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ASSESSING THE IMPACT OF ARTIFICIAL INTELLIGENCE ON MBA PURSUING STUDENTS' KNOWLEDGE WITH REFERENCE TO ERODE DISTRICT

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ABSTRACT

The aim of this research is to examine the ways in which Erode District MBA students are using artificial intelligence (AI) to learn. Given the rapid integration of AI technologies into educational frameworks, the goal of this study is to assess the impact of AI tools and platforms on the learning outcomes and experiences of these students. The study uses a mixed-method approach to gather information from a representative sample of local MBA candidates by combining qualitative interviews with quantitative questionnaires. The results of the study should provide Erode District MBA students with useful knowledge about artificial intelligence. This information will facilitate the best possible integration of AI into MBA programs, resulting in a more flexible and productive learning environment.

Keywords : Artificial Intelligence, MBA programs, Human and Computer capabilities

1.INTRODUCTION OF THE STUDY

The advent of artificial intelligence (AI) has ushered in a transformative era in education. In particular, the Master of Business Administration (MBA) program has shown that integrating AI technology into curricula has great potential to enhance student learning outcomes and experiences. The primary objective of this study is to investigate how AI influences the knowledge acquisition of MBA students in the Erode District neighbourhood, which is renowned for its intellectual pursuits and growing number of educational institutions. This study focuses on the distinct impacts of AI on the academic experiences of MBA students in the Erode District. With the help of artificial intelligence (AI) tools and applications, this project seeks to enhance student learning, engagement, and general

1.2.ARTIFICIAL INTELLIGENCE IN THE EDUCATION SECTOR

AI's main contributions to education are in the areas of intelligent material, 24/7 accessibility, personalized learning, and task automation for both administrative and academic use. In the end, artificial intelligence has resolved the accessibility issue in several domains, such as the environment and health. Artificial Intelligence (AI) is transforming industries globally and surpassing traditional limits, posing a disruptive threat. The broad use of technology in education is having a significant impact on how we teach and learn. It has been demonstrated that artificial intelligence will revolutionize the field of education by enabling significant advancements in student engagement, individualized learning, and instructional strategies. By utilizing both human and computer capabilities, artificial intelligence (AI) in education aims to optimize students result

1.3 ARTIFICIAL INTELLIGENCE IN MBA

Artificial intelligence (AI) is beginning to change MBA education by serving as a collaborative teaching assistant in addition to a tool. Envision an educational setting where every pupil obtains customized support based

on their unique learning preferences and speed.

The corporate climate is changing due to technology, and so is MBA education. MBA programs could be completely transformed by artificial intelligence (AI). Future MBA education may be impacted by AI in the following areas:

- Personalized Learning
- Real-Time Feedback
- Virtual classrooms
- Intelligent Tutoring
- Data Analytics
- Collaborative Learning

2.STATEMENT OF THE PROBLEM

Artificial Intelligence (AI) has completely changed how individuals acquire knowledge, think, and utilize it. AI systems provide a knowledge base that is prone to sudden changes because they are dynamic and constantly changing. This could eventually make it challenging to maintain a consistent understanding of the subject matter.

To identify the factors influencing MBA students' use and understanding of artificial intelligence (AI), a study assessing their knowledge of the technology in the Erode region is required.

By closing this knowledge gap, we might be able to comprehend why users can find it difficult to keep up with changes, which might lead to misconceptions and knowledge gaps.

3. OBJECTIVE OF THE STUDY:

- To evaluate how much artificial intelligence has impacted students' knowledge.
- To determine how artificial intelligence influences educational results and learning processes.

4. RESEARCH DESIGN:

TYPE OF RESEARCH DESIGN:

- **Descriptive Research Design**
  - The research Design that is used by the investigator is descriptive

SAMPLE DESIGN:

- Simple random sampling

METHODS OF DATA COLLECTION DATA SOURCES:

Data in the study are of two types:

- Primary data
- Secondary data

STATISTICAL TOOLS USED:

The collected data were classified, tabulated, and then analyzed by using the following statistical tools:

1. Simple Percentage Analysis
2. Chi-Square Method
3. Ranking
4. Anova

5. REVIEW OF LITERATURE

Gupta, S., & Patel, R et al (2023): This case study looks into how artificial intelligence is used in programs within a given geographic area. It looks at how instructors and students view the incorporation of AI, the difficulties they encounter, and the possible advantages for improving learning and skill development.

Author: Zhang, J., & Smith, et al 2022: A Comprehensive Analysis of Artificial Intelligence's Impact on MBA Education An extensive analysis of the body of research on artificial intelligence's effects on MBA education is

given in this paper. The usefulness of AI-based learning resources, their integration into MBA programs, and their effects on student learning outcomes are all covered.

Author: Zhang, Y., Hao, Y., & Zhang, Yet al (2020): The use of artificial intelligence in big data-driven higher education instruction The use of artificial intelligence, in particular big data analytics, in higher education instruction is examined in this research. It talks about how individualized learning routes and real-time feedback from AI technology may improve the MBA student experience.

Prasanna Vatsa and Kusuma Gullamjji et al (2019): To Study the Impact of Artificial Intelligence on Human Resource Management It is clearly stated that the integration of HR practices with AI-based applicants has a stronger impact in enhancing organizational performance. The study depicts that AI is everywhere in HR, be it in recruitment, training, onboarding, performance analysis, retention, and so on, but many organizations are still lagging in Integrating AI into their HR – practices because of its cost-associated integration.

Jennifer Johansson and Senja Herranen et al (2019): Artificial Intelligence's Use in Human Resource Management It is noted that the use of AI in hiring is still relatively new, with few companies having integrated the technology across the whole hiring process. It also notes that the primary advantages of AI are seen to be the accelerated quality and removal of repetitive jobs, while the primary obstacle is thought to be the organizations' general preparedness for the new technology.

6.ANALYSIS AND INTERPRETATION

ONE WAY ANOVA

ANOVA test for Age with Frequency of AI tool usage

H0= There is no significant relationship between Age with Frequency of AI tool usage

H1= There are significant relationship between Age with Frequency of AI tool usage

Table from the Age with Frequency of AI tool usage.

Anova: Single Factor						
SUMMARY						
Groups	Count	Sum	Average	Variance		
Age	5	200	40	4604.5		
Frequency of AI tool usage	5	200	40	1312.5		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0	1	0	0	1	5.31766
Within Groups	23668	8	2958.5			

INTERPRETATION:

As the P value is lesser than Sig. Value (0.01 and 0.05) all the 2 cases Frequency of AI tool usage, the Null Hypotheses are accepted

Hence, it is concluded that there is a statistically significant difference among the Age of the respondents with Frequency of AI tool usage.

ANOVA test for Gender with confidence in AI – information

H0= There is no significant relationship between Gender with confidence in AI – information

H1= There are significant relationship between Gender with confidence in AI – information

Table from the Gender with confidence in AI – information.

Anova: Single Factor						
SUMMARY						
Groups	Count	Sum	Average	Variance		
Gender	5	200	40	3312.5		
Confidence in AI information	5	200	40	1266.5		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0	1	0	0	1	5.317655
Within Groups	18316	8	2289.5			
Total	18316	9				

INTERPRETATION:

As the P value is lesser than Sig. Value (0.01 and 0.05) all the 2 cases confidence in AI – information, the Null Hypotheses are accepted

Hence, it is concluded that there is a statistically significant difference among the Genders with confidence in AI – information

7. FACTOR ANALYSIS:

Assess the impact of artificial intelligence on MBA pursuing student responses by using a servqual scale through factor analysis

Respondents are enquired with the servqual scale modified for the research. The responses are recorded on a five-point Likert scale ranging from 'strongly agree' to 'strongly disagree'. The items in the scale with the variables studied are given in Table 3.

Table 3: Impact of Artificial Intelligence on MBA Pursuing Students (Scale Items)

Dimensions	Items in the scale
Artificial Intelligence improves pupils' individualized learning	Strongly agree
	Agree
	Neutral
	Disagree
	Strongly disagree
AI tools improve student engagement in the learning process	Strongly agree
	Agree
	Neutral
	Disagree
	Strongly disagree
AI technology helps identify and address individual learning gaps effectively	Strongly agree
	Agree
	Neutral
	Disagree

	Strongly disagree
AI-supported learning platforms facilitate better retention of learning material	Strongly agree
	Agree
	Neutral
	Disagree
	Strongly disagree
AI assists educators in creating adaptive learning pathways for students	Strongly agree
	Agree
	Neutral
	Disagree
	Strongly disagree
AI applications provide valuable real-time feedback to students on their progress	Strongly agree
	Agree
	Neutral
	Disagree
	Strongly disagree
AI-powered educational tools contribute to improving overall academic performance	Strongly agree
	Agree
	Neutral
	Disagree
	Strongly disagree
AI helps in the automation of administrative tasks, allowing educators to focus more on teaching	Strongly agree
	Agree
	Neutral
	Disagree
	Strongly disagree
AI contributes to the development of critical thinking and problem-solving skills in students	Strongly agree
	Agree
	Neutral
	Disagree
	Strongly disagree
AI supports inclusive education by catering to diverse learning needs and styles	Strongly agree
	Agree
	Neutral
	Disagree
	Strongly disagree

Students find it challenging to understand artificial intelligence tools and their applications. Exploratory factor analysis is carried out to determine the primary influence of artificial intelligence on learning and skill development. The analysis's outcome is shown in the tables below.

Table 4: KMO and Bartlett's test for the impact of artificial intelligence on MBA-pursuing student

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.578
Bartlett's Test of Sphericity	Approx. Chi-Square	332.727
	df	45
	Sig.	.000

Sampling adequacy is sufficient enough to interpret the results of factor analysis as the Kaiser-Meyer-Olkin (KMO) measure is above 0.5. The chi-square test value of Bartlett's Test of Sphericity is significant enough as the significance value is 0.000 which is lesser than 0.05 at a 5 percent level of significance. Factors derived with a principal component method with their squared loadings are presented in the total variance explained table.

Communalities		
	Initial	Extraction
Artificial Intelligence improves pupils' individualized learning	1.000	.780
AI tools improve student engagement in the learning process	1.000	.798
AI technology helps identify and address individual learning gaps effectively	1.000	.587
AI-supported learning platforms facilitate better retention of learning material	1.000	.707
AI assists educators in creating adaptive learning pathways for students	1.000	.521
AI applications provide valuable real-time feedback to students on their progress	1.000	.635
AI-powered educational tools contribute to improving overall academic performance	1.000	.667
AI helps in the automation of administrative tasks, allowing educators to focus more on teaching	1.000	.695
AI contributes to the development of critical thinking and problem-solving skills in students	1.000	.690
AI supports inclusive education by catering to diverse learning needs and styles	1.000	.433

Extraction Method: Principal Component Analysis.

TABLE: 5 Total Variance Explained for impact of artificial intelligence on MBA pursuing student

Total Variance Explained					
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.187	21.869	21.869	2.187	21.869
2	1.689	16.887	38.755	1.689	16.887
3	1.504	15.038	53.793	1.504	15.038
4	1.135	11.354	65.148	1.135	11.354
5	.904	9.035	74.183		
6	.692	6.917	81.100		
7	.605	6.048	87.148		
8	.480	4.798	91.946		
9	.463	4.631	96.577		
10	.342	3.423	100.000		

Total Variance Explained				
Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	21.869	1.787	17.875	17.875
2	38.755	1.719	17.191	35.066
3	53.793	1.592	15.916	50.982
4	65.148	1.417	14.166	65.148
5				

6				
7				
8				
9				
10				

Extraction Method: Principal Component Analysis.

The total variance table explains that 4 factors are extracted as important from the 10 variables identified. The explanatory power of these variables to understand the expectations of influences of AI is to the extent of 65.148 per cent. The factors identified are extracted by Varimax rotation and explained with the help of a rotated component matrix.

Table: 6 Rotated Component Matrix impact of artificial intelligence on MBA pursuing student

Component Matrix				
	Component			
	1	2	3	4
AI assists educators in creating adaptive learning pathways for students	-.683			
AI contributes to the development of critical thinking and problem-solving skills in students	.653			
AI technology helps identify and address individual learning gaps effectively	.625			
Artificial Intelligence improves pupils' individualized learning		.768		
AI tools improve student engagement in the learning process		.692		
AI-powered educational tools contribute to improving overall academic performance			.739	
AI applications provide valuable real-time feedback to students on their progress	-.530		.561	
AI helps in the automation of administrative tasks, allowing educators to focus more on teaching			.506	
AI-supported learning platforms facilitate better retention of learning material				.584
AI supports inclusive education by catering to diverse learning needs and styles				-.546

Extraction Method: Principal Component Analysis. [a]

a. 4 components extracted.

Rotated Component Matrix				
	Component			
	1	2	3	4
AI applications provide valuable real-time feedback to students on their progress	.794			
AI assists educators in creating adaptive learning pathways for students	.610			
Artificial Intelligence improves pupils' individualized learning		.868		
AI tools improve student engagement in the learning process		.868		

AI helps in the automation of administrative tasks, allowing educators to focus more on teaching			.827	
AI contributes to the development of critical thinking and problem-solving skills in students			.674	
AI-powered educational tools contribute to improving overall academic performance	.534		.609	
AI-supported learning platforms facilitate better retention of learning material				.797
AI technology helps identify and address individual learning gaps effectively				.652
AI supports inclusive education by catering to diverse learning needs and styles				-.508

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization. [a]

a. Rotation converged in 5 iterations.

The factors extracted are identified with the loadings (above 0.8) irrespective of sign and are listed below in the order of extraction. These are the major respondents who are experiencing AI learning
Factor 1: Artificial Intelligence improves pupils' individualized learning
Factor 2: AI tools improve student engagement in the learning process
Factor 3: AI technology helps identify and address individual learning gaps effectively
Factor 4: AI-supported learning platforms facilitate better retention of learning material

Component Transformation Matrix

Component	1	2	3	4
1	-.684	.357	.416	.481
2	-.042	.833	-.491	-.253
3	.656	.423	.619	.084
4	.315	.004	-.451	.835

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

Assessing the impact of artificial intelligence on MBA-pursuing students as revealed in the analysis are:

Assessing the impact of artificial intelligence on MBA pursuing students Respondents are enquired with the servqual scale modified for the research. The responses are recorded on a five-point Likert scale ranging from 'strongly agree' to 'strongly disagree'. It is difficult for students to be familiar with artificial intelligence tools and their applicability. Exploratory factor analysis is conducted to identify the major impact of the AI in application of learning and improve their skills. The total variance table explains that 4 factors are extracted as important from the 10 variables identified. The explanatory power of these variables to understand the impact of AI is to the extent of 65.148 per cent. The factors identified are extracted by Varimax rotation and explained with the help of a rotated component matrix The major impacted factors are: Factor 1: Artificial Intelligence improves pupils' individualized learning Factor 2: AI tools improve student engagement in the learning process **Factor 3:** AI technology helps identify and address individual learning gaps effectively **Factor 4:** AI-supported learning platforms facilitate better retention of learning material.

8. CONCLUSION

The purpose of this research is to examine how artificial intelligence (AI) affects the educational experiences and knowledge acquisition of MBA-pursuing students in the Erode District. The study's conclusions show that artificial intelligence (AI) tools and applications greatly improve learning by providing individualized

and effective learning environments. Through interactive material, real-time feedback, and adaptive learning techniques—which are especially helpful for complicated subjects and case studies—AI-driven platforms enable improved understanding. Nevertheless, the research also emphasizes a few difficulties and factors. the dependence of educational platforms' content correctness and dependability on AI. A balanced strategy that incorporates both conventional teaching methods and AI-driven approaches is also necessary to provide a thorough educational experience.

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