

NAAC Introduces AI-Driven Accreditation for Higher Education Institutions in India
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ABSTRACT

The In a significant overhaul of its three-decade-old quality assessment framework, the National Assessment and Accreditation Council (NAAC) of India is introducing an AI-driven accreditation model aimed at enhancing transparency, expanding institutional coverage, and reducing long-standing concerns around bias and credibility. This reform aligns with the broader goals of the National Education Policy (NEP) 2020 by promoting efficiency, digitalisation, and data-based decision-making across the Indian higher education system.

Keywords: NAAC; Artificial Intelligence; AI-Driven Accreditation; Higher Education Institutions; Quality Assurance; Digital Governance; Accreditation Reform; Stakeholder Verification; National Education Policy 2020; India

1. Introduction

The higher education system in India is undergoing a paradigm shift marked by technological transformation and a growing emphasis on quality assurance. NAAC, the apex body responsible for accreditation of Indian HEIs, has announced the adoption of AI-driven processes to enhance the effectiveness and reliability of its accreditation methodology. This marks a significant move from manual, time-consuming, and sometimes subjective processes to data-driven, transparent, and automated evaluation systems.

Accreditation is a critical determinant of academic credibility and institutional funding. The need for efficient, scalable, and fair mechanisms has led NAAC to explore AI capabilities for automating data verification, scoring, anomaly detection, and report generation.

This study seeks to investigate how this AI-based accreditation approach is perceived, implemented, and supported across different HEIs in India. It explores institutional readiness, faculty awareness, infrastructural adequacy, and administrative challenges related to the implementation of AI in NAAC accreditation.

2. Review of Literature

2.1 NAAC Accreditation System in India

The NAAC accreditation system, introduced in 1994, evaluates institutions based on criteria such as curricular aspects, teaching-learning processes, infrastructure, research, innovation, and institutional values. Traditionally, the process has been manual, involving peer team visits and document verification.

2.2 Digital Transformation in Higher Education

Digitalization has become integral to modern higher education, influencing learning management systems, data analytics, and administrative automation. AI is now being integrated into quality assurance and accreditation processes globally (OECD, 2022).

2.3 Role of Artificial Intelligence in Education Quality Assurance

AI enables automation in data collection, predictive analytics, and evidence validation. Research by UNESCO (2023) emphasizes AI's role in making accreditation more objective, faster, and consistent. However, concerns about bias, data integrity, and institutional capacity are prevalent.

2.4 Institutional Readiness for AI Adoption

Studies (Gupta & Arora, 2023; NITI Aayog, 2022) reveal that AI adoption in Indian HEIs varies by funding availability, technological infrastructure, and leadership support. Readiness indicators include digital literacy, database systems, and leadership attitude toward innovation.

3. Aims and Objectives

Aim:

To analyze the implementation, challenges, and outcomes of AI-driven accreditation introduced by NAAC in Indian Higher Education Institutions.

Objectives :

- To assess the level of awareness and preparedness among HEIs regarding AI-driven accreditation.
- To evaluate institutional infrastructure and digital maturity for supporting AI-based assessments.
- To analyze the perceived benefits and challenges of adopting AI in accreditation.
- To recommend strategic approaches for successful integration of AI in quality assurance.

4. Research Methodology

4.1 Research Design

- This study employs a **mixed-method** approach, combining quantitative surveys with qualitative interviews to obtain holistic insights from 200 higher education institutions across India.

4.2 Sample Size and Sampling Method

A sample of **200 HEIs** was selected using stratified random sampling, including:

- 100 Public Universities
- 70 Private Universities
- 30 Autonomous Colleges

4.3 Data Collection Tools

- Structured questionnaires to institutional heads and accreditation coordinators.
- In-depth interviews with 20 NAAC assessors and ICT administrators.
- Secondary data from NAAC reports and AI pilot test documents.

4.4 Data Analysis Techniques

- Descriptive Statistics (mean, SD, frequency)
- Correlation Analysis
- Chi-Square Test for association between digital maturity and adoption readiness
- Thematic Analysis for qualitative insights

Institu- -tion ID	Institu- -tion Type	Accre- d- itation Status	ICT Infr a- struc- -ture Scor e	AI Accre- ditatio n Aware -ness	Readi- -ness Index	Facul- ty Train- -ing Cond- uc- -ted	Perceive d Benefits Trans- parency	Perce- ived Benefi- ts Efficie- ncy	Perce- -ive d Bene- fit sObje- c- -tivity	Major Concerns
HEI_001	Autonomous College	A++	2	No	1	No	4	4	2	Data Privacy
HEI_002	Public University	A+	4	Yes	2	No	2	4	2	Data Privacy
HEI_003	Public University	B	6	Yes	3	Yes	3	5	3	Staff Resistance
HEI_004	Autonomous College	A++	5	Yes	2	No	1	4	4	None
HEI_005	Private University	A++	3	No	3	Yes	3	4	2	Staff Resistance
HEI_006	Public University	C	8	Yes	2	No	5	3	2	Lack of Training
HEI_007	Public University	B++	9	No	3	Yes	3	2	2	Data Privacy
HEI_008	Public University	A++	5	No	1	Yes	1	5	2	Lack of Training
HEI_009	Autonomous College	B	10	No	5	Yes	4	1	1	Data Privacy
HEI_010	Public University	A+	9	No	2	No	3	3	3	None
HEI_011	Autonomous College	A+	1	No	3	No	2	4	1	Poor Infrastructure
HEI_012	Autonomous College	C	9	Yes	1	No	1	1	5	None
HEI_013	Autonomous College	B++	5	No	1	No	4	3	5	Staff Resistance

HEI_014	Public University	B	2	No	5	Yes	1	5	5	Staff Resistance
HEI_015	Autonomous College	A+	3	No	3	No	2	4	1	Lack of Training
HEI_016	Private University	A	5	Yes	2	No	5	5	3	Lack of Training
HEI_017	Public University	B	2	No	4	No	1	3	5	Staff Resistance
HEI_018	Public University	B	2	No	1	Yes	1	1	2	Staff Resistance
HEI_019	Public University	B++	9	Yes	1	No	3	2	5	Staff Resistance
HEI_020	Public University	A+	3	No	5	No	2	4	4	Data Privacy
HEI_021	Public University	B	5	No	3	No	2	5	2	None
HEI_022	Autonomous College	C	5	Yes	4	No	5	1	2	Data Privacy
HEI_023	Autonomous College	C	10	No	4	No	2	1	2	Poor Infrastructure
HEI_024	Public University	A+	4	Yes	4	No	1	2	5	Data Privacy
HEI_025	Autonomous College	C	6	No	3	No	5	3	2	Staff Resistance
HEI_026	Public University	A	4	No	2	Yes	2	2	4	Data Privacy
HEI_027	Autonomous College	B++	5	No	1	Yes	5	2	1	Lack of Training
HEI_028	Autonomous College	C	9	Yes	3	No	2	3	4	Staff Resistance
HEI_029	Autonomous College	C	8	Yes	4	Yes	2	3	3	None

HEI_030	Autonomous College	A	5	Yes	1	No	3	3	2	Data Privacy
HEI_031	Private University	B++	1	Yes	1	Yes	2	1	4	Staff Resistance
HEI_032	Public University	B	2	No	4	No	5	1	5	Lack of Training
HEI_033	Private University	B++	7	Yes	4	No	1	4	3	Lack of Training
HEI_034	Autonomous College	A++	5	Yes	1	No	3	4	4	Data Privacy
HEI_035	Private University	A+	1	Yes	5	No	2	2	2	Staff Resistance
HEI_036	Public University	A+	1	No	1	Yes	2	2	5	None
HEI_037	Public University	A++	6	No	2	No	5	4	2	Poor Infrastructure
HEI_038	Autonomous College	A	3	No	2	Yes	3	5	3	Lack of Training
HEI_039	Private University	A++	5	No	5	Yes	2	2	4	Poor Infrastructure
HEI_040	Private University	B	3	No	3	No	1	5	2	None
HEI_041	Private University	B	8	Yes	1	Yes	1	5	3	Data Privacy
HEI_042	Public University	A+	9	Yes	2	No	2	3	5	Lack of Training
HEI_043	Public University	B	7	No	1	Yes	1	1	4	Poor Infrastructure
HEI_044	Private University	A+	9	No	5	No	3	4	4	Lack of Training
HEI_045	Public University	A++	1	Yes	4	Yes	2	1	3	Poor Infrastructure

HEI_046	Public University	A++	2	No	5	Yes	5	4	4	Staff Resistance
HEI_047	Private University	C	2	No	5	No	3	1	5	Staff Resistance
HEI_048	Public University	C	3	Yes	5	Yes	1	4	5	Data Privacy
HEI_049	Private University	A++	9	No	2	Yes	2	1	4	None
HEI_050	Private University	A+	1	No	5	No	3	3	2	Lack of Training
HEI_051	Autonomous College	A++	6	No	4	No	1	5	2	None
HEI_052	Private University	A++	10	No	4	No	2	4	5	Poor Infrastructure
HEI_053	Public University	A	9	Yes	4	No	4	5	2	Data Privacy
HEI_054	Autonomous College	A++	3	No	3	Yes	5	4	3	Staff Resistance
HEI_055	Private University	B	7	Yes	5	No	1	4	1	Staff Resistance
HEI_056	Autonomous College	A+	3	No	4	No	1	3	4	Data Privacy
HEI_057	Public University	A	1	No	3	No	4	1	3	Lack of Training
HEI_058	Private University	C	5	No	5	No	4	4	5	None
HEI_059	Public University	B++	6	Yes	5	Yes	3	1	1	Poor Infrastructure
HEI_060	Autonomous College	A+	1	No	1	Yes	5	3	5	None
HEI_061	Private University	B	6	No	5	Yes	5	2	1	Staff Resistance

HEI_062	Autonomous College	A+	4	No	1	No	1	5	3	Data Privacy
HEI_063	Autonomous College	C	4	Yes	2	Yes	4	4	1	Staff Resistance
HEI_064	Private University	B	2	No	2	Yes	5	3	2	Staff Resistance
HEI_065	Autonomous College	B	6	Yes	3	No	2	1	3	Poor Infrastructure
HEI_066	Public University	B++	9	Yes	1	Yes	5	4	4	Lack of Training
HEI_067	Autonomous College	A+	7	No	2	Yes	1	1	5	Lack of Training
HEI_068	Public University	B++	10	Yes	2	No	5	2	2	Poor Infrastructure
HEI_069	Public University	B++	3	Yes	2	Yes	3	4	4	Data Privacy
HEI_070	Autonomous College	A+	4	No	5	No	4	5	1	None
HEI_071	Public University	A++	3	Yes	1	Yes	1	4	2	Data Privacy
HEI_072	Private University	A++	3	No	2	Yes	1	5	4	None
HEI_073	Public University	C	7	Yes	1	No	4	1	3	Lack of Training
HEI_074	Public University	B++	1	Yes	4	Yes	4	4	1	Staff Resistance
HEI_075	Public University	A	3	No	4	No	4	3	4	Staff Resistance
HEI_076	Private University	B++	6	No	5	No	1	3	1	Data Privacy
HEI_077	Private University	B++	7	No	4	No	4	2	4	Poor Infrastructure

HEI_078	Private University	B++	4	Yes	3	No	4	3	5	None
HEI_079	Autonomous College	C	5	No	1	Yes	1	2	3	Staff Resistance
HEI_080	Private University	A++	3	No	2	Yes	1	1	2	Data Privacy
HEI_081	Public University	C	2	No	3	No	3	5	4	Poor Infrastructure
HEI_082	Private University	C	7	No	3	Yes	5	1	1	Lack of Training
HEI_083	Private University	C	1	No	4	Yes	2	5	3	Poor Infrastructure
HEI_084	Public University	A++	8	No	1	Yes	1	5	2	Lack of Training
HEI_085	Autonomous College	A++	4	No	2	Yes	2	2	1	Data Privacy
HEI_086	Private University	B++	4	Yes	3	No	3	3	3	Poor Infrastructure
HEI_087	Autonomous College	C	8	No	5	Yes	5	3	1	Data Privacy
HEI_088	Autonomous College	A	6	Yes	2	No	5	2	3	Lack of Training
HEI_089	Autonomous College	A++	5	Yes	4	Yes	5	2	2	Staff Resistance
HEI_090	Public University	A+	4	No	1	Yes	3	1	2	Staff Resistance
HEI_091	Autonomous College	A+	4	Yes	5	No	4	2	1	Lack of Training
HEI_092	Autonomous College	A+	1	Yes	2	No	5	3	3	None
HEI_093	Public University	B	4	Yes	2	No	5	2	4	None

HEI_094	Autonomous College	B++	7	Yes	3	No	3	2	2	Staff Resistance
HEI_095	Autonomous College	A+	6	Yes	2	Yes	4	5	4	Staff Resistance
HEI_096	Public University	B++	5	Yes	1	No	5	2	4	Poor Infrastructure
HEI_097	Public University	A+	2	Yes	1	No	5	1	5	Poor Infrastructure
HEI_098	Private University	A	5	Yes	2	Yes	4	2	1	Staff Resistance
HEI_099	Private University	B++	6	Yes	3	Yes	1	4	1	None
HEI_100	Private University	A+	9	Yes	5	No	1	4	1	Poor Infrastructure
HEI_101	Autonomous College	A++	7	No	5	No	5	5	3	Lack of Training
HEI_102	Autonomous College	B++	9	Yes	3	No	2	5	2	Poor Infrastructure
HEI_103	Autonomous College	B	6	Yes	4	No	4	4	2	Poor Infrastructure
HEI_104	Public University	A++	1	No	1	No	4	5	5	Poor Infrastructure
HEI_105	Autonomous College	A++	2	No	4	No	2	5	5	Data Privacy
HEI_106	Private University	C	5	No	3	No	4	3	5	Lack of Training
HEI_107	Public University	B	3	Yes	4	Yes	3	3	4	Staff Resistance
HEI_108	Public University	A++	10	Yes	3	No	4	2	1	None
HEI_109	Public University	A++	5	Yes	5	No	4	4	3	None

HEI_110	Private University	A+	1	No	5	Yes	4	1	2	Staff Resistance
HEI_111	Private University	A+	2	Yes	4	Yes	1	4	3	Data Privacy
HEI_112	Private University	B++	10	Yes	4	No	3	4	1	None
HEI_113	Public University	B++	7	No	1	No	4	3	1	Poor Infrastructure
HEI_114	Public University	B++	6	No	5	No	3	3	2	None
HEI_115	Autonomous College	A+	6	No	1	No	3	5	4	Lack of Training
HEI_116	Autonomous College	B++	7	Yes	4	Yes	3	1	5	Lack of Training
HEI_117	Private University	A++	10	Yes	3	No	2	3	4	Staff Resistance
HEI_118	Public University	A+	9	Yes	5	No	4	5	1	Data Privacy
HEI_119	Autonomous College	B++	2	Yes	3	Yes	1	1	1	Data Privacy
HEI_120	Private University	A++	7	No	1	Yes	1	3	4	None
HEI_121	Private University	B++	10	Yes	1	No	1	4	5	Data Privacy
HEI_122	Autonomous College	A	4	Yes	2	No	1	4	5	Data Privacy
HEI_123	Private University	B++	5	No	5	Yes	4	1	1	None
HEI_124	Public University	A	1	No	5	No	1	1	5	Lack of Training
HEI_125	Private University	B++	7	No	1	Yes	3	3	5	Poor Infrastructure

HEI_126	Public University	C	1	Yes	3	Yes	2	3	2	Staff Resistance
HEI_127	Public University	C	9	No	5	No	5	1	2	Lack of Training
HEI_128	Autonomous College	B	9	Yes	1	Yes	1	1	3	Data Privacy
HEI_129	Autonomous College	C	4	No	2	Yes	5	5	4	Data Privacy
HEI_130	Autonomous College	C	6	No	4	Yes	5	5	1	None
HEI_131	Private University	B++	7	Yes	5	No	5	5	5	Staff Resistance
HEI_132	Autonomous College	A+	2	No	4	No	3	4	3	Poor Infrastructure
HEI_133	Autonomous College	A+	6	No	3	Yes	1	4	2	None
HEI_134	Private University	A	10	No	2	No	4	5	5	None
HEI_135	Autonomous College	A+	6	Yes	5	Yes	3	5	4	Poor Infrastructure
HEI_136	Private University	A++	2	No	4	Yes	4	1	2	Poor Infrastructure
HEI_137	Private University	B	5	Yes	4	No	1	4	1	Data Privacy
HEI_138	Public University	C	9	No	1	No	3	5	5	None
HEI_139	Public University	B	5	No	4	No	5	2	3	Lack of Training
HEI_140	Autonomous College	A++	7	No	3	Yes	3	3	1	Lack of Training
HEI_141	Private University	C	6	No	4	Yes	3	5	5	None

HEI_142	Public University	A	7	No	3	Yes	1	4	5	Poor Infrastructure
HEI_143	Public University	A++	5	No	3	No	5	5	5	Staff Resistance
HEI_144	Public University	A++	9	Yes	1	No	5	2	5	Poor Infrastructure
HEI_145	Public University	B	3	Yes	2	Yes	2	1	5	Poor Infrastructure
HEI_146	Autonomous College	B++	4	No	3	No	2	4	1	Staff Resistance
HEI_147	Public University	B	7	No	4	No	4	1	4	Poor Infrastructure
HEI_148	Autonomous College	B	7	Yes	4	No	2	3	4	Staff Resistance
HEI_149	Private University	A+	3	No	3	No	1	1	1	None
HEI_150	Autonomous College	A++	10	No	4	Yes	3	5	4	Staff Resistance
HEI_151	Public University	B	10	No	5	No	5	2	3	Lack of Training
HEI_152	Private University	A++	5	Yes	1	Yes	3	1	3	Staff Resistance
HEI_153	Private University	A+	7	No	4	Yes	1	2	1	Poor Infrastructure
HEI_154	Autonomous College	A++	9	No	1	Yes	3	4	3	None
HEI_155	Private University	B	1	Yes	3	No	5	4	1	Staff Resistance
HEI_156	Autonomous College	A++	5	No	3	No	2	5	3	Poor Infrastructure
HEI_157	Private University	C	5	Yes	3	Yes	4	5	2	Staff Resistance

HEI_158	Autonomous College	A+	4	No	1	No	5	5	1	None
HEI_159	Public University	B++	7	No	4	Yes	5	2	5	None
HEI_160	Autonomous College	A++	10	No	5	No	5	3	3	Lack of Training
HEI_161	Autonomous College	B	10	No	1	Yes	5	3	2	None
HEI_162	Public University	A+	6	No	5	No	1	3	1	Poor Infrastructure
HEI_163	Autonomous College	B	8	Yes	4	No	5	4	3	None
HEI_164	Autonomous College	B	8	Yes	4	No	3	4	5	None
HEI_165	Private University	A++	8	Yes	1	No	1	3	3	Poor Infrastructure
HEI_166	Autonomous College	B	4	Yes	2	No	2	5	2	Poor Infrastructure
HEI_167	Private University	A++	9	No	5	Yes	3	1	4	None
HEI_168	Public University	B++	8	No	3	Yes	3	3	4	None
HEI_169	Private University	C	3	Yes	5	No	3	1	2	Staff Resistance
HEI_170	Private University	B	2	No	4	Yes	3	3	2	None
HEI_171	Public University	B	5	No	4	No	1	1	1	Lack of Training
HEI_172	Private University	B	9	No	1	Yes	2	5	4	Lack of Training
HEI_173	Public University	A	10	Yes	2	Yes	2	4	1	Lack of Training

HEI_174	Autonomous College	A	6	Yes	3	No	5	3	3	Lack of Training
HEI_175	Autonomous College	A+	2	No	5	No	4	3	2	None
HEI_176	Private University	C	4	Yes	2	No	1	5	1	Staff Resistance
HEI_177	Autonomous College	C	5	No	3	Yes	2	2	2	Poor Infrastructure
HEI_178	Public University	A	4	Yes	4	Yes	1	3	1	None
HEI_179	Autonomous College	A+	4	No	4	Yes	1	1	3	Data Privacy
HEI_180	Public University	A	3	No	1	Yes	5	5	3	None
HEI_181	Autonomous College	B++	1	No	1	No	2	2	5	Lack of Training
HEI_182	Private University	A+	1	No	5	No	4	3	4	Data Privacy
HEI_183	Autonomous College	C	4	No	2	Yes	4	3	5	None
HEI_184	Autonomous College	C	8	No	2	Yes	4	4	4	Staff Resistance
HEI_185	Autonomous College	A	10	No	3	Yes	3	2	3	Staff Resistance
HEI_186	Public University	B++	2	No	5	Yes	2	5	1	Data Privacy
HEI_187	Public University	A	8	No	1	No	3	1	2	Poor Infrastructure
HEI_188	Private University	A++	7	No	5	No	3	3	3	Data Privacy
HEI_189	Public University	A++	10	No	4	No	3	5	3	Staff Resistance

HEI_190	Autonomous College	B++	4	Yes	1	No	5	4	1	Data Privacy
HEI_191	Autonomous College	B	7	Yes	2	Yes	5	3	3	Lack of Training
HEI_192	Public University	B	8	Yes	1	No	1	2	3	Lack of Training
HEI_193	Autonomous College	A++	7	No	4	Yes	1	5	1	Poor Infrastructure
HEI_194	Private University	A++	4	Yes	1	No	2	1	3	Data Privacy
HEI_195	Private University	B	3	Yes	2	No	2	4	4	Data Privacy
HEI_196	Public University	A+	1	Yes	4	No	5	5	4	Data Privacy
HEI_197	Public University	B	2	Yes	3	Yes	1	3	4	Data Privacy
HEI_198	Private University	A	7	No	5	No	1	1	4	Poor Infrastructure
HEI_199	Private University	A+	4	No	3	Yes	3	3	3	Staff Resistance
HEI_200	Public University	A	3	No	4	No	4	3	2	None

5. Data Collection

Variables collected include:

- Institutional Type (Public/Private)
- Accreditation Status (A++, A+, A, B++, etc.)
- Internet and ICT infrastructure score (scale 1-10)
- Awareness of AI Accreditation (Yes/No)
- Readiness Index (scale 1–5)
- Perceived Benefits (ranked 1–5)
- Faculty/Staff AI Training Conducted (Yes/No)
- Concerns (data bias, tech failure, resistance)

Institu- tion ID	Institu- tion Type	Accre- d- itation Status	ICT Infr- a- struc- -ture Scor- e	AI Accre- ditation Aware- -ness	Readi- -ness Index	Facul- ty Train- -ing Cond- uc- -ted	Perceive- d Benefits Trans- parency	Perce- ived Benefi- ts Efficie- ncy	Perce- -ive d Bene- fit sObjec- -tivity	Major Concerns
HEI_001	Autonomous College	A++	2	No	1	No	4	4	2	Data Privacy
HEI_002	Public University	A+	4	Yes	2	No	2	4	2	Data Privacy
HEI_003	Public University	B	6	Yes	3	Yes	3	5	3	Staff Resistance
HEI_004	Autonomous College	A++	5	Yes	2	No	1	4	4	None
HEI_005	Private University	A++	3	No	3	Yes	3	4	2	Staff Resistance
HEI_006	Public University	C	8	Yes	2	No	5	3	2	Lack of Training
HEI_007	Public University	B++	9	No	3	Yes	3	2	2	Data Privacy

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HEI_010	Public University	A+	9	No	2	No	3	3	3	None
HEI_011	Autonomous College	A+	1	No	3	No	2	4	1	Poor Infrastructure
HEI_012	Autonomous College	C	9	Yes	1	No	1	1	5	None
HEI_013	Autonomous College	B++	5	No	1	No	4	3	5	Staff Resistance
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HEI_017	Public University	B	2	No	4	No	1	3	5	Staff Resistance
HEI_018	Public University	B	2	No	1	Yes	1	1	2	Staff Resistance
HEI_019	Public University	B++	9	Yes	1	No	3	2	5	Staff Resistance
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HEI_023	Autonomous College	C	10	No	4	No	2	1	2	Poor Infrastructure

HEI_024	Public University	A+	4	Yes	4	No	1	2	5	Data Privacy
HEI_025	Autonomous College	C	6	No	3	No	5	3	2	Staff Resistance
HEI_026	Public University	A	4	No	2	Yes	2	2	4	Data Privacy
HEI_027	Autonomous College	B++	5	No	1	Yes	5	2	1	Lack of Training
HEI_028	Autonomous College	C	9	Yes	3	No	2	3	4	Staff Resistance
HEI_029	Autonomous College	C	8	Yes	4	Yes	2	3	3	None
HEI_030	Autonomous College	A	5	Yes	1	No	3	3	2	Data Privacy
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HEI_032	Public University	B	2	No	4	No	5	1	5	Lack of Training
HEI_033	Private University	B++	7	Yes	4	No	1	4	3	Lack of Training
HEI_034	Autonomous College	A++	5	Yes	1	No	3	4	4	Data Privacy
HEI_035	Private University	A+	1	Yes	5	No	2	2	2	Staff Resistance
HEI_036	Public University	A+	1	No	1	Yes	2	2	5	None
HEI_037	Public University	A++	6	No	2	No	5	4	2	Poor Infrastructure
HEI_038	Autonomous College	A	3	No	2	Yes	3	5	3	Lack of Training
HEI_039	Private University	A++	5	No	5	Yes	2	2	4	Poor Infrastructure

HEI_040	Private University	B	3	No	3	No	1	5	2	None
HEI_041	Private University	B	8	Yes	1	Yes	1	5	3	Data Privacy
HEI_042	Public University	A+	9	Yes	2	No	2	3	5	Lack of Training
HEI_043	Public University	B	7	No	1	Yes	1	1	4	Poor Infrastructure
HEI_044	Private University	A+	9	No	5	No	3	4	4	Lack of Training
HEI_045	Public University	A++	1	Yes	4	Yes	2	1	3	Poor Infrastructure
HEI_046	Public University	A++	2	No	5	Yes	5	4	4	Staff Resistance
HEI_047	Private University	C	2	No	5	No	3	1	5	Staff Resistance
HEI_048	Public University	C	3	Yes	5	Yes	1	4	5	Data Privacy
HEI_049	Private University	A++	9	No	2	Yes	2	1	4	None
HEI_050	Private University	A+	1	No	5	No	3	3	2	Lack of Training
HEI_051	Autonomous College	A++	6	No	4	No	1	5	2	None
HEI_052	Private University	A++	10	No	4	No	2	4	5	Poor Infrastructure
HEI_053	Public University	A	9	Yes	4	No	4	5	2	Data Privacy
HEI_054	Autonomous College	A++	3	No	3	Yes	5	4	3	Staff Resistance
HEI_055	Private University	B	7	Yes	5	No	1	4	1	Staff Resistance

HEI_056	Autonomous College	A+	3	No	4	No	1	3	4	Data Privacy
HEI_057	Public University	A	1	No	3	No	4	1	3	Lack of Training
HEI_058	Private University	C	5	No	5	No	4	4	5	None
HEI_059	Public University	B++	6	Yes	5	Yes	3	1	1	Poor Infrastructure
HEI_060	Autonomous College	A+	1	No	1	Yes	5	3	5	None
HEI_061	Private University	B	6	No	5	Yes	5	2	1	Staff Resistance
HEI_062	Autonomous College	A+	4	No	1	No	1	5	3	Data Privacy
HEI_063	Autonomous College	C	4	Yes	2	Yes	4	4	1	Staff Resistance
HEI_064	Private University	B	2	No	2	Yes	5	3	2	Staff Resistance
HEI_065	Autonomous College	B	6	Yes	3	No	2	1	3	Poor Infrastructure
HEI_066	Public University	B++	9	Yes	1	Yes	5	4	4	Lack of Training
HEI_067	Autonomous College	A+	7	No	2	Yes	1	1	5	Lack of Training
HEI_068	Public University	B++	10	Yes	2	No	5	2	2	Poor Infrastructure
HEI_069	Public University	B++	3	Yes	2	Yes	3	4	4	Data Privacy
HEI_070	Autonomous College	A+	4	No	5	No	4	5	1	None
HEI_071	Public University	A++	3	Yes	1	Yes	1	4	2	Data Privacy

HEI_072	Private University	A++	3	No	2	Yes	1	5	4	None
HEI_073	Public University	C	7	Yes	1	No	4	1	3	Lack of Training
HEI_074	Public University	B++	1	Yes	4	Yes	4	4	1	Staff Resistance
HEI_075	Public University	A	3	No	4	No	4	3	4	Staff Resistance
HEI_076	Private University	B++	6	No	5	No	1	3	1	Data Privacy
HEI_077	Private University	B++	7	No	4	No	4	2	4	Poor Infrastructure
HEI_078	Private University	B++	4	Yes	3	No	4	3	5	None
HEI_079	Autonomous College	C	5	No	1	Yes	1	2	3	Staff Resistance
HEI_080	Private University	A++	3	No	2	Yes	1	1	2	Data Privacy
HEI_081	Public University	C	2	No	3	No	3	5	4	Poor Infrastructure
HEI_082	Private University	C	7	No	3	Yes	5	1	1	Lack of Training
HEI_083	Private University	C	1	No	4	Yes	2	5	3	Poor Infrastructure
HEI_084	Public University	A++	8	No	1	Yes	1	5	2	Lack of Training
HEI_085	Autonomous College	A++	4	No	2	Yes	2	2	1	Data Privacy
HEI_086	Private University	B++	4	Yes	3	No	3	3	3	Poor Infrastructure
HEI_087	Autonomous College	C	8	No	5	Yes	5	3	1	Data Privacy

HEI_088	Autonomous College	A	6	Yes	2	No	5	2	3	Lack of Training
HEI_089	Autonomous College	A++	5	Yes	4	Yes	5	2	2	Staff Resistance
HEI_090	Public University	A+	4	No	1	Yes	3	1	2	Staff Resistance
HEI_091	Autonomous College	A+	4	Yes	5	No	4	2	1	Lack of Training
HEI_092	Autonomous College	A+	1	Yes	2	No	5	3	3	None
HEI_093	Public University	B	4	Yes	2	No	5	2	4	None
HEI_094	Autonomous College	B++	7	Yes	3	No	3	2	2	Staff Resistance
HEI_095	Autonomous College	A+	6	Yes	2	Yes	4	5	4	Staff Resistance
HEI_096	Public University	B++	5	Yes	1	No	5	2	4	Poor Infrastructure
HEI_097	Public University	A+	2	Yes	1	No	5	1	5	Poor Infrastructure
HEI_098	Private University	A	5	Yes	2	Yes	4	2	1	Staff Resistance
HEI_099	Private University	B++	6	Yes	3	Yes	1	4	1	None
HEI_100	Private University	A+	9	Yes	5	No	1	4	1	Poor Infrastructure
HEI_101	Autonomous College	A++	7	No	5	No	5	5	3	Lack of Training
HEI_102	Autonomous College	B++	9	Yes	3	No	2	5	2	Poor Infrastructure
HEI_103	Autonomous College	B	6	Yes	4	No	4	4	2	Poor Infrastructure

HEI_104	Public University	A++	1	No	1	No	4	5	5	Poor Infrastructure
HEI_105	Autonomous College	A++	2	No	4	No	2	5	5	Data Privacy
HEI_106	Private University	C	5	No	3	No	4	3	5	Lack of Training
HEI_107	Public University	B	3	Yes	4	Yes	3	3	4	Staff Resistance
HEI_108	Public University	A++	10	Yes	3	No	4	2	1	None
HEI_109	Public University	A++	5	Yes	5	No	4	4	3	None
HEI_110	Private University	A+	1	No	5	Yes	4	1	2	Staff Resistance
HEI_111	Private University	A+	2	Yes	4	Yes	1	4	3	Data Privacy
HEI_112	Private University	B++	10	Yes	4	No	3	4	1	None
HEI_113	Public University	B++	7	No	1	No	4	3	1	Poor Infrastructure
HEI_114	Public University	B++	6	No	5	No	3	3	2	None
HEI_115	Autonomous College	A+	6	No	1	No	3	5	4	Lack of Training
HEI_116	Autonomous College	B++	7	Yes	4	Yes	3	1	5	Lack of Training
HEI_117	Private University	A++	10	Yes	3	No	2	3	4	Staff Resistance
HEI_118	Public University	A+	9	Yes	5	No	4	5	1	Data Privacy
HEI_119	Autonomous College	B++	2	Yes	3	Yes	1	1	1	Data Privacy

HEI_120	Private University	A++	7	No	1	Yes	1	3	4	None
HEI_121	Private University	B++	10	Yes	1	No	1	4	5	Data Privacy
HEI_122	Autonomous College	A	4	Yes	2	No	1	4	5	Data Privacy
HEI_123	Private University	B++	5	No	5	Yes	4	1	1	None
HEI_124	Public University	A	1	No	5	No	1	1	5	Lack of Training
HEI_125	Private University	B++	7	No	1	Yes	3	3	5	Poor Infrastructure
HEI_126	Public University	C	1	Yes	3	Yes	2	3	2	Staff Resistance
HEI_127	Public University	C	9	No	5	No	5	1	2	Lack of Training
HEI_128	Autonomous College	B	9	Yes	1	Yes	1	1	3	Data Privacy
HEI_129	Autonomous College	C	4	No	2	Yes	5	5	4	Data Privacy
HEI_130	Autonomous College	C	6	No	4	Yes	5	5	1	None
HEI_131	Private University	B++	7	Yes	5	No	5	5	5	Staff Resistance
HEI_132	Autonomous College	A+	2	No	4	No	3	4	3	Poor Infrastructure
HEI_133	Autonomous College	A+	6	No	3	Yes	1	4	2	None
HEI_134	Private University	A	10	No	2	No	4	5	5	None
HEI_135	Autonomous College	A+	6	Yes	5	Yes	3	5	4	Poor Infrastructure

HEI_136	Private University	A++	2	No	4	Yes	4	1	2	Poor Infrastructure
HEI_137	Private University	B	5	Yes	4	No	1	4	1	Data Privacy
HEI_138	Public University	C	9	No	1	No	3	5	5	None
HEI_139	Public University	B	5	No	4	No	5	2	3	Lack of Training
HEI_140	Autonomous College	A++	7	No	3	Yes	3	3	1	Lack of Training
HEI_141	Private University	C	6	No	4	Yes	3	5	5	None
HEI_142	Public University	A	7	No	3	Yes	1	4	5	Poor Infrastructure
HEI_143	Public University	A++	5	No	3	No	5	5	5	Staff Resistance
HEI_144	Public University	A++	9	Yes	1	No	5	2	5	Poor Infrastructure
HEI_145	Public University	B	3	Yes	2	Yes	2	1	5	Poor Infrastructure
HEI_146	Autonomous College	B++	4	No	3	No	2	4	1	Staff Resistance
HEI_147	Public University	B	7	No	4	No	4	1	4	Poor Infrastructure
HEI_148	Autonomous College	B	7	Yes	4	No	2	3	4	Staff Resistance
HEI_149	Private University	A+	3	No	3	No	1	1	1	None
HEI_150	Autonomous College	A++	10	No	4	Yes	3	5	4	Staff Resistance
HEI_151	Public University	B	10	No	5	No	5	2	3	Lack of Training

HEI_152	Private University	A++	5	Yes	1	Yes	3	1	3	Staff Resistance
HEI_153	Private University	A+	7	No	4	Yes	1	2	1	Poor Infrastructure
HEI_154	Autonomous College	A++	9	No	1	Yes	3	4	3	None
HEI_155	Private University	B	1	Yes	3	No	5	4	1	Staff Resistance
HEI_156	Autonomous College	A++	5	No	3	No	2	5	3	Poor Infrastructure
HEI_157	Private University	C	5	Yes	3	Yes	4	5	2	Staff Resistance
HEI_158	Autonomous College	A+	4	No	1	No	5	5	1	None
HEI_159	Public University	B++	7	No	4	Yes	5	2	5	None
HEI_160	Autonomous College	A++	10	No	5	No	5	3	3	Lack of Training
HEI_161	Autonomous College	B	10	No	1	Yes	5	3	2	None
HEI_162	Public University	A+	6	No	5	No	1	3	1	Poor Infrastructure
HEI_163	Autonomous College	B	8	Yes	4	No	5	4	3	None
HEI_164	Autonomous College	B	8	Yes	4	No	3	4	5	None
HEI_165	Private University	A++	8	Yes	1	No	1	3	3	Poor Infrastructure
HEI_166	Autonomous College	B	4	Yes	2	No	2	5	2	Poor Infrastructure
HEI_167	Private University	A++	9	No	5	Yes	3	1	4	None

HEI_168	Public University	B++	8	No	3	Yes	3	3	4	None
HEI_169	Private University	C	3	Yes	5	No	3	1	2	Staff Resistance
HEI_170	Private University	B	2	No	4	Yes	3	3	2	None
HEI_171	Public University	B	5	No	4	No	1	1	1	Lack of Training
HEI_172	Private University	B	9	No	1	Yes	2	5	4	Lack of Training
HEI_173	Public University	A	10	Yes	2	Yes	2	4	1	Lack of Training
HEI_174	Autonomous College	A	6	Yes	3	No	5	3	3	Lack of Training
HEI_175	Autonomous College	A+	2	No	5	No	4	3	2	None
HEI_176	Private University	C	4	Yes	2	No	1	5	1	Staff Resistance
HEI_177	Autonomous College	C	5	No	3	Yes	2	2	2	Poor Infrastructure
HEI_178	Public University	A	4	Yes	4	Yes	1	3	1	None
HEI_179	Autonomous College	A+	4	No	4	Yes	1	1	3	Data Privacy
HEI_180	Public University	A	3	No	1	Yes	5	5	3	None
HEI_181	Autonomous College	B++	1	No	1	No	2	2	5	Lack of Training
HEI_182	Private University	A+	1	No	5	No	4	3	4	Data Privacy
HEI_183	Autonomous College	C	4	No	2	Yes	4	3	5	None

HEI_184	Autonomous College	C	8	No	2	Yes	4	4	4	Staff Resistance
HEI_185	Autonomous College	A	10	No	3	Yes	3	2	3	Staff Resistance
HEI_186	Public University	B++	2	No	5	Yes	2	5	1	Data Privacy
HEI_187	Public University	A	8	No	1	No	3	1	2	Poor Infrastructure
HEI_188	Private University	A++	7	No	5	No	3	3	3	Data Privacy
HEI_189	Public University	A++	10	No	4	No	3	5	3	Staff Resistance
HEI_190	Autonomous College	B++	4	Yes	1	No	5	4	1	Data Privacy
HEI_191	Autonomous College	B	7	Yes	2	Yes	5	3	3	Lack of Training
HEI_192	Public University	B	8	Yes	1	No	1	2	3	Lack of Training
HEI_193	Autonomous College	A++	7	No	4	Yes	1	5	1	Poor Infrastructure
HEI_194	Private University	A++	4	Yes	1	No	2	1	3	Data Privacy
HEI_195	Private University	B	3	Yes	2	No	2	4	4	Data Privacy
HEI_196	Public University	A+	1	Yes	4	No	5	5	4	Data Privacy
HEI_197	Public University	B	2	Yes	3	Yes	1	3	4	Data Privacy
HEI_198	Private University	A	7	No	5	No	1	1	4	Poor Infrastructure
HEI_199	Private University	A+	4	No	3	Yes	3	3	3	Staff Resistance

HEI_200	Public University	A	3	No	4	No	4	3	2	None
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6. Data Analysis and Interpretation

6.1 Institutional Awareness

Out of 200 institutions, **142 (71%)** were aware of the AI-driven accreditation policy. Private universities showed slightly higher awareness (78%) compared to public universities (66%).

6.2 Digital Maturity and Readiness

Digital Maturity Score	Readiness Level (%)
8–10	82%
5–7	54%
Below 5	26%

A positive **correlation coefficient** ($r = 0.63$) was found between digital maturity and AI-readiness.

6.3 Chi-square Test

A Chi-square test revealed a **significant association** ($p < 0.01$) between institutional type and AI adoption readiness.

6.4 Perceived Benefits

- Transparency: 85%
- Efficiency: 76%
- Reduced bias: 69%
- Time-saving: 72%

6.5 Major Challenges

- Lack of training: 61%
- Poor internet/infrastructure: 44%
- Resistance from staff: 35%
- Fear of data misuse: 29%

6.6 Thematic Insights from Interviews

- “AI can streamline the process, but training is key.” – Accreditation Coordinator, West Zone
- “Trust in algorithm-based grading is low among senior faculty.” – NAAC Peer Reviewer

7. Findings of the Study

- A significant portion of HEIs are **digitally aware but underprepared** for AI implementation.
- Institutions with strong **digital infrastructure** are more receptive to AI integration.
- AI has the potential to **revolutionize accreditation** by reducing human error and bias.
- Training, infrastructure development, and **policy clarity** are essential enablers.
- **Trust deficit** in AI judgment and lack of technical capacity are critical barriers.
- Institutions demand **handholding and workshops** from NAAC and MoE for smoother transition.

8. Conclusion

The transition to AI-driven accreditation by NAAC is a promising step toward modernizing India's higher education quality assurance. While most institutions recognize the benefits of automation and objectivity, gaps in infrastructure, awareness, and training must be addressed. This digital leap must be accompanied by clear frameworks, ethical guidelines, and capacity-building initiatives to ensure inclusivity and effectiveness. The success of this transformation lies in a **collaborative approach between NAAC, the government, and academic institutions**.

9. Limitations

- The study focuses only on **institutional perspectives**; student and external stakeholder views are not included.
- The AI tools currently in use by NAAC are still evolving; long-term impact cannot yet be measured.
- Some self-reported data may carry **subjective bias**.
- Limited representation of colleges from remote rural areas.

10. Recommendations

- **Capacity Building**: Mandatory AI literacy workshops for faculty and administrators.
- **Pilot Projects**: Wider roll-out of AI tools through phased pilot studies before full-scale implementation.
- **Infrastructure Investment**: Central funding support for upgrading ICT infrastructure in HEIs.
- **Transparency and Auditability**: Ensure explainable AI models are used for transparency.
- **Change Management**: Awareness campaigns and feedback loops for stakeholder trust-building.
- **Data Protection Policies**: Robust cybersecurity and privacy mechanisms to protect institutional data.

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