

**SUSTAINABILITY AND GROWTH IN ARTIFICIAL INTELLIGENCE ON  
KNOWLEDGE MANAGEMENT IN THE IT SECTOR**

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**ABSTRACT**

*Artificial intelligence tackles the environmental challenges of managing information technology based on a multi-based platform. It improves the quality of day-to-day work routine and even complicated tasks, within a short period. The manpower and machine power combined creates a suitable development in economic growth. The researcher tries to study the influence of artificial intelligence and knowledge management to have suitable growth in the IT sector. As we know, the implementation of Industry 5.0 has caused a dramatic change in every sector. The Industry needs to adapt to the knowledge management culture to retain competitiveness in the local and international levels. The researcher examines the growth of knowledge management at the times involving artificial intelligence through descriptive analysis. In this paper especially focus the selected employees in the IT sector with 160 samples. The major finding of the study revealed that have good influence sustainability growth in artificial intelligence and knowledge management in the IT sector.*

**KEYWORDS:** Artificial intelligence, knowledge management, growth, suitability, multi - based platform.

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**1. INTRODUCTION:**

Artificial intelligence plays a vital role in knowledge management and comes into transformation again in how knowledge is carried out and how it is framed, developed, shared, and efficiently used within organizations. Knowledge management is the ambidextrous area that occupies psychology, epistemology, and cognitive science. Knowledge management focuses on permitting people to communicate, share, and reuse knowledge. The present-time influence of artificial intelligence on knowledge management is leading the way for future applications, especially in the It sector.

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The biggest question that arises in everyone's mind is where does the connection between knowledge management and artificial intelligence start? In recent times, computerized models simulate human thought processes. It involves learning artificial neural network software that uses big data mining, pattern recognition, natural language processing, etc. The collaboration occurs in automation, communication interface optimization, and insight generation. Knowledge management used in many associations with the procreation of knowledge in disciplines such as Management of information, innovation, and invention has the main contribution to broad knowledge. Particularly in the IT sector, implementation of the perspective of business operations and customer service and needs may have been unknown to the organizations.

The sector has tremendous growth in technology. Implementing Industry 5.0 may develop suitable in corporate sector. Some studies have proved that the influence of artificial intelligence causes standard growth in knowledge management. Hence, the researcher is interested in analyzing the factor that have more influence in knowledge management. Studies proved that this knowledge management made great influence of sustainable growth of employee commitment and organization culture. Another dimension of knowledge management is updating the machine learning concepts. These factors made drastic growth on personal intelligent assistants, collaboration of knowledge and general intelligence.

## 2. REVIEW OF LITERATURE

**IIZE BIRZNIECE (2011)** studied artificial intelligence in knowledge management implementation in Poland IT sectors. The study focused on the artificial intelligence and knowledge management software implication and the study follows the various aspects of knowledge creation and knowledge sharing its concentrate only on descriptive aspect. The major findings of the research is engaging the people in implementation to learn who software works and impact in people involvement in the learning.

**MOHAMMAD HOSSEIN JARRAHI & DAVID ASKAY (2022)** made a study on artificial intelligence and knowledge management implementation of AI. The main objective of the study is to understand the impact of artificial intelligence technologies in the implementation of people finder knowledge management. The primary data was collected through interview and questionnaire method is used. It is find the impact in employees towards the implementation of AI. Simple random sampling method is used with 120 sample respondents. The major finding of the study is to redesign of automation and augmentation provide a mix of skills and perspectives that are critical to the implementation of AI systems. If the management properly consider this and try to minimize the force of work load in implementation towards the knowledge management system increased.

## 3. STATEMENT OF PROBLEM

Specifically in the IT sector, the organization must be able to update the current scenario in a timely manner. As a result of many advanced technologies being implemented, learning more in day-to-day activities becomes easier and easier. Expanding industries and innovation models in a sector can be viewed as sowing seeds for new opportunities in the sector, giving new opportunities to new entrants. Due to the high cost of implementation and the lack of understanding about the new developments in the business, this leads to more misrepresentation on the part of the company.

**4. OBJECTIVES**

- To identify various knowledge management techniques used by IT sector.
- To study the employees perception on various knowledge management used by IT sector
- To analyze the relationship between artificial intelligences and knowledge management.

**5. RESEARCH METHODOLOGY**

The study relies on descriptive and empirical methods. Primary and secondary data were used in the study. The primary data were collected through the use of a questionnaire, and the secondary data were collected from journals and websites. The sample size used for the study is 110, and the sampling method used to collect the data for the study is a simple random sampling method. In order to analyse the data, Chi-square, t-tests, ANOVAs, correlations, and regressions are used.

**6. ANALYSIS AND INTREPRETATION****A. Descriptive statistics****TABLE: 01****Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Machine Learning	110	2.25	4.75	3.9113	.49815
Could Computing	110	2.25	5.00	3.9435	.50086
Learning Processing	110	3.00	4.75	3.8185	.47298
Knowledge Acquisition	110	3.00	5.00	3.8306	.55584
Knowledge Sharing	110	3.00	4.75	3.7944	.55723
<b>Overall Artificial Intelligence</b>	<b>110</b>	<b>3.25</b>	<b>4.58</b>	<b>3.8911</b>	<b>.28772</b>
<b>Overall Knowledge Management</b>	<b>110</b>	<b>3.00</b>	<b>4.75</b>	<b>3.8125</b>	<b>.48952</b>

Source: Primary data

The table 1 shows the descriptive details of knowledge management and its variables. Overall knowledge management has a mean score of 3.813 which says that organisation have using various types of knowledge management practices. The highest is found in could computing machine learning and knowledge acquisition which average score is more than the mean score of overall Artificial Intelligence.

**B. ANOVA**

H<sub>0</sub>1: There is no significant between age of the respondents and perception of employees on various knowledge management practices used by IT sector.

**TABLE: 02 showing the significant difference between age and perception of employees on various knowledge management practices**

Sl.No	Particulars	Sig.
1	Machine Learning	.001
2	Cloud Computing	.005
3	Learning Process	.002
3	Knowledge Acquisition	.043
5	Knowledge Sharing	.001

Source: Primary data

Table 2 states the significant difference on the perception of employees towards various aspects of knowledge management based on the age of the respondents. The P value for all aspects except satisfaction on knowledge acquisition is greater than 0.05 which states there is no significant difference on age.

### C. CORRELATION ANALYSIS

H02: there is no significant relationship between artificial intelligence and knowledge management

**TABLE: 03 showing relationship between artificial intelligence and knowledge management**

Independent variables	Dependent variables	Pearson correlation	P value
Artificial Intelligence technology	Knowledge acquisition	.536	.000
	Knowledge sharing	.547	.000

Table 3 portrays the correlation between the dependent variables knowledge management and independent variables artificial intelligence technology. Knowledge management has shown higher significant relation with P value .000.

### 7. FINDINGS

- The knowledge management in the IT sector is satisfactory that the various knowledge management practices are handled by the organization.
- Most of the respondents prefer the machine learning and knowledge sharing in the organization.
- Correlation results show that there is high correlation between knowledge management on artificial intelligence tools are used by the organization
- Proper awareness of the artificial intelligence in organization encourages employees to work more than before.
- Knowledge sharing practice is increased after the post pandemic
- The company should formulate guidelines for the proper utilization of the AI tools in the organization.

### 10. CONCLUSION

Knowledge management is essential for organization success. Today the IT industry is facing lack of awareness and criticism. Employment hiring became low in the information technology. Implementation of artificial intelligence emerged as essential pillars for ensuring responsible and socially conscious practices. Companies that embrace these principles will benefit from increased competitiveness, greater customer trust and reduced environmental impact, while making a positive contribution to global sustainability efforts. By fostering a symbiotic connection between AI and knowledge management, they can harness the complete potential of technology to drive positive change, proceed human knowledge and generate a more sustainable and equitable future. It is essential for the implementing updated knowledge management practice in the IT sector to increase the job satisfaction among employees.

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