



The Role of Generative AI in Structuring Organizational Knowledge

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Abstract

The study aims to measure the level of awareness of the study sample about generative AI technologies, and evaluate the actual and expected impact of using generative AI on the quality and efficiency of institutional knowledge structuring processes, and determine the power and impact of generative AI in its dimensions, (cognitive and applied) on the effectiveness of knowledge structuring. The descriptive-analytical approach was adopted in the study side by side with questionnaire, observation and standardizes interview were used as a method of collecting data. Also the SPSS statistical program version 23 was used to analyze the results of the study, and the study came out with a number of results, most notably: The level of awareness and perception of the benefits of generative AI (cognitive dimension) came in first place with a high arithmetic average (4.15), It was found that there is a clear disparity as the awareness and perception of the benefits of generative AI exceeds the level of its actual application in the organization (application dimension 3.80). The low standard deviation values (less than 0.80) indicate a great homogeneity in the opinions of the sample members about the various dimensions of the study, and there is a very strong and statistically significant direct correlation between generative artificial intelligence and knowledge structuring, where the correlation coefficient reached (0.75), the multiple regression model also proved to be statistically valid and predictable, with a significance value of (0.000) less than 0. The cognitive and applied dimensions together explain a very high rate of 64% of the variance in the effectiveness of institutional knowledge structuring (R^2 0.64).

Keywords:

Generative Artificial Intelligence, Knowledge Structuring, Institutional Knowledge.

Introduction

In recent decades, the institutional environment has undergone a radical transformation driven by the rapid advances in artificial intelligence (AI) technologies, and with advent of (Generative AI), It became possible to make a revolution in how knowledge assets are managed, categorized, and retrieved. Organizational knowledge with its complex structure and various axes is the first building block in competitive advantage and sustainability of performance so the relationship between the integration of these advanced technologies and the effectiveness of institutional knowledge structuring represents a vital issue that requires examination and analysis, as this study seeks to shed light on the dual role of generative AI, whether in its cognitive aspect (building awareness and understanding) or its applied aspect (technological tools) in organizing and improving the quality of classification and retrieval efficiency within organizations.

Despite the widespread awareness of the potential effect of generative AI, there remain fundamental challenges, constraints, and knowledge and process gaps that need to be addressed carefully. The research problem is centered on the urgent need to determine the actual and quantitative role that generative AI provides in enhancing the effectiveness of institutional knowledge structuring, especially since the results of the descriptive analysis indicated that the awareness and perception of the benefits of generative AI is higher than the level of its actual application at the university “the field of study”, This disparity raises questions: should we focus on infrastructure and applied tools, or on building awareness and cognitive understanding?

In addition, it is necessary to examine whether there are substantial differences in the evaluation of this effect due to the disparity in managerial levels, so the main problem of this study is to measure the actual role and relative contribution of both the cognitive and applied dimensions of generative AI in enhancing the effectiveness of institutional knowledge structuring.

Depending on this, the study seeks to answer the following questions:

1. What is the nature and strength of the correlational relationship between generative AI and institutional knowledge structuring?
2. What is the qualitative and quantitative impact of generative AI in its dimensions (cognitive and applied) on the effectiveness of institutional knowledge structuring?

The main objectives of this study were directed towards:

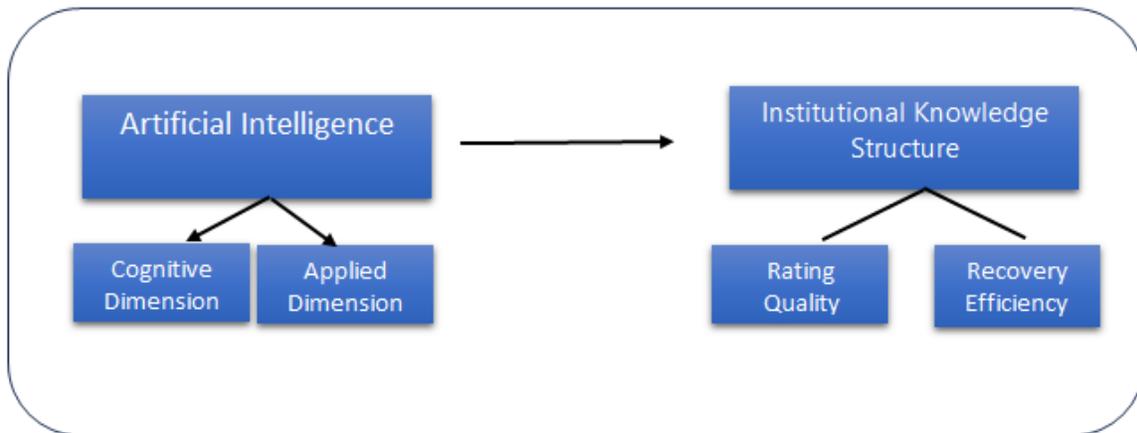
1. Measuring the level of awareness of the study sample (managers and department officials) about generative AI techniques.
2. Assess the actual and expected effect of the use of generative AI on the quality and efficiency of organizational knowledge structuring processes.
3. Determining the power and effect of generative artificial intelligence in its dimensions (cognitive and applied) on the effectiveness of knowledge structuring.
4. Explain the relative contribution of the cognitive and applied dimensions and determine which one is more important in explaining the total variation of knowledge structuring.

The importance of this research comes from the provision of accurate management directives based on statistical results to the organization's leadership on the priority of investing in training and building awareness (the knowledge dimension) as the strongest influencer, Before or in conjunction with investing in applied tools, helping to develop classification quality standards and retrieval efficiency in the enterprise knowledge management system, and promoting adoption to have a homogeneity of vision between management levels, this provides an opportunity for management leadership to embrace change without much resistance, and accelerate the transition towards AI integration.

As for the research hypothesis, the hypothesis was directed towards: There is a statistically significant direct correlation between generative AI and knowledge structuring.

Generative Artificial Intelligence (AI) with its dimensions (cognitive dimension and applied dimension) affects the effectiveness of institutional knowledge structuring. There are statistically significant differences in the assessment of the effect of generative AI attributable to the managerial position.

The hypothetical study outline is determined by determining the relationships between the study variables, as shown in the following figure:



The study community consists of all the managers and division officials of the university (field of study) during the time period from 2024 to 2025. And to achieve the research objectives, the specific intentional sample of 50 individuals, 20 managers and 30 division officials was selected, they were selected as an intentional sample to represent the key users of generative AI, the size of this sample was chosen to be representative of the statistical community, which allows for the possibility of drawing statistically significant conclusion.

This study relied on the descriptive-analytical method, where the phenomenon of generative artificial intelligence is described and then the relationships and effects between it and knowledge structuring are analyzed.

A set of tools and metrics was used, which we explain as follows:

The tool: The questionnaire as a key tool designed according to the five-point Likert scale, and includes the following dimensions:

Independent variable: the cognitive dimension and the applied dimension of generative artificial intelligence.

Dependent variable: classification quality, retrieval efficiency, and knowledge update.

The data collected was analyzed using SPSS version 23, and the search boundaries were framed as follows:

1. **Time Limits:** The period of time extending from 2024 to 2025.
2. **Place Boundaries:** Imam Al-Azam University College.
3. **Objectivity:** Focus on the dual role of generative AI (cognitive and applied) in shaping and improving classification quality and retrieval efficiency within organizational knowledge structuring processes.
4. **Human Limits:** Managers and Divisional Officials at the University.

Procedural Definitions of Study Variables:

This study deals with the affective relationship between the dimensions of generative artificial intelligence and the effectiveness of institutional knowledge structuring, and its variables are procedurally defined as follows:

Institutional knowledge structuring represents the dependent variable, and is procedurally measured by the general average of the responses of the study sample members on its main dimensions: classification quality and retrieval efficiency.

The independent variable, generative AI, is divided into two dimensions:

The first is the cognitive dimension, which is procedurally measured by the degree to which managers and administrators understand and realize the capabilities and benefits of generative AI technologies. The second is the applied dimension, which is procedurally measured by the degree of actual use and practical practices of generative AI tools in knowledge structuring processes within the organization. All of these variables were measured using the five-point Likert scale in the questionnaire.

Theoretical aspect:

The theoretical aspect aims to build the conceptual basis of the dependent variable in the study, which is the effectiveness of institutional knowledge structuring by reviewing the definitions of knowledge, its management processes, and the theoretical models that govern it.

First Topic: Conceptual Basics of Institutional Knowledge.

1.1 Definition of Institutional Knowledge

Knowledge is defined as the processes and procedures through which tacit and explicit knowledge is used in the implementation and completion of administrative, technical and specialized works in a precise and specialized manner that differs from others in the implementation mechanisms (Guitii & Kagwathi, 2014), Hamshari defines it as a set of personal skills, practices and perception acquired through observation and information processing based on personal experiences, and shares with them the personal ability to form ideas (Hamshari, 2012, page 55), (Jennex) also explained all the processes of preparation and organization to attract the knowledge of individuals within the organization in general, store and share it to apply it to achieve the company's competitive advantage (Jennex & Olfman, 2006).

1.2 Knowledge Management Processes and Structuring

Knowledge management processes differ according to their approaches, and writers and researchers also differ on the main processes in knowledge management (Al Harthi and Al-Fayedi., 2020, page 450) stressed on there are six essential processes of knowledge management, which are: diagnosing knowledge, setting knowledge goals, generating knowledge, storing knowledge, distributing it, and finally applying it:

1. **Knowledge Diagnosis:** The process of knowledge diagnosis refers to all the actions and processes that an organization performs to determine the quality, nature, and nature of the knowledge it wants, in addition to identifying the organization's knowledge and identifying the people who carry it, as one of the most important obstacles that organizations face in dealing with knowledge is the difficulty of accessing knowledge, as any mistake in dealing necessarily leads to shortcomings and inaccuracies in subsequent processes, and the success of knowledge management depends on the accuracy of the diagnosis process.
2. **Knowledge Acquisition:** It represents a set of activities through which an institution seeks to obtain knowledge (implicit and explicit) from its various sources inside or outside the organization, and the process of acquiring knowledge lies in extracting knowledge from its human sources in experts and symbolism (knowledge found in digital and physical media) and transferring and storing it in the knowledge base or in knowledge management systems.
3. **Knowledge Generation:** The process of knowledge generation refers to innovation, discovery, assimilation, and purchase, and the importance of generating new ideas increases when markets change, as a successful organization is the one that constantly creates new knowledge.
4. **Knowledge Storage:** Storage processes include retention, maintenance, research, access, and retrieval, and many organizations attach great importance to the process of storage as a result of some individuals leaving organizations for one reason or another, these institutions will lose a lot of their knowledge once these individuals leave because they carry their tacit knowledge inside their minds (undocumented knowledge), while documented knowledge will remain stored in their bases.
5. **Knowledge Distribution:** The process of dissemination refers to the dissemination, sharing, transfer and flow of knowledge, and among the conditions required for the transfer and distribution of knowledge to be completed: that there should be a means of

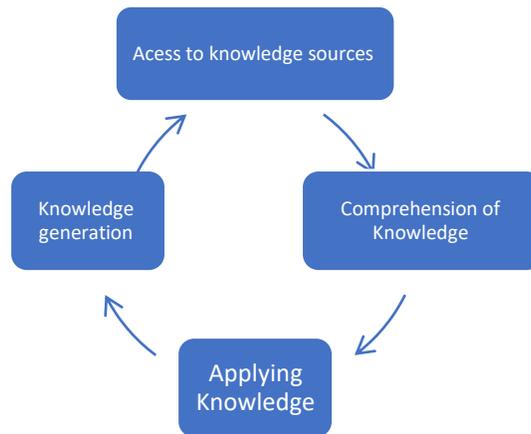
transferring knowledge and that it should be perceived and understood by workers, with the required incentive to transfer it, and finally, that there should be no obstacles to the transfer of knowledge.

6. **Application of Knowledge:** This process refers in its content to the terms of use, investment, reuse and benefit, and the application of knowledge is the purpose of knowledge management, which means the investment, acquisition and storage of available knowledge.

Second Topic: Knowledge Management Models and Structures

2.1 Knowledge Lifecycle

Knowledge is acquired through a complete cycle that begins with access to knowledge sources, i.e., the search for information that makes up knowledge, followed by the process of absorbing knowledge. This course consists of main stages: generation, storage, dissemination, and application, (Al-Malkawi, 2007, page 43) explains the life cycle of knowledge through the following figure:



2.2 Knowledge Management Models

(Nafisa, 2023), (David & David, 2012, p. 38), (Saxena, 2015, p. 146), and (Al-Rubaie & Muqrash, 2020) mentioned knowledge management models, which can be used to develop a knowledge management system within the organization, which can be explained as follows:

1. Marquardt Model

Marquardt's model (2002) proposes a systematic and holistic approach to knowledge management aimed at achieving cultural and organizational transformation. The ultimate goal of this model is to put knowledge directly at the service of the customer, while working to democratize it through the dissemination of its use and the diversity of values derived from it throughout the Organization. The model also seeks to bring about a fundamental change in the traditional leadership pyramid; The role of managers shifts to become trainers and consultants, and heads of knowledge pathways. The proposed model consists of six stages that cover the entire process of

transferring knowledge to the user, including: acquisition and generation, storage and extraction of information, transfer and dissemination, and then implementation and authentication.

2. The Three Processes Model of Knowledge Management

The Bryer & Zhao (1999) model, known as the three-process model of knowledge management, adopts a traditional perspective of transformational processes. This model is based on an integrated cycle that starts with inputs, which includes the necessary data and information related to customers, materials, and resources. This is followed by processes, which are the set of actions by which knowledge is transformed from the form of inputs into valuable outputs. The outputs are transformed knowledge aimed at enhancing and growing the intellectual capital of the organization.

3. Nonaka & Takeuchi Model

The Nonaka and Takeuchi Model (SECI) focus on the knowledge cycle, and assumes that individuals create knowledge through the dynamic interaction between their explicit knowledge and their implicit knowledge. In the process of its qualitative and quantitative expansion, knowledge goes through four main stages:

1. **Nurture:** In which tacit knowledge is created by exchanging experiences, ideas, and skills between individuals.
2. **Embodying:** This is followed by the stage of embodying tacit knowledge and transforming it into explicit knowledge, where knowledge is crystallized and documented in a form that is easy to share with others.
3. **Consolidation:** It is the process of transforming explicit knowledge into a more complex and systematic form through the integration and synthesis of various explicit knowledge.
4. **Individualism:** In which individuals self-characterize explicit knowledge, and transform it into tacit knowledge through practice or learning by doing, and it is done through the process of self-learning.

2.3 Knowledge Management Requirements

The application of knowledge management requires the preparation of the organization's environment to reach the maximum possible benefit from knowledge, and then knowledge can be stored, transferred, and applied, and the following are the explanations of these requirements (Laadiadi, Al-Mona, & Adham, 2022) and (Al-Rubaie & Muqrash, 2020):

1. **Organizational Culture:** The success of a knowledge management system depends on the existence of an organizational culture that supports its use efforts and the activities of employees in the organization to build and develop knowledge that can be used to improve work performance.
2. **Organizational Structures:** It is one of the basic requirements for the success of any business, as it is necessary to have a flexible organizational structure to enable knowledge

- individuals to show their creativity and work freely to discover and generate knowledge, as it controls how knowledge is obtained, controlled, managed, stored, enhanced, multiplied, and reused.
3. **Organizational Leadership:** Organizational leadership is a pivotal element in the adoption and implementation of knowledge management, where the leader is a role model in continuous learning. The suitability of leadership theories for knowledge management varies, with some arguing that the theory of leadership traits is less suitable, while theories of leader behavior are more in line with the desired leadership style.
 4. **Information Technology:** Information technology has played an important role in the development of organizations since the early 1990s by providing appropriate and timely information, supporting and improving the decision-making process, and improving and revitalizing the organization's communication traffic.

Second Topic: Generative Artificial Intelligence (GAI) and its Role in Knowledge Structuring

This paper examines the theoretical framework of the independent variable (generative artificial intelligence) and its transformative effect on knowledge structuring processes, while identifying the challenges associated with the cognitive and applied dimensions.

First Topic: Theoretical and Technical Framework of Generative Artificial Intelligence (GAI)

1.1 The definition of Generative AI

In computer science, the term artificial intelligence (AI) refers to any human-like intelligence displayed by a computer, robot, or other device. The common definition of artificial intelligence refers to the ability of a computer or machine to mimic the abilities of the human mind, learn from examples and experiences, recognize objects, learn and respond to language, make decisions, solve problems, combine these abilities, and others. These abilities are supposed to qualify a computer or any device to perform functions performed by humans, such as ascertaining the source of power or answering religious inquiries, jurisprudential comparisons, and other legal sciences, in other words, artificial intelligence is a combination of many different technologies that enable machines to understand, act, and learn with human-like intelligence. (Hisham Khalafallah, 2023, page 139)

Definition of artificial intelligence as a highly advanced science derived from computer science that simulates the human mind at its highest levels of intelligence and is used to perform all human tasks and solve all problems facing humans in advanced technological ways (Nagham Nehme, 2024).

2.1 The main Architectural Components of the Transformer

Generative AI is based on the structure of the transformer (Vaswani, A.2017 & Shazeer, N & Parmar, N). The original transformer model consists of three main components:

1. **Self-Attention Mechanism:** The self-attention mechanism is the operational pillar of transformer models, as it allows estimating the interaction of vocabulary within the input. This dynamic system allows for the grasp of the overall context of the text, and the complexities of the long linguistic dependencies of natural languages.
2. **Encoder:** It takes the input text and converts it into a median representation (numerical vectors). Its primary function is to understand the full context of the words in the entered sentence (bidirectional).
3. **Decoder:** It takes the resulting intermediate representation from the encoder and converts it into useful text. It works sequentially to generate word by word.

Second Topic: Mechanisms of the Transformative Impact of Generative Intelligence on Structuring

2.1 The use of large language models (LLMs) represents a qualitative development in the field of knowledge engineering, as they provide powerful mechanisms for extracting, organizing, and structuring knowledge from vast amounts of unstructured texts. Its mechanism of action is centered around:

- **Entity and Concept Extraction:** Define terms and entities that are relevant to the field.
- **Inference of relationships based on linguistic models:** Extracting knowledge in the form of triplets (entity-relation-entity), and inferring complex semantic relationships.
- **Building Cognitive Structures:** Organizing concepts into taxonomies and forming ontology in a structured form such as OWL/Turtle.

Third Topic: Challenges and Risks of Application (Cognitive and Ethical)

This topic covers the challenges associated with the cognitive and applied dimension that need to be addressed to ensure the effectiveness of structuring.

3.1 Challenges of Quality of Knowledge Output

(Chen et al. 2025), (Elzomor & Elsayed, 2025), (Wang et al. 2023)

1. **Hallucination:** The model's tendency to generate information that seems logical but incorrect or completely fabricated. This phenomenon occurs because LLMs work to predict the next most statistically probable word, not to human understanding of facts.
2. **Issues of accuracy and bias:** Inaccuracy means that the knowledge generated does not match the reference facts (Ground Truth). Bias arises when the model's outputs reflect or amplify the biases already present in the training data.

3.2 Ethical and Legal Dimensions (Somerville et al., 2021)

- **Intellectual Property Rights and Data Privacy:** Identifying IP is a challenge, as it questions whether the knowledge generated by an LLM is an original work. There is also a need to ensure that the organization's input data is not saved or used to retrain the model without consent.
- **Corporate responsibility (accountability):** The organization must clearly identify who is ultimately responsible for errors (such as hallucinations and bias) that result from the use of machine-generated systems, necessitating the establishment of clear ethical and legal frameworks (European Commission, 2024).

3.3 The Human Dimension and Organizational Resistance (Elzomor & Elsayed, 2025)

- **Organizational Resistance:** The reluctance or reluctance of individuals or departments to adopt new knowledge generation tools. This resistance stems from the fear of losing functionality or doubting the quality of the automated output.
- **The need for changes in skills (cognitive dimension):** Successful adoption of LLMs requires the development of a new set of skills in human cadres. The shift is in the transition from a "manual construction" role to a "supervision, verification and audit" role, and skills currently required include effective prompt engineering and ethical auditing.

Practical Aspect

This aspect aims to present and analyze the quantitative results extracted from the study sample, which were collected using the questionnaire tool. Statistical analysis has been adopted to test the hypotheses and determine the strength and nature of the relationship between generative AI variables and institutional knowledge structure, and this can be explained through the following:

First: Verification of the Psychometric Characteristics of the Study Tool

Before proceeding with statistical analysis, it was necessary to verify the reliability and validity of the measurement tool. A quantitative analysis methodology was adopted to test the hypotheses made, and validate the proposed model using appropriate statistical analysis tools. The procedures included collecting raw data through interviews, observation and questionnaires addressed to a representative sample of the study community, then they were entered and analyzed using SPSS software.

After performing normal data distribution tests, a five-point Likert scale (5 = strongly agree, 1 = strongly disagree) was used to collect the opinions of 50 individuals in the sample. To prove that the questionnaire will maintain its stability and give the same results when redistributed to the same sample and in a different period of time, the consistency coefficient was used through the

application of Cronbach's alpha, which depends on the consistency of the individual's responses from one paragraph to another.

Table (1) shows the results of this test.

Table (1): Stability test results using Cronbach's alpha

Variable	Dimension	Number of paragraphs	Cronbach's Alpha Value
Generative Artificial Intelligence	Cognitive Dimension	5	0.86
	Applied Dimension	5	0.91
Structuring Corporate Knowledge	Rating Quality	4	0.88
	Recovery Efficiency	4	0.85
The total number of study dimensions		18	0.93

Table Analysis

The previous table shows that the resolution is characterized by a very high stability, as the value of Cronbach's alpha coefficient for dimensions ranged between (0.85) and (0.91), and the total value of all paragraphs and axes was (0.93). These results confirm the validity of the internal consistency and stability of the tool, which makes the questionnaire in its final form valid and reliable for analyzing the results and answering the questions of the study.

Second: Descriptive Analysis of Sample Data

A descriptive analysis of the sample data was provided to determine the degree of agreement of the sample members on the paragraphs of different dimensions using arithmetic averages and standard deviations.

Table No. (2): Mathematical Averages and Standard Deviations of the Study Dimensions

Variable	Dimension	Arithmetic Average	Standard deviation
Generative Artificial Intelligence	Cognitive Dimension	4.15	0.65
	Applied Dimension	3.80	0.78
Structuring Corporate Knowledge	Rating Quality	3.65	0.55
	Recovery Efficiency	3.50	0.59

1- Overall arithmetic averages (all above 3.40) indicate a high level of agreement from the study sample on the importance and role of generative AI.

2- The "cognitive dimension" came in first place with an average of (4.15), which shows that awareness and perception of the benefits of generative AI exceeds the level of its actual application in the organization.

3- Low standard deviation values (less than 0.80) indicate a significant homogeneity in the opinions of the sample members about the various dimensions of the study.

Third: Hypothesis Testing

1- Hypothesis I Test: Correlation Analysis

This part examines the hypothesis of the correlational relationship between generative AI and knowledge structuring. The Pearson correlation coefficient (r) was calculated to indicate the strength and direction of the relationship.

Table (4): Pearson correlation coefficients matrix between the study variables

The Relationship between Generative ↔ Artificial Intelligence and Knowledge Structuring	Correlation coefficient (r)	Significance Level (P-Value)
	0.75	0.000

Table analysis:

A very strong direct correlation was observed between the two variables, with a strong correlation of (0.75), which is statistically significant (p-value = 0.000 < 0.05). This confirms the validity of the first hypothesis, and concludes that interest in generative AI is associated with more effective institutional knowledge structuring.

2. Test of the Second Hypothesis: Multiple Regression Analysis

This hypothesis examines the affective relationship and determines the suitability and validity of the model to explain the relationship between the dimensions of generative AI (independent variable) and institutional knowledge structuring (dependent variable).

Table No. (5): Summary of the Multiple Regression Model

Determination Coefficient (R2)	Multiple correlation coefficient (R)	Value	Significance Level (p-value)
0.64	0.80	45.3	0.000

Table Analysis

- Interpretation strength (R²): (0.64), which means that the cognitive and applied dimensions explain 64% of the variation in knowledge structure, which is a very high interpretation rate.
- Model Validity: Since the p-value (0.000) is less than 0.05, the model is statistically valid and has predictive significance.

Table (6): Regression coefficients

Independent variable	Beta Parameters (β)	Significance Level (P-Value)
Cognitive Dimension	0.55	0.001
Applied Dimension	0.30	0.045
Static (B-0)	0.85	0.150

Table Analysis

Both dimensions have a statistically significant effect on knowledge structuring (p-value < 0.05), Which accepts the second hypothesis. By comparing the beta coefficient, it is clear that the cognitive dimension (beta = 0.55) has a greater contribution and impact on improving knowledge structuring than the applied dimension (beta = 0.30). Accordingly, the Foundation recommends that you focus on awareness-building, deep understanding and strategic training as a priority in its efforts to improve structuring.

3. Test of the Third Hypothesis: Monivariate Analysis (ANOVA)

This hypothesis aimed to determine whether there are statistically significant differences in the evaluation of the impact of generative AI attributable to the managerial position variable.

Table (7): Results of the Single Variance Analysis (ANOVA) by Administrative Position

Significance Level (P-value)	F value	Source of Contrast
0.152	2.10	Administrative position (between groups)

Table Analysis

Since the significance level value (p-value = 0.152) is greater than 0.05, we reject the existence of statistically significant differences attributable to the managerial position. This means that managers' and division officials' assessments are homogeneous about the impact of generative AI, suggesting a consensus of vision among different levels of management on the subject.

The Study Results

1. The study instrument (questionnaire) has a very high internal stability, with the total value of Cronbach's alpha coefficient (0.93).
2. The level of awareness and perception of the benefits of generative AI (cognitive dimension) came in first place with a high arithmetic average (4.15).
3. There is a clear disparity, as awareness and perception of the benefits of generative AI outweighs the level of its actual application in the organization (application dimension 3.80).
4. Low standard deviation values (less than 0.80) indicate significant homogeneity in the opinions of the sample members about the different dimensions of the study.
5. There is a very strong and statistically significant direct correlation between generative AI and knowledge structuring, with a correlation coefficient of (+0.75).
6. The multiple regression model proved to be statistically valid and predictable, as the significance value (0.000) was less than 0.
7. Together, the cognitive and applied dimensions explain a very high 64% variance in the effectiveness of institutional knowledge structuring ($R^2 = 0.64$).
8. Both dimensions (cognitive and applied) came statistically significant in influencing the effectiveness of knowledge structuring ($p\text{-value} < 0.05$).
9. The cognitive dimension ($\beta = 0.55$) had a greater contribution and effect in improving knowledge structuring compared to the applied dimension ($\beta = 0.30$).
10. There are no statistically significant differences in the assessment of the impact of generative AI attributable to the managerial position variable ($p\text{-value} = 0.152 > 0.05$), suggesting a consensus of vision between managers and division officials.

Recommendations

1. It is recommended to give investment priority to training, building awareness and deep understanding of the capabilities of generative AI (the cognitive dimension), as it is the strongest influencer in improving knowledge structuring.
2. Investment in applied tools and infrastructure should be made simultaneously or after focusing on building knowledge awareness, to ensure effective and sustainable adoption of technology.
3. Management leadership should leverage the alignment of vision between management levels (managers and division officials) to accelerate the transition towards AI integration without much resistance.
4. Working to develop and update the standards of classification quality and retrieval efficiency within the enterprise knowledge management system, taking advantage of generative artificial intelligence mechanisms.
5. Emphasis should be placed on training human resources in a new set of skills, such as effective prompt engineering, and moving from a "manual construction" role to a "supervision, verification, and review" role.

6. Developing internal mechanisms to reduce the challenges of the quality of knowledge derived from generative AI models, especially the phenomenon of misinformation generation and bias issues.
7. Establish clear ethical and legal frameworks within the organization to determine ultimate responsibility for errors and biases resulting from the use of automated generated systems, and address intellectual property rights issues.

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