

# ENTREPRENEURIAL MANAGEMENT AND ITS ROLE IN ACHIEVING STRATEGIC SUCCESS

AN EMPIRICAL STUDY FROM THE PERSPECTIVE OF THE TOP LEADERS IN JORDANIAN UNIVERSITIES

Abdullah Barakat\*  
Kamel Hawahreh\*\*

## **P**URPOSE

*THIS study aimed to assess the impact of entrepreneurial management on achieving strategic success from the viewpoint of the top leaders in Jordanian universities.*

**Design/Methodology/Approach:** *A questionnaire comprising 29 statements was designed and distributed to a random sample of 475 leaders from the population under study; 435 of these questionnaires were returned, leading to a response rate of 91.75%. Using the statistical package SPSS version 17.0 and descriptive statistics, the impact of entrepreneurial leadership and structural flexibility in the specified strategic and effective implementation in the universities was evaluated. A factor analysis test assessed the reliability of the test and the study instrument.*

*Regression analysis and other statistical tests were used to determine the effect of entrepreneurial management on strategic success.*

**Findings:** *The study revealed that the assessment of top managers of the impact of entrepreneurial management in Jordan universities has been positive. There is also a positive and significant impact (á d" 0.05) or less of the dimensions of entrepreneurial management on achieving strategic success.*

**Research Limitations:** *This study recommends enhancing the incentive culture and linking it to the strategy, objectives, and performance results in the short and long term. In addition, it recommends providing innovative incentives such as direct compensation, estimated compensations, challenging situations at work, and educational opportunities.*

*Finally, the study suggests the adoption of integrated strategies for achievement, harnessing rituals, stories, and means to clarify and identify strategic initiatives as well as to assess the small distinctive contributions that add value to an organization in addition to knowledge sharing and support leadership development.*

*Jordanian universities should also focus on opportunities that enhance their added value ultimately creating a diverse portfolio of innovations, taking into account the calculated risks in the short and long term and following an entrepreneurial marketing approach in creativity.*

**Practical Implications:** *The significance of this study lies in addressing the issue of organizational entrepreneurship and its ability to achieve strategic success for the purpose of enhancing and improving organizational entrepreneurial performance among Jordanian universities in two respects, the theoretical significance and practical importance.*

\* Associate Professor, Shaqra University, Saudi Arabia.

\*\* Associate Professor, Middle East University, Jordan.

Abdullah Barakat and Kamel Hawahreh

**Originality/Value:** *The paper gave answer for the following main question:*

*What is the role of entrepreneurial management, with its dimensions of structural flexibility, and entrepreneurial leadership in achieving strategic success in Jordanian universities?*

*The paper provides a solution for the Jordanian Universities.*

**Key Words:** *Entrepreneurial Management, Structural Flexibility, Entrepreneurial Leadership, Strategic Success, Jordanian Universities.*

## **Introduction**

Entrepreneurial activity at the individual level and at the organizational level is considered as one of the key elements in reviving the economic situation in any country that desires to develop and rise in status (Jennings and Seaman, 1990). It also represents an economic development tool in many countries. In the long run, economic progress and success in any country depends on its ability to increase and double the value of what is produced in the country by depending on human resources, capital, and lands, and this depends largely on creative approaches or entrepreneurial business. (Harper, 2003), *as it likely that current entrepreneurial or small ventures as well as those under formation represent the foundation necessary to build and develop the national economy* (Bygrave and Minnitti, 2003). Entrepreneurship is seen as a dynamic process with a vision based on change and positive development. Therefore, this requires the use of one's intellectual capabilities to develop and apply new ideas and creative solutions (Kuratko and Hodgetts, 2004). Macke (2003) considered entrepreneurship to be a vital element in economic development, although he addressed and studied this in the context of the private sector. However, this can also be applied to government bodies and public organizations. According to Kuratko et al., (1993) and Pinchot (1985), it is inevitable to develop internal entrepreneurship in an organization in a form that allows the development of an initiative spirit while allowing the development of internal capabilities in light of existing competition at the national economic level and motivating individuals in different ways to foster an entrepreneurial spirit and innovations in various organizational contexts (Kuratko et al., 1993, Pinchot, 1985).

Studies dealing with organizational entrepreneurship have historically been interested in two main areas both of which concern large organizations: establishing new projects and entrepreneurs within large organizations. This includes studying entrepreneurial characteristics at the organizational level. (Hisrich, et al., 2005). Therefore, studies addressing organizational entrepreneurship have concentrated on three key fields. The first is the individual entrepreneur, for which studies examine individual characteristics of business entrepreneurs. The Second is the establishment of new organizational projects, with particular emphasis on different types of new projects, their compatibility and complementarity with an organization's activities and related operations, the duration of their development, and the manner in which they support an organization's internal environment. The last field is the entrepreneurial organization for which studies focus on the characteristics of such entrepreneurial organizations (Hofstede, 2001 and 2002). Therefore, we find that the main contribution to the field of organizational business entrepreneurship is to increase the awareness and comprehension of an entrepreneurial role in existing organizations, which includes the revitalization of these organizations and their performance, the role of successful organizational entrepreneurs, the role of new projects in the existing organizations, and the role of entrepreneurial organizations (Ferreira, 2001). Although individuals establish their organizations for reasons such as the pursuit of challenge and the opportunity of self-determination, most studies agree that the establishment of entrepreneurial projects can be traced to personal characteristics of each individual; these individuals can be invested in large organizations, as entrepreneurship is not exclusive to projects and small businesses. Many researchers have found that individuals work to achieve independence, autonomy, high income, and the opportunity to be master of themselves (Morris and Sexton, 1996). Individuals cannot reach this level of flexibility in large organizations unless there are flexible and open climates based on organizational characteristics that are capable of reducing turnover rates through accepting individual employees' ideas, testing their

ideas and trying to apply them (Norton and Moore, 2006 ). Consequently, universities are trying to increase their level of entrepreneurship and innovation by promoting individual products, which enhances regional and national development and competitiveness at the local and international level. For the purpose of applying the knowledge that is produced, the university depends on work quality because the transfer of knowledge and its uniform application in diverse environments are difficult as each application has unique characteristics, even if the publishing costs are low.

### **Study Statement**

With the changes in society, and the development of new technology, competition is increasing; it is inevitable that organizations will endeavor to meet these challenges. As a result, a variety of forces and variables have placed an intense pressure on all educational institutions, especially those in the higher education system, to become more dynamic (King and Boehlje, 2000; Miller, 2005). On the basis of Jordanian society's view regarding Jordanian universities, a problem has emerged that has a significant impact on Jordanian universities. The problem is that Jordanian universities were not included in the universal classification of the universities; this has provoked the anger of many symbols in the Jordanian higher education and Jordanian society, therefore, it is necessary to study the factors that led to this phenomenon and to try to find appropriate solutions. On this basis, the problem can be translated in the following main question:

What is the role of entrepreneurial management, with its dimensions of structural flexibility, and entrepreneurial leadership in achieving strategic success in Jordanian universities?

The following questions can be derived from the main question:

1. What is the available level of entrepreneurial management features (structural flexibility and entrepreneurship leadership) according to the top leaders of Jordanian universities?
2. What are the factors that lead to strategic success according to the top leaders in the Jordanian universities?

### **Study Objectives**

This study seeks to achieve the following objectives:

1. To identify the supporting elements of entrepreneurship in Jordanian universities.
2. To determine the impact of structural flexibility on strategic success according to the top leaders in Jordanian universities.
3. To determine the impact of entrepreneurial leadership on strategic success according to the top leaders in Jordanian universities.

### **Study Significance**

The significance of this study lies in addressing the issue of organizational entrepreneurship and its ability to achieve strategic success for the purpose of enhancing and improving organizational entrepreneurial performance among Jordanian universities in two respects.

#### **Theoretical Significance**

1. Establishment of a theoretical framework from the Arab environment in Jordanian universities, and the introduction of the concept of entrepreneurial universities.
2. The investigation of the importance of entrepreneurial management dimensions in enhancing the level of strategic success in Jordanian universities.
3. The discussion of the concept of entrepreneurial universities, which is deemed one of the concepts of modern management that researchers have begun to discuss in the Arab environment, as

well as discuss the modern point of view of strategic learning which is still in the research and verification process.

4. The attempt to identify the most prominent characteristics of organizational entrepreneurship that Jordanian universities enjoy from the perspective of the top leaders of Jordanian universities.

### **Practical Importance**

The practical importance of the study stems from the following:

1. The possibility that leaders in Jordanian universities can benefit from the results of this study by promoting organizational development and changing their universities for the betterment of entrepreneurial universities around the world.
2. To encourage the staff to take actions regarding education and continuous development such that Jordanian universities can behave as entrepreneurial universities and can perform their role in enhancing the entrepreneurial community.
3. Studying Jordanian universities may improve change management and the perceived organization-level readiness to become advanced entrepreneurial universities.
4. To draw the attention of Arab universities in general and Jordanian universities in particular to the need to explore the relationship between organizational entrepreneurial factors that support entrepreneurial universities in light of the findings of this study and their practical utilization.
5. The study's importance also stems from the lack of Jordanian researchers and studies regarding organizations' entrepreneurship to the best of the knowledge of the researchers.

### **Previous Studies**

Stevenson's (2010) study aimed to investigate the perceived entrepreneurial characteristics that affect women's access to entrepreneurship on the grounds that women had personal entrepreneurial characteristics that distinguish them from men with respect to the business environment by depending on driving personal characteristics, such as the perceived personal characteristics that each woman feels or believes. This will provide an understanding of the success of the female entrepreneur which will strengthen and aid the future success of women's entrepreneurship on the basis of personal characteristics, leading to an accurate knowledge of access to experience and success, the acceptance of failure, a strong vision, and self-confidence with regard to practical matters.

Stewart's (2009) study aimed to investigate leading entrepreneurial trends among employees in service organizations based on the entrepreneurial spirit of leaders and staff in these organizations and focusing on-the-job entrepreneurial behavior through individuals' characteristics in organizations and then to show the impact of this trend on individual performance and job satisfaction in the service sector. The results showed a relationship between staff driven by consumers (salesmen) and entrepreneurial features that they enjoy as employee entrepreneurs. The study also found that there is an impact of an entrepreneurial orientation on employees' performance compared with a consumer orientation in addition to the impact of entrepreneurial orientation on individuals. The study has revealed that there is a negative impact of entrepreneurial orientation on job satisfaction as a work environment variable and that the levels of job satisfaction among entrepreneurs are less affected by integration with managers and work teams and the lack of compatibility with the organization which indicates that these individuals are less sensitive to the working conditions of others in the organization.

Hasanmoradi and Ghahramani (2008), under the title "Building a model for entrepreneurial university capacities" use Iranian universities as a case study; given that the entrepreneurship was a product of economic, social, cultural and psychological approaches intended to develop opportunities with high global competitiveness. The study produced some results, such as entrepreneurial characteristics as

forecasted by university leadership, which included the following: the organizational structure of entrepreneurial universities such as universities' organizational structure policies, organizational rules, culture, organizational climate, leadership style, business operations, the university history learning styles, methods of assessment within colleges and departments, performance evaluations of faculty members, examination system, students' scores motivation systems, reward encouragement systems, funding sources, and others.

Monsen's, (2005) study aimed to understand the relationship between the entrepreneurial strategic orientation and organizational performance focusing on the analysis of the level of institutional analysis to individual analysis level, in an attempt to understand the possible adjustment processes at the individual functional level. The study found that there was a discrepancy in the entrepreneurial and organizational nature between groups and between individuals' cognitive attitudes due to independent factors and work teams in the group. The study showed that integrated independence and work teams reflect an attitude that is essential for understanding the relationship between entrepreneurial orientation and individuals' job performance. This study benefited executives in designing entrepreneurial organizing programs more successfully and has increased the benefits accruing to individuals and institutions together, whereas among researchers, it enhanced the vision of the relationship between entrepreneurial performance, structure, and strategy. Additionally, this study has created a strong link between the fields of organizational development and entrepreneurship.

Paul (2009) aimed to investigate the relationship between entrepreneurial orientation and the need for organizational sustainability in organizations, through an organizational leadership scope, focusing on the impact of a dynamic entrepreneurship strategy. The study used quantitative analysis of historical data and field survey reports based on selected groups of leaders in various entrepreneurial organizations in the United States. The study concluded that there was a positive relationship between a leader's entrepreneurial orientations and the organization-level sustainability of entrepreneurship in the studied organizations. The study also found that there was a positive relationship between the organizational level of the entrepreneurial orientation and the level of sustainability required within organizations. This relationship has been measured by focusing on growth rates and turnover rates in five years, and these results paved the way for an important theory that states that there was an important role for leaders in the improvement of organizations through a focus on behavior and entrepreneurial thinking and that there was an impact of granting a strong empowerment of entrepreneurial culture in the studied organizations.

Macke study, (2003) aimed to investigate the entrepreneurial benefits and capabilities that have been made through the developments and changes in education and to investigate organizations and individual entrepreneurs in education in the private sector. The goal of this study was to assess the extent to which the interest in investing in such a sector or variables related to the study were related to innovation and taking risks. The researcher designed a questionnaire and the sample study, consisted of 700 organizations in the USA education sector. The study had a number of conclusions: entrepreneurship in the education sector is similar to any activity in the business sector and there is a relationship between entrepreneurial behavior (innovation, risk taking, and creativity) and investment in the education sector.

Kuratko et al., (2001) conducted a study to identify the relationship between Acordia Company by inventing new products and strategic planning and using entrepreneurship strategies. The study was based on the following variables: individuals' performance, the rate of growth of the company's operations, and the return on investment.

Pirich et al., (2001) aimed to focus on the relationship between entrepreneurship and creativity and the associated research and development, organizational structure, strategic and technological capabilities, and skills in innovation, funding, and creativity. The study made the following conclusions. There was

a correlation between entrepreneurship and creativity. A social culture helps an organization accept failure and encourage risk taking and thus entrepreneurial work. Innovation has helped in building the capacity and skills of the workers. There was a correlation between reducing risk and cost and creativity. Additionally, economic activities had helped to motivate behavior, leadership and creativity.

Harris and Alburi (2009) aimed to shed light on the relationship between human resource management and its role in achieving the goals of entrepreneurial organizations. The study focused on a number of variables, such as human resource systems (recruitment, training and development, performance management, motivation, and development), entrepreneurial behaviors (related to employees and learning from mistakes, and expectations to produce innovation), outputs of the entrepreneurship process (related to the changes that urge industry and performance in the market) and strategic entrepreneurship (growth and innovation). A questionnaire was distributed to a sample of 80 human resources managers in the United States: the response rate was 66%. The study found that the continuous improvement in human resource management had a strong positive impact on employment systems. This was ranked first in terms of its association followed by development, motives and professional development. The entrepreneurship process output (being first in the market and having quick responses to industry variables had a positive impact on employees' behavior).

Danny (1983) aimed to clarify the nature of the correlation in entrepreneurial organizations and the driving elements in entrepreneurship through three variables associated with creativity, risk taking and entrepreneurship, and to determine who plays the primary role in these organizations in the areas of organizational structure, manager, personal items, and the strategy. The study sample consists of 52 organizations, and the sample distribution covered three types of entrepreneurial organizations: Simple entrepreneurship, the planned model (featuring the clarity of integration strategies in production market) and the organized model (featuring environmental and organizational structures). The study made the following conclusions: there was a correlation between entrepreneurship and the environmental and organizational structures. There was a correlation between the degree of control and entrepreneurship and a positive relationship between centralization and entrepreneurship in the simple model.

Ensley et al., (2000) aimed to know the extent of entrepreneurs' ability to influence organizations' risk performance as well as the relationship between vision and strategic entrepreneurship and the association among teams of entrepreneurs. The variables under study were entrepreneurship performance, sales growth, planning skills and the identification opportunities. A questionnaire was designed for the purpose of obtaining study data. The study sample consisted of (500) people in entrepreneurial organizations in the United States of America and the study made the following conclusions: entrepreneurs show a strong ability to identify opportunities, planning and evaluation skills, more visionary power, and are able to foster entrepreneurship among team members.

Floyd and Woolridge (1999) aimed to investigate the role of knowledge held by individuals in an organization's operations, as well as its role in the group, and it aimed to study the extent of its benefit on the development and competitive capacity of an organization. The study variables were created to identify entrepreneurial opportunities and the entrepreneurial initiative and upgrade organization capabilities, followed by the formulation of several hypotheses that are possible with the nature of this study's variables. A questionnaire was designed for the purpose of data collection: the study sample consisted of 350 entrepreneurial organizations in the United States. The study produced the following results: the uniqueness (excellence) of the information held by workers helps in the initiative to develop expertise in building an organization's competitive capacity. Additionally, it produces new ideas for individuals and helps them to identify opportunities. Finally, the entrepreneurial initiative of the ideas of employees aids in the development processes.

Brazeal et al., (1996) aims to explain and define the meaning of entrepreneurship to assist researchers in the future to have a full frame on how to study entrepreneurship and all related definitions and

variables as well as their elements and related concepts. The researcher explained that this concept was linked to three elements of creativity, innovation, and change and was associated with anything new (creativity) or anything that has been developed in new ways (innovation) and can address any problems that arise as a result of external circumstances (change). The researchers explained that the concept of creativity is linked to development and modernization for the purpose of achieving a competitive advantage, which may occur through the development of products or suggestions or through entry into new attractive markets. A distinction was made between organizational entrepreneurship and individual entrepreneurship. This was because entrepreneurial organizations always aim for excellence in their outputs, processes, and resources and act through creativity and the innovation to achieve a competitive advantage, whereas individual entrepreneurs distinguished in their ability to follow through on projects where there was an entrepreneurial spirit as well as on small-scale projects or in their having greater skills and abilities than other workers.

### Hypotheses

The study seeks to test the following hypotheses

1<sup>st</sup> Hypothesis: There is no statistically significant impact of structural flexibility on achieving strategic success in Jordanian universities.

2<sup>nd</sup> Hypothesis: There is no statistically significant impact of entrepreneurial leadership in achieving the strategic success in Jordanian universities.

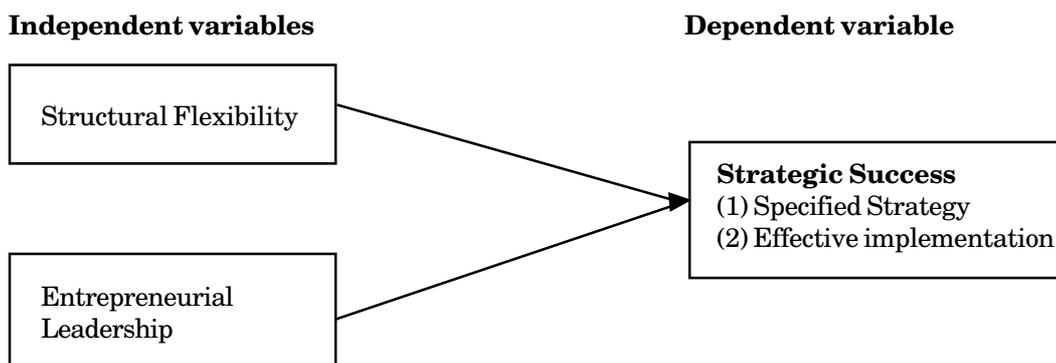
### Operational Definitions

**Entrepreneurial Management:** This refers to the organizational works, which “include the development of new organizations within the existing ones, and change or development of the existing organizations through renewal of their main deals, (Guth and Ginsberg 1990). Antoncic and Hisrich (2003) also defined it as “urgent behavioral intentions and associated organizational behaviors far away from the familiar and routine in the existing organizations, regardless of their size”.

**Entrepreneurial skills:** This refers to the skills that form the features the entrepreneur needs to have and includes skills such as vision, flexibility, deeds, actions orientation sincerity, dedication, determination, self-confidence, risks taking, curiosity, knowledge problem-solving, integrity, team work serious achievement determination to overcome failure and the ability to set self - targets (Kidwell, and Valentine, 2009).

### Study Model

The study model consists of the following proposed variables:



## **Methodology and Study Technique**

### **First: Methodology**

The study adopted the descriptive and exploratory approach, using a study instrument (questionnaire) to collect and analyze the collected data from respondents, with appropriate statistical techniques.

### **Second: Limitations**

A – Human Limitations: the study was limited to the top leadership in Jordanian universities.

B – Place Field: the study was limited to Jordanian public and private universities.

C – Subjective Field: the study was limited to entrepreneurial management.

### **Third: Population and Sampling**

The study population consists of all senior leaders (university heads their deputies assistants and college deans) at Jordanian public and private universities. The surveyed sample included 475 respondents for data Collection. A total of 15 questionnaires were excluded (15) because they were used for the pilot sample, and 25 questionnaires were excluded as these were not suitable for analysis. Consequently, the sample size used for the statistical analysis of the data was 435 that is 91.57% acceptance rate.

### **Fourth: Study Instrument**

**Data Collection Method:** The researcher used two types of sources both of which were needed for study completion.

**Secondary Sources:** This study employed literature related to the research subject including periodicals, conferences, and studies, which have helped in determining the dimensions in a form that helps with the determination of the theoretical dimension and study variables to formulate the problem, and the development of hypotheses. This study also employed outside literature for comparative purposes.

**Primary Sources:** The researcher designed and developed a questionnaire based on the number of sources that asked questions on various aspects of the study. This questionnaire consisted of three parts. The first part includes a letter addressed to the sample study, and the second addresses the statements that relate to the entrepreneurial management variable. The first dimension of this part addresses the structural flexibility measured by paragraphs 1-12 whereas the second dimension addresses entrepreneurial leadership measured by paragraphs 13-22. The design and formulae of these parts were based on those set out in the study by Hill (2003).

The third part addressed the strategic success and the researcher on dimensions such as the following: specific strategies, measured by paragraphs 23-26, and effective implementation, measured by paragraphs 27-29. A number of studies were used to develop the paragraphs of this section.

### **Fifth: Statistical Techniques**

The researcher used the statistical package SPSS version 17.0 in the analysis, using the following statistical techniques:

1. Cronbach's alpha correlation coefficient to ensure the stability of the study instrument and its internal consistency.
2. Descriptive statistical measures to describe the characteristics of the study sample to answer study questions and to arrange dimensions.
3. Skewness coefficient and Kurtosis test to determine the extent of the data normal distribution.

4. Simple regression analysis to determine the impact of independent variables on the dependent variable.

## Data Analysis

### Instrument Validity and Reliability

#### Instrument Validity

The researcher used two methods to ensure instrument content validity as follows:

**1. Face Validity:** Face validity was confirmed by a panel of referees who have experience and competence in business management fields and scientific research. Based on their comments, the researcher modified deleted or added new statements to the questionnaire.

**2. Construct Validity:** The researcher applied the questionnaire after the confirmation of face validity on a pilot on 15 respondents randomly selected from the original population to determine the extent of the questionnaire's internal uniformity, which was judged on the basis of contrast validity coefficients which were statistically significant at the statistically determined level. The data on these 15 respondents were then excluded from the distributed questionnaires. For the purpose of testing the related hypotheses it was necessary to carry out a number of tests related to the examination of the hypotheses of the study, including the following.

**3. Kaiser-Meyer-Olkin and Bartlett's Test of Sphericity:** As a prerequisite for conducting the Factor Analysis test and to show the study statements' contrast validity, the value of this test must be higher than 0.60. Additionally, the analysis of Bartlett's Test of Sphericity must show statistical significance to support the test's ability to analyze factors in the regression analysis and Table 1 shows the results of the tests.

**Table 1: Kaiser-Meyer-Olkin and the Bartlett's Test of Sphericity Results**

Study Variables	Kaiser-Meyer-Olki Values	Bartlett's Test of Sphericity		
		Approx. Chi-square	df	Sig
Entrepreneurial management	0.873	561.332	3	0.00
Strategic Success	0.782	165.282	4	0.00

**4. Factor Analysis:** Factor analysis was performed on dependent and independent variable statements as shown in Table 2. It shows that all study statements have high factor weights, which are much higher than the value observed from the factor analysis test (0.50) on one factor; therefore, the study instrument has construct validity. (See Table 2).

#### Study Reliability

The reliability coefficient has been extracted, according to the Cronbach's Alpha test for the internal consistency of each dimension. The results showed that the reliability coefficient for the independent variable entrepreneurial management is 0.821 for the independent variable dimensions, the results are as follows: structural flexibility (0.793), entrepreneurial leadership (0.851) and entrepreneurial culture (0.765). The reliability coefficient for the dependent variable was (0.835) and the reliabilities of the dependent variable dimensions were as follows: specific strategy (0.664), effective implementation (0.732), and motivation culture (0.762). The fourth dimension was coefficient stability (0.786). The reliability coefficients for all variables exceeded the minimum allowable limit of 60%: therefore, the questionnaire indicates statistically acceptable results (Andersen et al., 1990).

**Table 2: Factor Analysis of the Results for Each Statement**

No. Statements		Factor Loading	Factor No.	Eigen Value	Variable % of
<b>Entrepreneurial Management-Structural Flexibility</b>					
1	Our university is described as a bureaucratic university.	0.912	1	3.901	51.675
2	The organizational structure of our university is a hierarchy, with clear lines of authority and responsibility.	0.858			
3	The number of hierarchical levels of our university's organizational structure has increased in the last five years.	0.827			
4	The organizational structure of our university is flexible and allowed us to participate in resources.	0.898			
5	Employees career paths in our university are narrow and there is no possibility of change.	0.878			
6	Employees' ideas and suggestions at the functional level are taken seriously.	0.767			
7	An employee must request for permission from his superior officer before executing a task in a novel way.	0.687			
8	Our university approves designs and flexible job instead of official jobs descriptions.	0.840			
9	The university exerts efforts to rotate staff in different functions.	0.817			
10	On average, the number of subordinates subject to the performance report, directly or indirectly, is more than 20 employees.	0.803			
11	The university encourages staff to manage their business flexibility to solve various problems.	0.742			
12	Our staff have specialized functions with a limited range of activities.	0.868			
<b>Entrepreneurial Management – Entrepreneurial Leadership</b>					
13	The calculated risk of our university leaders is based on the discovered opportunities and its size.	0.785	1	2.987	64.907
14	Our university leaders are ambitious and encourage others.	0.756			
15	Our university leaders address university problems by brainstorming.	0.693			
16	Our university leaders seek for new market opportunities and potential.	0.853			
17	Our university leaders do not show any fatigue or loss of enthusiasm in university work.	0.796			
18	Our university leaders have a high ability to persuade others to accomplish their goal.	0.663			
19	Our university leaders does not encourage open discussions with the staff.	0.713			

20	Our university leaders offer entrepreneurial philosophy between all university staff.	<b>0.654</b>			
21	Our university leaders have vision and are flexible.	<b>0.764</b>			
22	Our university leader's enthusiasm is more than that of all other staff.	<b>0.558</b>			
<b>Strategic Success-Specified Strategy</b>					
23	The university is interested in formulating clear and specific strategies.	<b>0.884</b>	3	2.884	73.576
24	The quantitative and qualitative targets are reached often.	<b>0.835</b>			
25	The appropriate work method is always determined by the university's management.	<b>0.811</b>			
26	The university introduces changes and improvements in the forms and designs of its premises from the inside.	<b>0.793</b>			
<b>Strategic Success – Executive Implementation</b>					
27	Works are executed in an effective way within the university.	<b>0.659</b>	4	3.111	67.334
28	The university has great interest in its employees' good reputation.	<b>0.648</b>			
29	Work love and loyalty to the university is prevailing among employees.	<b>0.715</b>			

## Analysis of Results

Below are the results of the descriptive statistics, which are the mean and standard deviation of all study dimensions with each dimension taking into account the scale used which was a five-level Likert scale: Strongly Agree (5), Agree (4), Neutral (3), Disagree (2), and Strongly Disagree (1).

To determine the relative weight difference, the interval was a calculated term (introducing upper and lower limits) of the Likert scale and was divided by the scale number of categories to obtain the cell length. Then this value was added to the lowest value of the Likert scale to determine the upper limit of this cell. Therefore, the obtained mean values will be used to interpret the data as follows:

If the mean value of the statements is greater than 4.20, the importance is very high as is the consistency of respondents on the statement. If the mean value is between 3.4 and 4.2, the importance is high. If the mean value is between 2.6 and 3.4, the statement is of medium importance, and if the mean value is between 1.8 and 2.6, the statement is of weak importance. Finally, if the mean is between 1 and 1.8 this indicate very weak importance.

The first question: What is the availability level of entrepreneurship management features (structural flexibility and entrepreneurship leadership) according to the top leaders of Jordanian universities?

The statistical results in Table 3 show that the top leaders' perceptions regarding the availability of structural flexibility in the management of Jordanian universities have a mean of 3.32, which indicates a lack of availability of some properties of structural flexibility in the management of Jordanian universities which include the university's use of a bureaucratic system, and hierarchical structure, narrow career paths, non-activation of the ideas taken from staff employees', non-encouragement by the university administration to solve problems in innovative ways, and new entrepreneurship. With

regard to entrepreneurial leadership and as shown in Table 3, the mean of the statements' regarding entrepreneurial leadership in Jordanian universities was medium 3.04, and this indicates that the top leaders at the Jordanian universities do not have any satisfaction when it comes to entrepreneurial leadership. Instead they focus on autocratic leadership to some extent. This was shown by a dimension statement related to leadership, including the failure to encourage Jordanian universities' staff to work or to do so creatively, the inability to influence others to accomplish goals, the low propensity to encourage forms of open dialogue between employees, and instilling organizational entrepreneurship values among employees, which is reflected in the low morale of these employees. Moreover, the strategic dimension related to vision also shows a significant reduction.

**Table 3: Means and Standard Deviations for Entrepreneurial Management**

No. Statements	Mean	Standard Deviation	Level
<b>Entrepreneurial Management-Structural Flexibility</b>			
1 Our university is described as a bureaucratic University.	<b>3.56</b>	<b>0.84</b>	<b>High</b>
2 The organizational structure of our university is hierarchy with clear lines of authority and responsibility.	<b>3.76</b>	<b>0.64</b>	<b>High</b>
3 The number of hierarchical levels of our university's organizational structure has increased in the last five years.	<b>3.03</b>	<b>0.77</b>	<b>Medium</b>
4 The organizational structure of our university is flexible and allowed to participate in resources.	<b>2.76</b>	<b>0.54</b>	<b>Medium</b>
5 Employees career paths in our university are narrow and there is no possibility of change.	<b>3.84</b>	<b>0.62</b>	<b>High</b>
6 Employees' ideas and suggestions at the functional level are taken seriously.	<b>2.89</b>	<b>0.72</b>	<b>Medium</b>
7 Employee must requests for permission from his superior officer before executing a task in a different way.	<b>4.23</b>	<b>0.67</b>	<b>Very High</b>
8 Our university approves designs and flexible job instead of an official job description.	<b>2.54</b>	<b>0.82</b>	<b>Weak</b>
9 The university exerts efforts to rotate staff in different functions.	<b>2.94</b>	<b>0.89</b>	<b>Medium</b>
10 On an average, the number of subordinates subject to the performance report, directly or indirectly, is more than 20 employees.	<b>3.43</b>	<b>0.61</b>	<b>High</b>
11 The university encourages staff to manage their business flexibly to solve various problems.	<b>2.65</b>	<b>0.77</b>	<b>Medium</b>
12 Our staff has specialized functions with a limited range of activities.	<b>4.22</b>	<b>0.76</b>	<b>Very High</b>
<b>Total Average</b>	<b>3.32</b>	<b>Medium</b>	
<b>Entrepreneurial Management – Entrepreneurial Leadership</b>			
13 The calculated risk of our university leaders is based on the discovered opportunities and it's size.	<b>2.67</b>	<b>0.98</b>	<b>Medium</b>
14 Our university leaders are ambitious and encourage others.	<b>2.87</b>	<b>0.84</b>	<b>Medium</b>

15	Our university leaders address university problems by brainstorming.	<b>2.99</b>	<b>0.93</b>	<b>Medium</b>
16	Our university leaders seek new market opportunities and potential.	<b>3.08</b>	<b>0.87</b>	<b>Medium</b>
17	Our university Leader do not show any fatigue or loss of enthusiasm for university work.	<b>3.56</b>	<b>0.88</b>	<b>Medium</b>
18	Our university leaders have a high ability to persuade others to accomplish their goals.	<b>2.77</b>	<b>1.09</b>	<b>Medium</b>
19	Our university leaders do not encourage open discussions with the staff.	<b>4.22</b>	<b>0.99</b>	<b>Very High</b>
20	Our university leaders offer an entrepreneurial philosophy that is shared between all university staff.	<b>2.88</b>	<b>1.12</b>	<b>Medium</b>
21	Our university leaders have vision and are flexible.	<b>2.55</b>	<b>0.67</b>	<b>Weak</b>
22	Our university leader's enthusiasm level is higher than that of other staff.	<b>2.78</b>	<b>0.77</b>	<b>Medium</b>
<b>Total average for entrepreneurial leadership statements</b>		<b>3.04</b>	<b>Medium</b>	
<b>Total average for entrepreneurial culture statements</b>		<b>2.95</b>	<b>Medium</b>	
<b>Total average for entrepreneurial management statements jointly</b>		<b>3.10</b>	<b>Medium</b>	

**Second Question:** What are the factors leading to the achievement of strategic success from the viewpoint of the top leaders in Jordanian universities?

Table 4 shows that the total mean dependent variable dimensions are high (3.52). The determined strategy ranked first with a mean of 3.98, and the effective implementation ranked the second, with a mean totaling 3.57. This high number of reasons for strategic success in Jordanian universities is deemed a positive indicator, as the strategic dimension is a feature of successful organizations, where there is some sort of consensus and harmony between an individual and an organization, which provides many benefits, such as commitment motivation, and performance which will enhance their competitiveness and uniqueness among competitors.

### Hypothesis Testing

Before commencing the application of regression analysis to test the study's hypotheses, the researcher made some tests to ensure the appropriateness of the data for assumptions of regression analysis as follows:

It was confirmed that there was no high link between independent variables (multicollinearity) using the variance inflation factor (VIF) and the allowed tolerance test for each variable of study variables, taking into account not exceeding the variance inflation factor (VIF) value of 10 with the value of the allowed tolerance test being (0.05). It was also confirmed that the data follow a normal distribution by computing the (Skewness coefficient) and the (Kurtosis test) taking in consideration that the data follow a normal distribution if the value of the Skewness coefficient and the Kurtosis test value are between ( $\pm 3$ ) (Hair, et al., 1998). Table (5) shows the results of these tests.

**Table 4: Means and Standard Deviations for Reasons of Strategic Success Reasons**

No. Statements	Mean	Standard Deviation	Level
<b>Strategic Success-Specified Strategy</b>			
23 The university is interested in formulating a clear and specific strategy.	4.23	0.67	Very high
24 Quantitative and qualitative targets are reached often.	3.58	0.85	High
25 The appropriate work method is always determined by university management.	4.13	0.94	High
26 The university introduces changes and improvements in the forms and designs of its premises from the inside.	3.98	0.82	High
<b>General mean for strategic dimension</b>	<b>3.98</b>		High
<b>Strategic Success – Executive Implementation</b>			
27 Works are executed in an effective way within the university.	3.66	0.77	High
28 The university has great interest in employees’ good reputation.	3.86	0.82	High
29 Work love and loyalty to the university is prevailing among employees.	3.18	0.69	High
<b>Mean for effective implementation statements</b>	<b>3.57</b>	<b>High</b>	
<b>Mean for strategic success dimension statements</b>	<b>3.52</b>	<b>High</b>	

**Table 5: Variance Inflation Factory, Tolerance, Skewness and Kurtosis**

Independent Variables	VIF	Tolerance	Kurtosis	Skewness
Structural Flexibility	2.854	0.698	-0.426	0.422
Entrepreneurial Leadership	2.674	0.476	-0.406	0.323

With regard to the test model’s validity for the testing of the study hypothesis testing variance analysis was performed. It is clear from statistical data in Table 6 that the model’s validity and stability were high enough to test the three hypotheses based on that (F) calculated values are more than the tabulated value level of significance ( $\alpha = 0.01$ ) and degrees of freedom (1.435) amounting to 6.63. It is clear from this model that structural flexibility is an important entrepreneurial leadership dimension explaining 37.6% of variance in strategic success achievement, that entrepreneurial leadership explains 42.3%, and that the entrepreneurial culture explains 29.8% of the difference in achieving strategic success. This indicates that there is a significant effect of independent variable dimensions on the dependent variable. Based on the model’s validity stability hypotheses can be tested using simple regression analysis.

The first hypothesis: There is no statistically significant impact of structural flexibility in achieving strategic success in Jordanian universities. The statistical data in Table 7 indicates that there is an effect of the independent variable of structural flexibility on the dependent variable (specified strategy, effective implementation, culture stimulus, and flat structure) due to high beta coefficients and the calculated values of t (15.75, 17.98), which are more than the tabulated value (2.326) at a significance level of  $\alpha = 0.01$  and 434 degrees of freedom. Additionally, the independent variable (structural flexibility) explains 21.9% of the variance in the dependent variable (specified strategy) and 23.9% of the variance

**Table 6: Variance Analysis Results to Ensure Model Validity for Hypothesis Testing**

<b>Independent Variables</b>	<b>F Calculated</b>	<b>Sig F</b>	<b>R</b>	<b>R<sup>2</sup></b>	<b>Model Validity</b>
Structural Flexibility	98.34	0.000	0.235	0.376	Valid for 1 <sup>st</sup> Hypothesis
Entrepreneurial Leadership	124.97	0.000	0.276	0.423	Valid for 2 <sup>nd</sup> Hypothesis

in the dependent variable (effective implementation) and 15.2% of the variance in the dependent variable (culture stimulus) and finally 9.30% of the variance in the dependent variable (flat structure) which requires the rejection of the null hypothesis, and the acceptance of the alternative hypothesis, which states that there is a statistically significant impact of the independent variable (structural flexibility) on strategic success variable (specified strategy, and effective implementation). The researcher concludes from this that whenever there was interest in structural flexibility and its activation, Jordanian Universities have tended to use the entrepreneurial management principles.

**Table 7: Results of Simple Regression Analysis to Test the Impact of Structural Flexibility in Achieving Strategic Success**

<b>Independent Variable</b>	<b>Dependent Variable</b>	<b>B</b>	<b>R<sup>2</sup></b>	<b>Beta</b>	<b>T-Calculated</b>	<b>T-Sig</b>
Structural Flexibility	Specified Strategy	0.413	0.219	0.345	15.75*	0.00
	Effective Implementation	0.442	0.239	0.361	17.98*	0.00

\* significant at  $\alpha=0.01$

\* Tabulate T at the significance level  $\pm d^{\circ}0.01$  and degrees of freedom (434) = 2.326

### Second Hypothesis

There is no statistically significant impact of entrepreneurial leadership on the achievement strategic success among Jordanian universities.

It is clear from the statistical data in Table 8 that there is an impact of the independent variable (entrepreneur leadership) in the dependent variable strategic success (Specified Strategy, and effective implementation), in terms of high Beta coefficients in terms of (T) calculated values (7.87, 9.33), at the significance level  $\alpha^{\circ}0.01$  and degrees of freedom (434), and in terms of (R<sup>2</sup>) coefficient values shown in the table, which requires the rejection of a null hypothesis, and the acceptance of the alternative one, which states that there is a significant statistically significant impact of the independent variable (entrepreneurial leadership) on the dependent variable of strategic success (specified strategy and effective

**Table 8: Results of Simple Regression Analysis to Test the Impact of Structural Flexibility in Achieving Strategic Success**

<b>Independent Variable</b>	<b>Dependent Variable</b>	<b>B</b>	<b>R<sup>2</sup></b>	<b>Beta</b>	<b>T-Calculated</b>	<b>T-Sig</b>
Entrepreneurial Leadership	Specified Strategy	0.132	0.187	0.313	7.87*	0.00
	Effective Implementation	0.315	0.319	0.465	9.33*	0.00

\* significant at  $\pm =0.01$

\* Tabulated T at the significance level  $\pm d^{\circ}0.01$  and degrees of freedom (434) = 2.326

implementation). This indicates that as long as Jordanian universities are interested in entrepreneurial leadership, the element is reflected in the success of their various works and the transition to entrepreneurial universities instead of remaining within university traditional concept which does not equate with the knowledge-based society and which various organizations are trying in their work.

## **Conclusions, Discussion, and Recommendations**

### **Results Discussion**

The study concluded the following:

1. The results indicated that the availability level of an organization's entrepreneurial characteristics in Jordanian universities was moderate, with an average amounting to 3.1. This result is attributed to the Jordanian universities top leaders perception of slow adoption, in flexible bureaucratic structures, and a lack of using a transformational leadership style in the practice of various activities, in addition to the adoption of inflexible incentive systems, resulting from using a traditional organizational culture and not an entrepreneurial organizational culture at their work.
2. The results showed that reasons for strategic success of top leaders of Jordanian universities were moderate, with an average of 3.52, and top leaders' responses focused on specified strategy dimensions and the stimulus culture, followed by focusing on the effective implementation and finally on the organizational structure dimension, which was considered a mechanical bureaucratic structure. The emergence of this high strategic success from the perspective of top leaders in Jordanian universities may be deemed a positive indicator because success is a feature of successful organizations where there is some sort of consensus between the individual and the organization.
3. There are important statistically significant impacts of flexible structure on organizational entrepreneurship dimensions in achieving strategic success (which include a defined strategy, effective implementation, culture stimulus, and flat structure). The results of regression analysis indicated that the independent variable explains 21.9% of the variance in the dependent variable (defined strategy) and 23.9% of variance in the dependent variable (effective implementation) and 15.2% of variance in the dependent variable (incentive culture) and 9.3% of the variance in the dependent variable (flat structure).
4. There are important statistically significant impacts of entrepreneurial leadership on organizational entrepreneurship dimensions in achieving strategic success (which include a defined strategy, effective implementation, culture stimulus, and flat structure). The results of the regression analysis indicated that the independent variable explains 18.7% of the variance in the dependent variable (defined strategy), 31.9% of the variance in the dependent variable (effective implementation), 24.1% of variance in the dependent variable (incentive culture) and 28.4% of the variance in the variable variance in the dependent variable (flat structure).
5. There are important implications of the statistical significance of structural flexibility as one of the dimensions of the lead regulators in achieving strategic success (defined strategy, and effective and whether tracking stimulus, and the structure of the flat). The results of the regression analysis are that the independent variable explains 27.4% of the variance in the dependent variable (strategy set) and 32.4% of the variance in the dependent variable (effective implementation), 22.8% of the variance in the dependent variable (culture incentive), and 14.3% of the variance in the dependent variable (flat structure).
6. There are important statistically significant impacts for flexible structure as one of organizational entrepreneurship dimensions in achieving strategic success (defined strategy, effective implementation, culture stimulus, and flat structure). The results of the regression analysis indicated that the independent variable explains 27.4% of the variance in the dependent variable (defined strategy), 32.4% of the variance in the dependent variable (effective implementation),

and 22.8% of the variance in the dependent variable (incentive culture) and 14.3% of the variance in the variable variance in the dependent variable (flat structure).

## Recommendations

Based on the results, the study recommends the following:

1. To promote an incentive culture, link it with the strategy, objectives, performance results in the short and long term, and to offer innovative incentives, including direct compensations estimated compensations, challenging conditions at work, and educational opportunities.
2. Despite the difficulty faced in changing an organizational culture, Jordanian universities can adopt integrated actions such as the following: use of rituals and stories, clarifying means identifying strategic initiatives assessing small and distinct contributions that add value to an organization, engaging in knowledge sharing and supporting leadership development.
3. To concentrate on opportunities that enhance the added value of the Jordanian universities and their excellence through the creation of a diverse creations portfolio, taking into consideration the calculated risks in the short and long term and following an entrepreneurship marketing approach in innovation.
4. To make an attempt to transfer an organizational structure from a mechanical structure to a flexible organic structure and to encourage work teams with various creative projects.
5. To concentrate on the implementation of specific strategies based on market orientation and to promote individual work teams' creative behavior and transitions to entrepreneurial universities.
6. To conduct similar studies that deal with other variables not mentioned in this study such as the impact of the entrepreneurial orientation on strategic success or the impact of ambiguous roles initiative, or risk taking on strategic success and other subjects related to the management universities.

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