The Use Of NNIS To Develop Mental Abilities A Case Study Of Learning Leaders At Al-Mustansiriya University

Asst. Pro. Dr. Fouad Yousif Abdul-Rahman , Asst. Pro. Dr. Sumaya Abbas Majeed And Asst. Pro. Dr. Sahar Ahmed Kurji

Al-Mustansiriya University.

Abstract :

The study relies on proposing the idea that the use of a neural network information system as one of the types of artificial intelligence has an important role in preparing new models of thinking that support the functions of the human mind and develop its mental skills and abilities. Where many leaders suffer from time management to solve many of the problems that afflict their organizations, which requires the use of electronic digitization and the degree of fear of its use. Where he expressed the problem with a set of questions about the possibility of synchronization between them. The two researchers used the case study and the checklist to explain the philosophical and scientific connection between them, using a sample of "deans, assistants, and heads of scientific departments" from Al-Mustansiriya University as a sample of (100) individuals. The researchers used measures of central tendency and the descriptive analytical method to address the quantitative side. And they reached the most important conclusion: "There is an intellectual awareness among the research sample of the importance of NNIS as a model of thinking that helps and supports the functions of the mind of the individual."

Keywords : NNIS, Mental Abilities, Developed, Network Information System.

Introduction:

The world lives in light of the congestion of terminology, modern and accelerating variables, and weakness in mental capabilities to keep pace with the movement of development in it and the human mind resorting to a mutual attribution request from the

electronic digitization system. Harmonization between the human mind and the electronic mind and building an intelligence system that helps in making continuous decisions that rely on feedback to achieve intensive parallel treatments of problems and build an advanced mental image of leadership dealings according to the principles of modern digitization. Accordingly, the following questions were raised:

1. Do administrative and scientific leaders use (NNIS) applications to develop their skills and abilities?

2. Are there capabilities and infrastructure for the implementation process?

3. Is there an actual need to harmonize the human and electronic minds of problem-intensive parallel treatments?

4. Is there a community awareness of applying the NNIS system?

5. Will these NNIS systems contribute to promoting new models of thinking and developing mental skills?

Where it is noticeable that creating advanced systems for work and the use of information technology and dealing with its outputs that are characterized by a state of imperfection, certainty and lack of accuracy in the use of information needed by administrative and scientific leaders in light of the crowdedness of modern and renewable variables and their need to achieve compatibility to address the continuing problems in the flow in a sometimes narrow and wide range In other areas, through which the importance of the study emerged. In light of this, the study aimed to build a society that is first aware of the uses of the systems, their belief in them, the actual need to deal with them, and the building of an advanced system to deal with the accelerating change movement in the business world. The researchers used the case study method to produce detailed information and treatments that contribute to drawing a modern image and vision according to standards prepared for this purpose.

The first topic

the theoretical side

First, the neural network information system (NNIS) aneural network lnformation system

Neural networks information system, as one of the types of artificial intelligence systems, is based on thinking models that are based on the functions of the human mind, specifically (the brain), which is a complex dynamic system that relies on continuous feedback to achieve intense parallel treatments of problems in order to reach the optimal solution within the scope of non-linear but structural and network treatments in same time . (Chan & Guillet, 2011).

1. The concept of the Neural Network Information System (NNIS) ...

It is an artificial intelligence system that is able to find and distinguish patterns by learning the mind how to think about many combined and complex factors in a dynamic manner that works on the basis of parallel treatment of dense and huge problems and works under information characterized by uncertainty and its analysis of non-linear relationships in it. An example of this is its use in many banks and financial and administrative institutions to create market opportunities.(Abdulrahman,2019:151)

2. Advantages of the Neural Network Information System (NNIS) ...(yassin,2005:126)

In order to know the value of the system and the effectiveness of its outputs, it is necessary to address the advantages it enjoys, which can be summarized as follows: -

A- Learning and adapting to new circumstances on its own.

B- Neural networks with their informational system are compatible with massive parallel processing.

C- NNIS operates without complete information under uncertainty or well-organized.

D- (NNIS) deals with huge amounts of data that it works on and with many variables that are addressed by the rapidly changing business arena.

E- Analyzing non-linear relationships of information using multiple regression analysis systems.

F- (NNIS) analyzes financial markets and their use in banks and financial institutions.

G- (NNIS) uses advanced technology and information systems that coincide with the development of the human mind.

H- It works within a non-linear as well as structural and network processing logic at the same time. (Lipiäinen, H, (2014))

I- Systems that learn from experience and gain their experience and knowledge through training and scientific practices.

3. Characteristics of a Neural Network Information System (NNIS).

The neural networks information system has a set of characteristics that distinguish it from the rest of the advanced information systems as one of the artificial intelligence systems, which can be summarized as follows: -(Abdulrahman,2019:153)

A- The ability to search and reach optimal solutions.

B- The ability to recognize patterns and self-learn.

C- The ability to present and interpret solutions to problems that require non-algorithmic solutions.

D- The NNIS system uses the exploratory approach. (Al-Tai, 2000)

E- The ability to improve the proposed solution through training, education and experience.

F- The widespread use of predicting the behavior of nonlinear phenomena.

G- Dynamics in work and dealing with variables.

H- The ability to interpret incomplete entries.

I- the possibility of abstraction and generalization.

Secondly, the development of mental capabilities

Mental capabilities are the main pillar for the launch towards digital knowledge on which the new global variables are built and to define more transformative goals towards the world of survival in light of these variables and the uncertainty in information so that the development process contributes to programming the human mind to deal with decisions and alternatives in a scientific way based on the support of artificial intelligence for them. And its use of information systems is in harmony with the movement of change towards innovation.

1. The concept of mental abilities.

These abilities are based on expressions of intelligence and intelligence and the building of primary and secondary memory that derives its knowledge from databases in which the components of the human mind have been stored from inherited preparations and acquired experiences to perceive the situations in their entirety and their generalities and peculiarities and to understand the facts surrounding them, analyze them and link them logically based on information of a real and strategic dimension through which it turns into Specialist skills for activities based on intelligence, thinking and insight. The concept of mental capabilities can be prepared as a group of special abilities such as remembering, attention, imagination and innovation for a person, which are related to the human mind and its capabilities that enable him to perform intellectually, sensory or emotional, and knowledge of things allows him to receive information, review it and analyze it in order to deal with it later. For the purpose of building a scientific image determined by the types of these capabilities, it is necessary to use electronic capabilities (artificial intelligence) to perpetuate the movement of change in today's world and the birth of new variables that need special capabilities through the mind to build it through: -(Abdulrahman,2010:82)

A- The ability to understand the meaning or word, comprehend it, analyze it, and express what is going on in it in terms of denials and decisions that may need in many cases an intellectual integration between the traditional and electronic thinking system.

B- The ability to build perceptions, visualize events and situations in a scientific way, anticipate scenarios and potential predictions, which require an information base with a

strategic dimension and information systems with advanced capabilities in dealing with strategic alternatives to decisions.

C- In order for the human mental capabilities to give complete control and progress over electronic thought, it is imperative to develop its mechanical capabilities for education.

D- The ability to acquire knowledge and use the outputs of information systems, develop thought and develop thinking capabilities in order to achieve the idea that coincides with the achievement of the goals.(Eggers & Kaplan, 2009)

2. How can mental abilities be developed?

The mind is seen as a source and a center for control and control in building its cells with a scientific philosophy that takes perception, imagination, creativity and possibility, framing them with the feelings of correct scientific logic, in order to direct its components and energies towards making and making decisions that need speed of dealing and modern understanding, or a dimension of strategies that is based on the state of uncertainty in building information and assurance. From reaching to achieving goals. In order to use sound thinking, which is a mental and mental activity based on the stored scientific thought, continuous reviews of the dynamics in the outputs of the mind are necessary and its use of modern methods to keep pace with the changing world and the permanent struggle between the variables and the preservation and overcoming of the knowledge gap. Therefore, the development process is based on three basic aspects: "learning - training - experience".

A- Learning.

Mental skills and abilities need to be renewed and added permanently to achieve an advantage with a sustainable dimension through the possibilities of education and its tools up to the state of scientific learning with the outputs of modern education built through the cognitive mix in building thinking and learning capabilities on how to deal with them and electronic knowledge that are the methods that support the human mind by using systems. Artificial intelligence . In order to know the movement of the internal and external environment, it is necessary to base the mind on new things and the different positions for dealing with making and decision-making and providing the actual intellectual needs to build this perception and achieve the global performance of the activities of the mind and reach the potential ideas of the desired activities and take care of them and participate through them to translate the thinking efforts into a tangible or constructive reality. A mental picture of what the human mind aspires to deal with new environment variables.(kreiner,kinicki,2012:84)

B- Training.

The human mind is not based on theoretical thinking in its dealings through education and education unless it is accompanied by applied training programs for those vocabulary,

especially those with high intelligence capabilities that need to be renewed in practices and drawing new methods of building and using mind exercises of an intellectual nature in its tracks away from the traditional method of dealing with Decisions are made and made. By following up on modern changes, the human mind needs to prepare programs and training plans that activate the capabilities and capabilities of the mind towards achieving sustainability in scientific and logical thinking away from familiar activities and the search for new skills that coincide with the global environment movement for business. And work to prepare a training plan to maintain communication between the human mind and the electronic mind, and to know the systems used and how to deal with them to develop capabilities towards strategic digitalization that rebuilds capabilities towards modernity and innovation.(ALqaruoty,2012:125)

C- Experience.

To ensure the continuous flow of the outputs of the human mind in its practical form after building its educational capabilities and obtaining the vocabulary of intellectual learning and delaying it with aspects of its training preparation through future plans that delay the strategic foundations of the mind. It is imperative to conduct an appropriate organization of these practices and prepare experiences that make the individual have a mental nature that coincides with the movement of sound thinking for the environment and to prepare activities that reach the achievement of the set goals and to determine the priorities of how to make and make decisions and build them according to the high flexibility that the experiments seek to achieve. And the use of applied theoretical and quantitative aspects in building mental images, whether in their human or electronic aspects, in application.(Zakaria,2005:184)

The Second Topic

Practical Side

The two researchers adopted the descriptive analysis to analyze the results of the case study on the response matrix of the sample members through (15) items distributed to the research sample of (100) education leaders at Al-Mustansiriyah University as follows:

1. Paragraph (1) of the checklist, "The research community possesses an intellectual awareness of the importance of NNIS as a thinking model that builds on and supports the functions of the human mind" affirmed that the arithmetic mean has a value of (2.42) and this value falls in the response matrix within the level of (agreed) and this indicates that On the importance of an intellectual awareness of the research community using the strategic digitization of the NNIS system as an electronic model that supports the skills and mental abilities and a real support for the mind and human strategic intelligence in line with the global change movement in contemporary changes, with a standard deviation of (0.654),

which reflects the homogeneity of the answers in an average way to the answers of the respondents .

2. Paragraph (2) of the checklist "believes that NNIS is a dynamic system that relies on continuous feedback to achieve dense balanced treatments of problems," stressing that the arithmetic mean has a value of (2.38) and this value falls in the response matrix within the level of (agreed) and indicates that there is Relatively moderate belief on the vitality and dynamism of the NNIS system in dealing with the knowledge and scientific gap of the external environment variables and the adoption of the electronic era in artificial intelligence systems in maximizing the life cycle of the system with the sustainable feedback system and achieving balanced solutions to the complex, dense and complex problems that you deal with in order to reach the best decision, and with a standard deviation It reached (0.663), which reflects a relatively average dispersion and homogeneity in the respondents' answers.

3. Paragraph (3) of the checklist "takes into account that NNIS is able to find and distinguish patterns by learning the mind how to think and develop its abilities" that the arithmetic mean has a value of (2.58) and this value falls in the response matrix within the level of (agreed) and indicates this The value of taking into account the researched community on the ability of the NNIS system to respond quickly and accurately to find and distinguish the approved patterns and their development by increasing the human mind's learning on modern methods of thinking synchronized with electronic thinking and developing its capabilities in responding to the best decision in light of the complexity and complexity of problems, with a standard deviation of (0.589) Which reflects the homogeneity and agreement of the respondents' answers.

4. Paragraph (4) of the checklist, "NNIS depends on learning and adapting to new conditions on its own to be able to renew ideas continuously" confirmed that the arithmetic mean has a value of (2.44) and this value falls in the response matrix within the level of (agreed) and indicates that The importance of using the NNIS system and adopting it in a partially agreed manner on its ability to learn, adapt and follow new global variables and methods of solving problems on its own due to the need to renew ideas and enhance the possibilities of solving complex and complex problems in a logical sequence that takes into account the priorities of choosing the best solution, and with a standard deviation of (0.671) Which reflects the relative agreement and homogeneity of the respondents' answers.

5. Paragraph (5) of the checklist "NNIS works in the absence of complete information and uncertainty and organization to attribute strategic mental capabilities" emphasized that the arithmetic mean amounted to (2.56) and this value falls in the response matrix within the level of (agreed) and indicates the importance of using (NNIS) system as a system that operates under conditions of turbulent environments, uncertainty, lack of accuracy, and complex and intertwined organizational conditions, which confirms its strategic ability to

support the mental capabilities of decision-makers to build and detail complex possibilities in order to reach the best solution that fits contemporary variables at the time of need and occurrence, and with a standard deviation of (0.592) and indicates agreement and relative homogeneity in the respondents' answers.

6. Paragraph (6) of the checklist "helps NNIS to analyze non-linear relationships about the internal and external environment to build a balanced mind image" affirmed that the arithmetic mean has a value of (2.24) and this value falls in the response matrix within the (neutral) level, and this indicates that Weakness in understanding some members of the research sample of many parts of the work of the NNIS system and interest in knowing that this system helps in analyzing non-linear relationships, which are known as unstructured, which is difficult to know how to solve their problems except by adopting probabilities and that the complex and complex approach, whether in its dealings with the internal environment or The external ones are to build a balanced image of the mind in harmony with use towards artificial intelligence, with a standard deviation of (0.753), indicating a weakness in the homogeneity of answers and an increase in their dispersion.

7. Paragraph (7) of the checklist "NNIS contributes to building the learning of mental abilities in light of huge amounts of data and processing it digitally" emphasized that the arithmetic mean amounted to (2.5) and this value falls in the response matrix within the level of (agreed) and indicates the extent of Contribution of (NNIS) system efficiently and effectively in responding to the needs of decision-makers and decision-makers to adopt its outputs with accurate digital processors despite its analysis, organization and indexing of the vast amount of data and the extent of learning and increasing knowledge of mental abilities from reducing the time of obtaining information by adopting the quality of processing quantities, and with a standard deviation of (0.659) and indicates homogeneity and relative agreement in the respondents' answers.

8. Paragraph (8) of the checklist, "NNIS contributes to building mental capabilities by using advanced information technology," emphasized that the computation value reached (2.58) and this value falls in the response matrix within the level of (agreed) and indicates the research community's understanding of the importance of the contribution of the system. (NNIS) in building its mental capabilities by using contemporary digitization of information and communication technology in bringing about the development of capabilities. However, the fear of moving towards the electronics of the age contributed to creating a knowledge gap of a digital character, with a standard deviation of (0.684), which reflects a relatively average homogeneity and agreement in the answers.

9. Paragraph (9) of the checklist, "NNIS contributes to training mental skills to discover phenomena and predict them to gain new experiences and knowledge" affirmed that the arithmetic mean has a value of (2.56) and this value falls in the response matrix within the level of (agreed) and indicates the extent of the contribution The high level of the (NNIS)

system by adopting a study and knowledge of its capabilities and following up the program's work as a training system to raise skills and mental capabilities by adopting its capabilities to discover and predict phenomena, and with a standard deviation of (0.574) indicating agreement and relative homogeneity in the respondents 'answers.

10. Paragraph (10) of the checklist "helps NNIS learn high skills in analyzing financial markets and using them in banks and financial institutions to face complex problems," emphasized that the arithmetic mean amounted to (2.09) and this value falls in the response matrix within the (neutral) level. And it indicates that the research sample is a result of the exclusion of electronic specialization or negligence in knowing how to deal with contemporary digitization, which generates their lack of knowledge that the (NNIS) system helps in analyzing financial markets and enhances the capabilities of institutions to face complex problems, with a standard deviation of (0.834), which reflects homogeneity and weak agreement. In the direction of the respondents' answers.

11. Paragraph (11) of the checklist affirmed that "there is a possibility of implementing NNIS and providing a digital infrastructure to be employed to assist in developing mental capabilities". The arithmetic mean has a value of (2.12) and this value falls in the response matrix within the (neutral) level and indicates that there is Weakness in the implementation of the NNIS system as a result of the apparent weakness in providing an infrastructure with a digital orientation, which can be reflected in the possibility of developing mental capabilities, with a standard deviation of (0.7), which reflects the homogeneity and relatively weak agreement of the respondents' answers.

12. Paragraph (12) of the checklist, "You believe that there are mental capabilities that accommodate the specialized training programs in NNIS with high performance and an advanced strategic character" emphasized that the arithmetic mean amounted to (2.51) and this value falls in the response matrix within the level of (agreed) and indicates The research sample believes in the existence of capabilities that accommodate specialized training programs that approach or possess specialization due to the importance of the (NNIS) system in achieving high performance of a strategic nature by dealing with modern variables with complex and intertwining problems, and with a standard deviation of (0.521) indicating homogeneity and relative agreement in the answers.

13. Paragraph (13) of the checklist, "The organization has the ability to search and reach optimal solutions to problems apart from NNIS," emphasized that the arithmetic mean reached its value (1.82), and this value falls in the response matrix within the (neutral) level. This indicates that part A large sample of the research sample does not have the answer, since its belief in electronic capabilities is based on attribution, but the weakness of use and its inability to cross the fear barrier in digital dealings and its adoption of the paper system and the single mental attribution made it directed towards knowing the organization's possession of capabilities, but does not meet the level of ambition away from

the systems of artificial memory, And a standard deviation of (1.51), indicating a high dispersion of the respondents' answers.

14. Paragraph (14) of the checklist "has the conviction that the balance between NNIS and the human mind in light of non-algorithmic solutions and its interpretation is one of the proper learning patterns" affirmed that the arithmetic mean reached its value (2.14) and this value falls in the response matrix within the (neutral) level. This indicates that what was adopted in Paragraph (13) is reflected in the weak response and lack of knowledge of the correct orientation, because these systems are at the top of their bid if they are used within specialized minds heading towards digitalization as a true attribution of the reality of the human mind's dealings in light of non-algorithmic solutions, and with a standard deviation of (0.91) Reflecting the apparent weakness in the agreement and homogeneity in the answers.

15. Paragraph (15) of the checklist "believes in the success of implementing NNIS in the organization to interpret incomplete inputs" emphasized that the arithmetic mean amounted to (2.18) and this value falls in the response matrix within the (neutral) level and also indicates an addition to the explanations in the previous paragraphs The trend towards weakness in the possibility of implementing the system except for those with specialization and belief in their mental capabilities and seeking to develop them, with a standard deviation of (0.744) reflecting a weakness in the consistency and agreement of the answers.

The third topic

Conclusions and recommendations

First: the conclusions

1. The emergence of intellectual awareness and confidence in the necessity and importance of using the strategic digitization of the NNIS system in business organizations.

2. The ability of the NNIS system to operate under turbulent conditions and the absence of complete information.

3. NNIS enables the individual to analyze non-linear relationships that are difficult to deal with except by using it.

4. The high ability of the NNIS system to use and index data, which helped to obtain information in good quality and quantity.

5. The presence of a fear barrier among most of the sample from mental digital dealings and their dependence on the paper-based system.

6. The lack of use of these systems by administrative leaders has negatively affected business performance.

Second: Recommendations

1. Increasing support for the leadership segment to develop their skills and mental abilities in accordance with the developments of the external environment.

2. The necessity of constantly providing and renewing data for the system to work smoothly.

3. Reprogramming the work in the system constantly so that the individual can learn by himself and overcome the problems that may occur in the internal and external environment.

4. Enhancing the system's capabilities to continuously build the employees 'intellectual capabilities that contribute to achieving the goals.

5. Carrying out awareness programs continuously to demonstrate the importance and necessity of using these systems and to maintain communication between the human mind and the electronic mind to develop capabilities towards modernity and innovation.

6. The need to engage administrative minds with training and development courses and programs on how to use this type of system to activate their mental capabilities and capabilities.

References

1- Abdulrahman ,fouad yousif,2019," **contemporary thought for management information technology**", Baghdad, Tuta library for printing and publishing.

2- Yassin,saad kalib,2005," **Fundmentals of management information systems and information technology**", Amman, curriculum house.

3- Abdulrahman, fouad yousif,2010," **The impact of information technology in job design and ergonomics dimension**", A thesis submitted to the council of the college of administration and economics.

4- Kreiner, Robert and kinicki, Angelo,2012," **Organizational behavior**", 9th edition, McGrae-Hill,Irwin, printed in china.

5- AL-qaruoty, Mahammed kassim,2012," **Organizational behavior**", Amman, Jordan, dar wael for publishing and distribution.

6- Zakaria, Abdullatif,2005," **behavior management**", Amman, Jordan.

7- Chan, N. L., & Guillet, B. D. (2011). Investigation of social media marketing: how does the hotel industry in Hong Kong perform in marketing on social media websites?. Journal of Travel & Tourism Marketing.

8- Heini Lipiäinen , Digitization of the Communication and its Implications for Marketing ,JYVÄSKYLÄ STUDIES IN BUSINESS AND ECONOMICS 152 , UNIVERSITY OF JYVÄSKYLÄ JYVÄSKYLÄ 2014.

9- Eggers & Sarah Kaplan , Cognition and Renewal : Comparing CEO and Organizational Effects on Incumbent Adaptation to Technical Change , April 2009.

10 - Al-Tai, Mohammed Abdul Hussein, 2000, "Management Information Systems" Amman, House of Culture for publication and distribution

Appendix A.

Case Study

Ministry of Higher Education and Scientific Research

Mustansiriya University

Faculty of Administration and Economics

Business Administration Department

good greeting..

The researchers intend to conduct a case study tagged (the use of NNIS to develop mental abilities, a case study for education leaders in

Al-Mustansiriya University) to demonstrate how to use the NNIS Neural Check Information System as it is one of the types of artificial intelligence and its role

The important thing in preparing new models of thinking to support the functions of the human mind and developing its skills and mental capabilities for administrative and scientific leaders

Seeking to solve the problems facing them.

The success of the study depends on the accuracy of your response in indicating the response expressing your conviction and the reality of your work, and that the recorded information will be

Dealing with it for the purposes of study for the purposes of scientific research only, and God grant success.

The two researchers

Assis. Prof. Dr. Fouad Yousif Abdul-Rahman

Assis. Prof. Dr. Sumaya Abbas Majeed

Asst Pro. Dr. Sahar Ahmed Kurji

		questions	Agreed	neutral	I do not agree
1.		It possesses an intellectual awareness of the importance of NNIS as a model of thinking that builds on and supports the functions of the human mind.			
2.		She believes that NNIS is a dynamic system that adopts continuous feedback to achieve balanced problem-intensive treatments.			
3.		Take into account that NNIS is able to find and distinguish patterns by learning the mind how to think and developing its capabilities.			
4.		NNIS relies on learning and adapting to new conditions on its own to be able to constantly renew ideas.			
5		NNIS operates in the absence of complete information, uncertainty, and organization to support strategic mental capacity.			
.6		NNIS helps analyze non-linear relationships of the internal and external environment to build a balanced mind picture.			
7.		NNIS builds learning of mental capacity with massive amounts of data and digitally processed.			
8.		NNIS helps build mental capabilities using advanced information technology.			
9.		NNIS contributes to training mental skills to discover and predict phenomena to gain new experiences and knowledge.			
10.		NNIS helps to learn high skills in financial market analysis and use it in banks and financial institutions to face complex problems.			
11.		There is complexity in implementing NNIS and providing a digital infrastructure to employ to help develop mental capacity.			
12.		believes that there are mental capabilities that accommodate the NNIS specialized training programs that are of high performance and an advanced strategic nature			

13.	The organization has the ability to search and find optimal solutions to problems outside of NNIS.			
14.	She has the conviction that balancing NNIS with dthe human mind in light of non-algorithmic solutions and its interpretation is a sound learning style.			
15.	Believes in successfully implementing NNIS in the organization to account for imperfect inputs.			