<u>Investigating the Role of innovation and creativity on creating a</u> <u>comparative advantage: Case study in the hospitality sector in Algeria</u>

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<u>Abstract</u>: The aim of this study is to analyze and explore the effects of innovation and creativity on realizing a comparative advantage in the selected hotels in Algeria, and identify the degree of care of Hotels in creativity and business innovation in general. The study used a quantitative descriptive approach to determine whether or not innovation, can impact realizing competitive advantage, of hospitality sector in Algeria. The population of the study consisted of 10 hotels in Algeria as indicated in the most recent available data provided by National Tourist Office in Algeria report in (2016).

The results showed that the distribution of the respondents according to the demographic characteristics (gender, age, educational degree, years of experience, and the current job position) effect positively the level of innovation and creativity in the hotels from the point of view of the respondents of the study. Also, innovation has a positive impact on the four dimensions of competitive advantage (time, quality, cost, flexibility), which will create eventually much better performance for the services providing by the hotels.

<u>Keys words</u>: creativity, innovation, organization, comparative advantage, hospitality sector in Algeria.

ملخص: تحدف هذه الدارسة إلى تحليل واستكشاف آثار الابتكار والإبداع على تحقيق ميزة تنافسية داخل منظمات الأعمال, و استيضاح الأثر الناجم عن تبني ثقافة إبداعية في تعزيز الميزة التنافسية في الفنادق المختارة ضمن مجتمع الدراسة ، وتحديد درجة رعاية و اهتمام الفنادق لفكرة الإبداع والابتكار في مجال الأعمال بشكل عام.

استخدمت الدراسة منهجا وصفيا كميا حيث يتكون مجتمع الدراسة من 10 فنادق تشتغل في الجزائر كما هو مبين في أحدث البيانات المتاحة التي قدمها المكتب السياحي الوطني في الجزائر في تقرير (2016).

وقد بينت النتائج بأن نوعية المستجيبين حسب الخصائص الديموغرافية (الجنس والعمر والدرجة العلمية وسنوات الخبرة والوظيفة الحالية) كان لها أثر إيجابي على مستوى الإبداع والابتكار في الفنادق من وجهة نظر المشاركين في الدراسة .كما أن للابتكار أثرا إيجابيا على الأبعاد الأربعة للميزة التنافسية (الوقت، الجودة، التكلفة، المرونة)، الأمر الذي سيخلق في نحاية المطاف أداء أفضل بكثير للخدمات التي تقدمها الفنادق.

الكلمات المفتاحية: الإبداع, الابتكار, منظمات الأعمال, الميزة التنافسية, قطاع الفندقة في الجزائر.

Introduction: In recent times there has been a growing interest for the ideas behind creativity and innovation and how to manage these processes. Even the Western part of the world has been labeled the Innovation Economy. In despite of this there is more than one approach to archive success in the field of innovation and creativity.

From a business point of view, society has moved to a postindustrial age. Due to globalization and automation of work processes manual work has declined, and a bigger demand for professional knowledge workers has occurred. Knowledge has become a valued form of capital and innovation the predominant engine for economic growth.

The focus of this dissertation is on creativity and innovation, since these are important factors for the companies' struggle for survival in today's society. Furthermore, the angle is seen from the management's point of view, which has great importance if companies are to be engaged in the right direction. However, much has been written about creativity and innovation management since Joseph Schumpeter popularized ideas about creative destruction and entrepreneurship nearly a century ago.

Bledow defined innovation as the development and intentional introduction into practice of new and useful ideas by individuals, teams, and organizations¹.

The term "value innovation²" is somewhat more explicit: It focuses on innovation as a process through which organizations find novel and effective ways of serving their current customers and identifying new markets, thus linking innovation to what customers value.

This terminology makes it clear that, at the level of organizations, innovation is not just a matter of coming up with a new idea but requires a valuable product, although "product" is not confined to devices or even tangible objects, but covers the full value chain, including marketing ,market research, sales, advertising, distribution and customer service³.

In recent years it has become almost axiomatic that the innovation process is a key one: At the macro level (for instance national innovation policy) it is accepted as vital in meeting the challenges of the early 21st century arising from technological advances, social change, globalization, and now the global financial crisis, while at the meso level of the individual organization innovation is "a key to organizational effectiveness and competitive advantage" and thus ultimately to commercial success and creation of wealth⁴.

LITERATURE REVIEW

Innovation: The term "innovation" as such was used for the first time by Schumpeter at the beginning of the 20th century. His ideas and research have been developed by a number of other authors⁵. Schumpeter defined innovations as product, process and organisational changes that do not necessarily originate from new scientific discoveries, but may arise from a combination of already existing technologies and their application in a new kontext. Innovation also originates from public research. It is therefore possible to summarise that according to these definitions innovations do not cover only technical and technological changes and improvements, but in particular practical application and particularly originates from research

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Creativity: Creativity is a process by which a symbolic domain in the culture is changed. New songs, new ideas, new machines are what creativity is about Mihaly(1997).

Creativity is the ability to make or otherwise bring into existences something new, whether a new solution to a problem, a new method or device, or a new artistic object or form. Wyckoff (1991) defines creativity as new and useful. Creativity is the act of seeing things that everyone around us sees while making connections that no one else has made. Creativity is moving from the known to the unknown. Culture exerts a negative force on creativity according to Pearce (1974), however, "were it not for creativity, culture itself would not be created."

There is widespread agreement in the literature that creativity requires the ability to produce outcomes that are novel, high quality and appropriate to the task⁸.

Creativity drives innovation both by underpinning the individual and organizational skills needed to adapt to the pace and nature of change in the modern world⁹, and by acting as a key ingredient in the process of generating new business opportunities, whether in the form of a product, process, system or service.

All innovation begins with creative ideas. creativity is the starting point for innovation. Creativity is however necessary but not sufficient condition for innovation. Innovation is the implantation of creative inspiration

Competitive Advantage: Michael Porter, said that Competitive Advantage grows out of value a firm is able to create for its buyers that exceeds the firm's cost of creating it. Value is what buyers are willing to pay, and superior value stems from offering lower prices than competitors for equivalent benefits or providing unique benefits that more than offset a higher price. There are two basic types of competitive advantage: cost leadership and differentiation.

Already in 1986 Tushman & Nadler stressed that "organizations can gain competitive advantage only by managing effectively for today while simultaneously creating innovation for tomorrow¹⁰" and suggested that "there is perhaps no more pressing managerial problem that the sustained management of innovation". Tushman& Nadler identify visionary leadership and also people, structures and values as important factors that affect whether an organization realizes benefits from innovation. Innovation is still seen as a critical drive of economic performance.

Competitive advantage seeks to address some of the criticisms of comparative advantage. Porter proposed the theory in 1985. Porter emphasizes productivity growth as the focus of national strategies¹¹. Competitive advantage rests on the notion that cheap labor is ubiquitous and natural resources are not necessary for a good economy. The other theory, comparative advantage, can lead countries to specialize in exporting primary goods and raw materials that trap countries in low-wage economies due to terms of trade. Competitive advantage attempts to correct for this issue by stressing maximizing scale economies in goods and services that garner premium prices¹².

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Competitive advantage has been so popular in the contemporary literature of management nowadays. The reasons behind such popularity include the rapid change that firms face today, the complexity of the business environment, the impacts of globalization and unstructured markets, the ever changing consumer needs, competition, the revolution of information technology.

Clark, Hayes, and Wheelwright suggested that firms compete in the marketplace by virtue of one or more of the following competitive priorities. Time, quality, and cost are, along with flexibility¹⁴. Several academics and practitioners have taken these four indicators, modified or not, over the past years. In this study we used the Clark's dimensions of competitive advantage (Time, quality, flexibility, and cost).

RESEARCH PROBLEMS & HYPOTHESIS: Building on the results of previous studies, this study consists of the following main hypothesis:

• There is a significant impact of innovation and creativity on creating competitive advantage in the hospitality sector in Algeria.

This main hypothesis is tested through the following sub-hypotheses:

- H0.1: There is a significant relation of innovation and creativity related to Time.
- H0.2 There is a significant relation of innovation and creativity related to Quality.
- H0.3: There is a significant relation of innovation and creativity related to Cost.
- H0.4: There is a significant relation of innovation and creativity related to Flexibility

METHODOLOGY: The study used a quantitative descriptive approach to determine whether or not innovation, can impact realizing competitive advantage, of hospitality sector in Algeria. The population of the study consisted of 25 hotels around the country as indicated in the most recent available data provided by National Tourist Office in Algeria report in (2016).

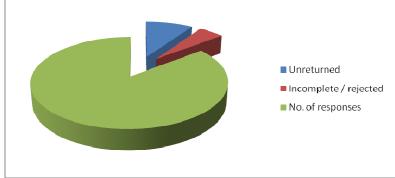
The study utilized a random sample size of 21% of the population which is considered representative and acceptable sample size for the purposes of statistical analysis. A close ended questionnaire was developed for primary data collection, based on the related literature, and the available former studies. The questionnaire contained the following parts: First part was a covering letter which aimed to encourage respondents to participate in answering the questions with an explanation of the response method and reassurance to them that the provided information is used for scientific research purposes only. The second part included questions regarding the personal characteristics; the questions in this part were primarily of a classification nature and aimed at providing a proper background of the respondents. The third part raised questions regarding creativity and innovation. Lastly, the fourth part contained questions about competitive advantage dimensions (time, quality, cost, and flexibility). The study utilized Lickert five-point scale, as it is one of the best and most frequently used scales to measure opinions, due to its ease and balance¹⁵.

Table (1) below states the number of questionnaires distributed. Out of 140 questionnaires only 120 were usable as 13 copies were unreturned, and 7 copies were eliminated either because failing to pass the criteria, or for being incomplete.

Tuble Houldhin	ary of itesponse itates
140	Questionnaires
	administrated
13	Unreturned
07	Incomplete / rejected
120	No. of responses
(120/140)=	Response rate
85.7%	_
140	Questionnaires
	administrated

-	-			-
Ta	ble	1:Summary	of Response	Rates

Figure (01):Summary of Response Rates

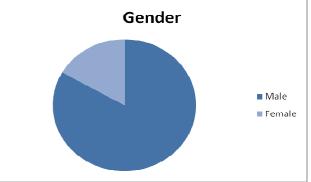


RESULTS: For the purpose of identifying some facts and data concerning the study sample, a number of personal and occupational variables were chosen. The variables included: gender, age, educational degree, years of experience, and the current job position. Frequencies and percentages of the demographic characteristics of the sample were analyzed, and results are presented in table (2).

Table 2: Demographic Profile of the Respondents according to the variable of the

<u>gender (n=120)</u>				
Variable Category Frequency Perce				
gender	Male	100	83.3%	
	Female	20	16.7%	

Figure (02) : the distribution of the respondents according to the variable of the gender



The Pie chart figure (02) shows that the highest percentage for the distribution of the respondents according to the variable of the gender was (83.3%) for male, while the lowest percentage (16.7%) was for women.

Table 3: Demographic Profile of the Respondentsaccording to the

<u>variable of the age (n=120)</u>				
Variable	Category	Frequency	Percent	
Age	Less than 30 years	66	55.0%	
	30-39 years	20	16.7%	
	40-49 years	28	23.3%	
	50 Years and older	6	5.0%	

Figure (03): the distribution of the respondents according to the variable of the age

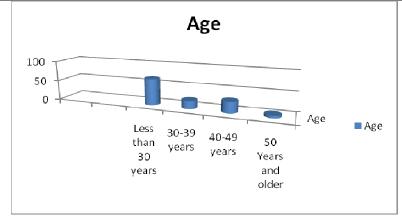


Figure (3) shows that the highest percentage for the distribution of the sample members according to the variable of age was (55.0%) for the age group of (Less than 30 years), while the lowest percentage was (5.0%) for the age group (50 years and older).

Variable	Table of theEducationalLevel (n=120)CategoryFrequencyPercent				
Educational	High School or Less	2	1.7%		
Level	Diploma	6	5.0%		
	Bachelor	102	85%		
	GraduateStudies	10	8.3%		

<u>Table 4: Demographic Profile of the Respondentsaccording to the</u> variable of theEducationalLevel (n=120)

Figure (4): the distribution of the respondents according to the variable of the
educational level

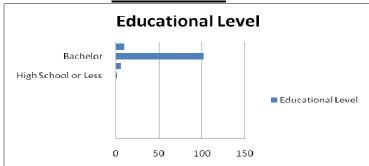
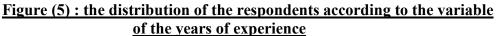
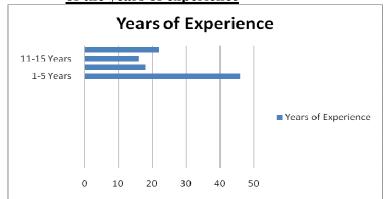


Figure (04) shows that the highest percentage for the distribution of the respondents according to the variable of the level of education was (85.0%) for (Bachelor). However, the lowest percentage (1.70%) was for (high school or less).

<u>Table 5: Demographic Profile of the Respondentsaccording to the variable</u> of theyears of experience (n=120)

Variable	Category	Frequency	Percent
Years of	1-5 Years	46	53.3%
Experience	6-10 Years	18	15.0%
	11-15 Years	16	13.3%
	More than 15 Years	22	18.3%



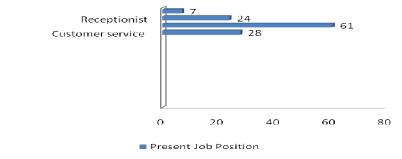


Based on the Multiple Bar Graph (5) the highest percentage for the distribution of the respondents according to the variable of the years of experience was (53.3.0%) for (01-05 years), while the lowest percentage (13.3%) was for (11-15 years).

Variable	Category	Frequency	Percent
Present Job	Customer service	28	23.3%
Position	Departement Manager	61	50.8%
	Receptionist	24	20%
	Other	7	5.8%

Table 6: Demographic Profile of the Respondents according to the
variable of theoresent job position (n=120)

Figure (6): the distribution of the respondents according to the variable of the present job position



Based on the figure (6) the highest percentage for the distribution of the sample members depending on the variable of the present job position in the selected hotels was (50.8%) for the category (department manager) whiles the lowest percentage (5.8%) was for the category (others).

Reliability Analysis: The Cronbach's alpha was computed to assess the items score of the independent variable (creativity innovation) and the dependent variable (competitive advantage). Each construct shows Cronbach's alpha readings of acceptable values above 60%. Reliability values for all constructs range from 0.714 to 0.886. This implies that the items form a scale with internal consistent reliability. Table (7) gives detailed explanation of the reliability of each variable.

<u>Table7: Summary of Kenability Test (n=120)</u>				
Variable name	Item number	Cronbach's alpha		
Innovation & creativity	5	0.872		
Time	4	0.866		
Quality	4	0.886		
Cost	4	0.704		
flexibility	4	0.857		
Overall Reliability	21	0.837		

Table7. Summary of Reliability Test (n=120)

Hypotheses Results: The hypotheses were tested as per the rule of thumb to accept the hypothesis if its calculated (F) value was higher than its tabulated value. Results of analysis for testing the hypothesis are shown in table (8).

		I adi	e ð :Regi	ression Analysis	
Component	R2	F Sig(F)	β	Coefficient	Null Hypothes is decision
Time	0.709	141.464	0.000	0.842	Reject
Quality	0.782	208.468	0.000	0.884	Reject
Cost	0.444	46.409	0.000	0.667	Reject
flexibility	0.613	29.038	0.000	0.783	Reject
Competitive	0.844	74.534	0.000	0.000	Reject
Advantage					•
Critical f at 0.05 level = 3.89 (degree of freedom $1\&251$)					

Table & Degrassion Analysis

Table (8) demonstrates the liner regression of the independent variable (creativity & Innovation) on the dependent variable (Competitive Advantage). The determination coefficient (\mathbb{R}^2) signified that the rate of the interpreted difference (**0.844**) indicated that **84.4%** of the overall differences in realizing competitive advantage is determined by creativity& innovation. Meanwhile, the computed F value (**74.534**) is higher than the tabulated F value at significant level of 0.05; this led to rejecting of the null hypothesis and accepting the alternative one. Tracking the partial regression coefficient (β) of each dimension of competitive advantage indicated that the quality is the most important dimension in terms of interrupted contribution in realizing competitive advantage, followed by time , then Flexibility and finally Cost. As the influence value were (0.884, 0.842, 0.783, and 0.667) respectively.

CONCLUSIONS:

The results of the statistical analysis of the data on the impact of creativity and innovation on realizing the competitive advantage showed that the distribution of the respondents according to the demographic characteristics (gender, age, educational degree, years of experience, and the current job position) effect positively the level of innovation and creativity in the hotels from the point of view of the respondents of the study.

The results show that innovation and creativity has positive impact on quality and time, as a matter of fact quality turned to be the most impacted dimension; this means adopting innovation and creativity lead to new products and services and new ideas as well. Improving the quality in general allows hotels to compete in the markets based on the characteristics and the specifications of its products and services; also innovation provides better quality and utilizes production methods efficiently.

Additionally, innovation has positive impact on time, this means that the use of innovation in hotels improves the lead time, and the time needed to develop new or modify current products and services. As discussed previously, innovation could have two types, product innovation and process innovation; time is improved in both types of innovation.

Lastly, the results confirms that cost and flexibility was the least important dimension of realizing competitive advantage, which indicates that hotels in Algeria not fully adopting innovation and creativity as a management concept

To conclude innovation has a positive impact on competitive advantage; the four dimensions of competitive advantage combined together show better result under the impact of creativity and innovation, indicating that the use of innovation and creativity in all competitive advantage dimensions will create eventually much better performance for the services providing by the hotels .

Recommendations:

Based on the results of the study, the researchers recommended the following:

- The above shows that the innovative activity of organizations significantly influences competitiveness which is based on inimitable skills and abilities.
- Achieving a higher competitiveness by means of innovations means producing less costly products of better quality compared to those manufactured by competitors.
- Innovations are a key source of a competitive advantage that determines the economic success of each organization.
- The importance of innovations and creativity is generally identical for all organizations, regardless of their size and economic sector.
- Innovations are a key source of a competitive advantage that determines the economic successof each organization.
- If organizations wish to survive and grow in today's turbulent environment, they have to make every effort to introduce an innovative approach and creativity; therefore top management's support is essential.

• The mangers of the hotels should place additional emphasis on innovation and creativity as it is an important driver for realizing competitive advantage. Improved innovation depends highly on the degree of its implementation as well.

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