Assessing Artifical Intelligence Usage Readiness among Higher Education Institutions Using AHP Analysis

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ABSTRACT

A study conducted by Digital Education Council in 2024, states that 86% of students are using AI tools for many tasks like resume building, presentations, problem solving, making it important for Higher Education Institutions (HEI) to integrate these practices into institutional operations and pedagogy. Understanding HEI's level of preparedness for using AI technologies is crucial. Therefore, the main aim of this study is to demonstrate a detailed readiness assessment for adopting AI in the academic and administrative rigor of HEIs in the city of Bengaluru. Through Literature review, the key enabling AI tools examined existing maturity models, which together serve as the foundation for the proposed readiness model. This framework will help HEIs to assess their capabilities and determine the required steps for effective transition to AI adoption.

Using Analytic Hierarchy Process (AHP), a conceptual method of constructs is identified to evaluate HEIs readiness. The research highlights five critical readiness constructs, which serves as pillars for integrating consistency in the degree of readiness evaluation for adopting AI technologies. A questionnaire developed with insights from experts, provides a scoring system to access readiness and also identifying the areas of opportunities. The readiness model presented in this study offers a personalized tool to assess readiness to adopt AI in academic delivery. The further scope of study recommended is to explore the interdependency of readiness dimensions and extend the assessment on a larger sample in tier II HEIs.

Keywords: Readiness assessment, Artificial Intelligence adoption, Higher Education Institutions, AHP analysis, digital transformation, Conceptual Constructs.

1. INTRODUCTION

Education is undergoing a major transformation with the influence of Artificial intelligence. It is changing the way primary and higher education teachers are acquiring and delivering knowledge. Adapting to technologies helps teachers in various ways like answering questions, designing assignments, generating questions papers, framing activities, creating PPTs. Gen AI is very versatile which allows application across varied disciplines whether it Is science, technology, social sciences, humanities, engineering or Arts.

In early 2000, teachers would prepare and carry heavy loads of papers and notes to class, marking the assignments manually, not able to figure out if assignments were plagiarized from other sources. Today professors walk into the classroom with hardly any notes, evaluation is done on NLP algorithms which assists in grading assessments, able to provide feedback to students immediately. Teachers are relived of repetitive jobs to concentrate on promising and progressive activities. The introduction, advancement of technology more so AI has made it a lot easier for instructors to plan their duties namely academic, research, co-curricular more efficiently. AI tools like Chat GPT, Magic school (Generates lesson plans) Diffit (Differentiated instruction) Chatbots like Gemini or Copilot, Microsoft NLM has helped both primary and as well as higher education instructors to focus on personalized student learning experiences and adapting to student's specific needs. Assessing students' performance is also driven by Large Language Models and Machine learning which ensures consistent and efficient grading while providing immediate feedback. These advancements have been creating fairer and more reliable assessments to enhance educational outcomes. In short, AI I revolutionizing

traditional teaching by assisting in adaptive learning, automated administration and data driven assessment of performance.

However, the successful implementation of AI in education squarely depends on teacher's readiness to adopt and integrate these technologies into their teaching and research practices. Understanding the readiness of teachers to adapt and implement has become the point of contemporary educational research, as educators are driving force of adoption and successful implement of AI in a classroom.

Many studies have highlighted that teachers with more experience have maliciously integrated diverse materials to customize teaching to suit student's needs, whereas less experienced teachers focus on immediate need and rely on prescribed materials (Fatih Karatas, 2025) yet another study indicates that 16.1% of respondents do not consider AI as an innovation to adapt due to fear of uncertain future, misunderstanding of the benefits or fear of job loss (Zhanat Kunapianovna)

Perception of teachers towards readiness of adapting to AI varies on many factors as it is in context as well. Teacher's attrition, disrupts AI adoption, resource availability, attitudes and physiological readiness impacts the adaptive process. On one hand there is great admiration for the capability that AI brings to work and the ease of doing academic and administrative work on the other hand there is hesitation in implementing AI as it challenges status-quo, financial costs, lack of skill to use it, and losing the importance as teachers in classroom.

To overcome these hesitations, research is required to understand if these impediments stems from lack of readiness due these factors. To facilitate incremental improvement in Higher education, it is essential to identify the present state and prepare HEIs for technological adaption. Critical readiness assessment forms a groundwork for HEIs to adapt to AI in the educational process.

The principal objective of this paper is to aid HEIs in assessing their readiness for the essential pre requisites required to initiate the AI adoption ensuring smooth transition and supports teaching and learning for both students and faculty. By providing a structured approach to evaluate readiness, this paper aims to support HEIs in identifying gaps, developing support systems and effective plans to initiate the use of AI in Academic process.

2. REVIEW OF LITERATURE

Artificial Intelligence has fueled the digital transformation in higher education, its potential usage in pedagogy and teaching , Assessment, administration, student support services and research. AI technologies such as machine learning, natural language processing (NLP), expert systems, intelligent tutoring systems (ITS), chatbots, predictive analytics, and generative AI are increasingly integrated into higher education to enhance institutional effectiveness and improve educational outcomes

Readiness of using AI has been very uneven across higher education institutions. Readiness is not merely technical capacity but a multidimensional construct involving infrastructure, human capital, and ethical governance (Bacalso et al., 2026; Younas et al., 2025)

Readiness is typically of 3 dimensions, Technological readiness, human readiness and ethical readiness (Yuensook et al. (2025) Technological adoption with faculty skills and ethical guardrails will give dire consequences. Readiness of adopting AI of Higher educational institution is interdependent on availability of digital platforms, faculty digital literacy and governance structure like transparency and privacy.

One of the most researched area is usage of AI in teaching and learning, AI facilitates personalized learning, adapting content to student's pace and preference. John S. Bransford and colleagues (2000) emphasized the importance of learner-centered education, which AI systems effectively support through adaptive learning platforms. Similarly, Rose Luckin (2018) argued that AI can function as an intelligent teaching assistant by providing individualized feedback and identifying learning gaps. Studies suggest that 'Intelligent tutoring

system'(ITS) provides immediate feedback and personalized instructions thereby improving student's performance.

Traditional assessment methods are replaced by AI automated assessments by providing formative grading by supporting competency based education According to Wayne Holmes et al. (2019), AI-based assessment systems reduce faculty workload while increasing consistency and objectivity in grading. Machine learning algorithms can evaluate objective examinations, programming assignments, and even written essays using Natural Language Processing.

Higher education institutions increasingly employ AI-powered chatbots and virtual assistants to improve student support services. Chatbots provide instant responses to student inquiries related to admissions, course registration, examination schedules, financial aid, and campus facilities. Studies demonstrate that AI chatbots improve student satisfaction by offering 24/7 support while reducing administrative workload.

Administrative efficiency represents another major functional application of AI in higher education. AI-driven decision support systems improve institutional planning by analyzing large datasets and generating evidence-based recommendations

AI tools are significantly used by researchers for enhance the quality of research conducted. Machine learning algorithms assist researchers in identifying patterns within large datasets, while NLP tools facilitate systematic literature reviews and document classification. AI also supports plagiarism detection, citation analysis, and research collaboration. Predictive analytics helps in forecasting student's drop out risks, budget planning, faculty recruitment and a host of administrative requirements.

However, there are challenges to be tackled in term of Data privacy, Algorithmic bias, cyber security, transparency, faculty readiness, Infrastructure gaps, Digital divide (Bacalso et al., 2026; Figueroa & Farhadian, 2025). UNESCO (2023) emphasizes the importance of developing ethical frameworks that ensure AI remains human-centered, transparent, fair, and inclusive. Many research has highlighted the best practices for making institutions ready for AI adoption. Strong leadership and governance frameworks (Bacalso et al., 2026) This systematic literature review identifies few thematic findings that effective adoption depends on governance maturity, characterized by coherent multi-unit oversight, clearly defined academic integrity and disclosure standards, and risk based data governance frameworks. Faculty training and continuous professional development (Yuensook et al., 2025) is very important for adopting AI and reaping its benefits. Clear ethical guidelines and accountability mechanisms (Figueroa & Farhadian, 2025) helps in AI readiness. K-Means clustering, reveal that the interest focusing on ethical governance, the enhancement of personalized learning, and the development of faculty AI competencies. Collaboration between academia, industry, and policymakers (Peng & Li, 2025) Coordinated efforts among academia, industry, and policymakers are essential to develop scalable, context-sensitive AI solutions that advance inclusive, adaptive, and transformative higher education. Continuous evaluation using standardized readiness metrics (Hoogers et al., 2026) in his study the results indicated majority reported statistically significant improvements in academic performance (85.1%), learner engagement (78.7%), and personalized learning experiences (72.3%) when using AI tools, Key challenges identified include algorithmic bias, data privacy concerns, insufficient instructor AI literacy, and inequitable digital access.

The literature (2020–2026) confirms that AI readiness in higher education is **advancing but uneven**. Institutions with robust infrastructure and leadership are piloting AI-driven solutions, while others struggle with systemic barriers. A successful roadmap requires **capacity building, ethical governance, and inclusive access** to ensure AI enhances—not disrupts—the mission of higher education (Younas et al., 2025; Yuensook et al., 2025; Hoogers et al., 2026; Peng & Li, 2025; Figueroa & Farhadian, 2025; Bacalso et al., 2026).

2.1 Research Gaps:

- Most studies highlight faculty resistance and lack of digital literacy, **but few explore the readiness of HEIs in building AI teaching competencies.** Limited empirical work on how faculty integrate AI into pedagogy.

- Gaps remain in addressing algorithmic bias, accountability, and student data ownership and building governance framework to address the challenges of Bias and data privacy.
- Most studies focus on developed countries, with limited evidence from developing nations
- Limited empirical research investigates faculty acceptance and organizational readiness for AI adoption.

3. RESEARCH OBJECTIVES

- Assessing the readiness of adapting AI in Higher Education institutions through the five prerequisites: Technology enabler, integrated learning process, financial support, management support, skill Competencies.
- Determining the degree of readiness in adopting to the prerequisites for complete integration of AI in Teaching, learning and administration.

4. RESEARCH METHODOLOGY

This research identifies five basic prerequisites to adapt to AI related teaching tools: Technology enabler, integrated learning process, financial support, management support and skill Competencies. Theses prerequisites are named readiness constructs.

Technology enabler: The interest and application of AI in education has increased in recent times, primarily due to technological innovations in AI, the top tools commonly used are Eduaide.AI, Magicschool.ai for lesson planning, Grade scope for automated grading, Notebook LM for research and Gamma for generating presentations. These AI tools ease the work of an instructor by creating rubrics, developing personalized learning, interactive content, there making classroom planning, assessment more efficient and less time consuming

Integrated learning process: There is a requirement to shift from traditional one-size-fits-all learning to personalized data driven learning. Adapting to AI will create a eco system connecting curriculum design, adaptive pedagogy and real time assessment. This seamless integration helps in reshaping the learning process quickly and effectively. Aligning the curriculum with the program outcomes (POs), thereby aligning all course outcomes to POs ensures the educational objectives are achieved. Adapting to AI ensures integrated learning process by adhering to quick actionable changes that can be implemented under the dynamic circumstances.

Financial support: Financial support is critical for effective implementation of AI tools, as most of them are subscribed versions. It has to be considered as long term investment rather than cost. While individual teachers can use the free source for limited time, scaling AI across academic and administrative work requires funding for licenses, IT infrastructure and training of employees.

Though initial costs may be high, the ROI in the long term would be beneficial as AI implementation has significant financial benefits, like automated administrative tasks, engaging students, optimized resource allocation, and time saving.

Management Support: Management support is another essential component for the adaptive process of AI, providing skill training, long term commitment, supporting change, monitoring progress and outcomes are the few interventions management can indulge in the process of AI adoption.

Skill Competencies: Institutions, faculty and students require skills sets to integrate and use AI for administrative and academic work. Developing competencies to use AI tools ethically, to ensure learning is enhanced rather than distracted is the essence to leverage technology effectively. Pedagogical Skills sets like prompt engineering, critical thinking, curriculum redesigning, technical skills sets like data management, system integration, Machine learning, Human-AI collaboration are to be built to create a culture to use AI responsibly and effectively.

The AI Readiness constructs (ARC) was further broken down into sub-dimensions through a structured survey conducted among 150 teaching and administrative staff in 10 Universities and colleges in Bengaluru. The panel included assistant professors, Associate professors, Professors, HODs, Directors and principals of private universities, First grade colleges, Autonomous colleges who every using AI in their academic and administrative work at different levels. The survey was administered online using google forms. The questionnaire consisted of multiple choices designed to identify the constructs of ARC. All the responses were reviewed for completeness and consistency. To assess the internal reliability of data, Cronbach's alpha was calculated for each dimension. As presented in the Table 1, all constructs recorded alpha value above 0.70, indicating acceptable reliability across sub-dimensional structure thereby confirming the strong framework for analysis and application.

Table 1 Cronbach's alpha value of AI Readiness constructs

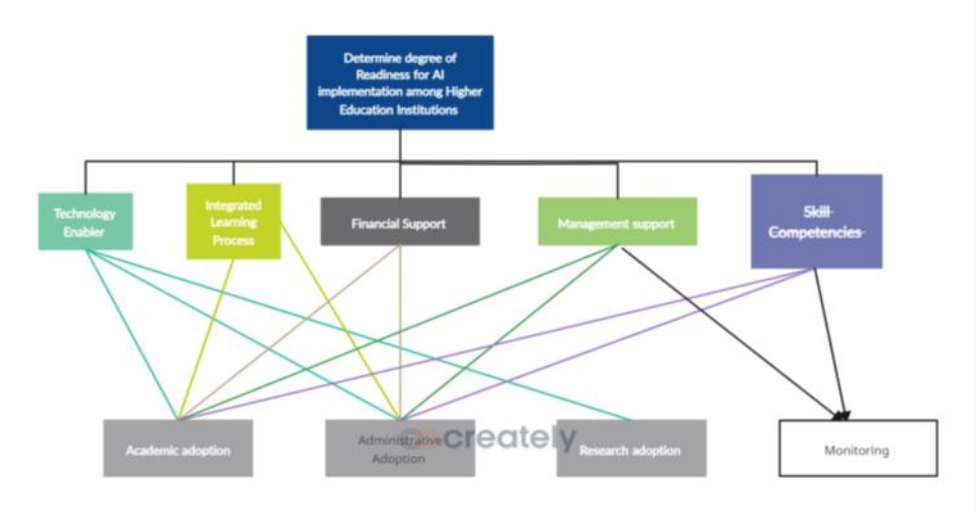
AI readiness Constructs	**Sub-dimensions**	**Cronbach 's Alpha**
	AI Tools accessibility	
	Cyber security	
Technology enabler	Data management system	0.826
	Strong Internet connectivity	
	Modern ICT availability	
	Intern-departmental collaboration	
Integrated Learning process	Centralized data management	
	Alignment of curriculum-teaching-assessment	0.712
	Real-time assessment system	
	Initial Investment	0.722
Financial support	ROI in long term	
	Open to change and investment	
Management support	Monitoring	0.784
	Training skills	
Skill Competencies	Readiness to adapt	0.783
	Measuring outcomes	

5. AHP ANALYSIS TO DETERMINE CRITERIA WEIGHTS:

We have identified the readiness dimensions through detailed literature review and opinions. It is necessary to determine the weighted criteria for the identified readiness dimensions, which helps to identify which dimensions are to emphasized to make AI more adaptable in higher educational institutions. The Analytical Hierarchy Process (AHP) is multi criteria decision analysis (MCDA) which breaks down decisions in hierarchical structure of decision making goals, criteria and alternatives.

In Figure 1 the aim is to determine the 'degree of readiness for AI implementation in Higher education institutions'. The five readiness dimensions identified are considered the 'criteria' and the functional areas are considered the 'alternatives'. The scoring process for the weighted readiness dimensions leads to generating a total score for each alternative, which is used to rank them.

Figure 1:



In this research, experts' opinion has been taken for developing the pairwise comparison matrix. The insights from experts has been foundation for determining the most critical factors that need attention to make AI integration seamless. Table 2 Readiness dimensions are labeled as ARC1, ARC2, ARC3, ARC4, ARC5.

Table 2: Naming the dimensions for AI readiness Constructs:

Naming Dimensions		
ARC 1	Technology enabler	TE
ARC2	Integrated learning process	ILP
ARC 3	Financial Support	FS
ARC 4	Management Support	MS
ARC5	Skill &Competencies	SC

AHP analysis is following relatively importance rubrics scale (Table 3) Based on this scale each ARC will be measured against other ARC, if one ARC is equally important or moderately important or strongly important than the other. Similarly, comparisons must be done between all ARC.

Table 3: Relative importance scale of pair-wise comparison

Relative importance scale of pair-wise comparison		
Relative Importance	Definition	Reciprocal rating
1	Equal Importance	1
3	Moderate importance	3-Jan
5	Strong importance	5-Jan
7	Very strong importance	7-Jan
2,4,6	Intermediate importance	½,1/4, 1/6

Based on experts opinion and survey conducted through HEI employees and considering the Satty relative scale commonly used for AHP which is mentioned in Table 3. A pair-wise comparison Matrix is shown in Table 4

Table 4: AHP Calculations (Pair wise comparison Matrix)

	TE	**ILP**	**FS**	**MS**	**SC**
TE	1	3	0.25	3	2

ILP	4	1	0.33	0.5	2
FS	0.33	0.25	1	2	5
MS	0.33	2	0.5	1	0.5
SC	0.5	0.5	0.2	2	1

The sum of six dimensions starting from TE to SC are calculated and mentioned in Table 5.

Table 5: AHP Calculations (Take sum of pair-wise matrix)

	TE	**ILP**	**FS**	**MS**	**SC**
TE	1	3	0.25	3	2
ILP	4	1	0.33	0.5	2
FS	0.33	0.25	1	2	5
MS	0.33	2	0.5	1	0.5
SC	0.5	0.5	0.2	2	1
SUM	**6.16**	**6.75**	**2.28**	**8.5**	**10.5**

In Table 6, matrix is normalized by dividing all the values of readiness dimensions in the column with the total sum of the same columns and in step-2 criteria weights is determined by taking up average of each row values

Table 6: AHP calculation (determination of criteria weights)

	TE	**ILP**	**FS**	**MS**	**SC**	**Criteria Weights**
TE	0.17	0.44	0.1	0.35	0.19	0.25
ILP	0.64	0.15	0.15	0.06	0.19	0.23
FS	0.05	0.03	0.43	0.24	0.47	0.24
MS	0.06	0.29	0.21	0.11	0.06	0.14
SC	0.08	0.07	0.08	0.24	0.09	0.11

In Table 7, In order to check the consistency, after determining the criteria weights (Table 6), A matrix is formed by multiplying row wise pair-wise comparison matrix (Table 4) with criteria weights determined in Table 6. Then the Weighted Sum Values is calculated by taking row wise sum of all multiplied values for ARC.

Table 7: AHP calculation (Calculate the consistency)

	TE	**ILP**	**FS**	**MS**	**SC**	**Weighted sum values**	**Criteria Weights**	**Lambda max**
TE	0.25	0.75	0.06	0.75	0.5	0.46	0.25	1.84
ILP	0.92	0.23	0.07	0.11	0.46	0.35	0.23	1.52
FS	0.07	0.06	0.24	0.48	1.2	0.41	0.24	1.7
MS	0.04	0.28	0.07	0.14	0.07	0.12	0.14	0.85
SC	0.05	0.05	0.02	0.22	0.11	0.09	0.11	0.81

The AHP Model calculations are performed from Table 4 to Table 7 to calculate consistency ratio, Consistency ratio is calculated by dividing consistency index with reliability index (Equation -2).

Consistency index (equation 1) is calculated by determining Lambda max (max) value and number of dimensions (n). Lambda max is the average value of ratio calculated by dividing weighted sum values with criteria weights, as per table 7, the Lambda max value determined is 1.272

CI = Lambda max-n/ n-1 = 1.27-5/5-1= **0.932**

Consistency ratio= Consistency Index (CI) / Random Index (RI) (equation 2)

Consistency Ratio (CR) = 0.932/ 1.12= 0.083

Here the Random Index (RI) for n=5 is 1.12, and n is considered as the number of ARC.

Since the Consistency Ratio (CR) value is less than 0.10 the proportion of inconsistency is < .10 the pair –wise comparison matrix is considered to be 'Consistent' and can be used for further evaluation.

5.1 Determining the Degree of Readiness

The method followed in this research paper to measure the readiness level of higher educational institutions for implementing AI tools is a combination of various valuation methods, thorough literature review, expert surveys and AHP analysis. Each of the perquisite is measures

Level 0 (LO):- indicates HEIs has no intension to support AI tool implementation, referred as the 'Novice' status

Level 1(L1): Signifies that HEIs has basic or minimum intention to support AI implementation, referred to as 'Basic' status

Level 2 (L2): indicates the HEIs has medium intention to support AI implementation, referred to as 'Intermediate' status

Level 3 (L3): signifies that the HEIS has complete intention to support AI implementation referred to as "complete' status.

Academic readiness constructs (ARC) comprises certain sub-dimensions, which define essential requirement for enabling the ARC. These sub-dimensions are measured using scoring approach. A set of questionnaire is defined for each sub-dimension with each level assigned a specific point value: L0 -0 points, L1 -1 Point, L2-2 points, and L3-3 points.

Based on Lucato et al. the degree of readiness for each sub-dimension is calculated by dividing the actual points obtained for one question by the sum of the maximum possible points for that question (Pacchini et.al, 2019). This process is repeated for all questionnaires under the sub-dimensions, and the sum of these calculated scores represents the degree of readiness for each sub-dimension.

The Degree of Readiness (Equation 3) for an ARC is determined by dividing all sub-dimensions combined degree of readiness by the number of sub-dimensions identified. This approach provides an inclusive evaluation of an HEI's preparedness to implement AI tools.

DRARC= DRsub-dimension/n----------(Equation 3)

To identify the degree of readiness of using AI in Higher education (equation -4) an approach involving the consideration of multiple ARC is employed. These ARC are identified through AHP. The summative aggregate of the degree of readiness will provide an overall measure of the HEI's readiness to adapt to AI technology.

DROrg= DRIRC/n----------(Equation 4)

DR (org)= Degree of readiness of the HEIs

DR (ARC)= Degree of readiness of the ARC Readiness Constructs

n =Number of ARC identified, it is 5 in this research

The following steps are followed:

- Identify ARC Constructs: Based on Literature reviews, expert's opinions and the AHP process the essential ARC are determined
- Assign weights: AHP is used to assign weights to each ARC, reflecting the importance in the overall readiness assessment.
- Evaluate sub dimensions: Each ARC consists of sub-dimensions; a pair-wise comparison matrix is developed to evaluate these sub-dimensions using data from expert surveys.
- Scoring system: A rubric system for each sub dimension is assessed through questionnaire and points are assigned.
- Calculate Degree of Readiness for sub-dimensions: for each sub dimension, degree of readiness is calculated
- Aggregate sub-dimension scores: Sum the calculated scores of all sub-dimensions with each ARC to obtain the Degree of Readiness
- Summative Aggregate: Combine the Degree of readiness of all ARC to determine the overall readiness score for the organization.

This approach ensures that readiness to implement AI in HEIs are assessed properly, taking into account critical dimensions and their sub dimensions, The Degree of Readiness (DR%) is defined in percentages. This scale helps HEIs to understand their standing in terms of readiness and what are the areas of support required for successful implementation.

The breakdown of the Degree of Readiness (DR) levels (Pacchini et al, 2019)

Table 8: Level of Degree of Readiness

DR in %	**Level of Readiness**	**Description**
Elementary	0% to 25%	HEIs has low preparation for using AI tools
Primary	26% to 50%	HEIs are in primary preparation stage
Intermediary	51% to 75%	The HEIs are moderately prepared with training and facilities required
Advanced	75% to 100%	The HEIs are in advanced stage and have developed the stage for seamless integration of AI tools in teaching and administration.

6. DATA ANALYSIS

In this research study, five prerequisites important to HEIs were identified and named ARC. These ARC had sub-dimensions. Expert surveys, AHP analysis and reliability tests were conducted to determine the consistency of these ARCs.

The data collected from 10 private universities, autonomous colleges and first grade colleges was analyzed carefully to ensure the inclusion of relevant ARCs, 150 responses collected only 132 responses were deemed valid and selected for further analysis, which represented 88% of the total respondents

Table 9 Demographic classification

Respondent age	Percentage
< 30 years	14%
31 to 40 years	23%
41 to 50 years	56%
>51 years	7%

Tenure of work	
<5 years	28%
6 to 10 years	42%
10 to 20 years	19%
>21 years	12%
Respondent's Designation	
Director/Dean/Principal	9%
Professor/Associate Professor	31%
Assistant Professor/Junior grade	25%
Administrative head	13%
Placement Head	16%
Admission Head	6%

The questionnaire was designed to measure the HEIs readiness level for each ARC. The evaluation is executed by identifying four possible answers for each statement: Level 0 (L0), Level (L1), Level(2), Level (3). Based on the responses corresponding values 0,1,2,3 are assigned. The scores of individual dimension is then divided by the sum of the maximum points for that sub dimension. For example, Technology enables is one of the ARC, which has 5 sub-dimensions, the total score for technology enabler will be 15. (Pacchini et.al.,2019)

The final score for each ARC is the summation of the individual sub-dimension scores. This process give a correct evaluation of each ARC and gives a clear understanding of HEIs readiness level of implementing AI

Degree of Readiness ARC= E DRsub-dimension/ n ……(Equation 5)

Based on the above scoring system, the degree of readiness for adopting AI in functionality of HEIs are calculated.

Table 10: Degree of Readiness of each ARC Constructs

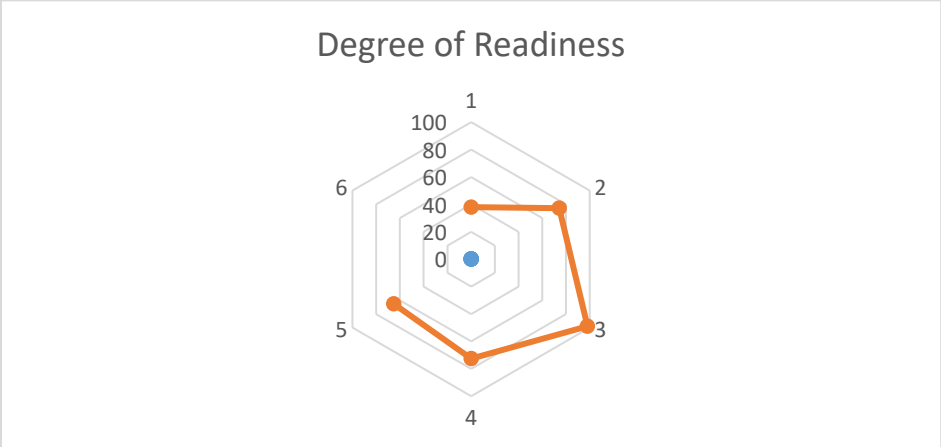
ARC Constructs	Sub-Dimensions	DR_{ARC}	Level of Readiness
	AI Tools accessibility		
	Cyber security		Primary
Technology enabler	Data management system	38	
	Strong Internet connectivity		
	Modern ICT availability		
	Intern-departmental collaboration		
Integrated Learning process	Centralized Data management		
	Alignment of curriculum-teaching-assessment		Intermediary
	Real-time assessment system	74.3	
	Initial Investment	98.1	Advanced
Financial support	ROI in long term		
	Open to change and investment	72.6	
Management support	Monitoring		Intermediary
	Training skills		
Skill Competencies	Readiness to adapt	65.2	Intermediary
	Measuring outcomes		

After the individual Digital readiness score are calculated (Table 10) the average of these scores will determine the degree of readiness to adapt AI in HEIs.

DR= 38+74.3+98.1+72.6+65.2/ 5 = 69.6

Based on the data collected from HEIs, it is evident that financial support from management towards technology deployment is high, reflecting that financial readiness is advanced. However, the HEIs overall Degree of readiness is calculated at 69.6, placing it at 'Intermediary level' of AI adaption. While HEIS benefits from financial and management support improvements are required in other key areas such as technology enablement, integrated learning process and skill competencies.

Figure 2: Radar chart visualizing AI adoption Degree of Readiness of HEIs.



In Summary, while the HEIs demonstrates a moderate to promising degree of readiness for adopting AI in Curriculum and Administrative functions of HEIs, investment of time and effort in integrated learning process and technology enablement is the key to advancing its readiness.

7. CONCLUSION

The objective of this paper was to determine the readiness of HEIs in implementing AI tools to enhance the teaching learning goals. To achieve this, a detailed literature review was conducted, identifying both factors/ constructs that to lead to readiness and implementation of AI in HEIs. Building on this foundation, the researcher proposed a readiness model developed through the support of AHP method to identify readiness factor weights. The model provides conceptual approach of HEIs readiness approach in evaluating HEIs readiness for the adoption of AI tools and technologies. The key outcomes are mentioned below:

- Identification of AI readiness constructs (ARC)

The study identifies 5 AI readiness constructs that serve as pillars for Ethical AI implementation. Integrated through review of literature, AHP analysis and expert opinions the constructs identified were consistent and effective for assessing AI readiness.

- Questionnaire based assessment model:

A structured questionnaire was developed incorporating insights from Professors and administrators of HEIs, AHP model evaluated each construct and their sub dimensions using scoring system. The resulting scores provide the present preparedness level, identifying areas of improvement.

- Practical implications for HEIs

The proposed readiness model is intended to help HEIs assess their present position and also support them in their journey towards becoming fully integrated technology driven institutions. Areas to improve are also identified which the HEIs can work on. On implementation the HEIs would gain a competitive advantage on achieving academic goals thereby creating an effective student friendly institution in the rapidly changing education field.

8. SCOPE OF FURTHER STUDY

- This readiness model can be applied to primary and secondary education sector also
- The ARCs are treated as independent factors in determining the readiness, further study can be done on their inter-dependencies of the ARCs
- The education sector is highly technology oriented, it is crucial to explore the advances and ensure the readiness model is suitable and adaptable by upgrading the model

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