Journal of Ecohumanism
2024
Volume: 3, No: 4, pp. 1075 – 1087
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i4.3623

Neural Network Modelling of Organizational Capabilities in Achieving Sustainable Competitive of Start-Up

Nourredine Khababa[1],Sabri Mekimah[2], Rahma Zighed[3], Ismail Bengana[4], Mahmaod Alrawad[5], Benaouali imane[6]

Abstract

This study aims at identifying the role of organizational capabili-ties in achieving sustainable competitive advantage of start-up.The analytical descriptive approach was adopted, by introducing the study variables theoretically, represented in both the organizational capacity variable and the sustainable competitive advantage. As for the applied part, in order to collect data, a form was designed and dis-tributed to a random sample of 255 Start-ups in Algeria. Moreover, so as to address and test the hypotheses of the study, the neural network modelling method was used, based on the Matlab program.The study concluded that the dimensions of organizational capabilities contribute very weakly to achieving sustainable competitive advantage of start-ups, especially after organizational flexibility and organizational creativity, as they contribute together by 52.5%, which is an average percentage. The start-ups should pay more attention to applying the dimensions of organizational capabilities which helps to achieve a sustainable competitive advantage.The importance of the study lies in the fact that it deals with a recent topic represented in organizational capabilities and sustainable competitive advantage in the field of scientific research and the scarcity of studies and research related to it. Furthermore, it is one of the first studies that apply organizational capabilities in Algerians start-ups. Thus, we hope that it would be a scientific reference that can be used in corporate devel-opment.

Keywords: *Organizational capabilities, Organizational learning, Organizational flexibility, Organizational creativity, Sustainable competitive advantage.*

Introduction

The last two decades of the previous century were marked by many developments and challenges that had direct effects on various institutions. Subsequently, the term organizational capabilities emerged as one of the terms that institutions began to give attention to, as they are the knowledge that distinguishes and supports competitive advantages through creativity, flexibility and union between strategic intent and organizational structure and the workforce expertise, this was stated in the study of (Gill, 2006).Besides, they are considered a tool that makes the institution able to perform a coordinated set of tasks using organizational resources for the purpose of achieving an effective end result and a competitive advantage, as was stated in the study of (Helfat & Peteraf, 2003). Moreover, the latter makes it able to deploy their tangible or intangible resources. So as to perform a specific task or activity to improve performance, as was stated in a study of (Amit & Schoemaker, 1993).

Organizational capabilities can be viewed as the organizational context in which the members of the institution perform outstanding work in order to contribute to growth, service or other things to achieve organizational goals, as was confirmed by a study of (Ankur & al, 2018).they perform complex routine procedures determining the efficiency that institutions perform by converting inputs into material outputs, as they represent their primary role in the formation of intellectual assets, knowledge integration, creativity

[1] Department of Finance, College of Business, King Faisal University, Saudi Arabia. Email: nrkhababa@kfu.edu.sa, ORCID: 0000-0002-6061-0324
[2] Laboratory ECOFIMA, University of 20 Août 1955 Skikda, Email: Algeria s.mekimah@univ-skikda.dz. ORCID:0000-0002-7701-7500.
[3] Laboratory ECOFIMA, University of 20Août 1955 Skikda, Email: Algeria, r.zighed@univ-skikda.dz, ORCID:0009-0007-5957-5713.
[4] Department of Quantitative Methods, College of Business, King Faisal University, Saudi Arabia, Department of economic sciences, College of Business and Eco-nomics, Ouargla University, Algeria, Email: ibengana@kfu.edu.sa, ORCID: 0000-0002-9968-4240. (Corresponding author)

[5] Department of Quantitative Methods, College of Business, King Faisal, University, Saudi Arabia. Email: malrawad@kfu.edu.sa, ORCID: 0000-0002-8871-3392

[6] Department of Business, College of Business, University of Ghardaia, Algeria, benaouli.imane@univ-ghardaia.dz, ORCID: 0000-0003-4791-3168.

Journal of Ecohumanism
2024
Volume: 3, No: 4, pp. 1075 – 1087
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i4.3623

achievement and organizational learning, their goal is to manage effective knowledge and achieve a sustainable competitive advantage, as was stated by the study of (Kimberly, 2009).

Through this study, we will address the role of organizational capabilities in achieving sustainable competitive advantage in start-ups, the problematic has been raised as follows:

What is the contribution of organizational capabilities to achieving sustainable competitive advantage in start-ups?

To clarify the subject of the study more, we ask the following questions:

What is the contribution of organizational learning to achieving sustainable competitive advantage in start-ups?

What is the contribution of organizational flexibility to achieving sustainable competitive advantage in start-ups?

What is the contribution of organizational creativity to achieving sustainable competitive advantage in start-ups?

As a preliminary answer to the problematic and questions raised previously, the following main hypothesis was adopted:

Organizational capabilities contribute to a high percentage in achieving sustainable competitive advantage in start-ups.

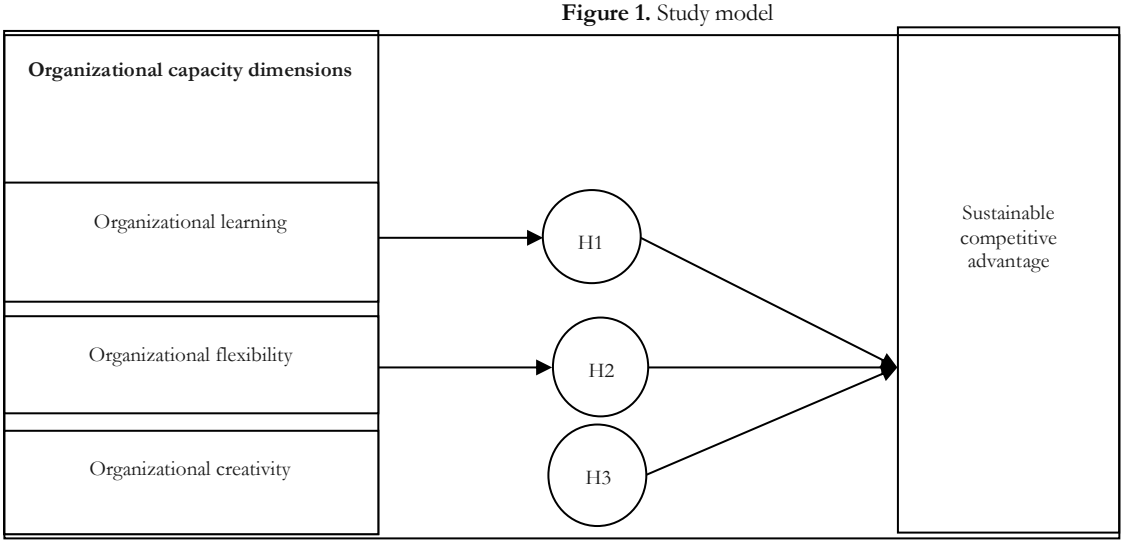
In order to derive from it the sub-hypotheses of:

Organizational learning contributes to a high percentage in achieving sustainable competitive advantage in start-ups.

Organizational flexibility contributes to a high percentage of achieving sustainable competitive advantage in start-ups.

-Organizational creativity contributes to a high percentage in achieving sustainable competitive advantage in start-ups.

Figure 1. Study model



Source**:** Prepared by researchers.

Journal of Ecohumanism
2024
Volume: 3, No: 4, pp. 1075 – 1087
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i4.3623

This study aims at achieving the objectives related to clarifying the various concepts related to organizational capabilities and sustainable competitive advantage, as well as to identify whether the start-ups in Algeria has orientations and procedures which endeavours to determine the degree of contribution of organizational capabilities to achieving sustainable competitive advantage. In addition to presenting some recommendations that may contribute to supporting and encouraging the adoption of organizational capabilities and sustainable competitive advantage in the company under study.

The importance of the study lies in the fact that it deals with a recent topic represented in organizational capabilities and sustainable competitive advantage in the field of scientific research in Algeria and the scarcity of studies and research related to it. Furthermore, it is one of the first studies that apply organizational capabilities in start-ups in Algeria. Thus, we hope that it would be a scientific reference that can be used in the companies.

The analytical descriptive approach was adopted, by introducing the study variables theoretically, represented in both the organizational capacity variable and the sustainable competitive advantage. As for the applied part, in order to collect data, a form was designed and distributed to a sample of workers of the port company in Skikda. Moreover, so as to address and test the hypotheses of the study, the neural network modelling method was used, based on the Matlab program.

Literature Review

Organizational capabilities are all competencies and skills of employees in the company for the purpose of transforming inputs into outputs. Besides, they have the capability to combine tangible and intangible resources, using organizational processes for the purpose of achieving the goals of the company (Dess & all, 2007). Furthermore, they are functional, technical and practical assets and activities that assist in achieving competitive advantage (Takahashii & tuan, 2009). Accordingly, every corporation must possess organizational capabilities, since the latter, if they exist, contribute to achieve benefits such as supporting human resource practices and organizational coordination, as well as to improve organizational effectiveness and supporting the activities of the organization and pushing them to do better (anajal & Grant, 2010).

Organizational capabilities are based on key dimensions, among them are organizational learning which is the companies' ability to gain insight and deep understanding through experience, experiment and observation, analysis and the desire to examine both success and failure experiences (Odor, 2018). Morever, it aims to achieve outstanding and competitive performance and continuous improvement in quality. It also aims at creativity, innovation, efficient time management and understanding the overlap between inside and outside the company (Odor, 2018). Furthermore, we also find the dimension of organizational flexibility which is the companies' ability to adapt to the requirements of the surrounding environment, as it has the ability and influence to develop management capabilities and accommodate emergency variables (shalende, 2015). Besides, it provides the company with the ability to adapt to change and respond quickly to market forces and uncertainties (Lucas & Olson, 1994).We also find the dimension of organizational creativity which is one of the modern concepts in management, and the process that results in the emergence of a new idea, practice, product or service that can be adopted by workers. A sit represents something tangible or intangible, whether it is products or ideas generation processes.However, it must be targeted despite the possibility of obtaining unplanned changes and aimed to achieve the benefits of the company, because it is a way to overcome internal and external environmental pressures, the latter responses to pressures, such as competition and scarcity of resources and others, or due to the use of internal organizational options such as acquiring distinctive skills and reaching a high level of ambition (Diss anayake & al, 2017).

Competitive advantage is defined as the business companies' exploitation of its internal strengths in the performance of its own activities. Thus, a value is generated that competitors cannot achieve in the performance of their activities (Pitts & Lei, 1996). It is achieved through the best utilization of technical, material, financial and organizational capabilities and resources, in addition to capabilities, competencies and others that enable it to design and implement its competitive strategies (Ceglinski, 2017).As for the

Journal of Ecohumanism
2024
Volume: 3, No: 4, pp. 1075 – 1087
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i4.3623

sustainable competitive advantage which has become a primary goal in companies that seek to achieve by owning something special difficult to imitate or replace with other alternatives. As it implements the value creation strategy asynchronously with its current and future competitors and when other companies are not able to reproduce the benefits of this strategy (Barney, 1999).

The sustainable competitive advantage is characterized by being renewable according for both external environment and the capabilities and internal resources of the company. Besides, it is difficult to imitate and simulate , it is also achieved for a long time and it does not disappear quickly when it is developed and renewed, in other words, it achieves continuity over time, flexible in the sense that new products, services, or even competitive advantages can be replaced in its place even though it takes into account and achieves all the requirements and objectives of the stakeholders (Mukesh & al, 2013),However, its lifespan depends on the speed of this moving feature in its life curve, as it varies from one feature to another, this is due to a group of influencing factors, namely continuity and the possibility of imitation.If the competing company imitates, it must overcome the problem of information and copying the strategy. Furthermore, achieving sustainable competitive advantage depends on the availability of many elements and on the nature of interaction and integration between them. Among the most prominent elements, we find natural resources and capital, in addition to technology and human resources (Alharthi, 2012).

Organizational learning is considered as a source of sustainable competitive advantage, because it enables the company to deal with the environment through the ability to mobilize resources and improve practices, culture, processes and organizational structure. Thus this ability is a factor in the success of the organization in achieving a sustainable competitive advantage. When companies learn, they develop standard rules and procedures to facilitate work and save more effort. Consequently, the research and learning processes diminish again, as the process of acquiring new skills that gain superiority over competitors becomes a routine that does not require much effort (EROGLU & GUROL, 2021).

Organizational creativity is a way to create new ideas and put them into practice, as this shows the sequence from the idea to the product and then to the market, where the sustainable competitive advantage of the latter appears through the uniqueness and distinction in the product over the rest of the competitors' products. It is considered one of the most important factors for gaining competitive advantages, especially if the ability to create knowledge among the companies experts is high (Thawabieh & Saleem's, 2016).Furthermore, organizational flexibility is crucial in adapting and appropriateness to the external environment. Therefore, it is linked to a strong relationship with sustainable competitive advantage in the event of environmental turmoil and provides companies with a rapid response to investing opportunities and facing competition by developing unprecedented products and entering new markets, enabling them to achieve a sustainable competitive advantage.Besides, it is also related to the results of the company's performance and building sustainable competitive advantages, which provides the company with the ability to control its changing environment, manage chaos, turmoil and crises, and achieve desired profitability, leading to organizational prosperity (Head & Deshmukh, 2013).

Research Methodology

For the purpose of analysing the data and information of the study and inferring the results, we followed the descriptive and analytical methods in order to collect the study data by relying on various statistical methods.

Neural Networks

It is a system of artificial intelligence systems, consisting of simple processor units that have a natural tendency to store empirical knowledge and make it available for use. It is distributed in parallel and broadly similar to the human brain, through the acquisition of knowledge of the network by its environment, in addition to the learning process and the neural nodes that are used for storage (Haykin, 2008), It is a simulation system used in the study to build a model for the impact of inputs; organizational capabilities, and outputs; the sustainable competitive advantage, It is characterized by the ability to learn how to perform

Journal of Ecohumanism
2024
Volume: 3, No: 4, pp. 1075 – 1087
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i4.3623

tasks based on the data provided by training, and it also works to discover and correct the error in proportion to the process of education and then training received by the network.

Sample And Study Population

The study population was made up of all 756 start-ups in Algeria. A simple random sample was selected using the equation of Steven Thompson, with a size of 255 start-ups,255 start-ups that were suitable for analysis were retrieved, resulting in a response rate with a response rate of 100% (Thompson, 2012).

Table 1. Range according to the scale of adoption or importance

Fifth Likert Scale	Strongly disagree	Disagree	Neutral	Agree	Strongly agre
Arithmetic mean	1-1.8	1.8-2.6	2.6-3.4	3.4-4.2	4.2-5
Rating	20%-36%	36%-52%	52%-68%	68%-84%	84%-100%
degree of importance	Very Weak	Weak	Average	High	Very high

Source: prepared by researchers

The Reliability and Validity of The Study Tool

In this way, we will discuss both the reliability and validity of the study tool:

Table 2. Reliability coefficients (Cronbach's alpha) for each axis

Axes	Cronbach alpha reliability coefficient	Internal Consistency Validity
Organizational learning	0,850	0,593**
Organizational flexibility	0,916	0,872**
Organizational creativity	0,917	0,894**
Organizational capabilities	0,917	0,871**
Sustainable competitive advantage	0,938	0,876**
Total	0,941	0,976**

Source: Prepared by researchers

This table indicates, depending on the obtained results, that the value of the Cronbach's alpha coefficient for various axes exceeded 60%, as it ranges between 0.850 and 0.938, which is a high value, while the total value of the Cronbach's alpha coefficient is 0.941, which is a high value as well. Thus, this indicates the reliability tool measurement through the terms included in the questionnaire.

It is also clear that the total value of the axis of organizational capabilities and sustainable competitive advantage estimated at 0.976, which is positive and statistically significant at the level of significance of 0.01. Therefore; the statements are valid for what they were intended to measure.

Research Findings/Results

Journal of Ecohumanism
2024
Volume: 3, No: 4, pp. 1075 – 1087
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i4.3623

To evaluate the result of the algorithm based on Min SSE, we got the following results:

Table 3.K-mean accuracy test for dimensions of organizational capabilities

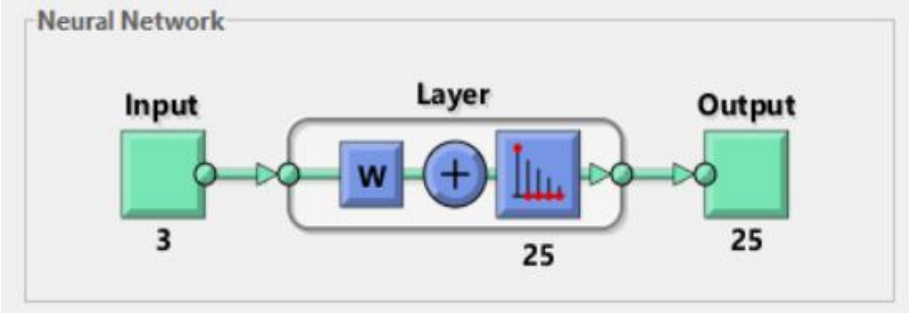
K	Min SSE
2	310
3	239
4	219
5	148
6	136
7	106

Source: Prepared by researchers using Matlab program

We notice from the previous table that the greater the number of clusters, the lower the value of Min SSE in both cases. Moreover, the implementation of the algorithm varies according to the number of clusters required and on all variables.

During the training process, each weight vector moves with all neurons until they become clusters. Furthermore, the neurons in the map move close to each other in the input space. The map is five according to Fifth Likert Scale, and the algorithm used in training is batch weight. For evaluating the performance used by MSE, the mean squared error and the epoch represent the number of times a neural network has been trained, as it is hypothetical determined by the program.

Figure 2. Training process in Matlab program for node SOM in neural network



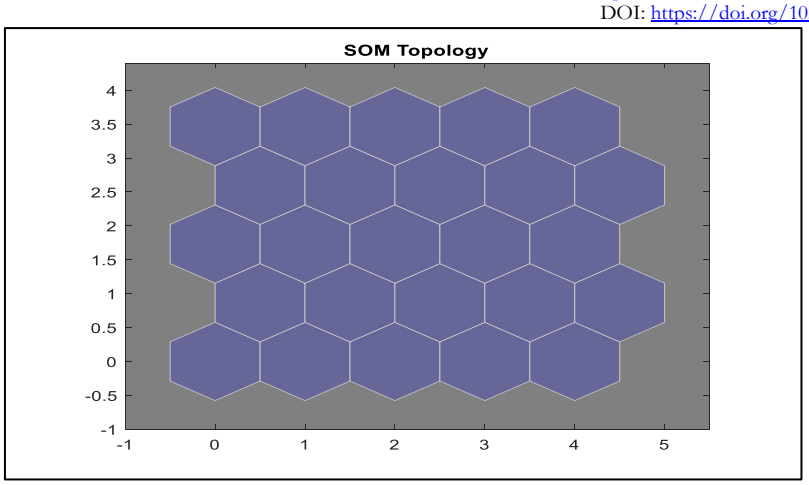
Source: Prepared by researchers using Matlab program

The learning maps show the relationships between the inputs, which are from 5 * 5 according to the maximum number of answers as the Fifth Likert Scale used, where the figure shows the presence of 25 small weights that deal in the starting functions of the random cluster stage.

Map Of Weights in Soms

Figure 3. Weights representation map in SOMs topology

Journal of Ecohumanism
2024
Volume: 3, No: 4, pp. 1075 – 1087
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i4.3623



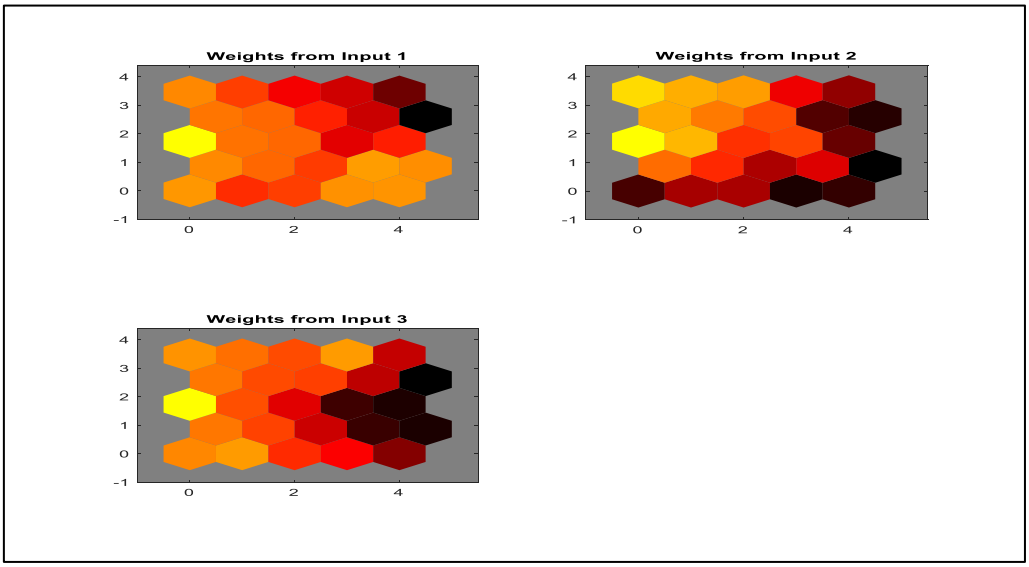
Source: Prepared by researchers using Matlab program

Besides, the blue colour indicates that the training process is complete and that the small weights are distributed in clusters to form impact weights. However, the training is considered correct and applicable, which impact weights map for input SOMs.

Applies to the previous figure, while the white colour (if it is inside the map) indicates the training process is still missing many elements and is incorrect.

After completing the learning and training process for neural networks using the SOMs algorithm, the results of the input effect weights were as follows:

Figure 4. Input impact weights map



Source: Prepared by researchers using Matlab program

Input 1 = organizational learning

Input 2 = Organizational flexibility

Input 3 = Organizational creativity

Journal of Ecohumanism
2024
Volume: 3, No: 4, pp. 1075 – 1087
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i4.3623

The dark colour indicates that the region has more weights than others, while the light colours indicate that the region has the lowest weights. Morever, the weights of the rest of the colours are calculated according to the degree of their proximity to the light or dark colours.

Through the map of impact weights for organizational capabilities, we can conclude that there is a relatively dark area colour in dimension 2. However, it is the least influential because of the heterogeneity of colours. Besides, dimension 1 is the most homogeneous despite the least dark area. Then, dimension 3 has a darker region than dimension 1, but less homogeneous.

Organizational Capabilities Test Results

This can be explained by the following:

Table 4. SOMs Test for Elements of Organizational Capabilities

Organizational Capabilities	Analysis SOMs
Organizational learning	Most homogeneous
Organizational flexibility	Least homogeneous
Organizational creativity	The second level in terms of homogeneity

Source: Prepared by researchers using Matlab program

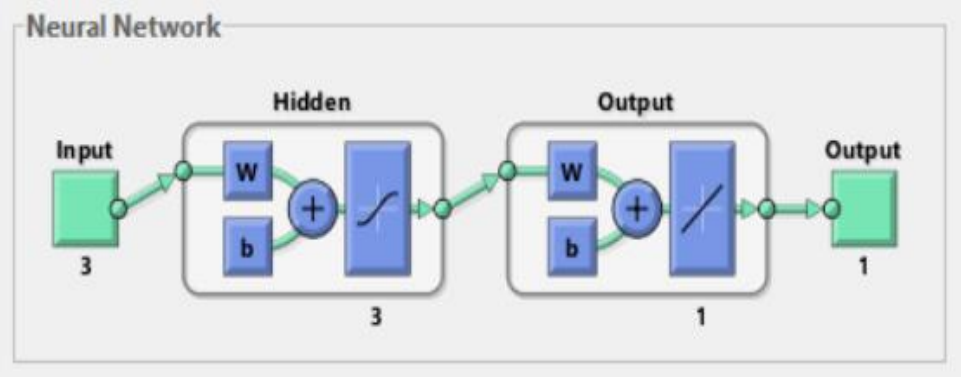
We conclude through this table that the ranking of the first dimension (organizational learning) is the most influential, then the third dimension (organizational creativity and then the second dimension (organizational flexibility) after tests of impact weights in neural networks using the SOMs algorithm.

Tests Of the Form

After training the model to consider organizational capabilities as inputs and sustainable competitive advantage as one factor as outputs for neural networks.

Furthermore, by using the Fitting app method, through which we can make a neural network linked by data between the inputs and the outputs.

Figure 5. Training process in neural networks



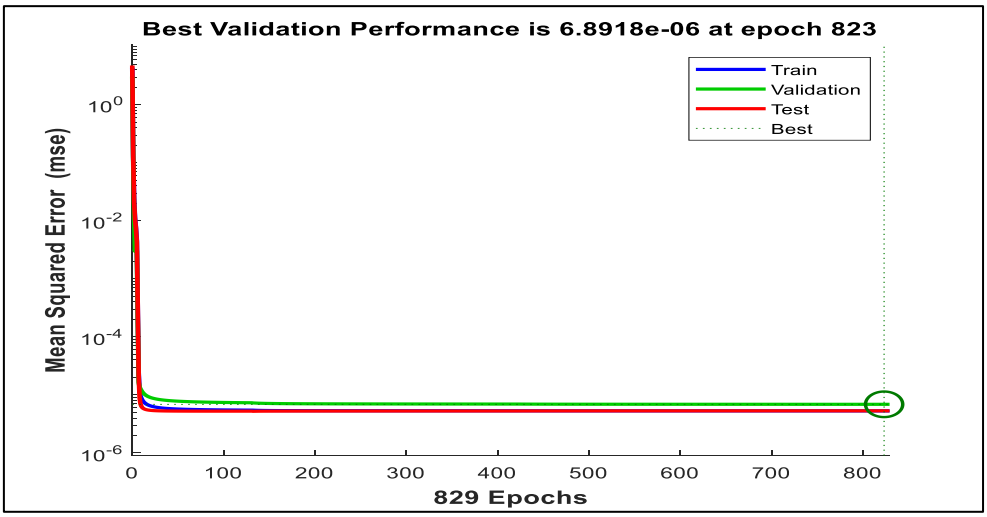
Source: Prepared by researchers using Matlab program.

After the training process, the following figure shows MSE, which is the mean squared error between the independent and the dependent, where the lowest values are the best; in this case the value was zero, which means that there is no error. R measures the regression values, that is, the relationship between the variables (independent and dependent). When the value is 1 means that there is a close relationship between the variables, when the value is 0, it means that there is a random relationship.

Journal of Ecohumanism
2024
Volume: 3, No: 4, pp. 1075 – 1087
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i4.3623

System Performance Test

Figure 6. System performance testing curve



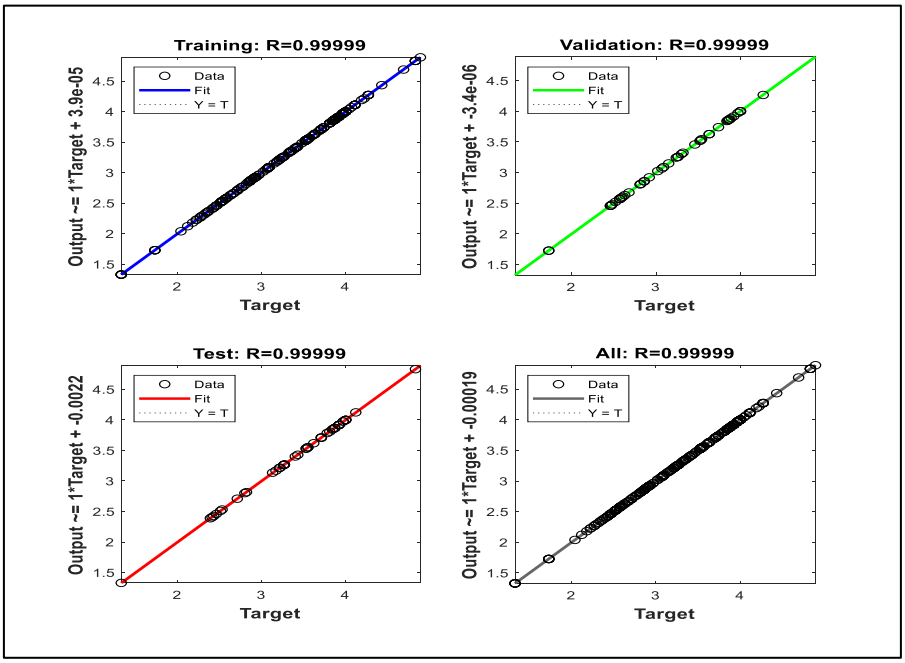
Source: Based on Matlab program

The figure shows the curve of system errors by MSE over the error square and the number of times the training system epochs. It follows from the figure that the more times the system is trained; the error will be constant until it reaches the peak at time 800.

Regression Test of the Neural Networks Model

It is a network response analysis procedure, as it is based on the implementation of a linear regression between the network output and the corresponding target. This figure shows the following results:

Figure 7. Regression test of the form or model of neural networks



Source: Prepared by researchers using Matlab program.

Journal of Ecohumanism
2024
Volume: 3, No: 4, pp. 1075 – 1087
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i4.3623

By following the results of the regression test of the neural networks model, it is clear that the validity of the system is at a level of 99%, which is similar to the training response of 99%, as well as the response of the internal test of the network 99%, where the value of R was more than 0.99 for the total response and is greater than 0.95, thus, this confirms that it is suitable to achieve best results in neural networks.

Impact Weights Analysis

The simulation system via MATLAB shows the impact weights of the hidden neurons (Hidden layer) after performing 100% training and error testing, the following table shows the construction of the impact weights for each of the three neurons.

Table 5. The strength of the relationship between the nodes layers

Sustainable competitive advantage	**Impact weights**			**Inputs organizational capabilities**
	H3	**H2**	**H1**	
	0.461	-0.035	0.943	**Organizational learning**
	0.145	0.469	-1.360	**Organizational flexibility**
	0.271	0.169	-0.595	**Organizational creativity**
1.648				
-0.746				
0.107				

Source: Prepared by researchers using Matlab program.

The process of the aggregate function is done first, where each vector is combined towards the hidden neuron to be the final weight for each neuron, where (1.648) is the sum of the weights of the vectors in the hidden neuron No. 1, and (-0.746) is the sum of the weights in the hidden neuron No. 2 and (0.107) is the sum 3 hidden neuron weights.

Measuring The Impact Ratios

By summing the weights of the impact of each input, the following table shows the weights of the impact of the dimensions of organizational capabilities on the sustainable competitive advantage.

Table 6. Aggregate function results

Organizational capacity dimensions	**Relative weights for the impact on the output by aggregate function**
Organizational learning	1.36
Organizational flexibility	-0.74
Organizational creativity	-0.15

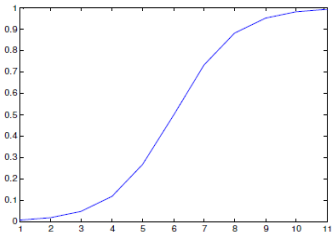
Source: Prepared by researchers using Matlab program

It is clear that the relative weight of organizational learning is 1.369, which is considered the most influential, while organizational creativity comes in second place -0.746, and organizational creativity ranks third -0.155.

It is the last stage of neural network operations, as shown in the following figure:

Figure 8. Equation with curve function

Journal of Ecohumanism
2024
Volume: 3, No: 4, pp. 1075 – 1087
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i4.3623

Logistic Sigmoid		$f(x)=\frac{1}{1+e^{-x}}$

Source: prepared by researchers

Table 7. Logistics function results

Dimensions	Logistic function results to measure materiality
Organizational learning	=0.80
Organizational flexibility	=0.32
Organizational creativity	=0.46
Total	=0.83

Source: Prepared by researchers based on the logistic function equation.

It is clear from the previous table that the outputs of the logistic function are less than one and range between 0.32 and 0.83, as shown by the logistic function output curve.

Percentage Impact Weights

The following table shows the percentage of the final impact weights for each of the dimensions of organizational capabilities (organizational learning, organizational flexibility, organizational creativity) on the sustainable competitive advantage.

Table 8. Percentage of final impact weights of organizational capacity dimensions on sustainable competitive advantage

Organizational capabilities	The percentage of variables importance
Organizational learning	50.6%
Organizational flexibility	20.2%
Organizational creativity	29.1%
Total	52.5%

Source: Prepared by researchers based on the logistic function equation.

By taking the highest value which is the total factor of organizational capabilities, then the process of dividing the rest of the dimensions by it, therefore, the final product of the relative importance of each dimension is as follows: 50.6. %, 20.2%, 29.1%, while the total value of all dimensions was 52.5%The relative importance of organizational capabilities constituted a level of 52.5% in influencing the sustainable competitive advantage in the company. Thus this negates the validity of the hypothesis and the acceptance of the alternative hypothesis which states that: Organizational capabilities contribute in an average percentage to achieve sustainable competitive advantage in start-ups in Algeria.

The relative importance of the dimension (organizational learning) was 50.6 % influencing the sustainable competitive advantage in the company. Thus this negates the validity of the hypothesis and the acceptance

Journal of Ecohumanism
2024
Volume: 3, No: 4, pp. 1075 – 1087
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i4.3623

of the alternative hypothesis which states that: Organizational learning contributes a weak percentage to achieve sustainable competitive advantage in start-ups in Algeria.

The relative importance of the dimension (organizational flexibility) was at a level of 20.2% in influencing the sustainable competitive advantage in the company. Thus this negates the validity of the hypothesis and accepts the alternative hypothesis which states that: organizational flexibility contributes a very weak percentage to achieving sustainable competitive advantage in start-ups in Algeria.

The relative importance of the dimension (organizational creativity) constituted a level of 29.1% in influencing the sustainable competitive advantage in the company. Thus, this negates the validity of the hypothesis and the acceptance of the alternative hypothesis which states that: Organizational creativity contributes to a very weak percentage in achieving sustainable competitive advantage in start-ups in Algeria.

Discussion

We endeavoured through this study to identify the role of organizational capabilities in achieving sustainable competitive advantage in start-ups in Algeria, which is mainly represented in organizational learning, organizational flexibility, and organizational creativity as well as the extent of their contribution to achieve sustainable competitive advantage, as it was addressed from the theoretical and applied parts. Therefore, the most important results we have found can be summarized as follows**:**

The result of the study have The companies has the ability to change priorities according to the needs of the work, because this enabled them to provide wide efforts beyond awareness and help workers in promoting and accomplishing tasks well, and The companies does not work on developing social relations for workers, in order to ensure its development of work, Workers do not have sufficient knowledge of the tasks they occupy, this is due to the fact that the companies did not give its workers responsibilities during the implementation of their tasks.

The companies does not have the ability to present more than one idea during a certain period of time, this is due to the fact that it is satisfied with one idea to solve a specific problem and accomplish tasks, and The companies usually repeats the procedures followed in completing the work, this indicates that it relies to a large extent on the same methods in accomplishing all tasks, does not company have the ability to adapt to new ways of working, this indicates that it relies heavily on traditional methods.

The companies does not ensure to present new ideas in the field of work significantly, and The organizational capabilities contribute a very weak percentage to achieve the sustainable competitive advantage in the start-ups in Algeria, this is due to the fact that the companies does not depend on the method of updating programs to develop the skills and capabilities of individuals, Organizational learning contributes a weak percentage to achieve sustainable competitive advantage in the start-ups in Algeria, this is due to the fact that the companies did not provide its workers with awareness, education and training programs compared to its competitors.

Organizational flexibility contributes very little to achieve sustainable competitive advantage in the start-ups in Algeria, this is due to the fact that the company does not rely on the method of collective consultation with workers to ensure the success of decisions, and Organizational creativity contributes very little to achieve sustainable competitive advantage in the start-ups in Algeria, this is due to the fact that the corporation does not depend on the policy of adopting new methods and ideas for a particular problem and searching for its solution.

Conclusions

It can be concluded that the previous results, we recommend start-ups in Algeria to pay attention to organizational capabilities because of their great significance, and to ensure the presentation of new ideas in the field of work, as this helps to achieve its creative process, while working on the development of social

Journal of Ecohumanism
2024
Volume: 3, No: 4, pp. 1075 – 1087
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i4.3623

relations for workers, in order to oversee the development of work within the companies. Furthermore, the companies must also rely on modern methods and ways of work during the implementation of tasks in order to achieve distinction compared to its competitors, while working to increase interest in organizational learning because of its important role in achieving a sustainable competitive advantage. Moreover, the companies must also pay attention to organizational flexibility which helps to adapt to change and respond quickly to market forces and uncertainties. Besides, it must also periodically and continuously carry out the process of organizational innovation because it is the most important dimension that the companies can rely on, as this facilitates to achieve its effective management**.**

Acknowledgement

The funding number (KFU241255) and the financing party (Deanship of Scientific Research, King Faisal University, Saudi Arabia).

References

Alharthi, S. Z. (2012). Sustainable Competitive Advantage: Toward a Gener-ic Framework. International Journal of Business Research and Develop-ment, Vol 1 (No 1).

Anajal, b., & Grant, r. (2010). creating organizational capability in new businesses: building sets of complementary capabilities. journal of manage-rial science, Vol 1 (No 2), doi: 10.2139/ssrn.2576531.

Barney, j. (1991). firm resources and sustained competitive advantage. journal of management, vol 17 (N 1).

Ceglinski, p. (2017). The concept of competitive advantage, Logic, source and durability. journal of positive management, Vol 7 (No 3), doi: 10.12775/JPM.2016.016.

Dess, G. G., & all. (2007). Strategic management creating competitive advantage (éd. 3rd Ed). U.S.A: Mc Graw. Hill, Inc .

Diss anayake, r., & al. (2017). the role of organizational creativity to-wards innovations: A conceptual review on services sector reaearch direc-tions. Journal of Social Sciences, vol 9 (No 1).

EROGLU, S., & GUROL, Y. (2021). The impact of organizational learn-ing on competitive advantage in turkey. Journal of global strategic man-agement, vol 15 (No 1), doi: 10.20460/JGSM.2021.298.

Head, B. R., & Deshmukh, A. (2013). Role of Organizational Flexibility in Enhancing Sustainable Green Management Practices: A Study in Emerg-ing Market Context. international journal of management & information technology, vol 4 (No 3), doi:.24297/ ijmit.V4i3.4540.

Iqbal Khan, T., Kaewsaeng-on, R., Hassan Zia, M., Ahmed, S., & Khan, A. Z. (2020). Perceived organizational politics and age, interactive effects on job outcomes. SAGE Open, 10(3), 2158244020936989

Jamil, R. A., Qayyum, U., ul Hassan, S. R., & Khan, T. I. (2023). Impact of social media influencers on consumers' well-being and purchase intention: a TikTok perspective. European Journal of Management and Business Economics, (ahead-of-print).

Kuo, Y. K., Khan, T. I., Islam, S. U., Abdullah, F. Z., Pradana, M., & Kaewsaeng-On, R. (2022). Impact of green HRM practices on environmental performance: The mediating role of green innovation. Frontiers in Psychology, 13, 916723.

Lucas, J. H., & Olson, M. (1994). the impact of information technology on organizational flexibility. journal of organizational computing and elec-tronic commerce, Vol 4 (No 2).

Mukesh, S., & al. (2013). Building a Sustainable Competitive Ad-vantage. Journal of technology management innovation, Vol 8 (No 3), doi: 10.4067/S0718-27242013000200004.

Odor, H. (2018). A literature review on organizational learning and learning organizations. International Journal of Economics & Management Sciences, Vol 7 (No 1), doi: 10.4172/2162-6359.1000494.

Pitts, R., & Lei, D. (1996). strategic management: building and sustain-ing competitive advantage. U.S.A: west publication.

Sandeep, s. d., & al. (2018). A research on organizational capability and their strategic impact on manufacturing industry. Asian review of mechanical engineering, Vol 7 (No 2).

Sayed Mohammed, G. A.-R. (2006). Management of Intellectual and Knowledge Resources in Modern Business Organizations. Cairo.

shalende, K. (2015). organizational flexibility for superior value proposi-tion: implication for service industry. international journal of economocs & management siences, Vol 4 (No 6), doi: 10.4172/2162-6359.1000256.

Takahashii, y., & tuan, N. p. (2009). resources organizational capabili-ties and performance, some empirical evidence from Vietnams supporting industries. international review of business research papers, Vol 5 (No 4).

Thawabieh, F. A., & Saleem's, M. (2016). Organizational Creativity and Competitive Advantage: A GCC Perspective. international journal of eco-nomics & management sciences, vol 5 (No 4), doi: 10.4172/2162-6359.1000355.

Thompson, S.(2012). Sampling Thom willey and sons, INC publication, 3rd. Canada