 4TH Trimester 2020) + 0,29%

Source: ARPCE, Observatory on the Mobile Phone Market in Algeria, the 4th trimester 2020, Algeria, p. 3

Among the 45.556 million active subscribers, we find 6,783 million subscribers in the GSM network, or 14.89%, compared to 38,773 million subscribers in the 3G and 4G networks, then 85.11%. (Figure2)

Figure N° 2

Distribution of Subscribers by Type of Technology

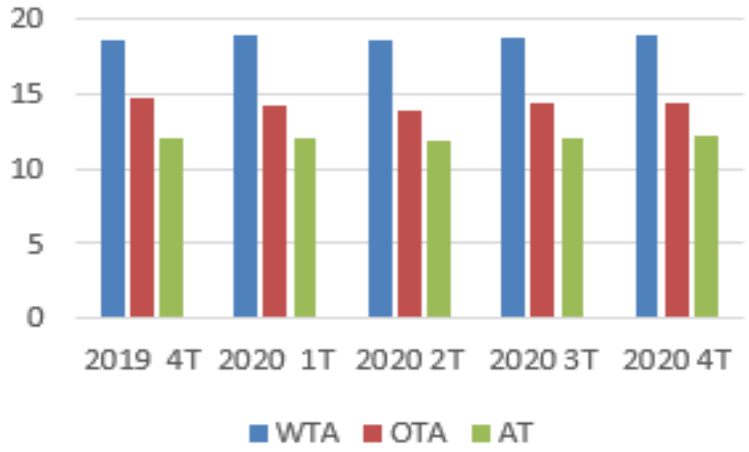


Source: ARPCE, Observatory on the Mobile Phone Market in Algeria, the fourth trimester 2020, Algeria, p.4

The evolution of active subscribers (in million) distributed to each operator represented as follows. (Figure3), Market distribution according to the number of subscribers. (Figure4)

Figure N° 3

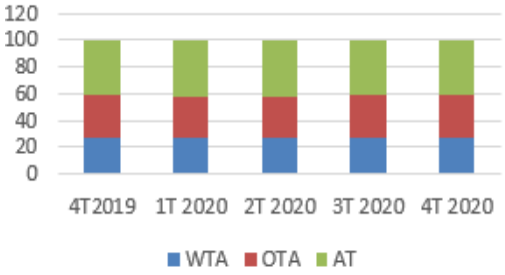
Subscribers Evolution of Each Operator



Source: ARPCE, Observatory on the Mobile Phone Market in Algeria, the fourth trimester 2020, Algeria, p.5

Figure N° 4

Market share



Source: Observatory on the Mobile Phone Market in Algeria, the fourth trimester 2020, ARPCE, Algeria, p. 5

Mobile Subscribers

Mobile subscribers (GSM, third and fourth generation) recorded a decrease of 367% during the year 2019, as mobile phone subscribers (GSM, third and fourth generation) moved from 47.154 million active subscribers in 2018 to 45.425 million active subscribers in 2019 That is, a decrease of 3.67%, while 3G and 4G subscribers recorded a slight increase of 1.57%. As for mobile intensively, it decreased by six (6) points, moving from 109% in 2018 to 103% in 2019. (Table 2 & Figure 5).

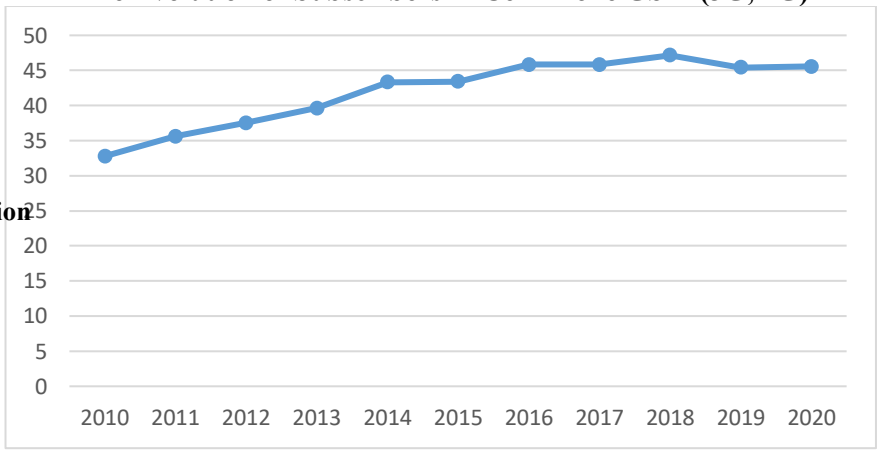
Table N°2
Subscribers and Access to the mobile phone network

Year	2018	2019
Total subscribers	47 154 264	45 425 533
Access to the mobile phone network	%109	%103

Source: ARPCE, Annual Report 2019-2020 Algeria, p.13

Figure N° 5

The Evolution of Subscribers in Cell Phone GSM (3G, 4G)



Source: ARPCE, Annual Report 2019-2020, Algeria, p.13

Reliability

The Reliability of the tool is intended to give this tool (questionnaire) the same result if it was redistributed more than once under the same conditions and in different context, or in other words, the Reliability of the tool means Reliability in its results and not to change it significantly if it is redistributed among the sample members several times during certain periods of time, Researchers test the reliability of the questionnaire using the Cronbach alpha method, as follows:

Cronbach's Alpha

Researchers used the Cronbach alpha to measure the reliability of the questionnaire, and the results were as shown in the table below. (Table 3)

Table N°3
Results of the Cronbach alpha test

Dimensions	N of Items	AT N=64	WTA N=51	OTA N=38	Total N=153
Cost	5	,922	,917	.951	,921
Quality and Performance	5	.911	,921	,960	,952
Flexibility	5	.904	,931	,982	,927
Speed	5	.932	,913	,970	,961
Creativity and innovation	5	.907	,907	.951	,921
Total	25	,906	,906	,921	,952

Source: Developed by Researchers based on SPSS.V23 Outputs

It is clear from the results shown in the above table that the value of the Cronbach Alpha coefficient is high for each component of the questionnaire. Also, the value of the alpha coefficient for all components of the questionnaire was 0.952, which means that the reliability coefficient is high. Thus, the researcher has emphasized on the validity and reliability of the questionnaire, which makes him confident of its validity and reliability to achieve the results, analyze the data and test the hypotheses.

Guttman Split-Half Coefficient

The researcher used the Guttman Split-Half Coefficient to measure the reliability of the questionnaire as a second indicator, and the results were as shown in the following table:

Table N°4
Results of the Guttman Split-Half test

Dimensions	N of Items	AT N=64	WTA N=51	OTA N=38	Total N=153
Cost	5	,901	,922	,914	,819
Quality and Performance	5	,908	,901	,825	,904
Flexibility	5	,915	,911	,904	,905
Speed	5	,905	,901	,929	,902
Creativity and innovation	5	,902	,900	,908	,901
Total	25	,914	,901	,917	0.906

Source: Developed by Researchers based on SPSS.V23 Outputs

It is clear from the results of above table that the value of Guttman Split-Half is good for all questionnaire parts. Also, the value of the Guttman Split-Half coefficient for all survey parts was 0.906, which means that the reliability coefficient is high. Thus, Researchers have confirmed the validity and reliability of the questionnaire, which makes them confident of its validity to analyze the results, answer the questions and test its hypotheses.

Structural Validity

Structural Validity is one of the tool's validity measures, which measures the extent to which the goals are achieved by the research tool. It shows the extent to which each questionnaire part is related to the overall indicators score.

The following table shows the correlation coefficient between the competitive advantage and its dimensions. (Table 5)

Table N°5
The Correlation Coefficient Between the Competitive Advantage and its Dimensions

Dimensions	Pearson Correlation			Sig. (2-tailed)		
	AT N=64	WTA N=51	OTA N=38	AT N=64	WTA N=51	OTA N=38
Cost	,922**	,921**	,928**	,000	,000	,000
Quality and Performance	,914**	,918**	,920**	,000	,000	,000
Flexibility	,903**	,913**	,912**	,000	,000	,000
Speed	,924**	,914**	,913**	,000	,000	,000
Creativity and innovation	,912**	,908**	,879**	,000	,000	,000
Total	**1,000**	**1,000**	**1,000**	**-**	**-**	**-**

**. Correlation is significant at the 0.01 level (1-tailed)

Source: Developed by Researchers based on SPSS.V23 Outputs

It can be seen through the indicators in the table above that the correlation coefficients indicated are significant at $\alpha = 0.01$ levels and this is valid to measure. After testing the validity and reliability, as well as describing the variables, in this part we try to test the hypotheses through a set of tests to reach the empirical answer to the problematic, after determining the appropriate tests according to the hypotheses as follows:

Parametric Tests Hypotheses

We tested the hypotheses based on the Parametric Tests because the data are available of Parametric Tests hypotheses, which are:

- The variables nature is quantitative, for that Researchers purpose the evaluation method, not the Ordinal which is qualitative on Likert scales.
- The sample type is random: We relied on a multi-stage random sample that the society is quite homogeneous from managerial point of view. This facilitated the task and shortened the time of work.
- Observations follow the normal distribution, at least at 0.05 error level, and this is what the One-Sample Kolmogorov-Smirnov Test proves, according to the following hypotheses:
- H0: Observations follow the normal distribution of all components of competitive advantage.
- H1: Observations do not follow the normal distribution of all the components of competitive advantage.

Normality Distribution

We try to test the distribution of the competitive advantage dimensions if it follows the normal distribution by using the One-Sample Kolmogorov-Smirnov test. (Table 6)

Table N°6
One-Sample Kolmogorov-Smirnov test for Competitive Advantage

		Cost	Quality and Performance	Flexibility	Speed	Creativity and innovation
Normal Parameters[a,b]	Mean	4.2167	4.0201	4.0015	4.1113	4.3027
	Std. Deviation	.50201	.62123	.64016	.62022	.51113
Most Extreme Differences	Absolute	.179	.174	.149	.139	.156
	Positive	.179	.174	.108	.128	.116
	Negative	-.165-	-.149-	-.149-	-.139-	-.156-
Kolmogorov-Smirnov Z		1.088	1.068	.861	.799	.898
Asymp. Sig. (2-tailed)		.191	.213	.461	.550	.396

a. Test distribution is Normal.
b. Calculated from data.

Source: By researchers based on the SPSS.V23 outputs

The table shows the results of the One-Sample Kolmogorov-Smirnov test as the level of significance (Sig) for the components of the competitive advantage is greater than α (0.05) for all the dimensions, that meaning the distribution is not significant, this proves the H0, so the competitive advantage observations follow the normal distribution.

Descriptive Statistics

Based on the descriptive of indicators in the following table, we try to describe and prioritize the dimensions of the competitive advantage achieved by telecom operators. The following is a description and ranking of the main dimensions of competitive advantage. (Table 7)

Table N°7
Descriptive statistics of competitive advantage dimensions

Dimensions	Skewness			Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Creativity and innovation	.51113	-.228-	.389	-.927-	.722
Cost	.50201	-.211-	.389	-.801-	.722
Speed	.62022	-.232-	.389	-.802-	.722
Quality and Performance	.62123	-.284-	.389	-.643-	.722
Flexibility	.64016	-.072-	.389	-.930-	.722

Source: By Researchers Based on the SPSS.V23 Outputs

Through the above table that related to the description of competitive advantage indicators, we can observe the relative importance of the indicators that make up competitive advantage and their statistical measures.

Hypothesis Testing

In this part, we try to show the differences in achieving a competitive advantage among the studied companies (Mobilis, Ooredoo, and Djezzy) through their dimensions, by presenting and analyzing their indicators.

H_0: There are no differences in achieving competitive advantage among telecom companies in Algeria

H_1: There are differences in achieving competitive advantage among telecom companies in Algeria.

- **Cost:**

The following is a presentation of the indicators of the cost dimension and an attempt to describe them and find differences in their application among the studied companies (Mobilis, Ooredoo, and Djezzy) with a confidence level of 95%.(Table 8)

Table N°8
Cost ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1,163	2	,582	1,015	,370
Within Groups	26,362	150	,573		
Total	**27,525**	**152**			

Source: Developed by Researchers based on SPSS.V23 Outputs

In this table, the result of ANOVA test appears, as the test value (F =1,015) is not significant (P =, 370) and it is greater than 0.05 and this means that the three operators do not differ in their achievement the cost reduction. (Table 9)

Table N°9
Multiple Comparisons of Cost dimension

(I) GM	(J) GM	Mean Difference (I-J)	Std. Error	Sig.
Mobilis	Ooredoo	-,30455	,27167	,804
	Djezzy	,09879	,25349	1,000
Ooredoo	Mobilis	,30455	,27167	,804
	Djezzy	,40333	,29319	,527
Djezzy	Mobilis	-,09879	,25349	1,000
	Ooredoo	-,40333	,29319	,527

Source: Developed by Researchers based on SPSS.V23 Outputs

This table shows the bilateral comparisons between the three operators, as the differences between them are not significant, meaning that the three groups do not differ significantly in their achievement of the cost reduction at the 95% level.

- **Quality and Performance:**

The following is a presentation of the indicators of the Quality and Performance dimension and an attempt to describe them and find differences in their application among the studied companies (Mobilis, Ooredoo and Djezzy) with a confidence level of 95%. (Table 10)

Table N°10

Quality and Performance ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1,820	2	,910	1,846	,169
Within Groups	22,677	150	,493		
Total	**24,496**	**152**			

Source: Developed by Researchers based on SPSS.V23 Outputs

In this table, the result of ANOVA test appears, as the test value (F=1,846) is not significant (P=, 169) and it is greater than 0.05 and this means that the three operators do not differ in their achievement the Quality and Performance improvement. (Table 11)

Table N°11

Multiple Comparisons of Quality and Performance Dimension

(I) GM	(J) GM	Mean Difference (I-J)	Std. Error	Sig.
Mobilis	Ooredoo	-,25152	,25197	,970
	Djezzy	,26848	,23510	,778
Ooredoo	Mobilis	,25152	,25197	,970
	Djezzy	,52000	,27193	,186
Djezzy	Mobilis	-,26848	,23510	,778
	Ooredoo	-,52000	,27193	,186

Source: Developed by Researchers based on SPSS.V23 Outputs

This table shows the bilateral comparisons between the three operators, as the differences between them are not significant, meaning that the three groups do not differ significantly in their achievement of the Quality and Performance improvement at the 95% level.

- **Flexibility:**

The following is a presentation of the indicators of the Flexibility dimension and an attempt to describe them and find differences in their application among the studied companies (Mobilis, ooredoo, and djezzy) with a confidence level of 95%.

Table N°12

Flexibility ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1,349	2	,674	1,369	,264
Within Groups	22,656	150	,493		
Total	**24,005**	**152**			

Source: Developed by Researchers based on SPSS.V23 Outputs

In this table, the result of ANOVA test appears, as the test value (F=1,369) is not significant (P=, 264) and it is greater than 0.05 and this means that the three operators do not differ in their achievement the flexibility improvement. (Table 13)

Table N°13

Multiple Comparisons of Flexibility Dimension

(I) GM	(J) GM	Mean Difference (I-J)	Std. Error	Sig.
Mobilis	Ooredoo	,00000	,25185	1,000
	Djezzy	,36000	,23499	,397
Ooredoo	Mobilis	,00000	,25185	1,000
	Djezzy	,36000	,27181	,576
Djezzy	Mobilis	-,36000	,23499	,397
	Ooredoo	-,36000	,27181	,576

Source: Developed by Researchers based on SPSS.V23 Outputs

This table shows the bilateral comparisons between the three operators, as the differences between them are not significant, meaning that the three groups do not differ significantly in their improvement of the flexibility at the 95% level.

- **Speed:**

The following is a presentation of the indicators of the Speed dimension and an attempt to describe them and find differences in their application among the studied companies (Mobilis, Ooredoo, and Djezzy) with a confidence level of 95%. (Table 14)

Table N°14

Speed ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2,806	2	1,403	3,373	,043
Within Groups	19,134	150	,416		
Total	**21,940**	**152**			

Source: Developed by Researchers based on SPSS.V23 Outputs

In this table, the result of ANOVA test appears, as the test value (F= 3,373) is not significant (P=, 043) and it is greater than 0.05 and this means that the three operators do not differ in their achievement the Time reduction. (Table 15)

Table N°15

Multiple Comparisons of Speed Dimension

(I) GM	(J) GM	Mean Difference (I-J)	Std. Error	Sig.
Mobilis	Ooredoo	-,29545	,23145	,625
	Djezzy	,34788	,21596	,342
Ooredoo	Mobilis	,29545	,23145	,625
	Djezzy	,64333*	,24979	,040
Djezzy	Mobilis	-,34788	,21596	,342
	Ooredoo	-,64333*	,24979	,040

*. The mean difference is significant at the 0.05 level.

Source: Developed by Researchers based on SPSS.V23 Outputs

This table shows the bilateral comparisons between the three operators, as the differences between them are not significant, meaning that the three groups do not differ significantly in their achievement of the Time reduction at the 95% level.

- **Creativity and Innovation:**

The following is a presentation of the indicators of the Creativity and innovation dimension and an attempt to describe them and find differences in their application among the studied companies (Mobilis, Ooredoo, and Djezzy) with a confidence level of 95%. (Table 16).

Table N°16

Creativity and Innovation ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1,163	2	,582	1,015	,370
Within Groups	26,362	150	,573		
Total	**27,525**	**152**			

Source: Developed by Researchers Based on SPSS.V23 Outputs

In this table, the result of ANOVA test appears, as the test value (F = 1,015) is not significant (P =, 370) and it is greater than 0.05 and this means that the three operators do not differ in their achievement the Creativity and innovation improvement.

Table N°17

Multiple Comparisons of Creativity and Innovation Dimension

(I) GM	(J) GM	Mean Difference (I-J)	Std. Error	Sig.
Mobilis	Ooredoo	-,30455	,27167	,804
	Djezzy	,09879	,25349	1,000
Ooredoo	Mobilis	,30455	,27167	,804
	Djezzy	,40333	,29319	,527
Djezzy	Mobilis	-,09879	,25349	1,000
	Ooredoo	-,40333	,29319	,527

Source: Developed by Researchers based on SPSS.V23 Outputs

This table shows the bilateral comparisons between the three operators, as the differences between them are not significant, meaning that the three groups do not differ significantly in their achievement of the Creativity and innovation improvement at the 95% level.

Results and Discussion

We can present the results that related to the description and testing of competitive advantage indicators, we can observe the relative importance of the indicators that make up competitive advantage and their testing the hypothesis as follows:

1. The telecom operators have the factor of creativity and innovation, this is evidenced statistically, where, the mean of this dimension is high, "4.3027", with a standard error of ".09125", while the answers are dispersed with a standard deviation estimated at .51113 with a normal distribution according to the Asymp. Sig of One-Sample Kolmogorov-Smirnov test (.396). The indicators that express the differences are not significant at 95% confidence level. This proves that there are no differences in developing the creativity and innovation among the telecoms operators (Mobilis, ooredoo, Djezzy) through one-way ANOVA (,370).
2. The Telecom operators can control costs, this is evidenced statistically, where, the mean of this dimension is high, "4.2167", with a standard error of ".10013", while the answers are dispersed with a standard deviation estimated at .50201 with a normal distribution according to the Asymp. Sig of One-Sample Kolmogorov-Smirnov test (.191). The indicators that

express the differences are not significant at 95% confidence level. This proves that there are no differences in controlling cost among the telecoms operators (Mobilis, ooredoo, Djezzy) through one-way ANOVA (,370).

3. The Telecom operators can control Time (speed), this is evidenced statistically, where, the mean of this dimension is high, "4.1113", with a standard error of ".10213", while the answers are dispersed with a standard deviation estimated at .62022 with a normal distribution according to the Asymp. Sig of One-Sample Kolmogorov-Smirnov test (.550). The indicators that express the differences are not significant at 95% confidence level. This proves that there are no differences in controlling Time among the telecoms operators (Mobilis, ooredoo, Djezzy) through one-way ANOVA (,043).
4. The Telecom operators are available of Quality and Performance, this is evidenced statistically, where, the mean of this dimension is high, "4.0201", with a standard error of ".10116", while the answers are dispersed with a standard deviation estimated at .62123 with a normal distribution according to the Asymp. Sig of One-Sample Kolmogorov-Smirnov test (.213). The indicators that express the differences are not significant at 95% confidence level. This proves that there are no differences in developing the Quality and Performance among the telecoms operators (Mobilis, ooredoo, Djezzy) through one-way ANOVA (,169).
5. The Telecom operators have flexibility with different variables, this is evidenced statistically, where, the mean of this dimension is high, "4.0015 ", with a standard error of ".11095", while the answers are dispersed with a standard deviation estimated at .64016 with a normal distribution according to the Asymp. Sig of One-Sample Kolmogorov-Smirnov test (.461). The indicators that express the differences are not significant at 95% confidence level. This proves that there are no differences in developing the flexibility among the telecoms operators (Mobilis, ooredoo, Djezzy) through one-way ANOVA (,264).
6. We note the relative importance of the components of competitive advantage, represented in creativity and innovation in the first place, in the pursuit of meeting the ever-evolving desires and needs of customers, The cost is in the second place for the importance of this factors in the purchasing decision, the speed of delivery and implementation of the operations is in the third place, as competition fills the waiting spaces for customers because waiting is considered a cost and a sacrifice from customers leading to lose the organization values, Quality is ranked fourth for its direct impact on the purchasing decision but lesser than price sensitivity, then finally the flexibility Due to stability of the market and non-competitive economy.

Business organizations seek to survival and continuity in light of the factors surrounding, especially competition and customer orientations, in pursuit to compete by defined the optimal strategy for their activities scope to be more compatible and consistent with their environment and thus achieve differentiation and compatibility in order to gain customer satisfaction and then obtain loyalty as a qualitative factor of Competitive advantage.

Conclusion

In order to develop and maintain the competitive advantage, the business organization works to bring about continuous innovations and improvements in its products and services, higher management of its quality, control its costs, and flexibility in its transactions and relationships. And speed in implementing the correct processes that are among the most recent, prominent and successful means of creating a competitive advantage in addition to innovation and creativity.

In order for the business organization to be successful in reaching its goals, it must take into account its competitors in the market with the same importance and attention that it gives to its current and potential customers. The business organization must monitor and compare its products, prices and the method of distribution and promotion of its products with its direct competitors, and in order to achieve the success it is necessary to understand the competitive advantage and how to achieve and maintain it.

Various business organizations must rely on a real competitive advantage, which is established after perception and thinking, so that the business organization ensures high competitiveness, this requires accurate knowledge of the sources from which the competitive advantage is derived to achieve leadership in its field of activity.

References:

- Aulawi, H., Sudirman, I., Suryadi, K., & Govindara, R. (2008). Knowledge sharing behavior, antecedent and its influence towards the company's innovation capability. *IEEE International Conference on Industrial Engineering and Engineering Management,* (pp. 2092-2096). IEEE.
- Bratić, D. (2011). Achieving a competitive advantage by SCM. *IBIMA Business Review*, 1-13.
- Bulankulama, S., & Khatibi, A. (2014). A Theoretical Approach to the Competitive Advantage Moderating Effects of Strategies. *Innovation and IT.*, 2319.
- Chen, K. D. (2017). The affecting factors of career coaching implementation on college training programs in innovation and creativity-a case study. *International Conference on Applied System Innovation (ICASI),* (pp. 858-860) IEEE.
- Ghouchani, F., & Miri, S. (2018, June). Investigating the Factors Influencing the Green Export Strategy and its Impact on the Competitive Advantage and Export performance of the Company (Case Study: Tehran Manufacturing Companies). *International Journal of Applied Business and Economic Research*.
- Monsur, S., & Yoshi, T. (2012). Improvement of firm performance by achieving competitive advantage through vertical integration in the apparel industry of Bangladesh. *Asian Economic and Financial Review, 2*(6), 687.
- Xiao, C., & Gang, Z. (2017, July). How Do Innovation Capabilities of Industrial Cluster Evolve in the Context of E-Commerce?: A Case Study from China. (IEEE, Éd.) *Portland International Conference on Management of Engineering and Technology (PICMET)*, 1-8.