

# The Impact of COVID-19 on Educational Entrepreneurs in India with special reference to central state: M.P.

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## Abstract

After the historic disruption of the COVID-19 pandemic, no sector remained unaffected across the world, and similar to other critical sectors, the education sector too has been hit hard. Universities, colleges, schools, teachers, and the most vulnerable were the students who were deeply impacted. This calls for Governments, society, and specifically educational entrepreneurs, to re-think and put serious efforts into developing long-term strategies to meet the needs of education and ensure continued learning in unpredictable futures. In light of rising concerns, educational entrepreneurs have to redefine their way of working and have to include -online learning or e-learning as an integral part of their teaching process that too consistent basis. This exploratory research paper proposes that educational entrepreneurs must adopt the latest technology and technological gadgets to sustain themselves in the market and grow. The inclusion of online learning or e-learning facilities along with the offline mode of teaching is a necessity in today's dynamic environment. However, in its adoption, numerous factors play a vital role and must be considered to motivate educational entrepreneurs. This research study has identified factors to be considered that not only have an impact on the adoption of technology but also support its consistent use. Findings also reveal that apart from the identified factors, student's and teachers' digital readiness and motivation also play important roles in technological integration in the teaching process.

**Keywords:** COVID-19 impact, Education Entrepreneur, technology adoption, online learning, e-learning

## Introduction

As is evident and experienced by the whole society, every sector has been deeply affected by the recent COVID-19 pandemic. The education system is not an exception and is the most affected one. The recent times called for some of the unprecedented changes/paradigm shift, in the entire education system across the globe. Face-to-face experiential education was replaced by participative education using online digital platforms. This change called for a systematic and strategic change in the delivery of education by educational entrepreneurs. The online education system has to be designed by entrepreneurs, to make it participative and effective for teachers and at the same time understandable and adaptive by the students. The process involved many challenges to be considered to make education simple. During the COVID-19 pandemic times, virtual or online education platforms were widely used in continuing education in all educational institutions. As entrepreneurs, teachers, and students were not used to adapting to virtual digital platforms, the early pandemic times faced numerous issues in getting aligned to the new way of imparting education. The research studies so far have focused on challenges and factors influencing the adoption of online teaching methods by teachers and students however there is a need to diversify the analysis, by studying vital factors such as technological, organizational, and environmental factors, to narrow down the gap between

the education delivery system adapted by the educational entrepreneurs and the effectiveness of imparting the education to the students through classic experiential methods. These are three dimensions of the technology-organization-environment (TOE) framework, created by Tornatzky and Fleisher. It describes factors that influence technology adoption and its likelihood (Tornatzky and Fleisher, 1990).

Online education is now a core part of any education system and hence educational entrepreneurs need to focus on improvising on the hurdles of online education delivery, to sustain in the changed environment without losing their credibility on high standards of teaching. Simultaneously they need to overcome the challenges of teachers, study patterns, and students learning ability to ensure the adaptability of the changed education environment. To make it more smooth, the remaining bottlenecks of the digital education delivery need to be improvised further studying the factors involved from the entrepreneur's side. This will further improve the knowledge distribution through virtual platforms strengthening the sustainability and effectiveness on both sides (entrepreneurs as well as the students).

### Literature Review

Babbar and Gupta (2022) in their research study on the response of educational institutions to COVID-19 aimed to explore different modes of education during the pandemic time and provided a holistic view of efforts taken by the Government and universities to face that crisis. They concluded that there is a necessity for a shift to digital pedagogy, which was very challenging at that COVID-19 time. The COVID-19 outbreak highlighted Institutions' flexibility, sustainability, and readiness to accept change. The researchers recommended the adoption of Online learning in all educational institutions.

Wang et al (2022) explored the impact of COVID-19 on the Sustainable Development Goals (SDGs) that the United Nations approved in the year 2015. The researcher studied how the education institutes developed their e-learning systems overnight and collected relevant data from middle school students and developed an integrated model with five dimensions Learner, Design, Technology, Instructor, and Environment, to measure their satisfaction with the e-learning system. They found that learner's attitude towards computers, their self-efficacy, computer usefulness, instructor's attitude, and response have a positive impact whereas learner's anxiety, ease of use, availability of computer systems and internet, learning environment, and support, have a negative impact on their satisfaction with e-learning system. They concluded that developing countries can achieve sustainable development goals by improving learner satisfaction.

Malik et al (2021) studied the role of environmental factors which includes competition intensity, government support, trading partners' readiness, and standards uncertainty, technological factors which encompass perceived benefits, compatibility, information transparency, and disintermediation), and organizational factors like organization innovativeness, organizational learning capability, and top management support, in the adoption of technology (Blockchain) in Australia and found that these factors significantly affect the technology adoption, further moderated by "perceived risk."

Foulger et al (2021) studied the influence of contextual knowledge on teachers' intention to integrate technology in their teaching into the classroom. They applied Decomposed Theory of Planned Behavior (DTPB) to study the influence of contextual knowledge on teacher's intentions and developed model IT2 (Intention to Teach with Technology) which included contextual factors like behavioral, normative, and control beliefs and also incorporated factors like attitude, subjective norms, and perceived behavioral control. The researchers tested the IT2 model and found it quite plausible, accounting for a 75% variation in intention.

Qasem et al (2019) carried out a systematic literature review (SLR) to analyze existing research on the adoption and usage of cloud computing technology in Higher Education Institutes (HEIs). In this study, they identified contributing factors and barriers in the adoption of cloud computing technology in HEIs at both, individual and organizational levels. Based on a systematic approach, the researcher identified organizational-based category factors as Innovation Factors (Relative advantage, Complexity, and Compatibility), Technological Factors (Risk and Security), Contextual Factors (Infrastructure), and Usability Factors (Usefulness and Ease of Use). The research study also emphasized on the need for more academic attention to identify factors that influence the adoption of different technologies in HEIS from the organization's perspective.

Taherdoost (2018) offered a succinct summary of 14 models that have been employed to examine variables that influence the use of technology and/or intention to use technology such as Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB) and Diffusion of Innovation theory (DOI), Theory of Reasoned Action (TRA), Model of PC Utilization, Motivational Model Unified Theory of Acceptance and Use of Technology (UTAUT) and Social Cognitive Theory (SCT). Researchers found that different adoption models are rooted in a diversity of theories for example, the Diffusion of Innovation theory (DOI) is from sociology, the Theory of Reasoned Action (TRA) is from social psychology, TIB, TPB and SCT are psychosocial theories. In their study, they said that all three theories have proven their effectiveness in predicting and explaining a variety of human behaviors in differing contexts. They also found in their study that Theory of Reasoned Action- TRA and Theory of Planned Behavior -TPB differ from Diffusion of Innovation theory-DOI in the sense that the former focuses on explaining the behavior of individuals and the latter concentrates on adoption decisions in which the organizational characteristics play a key role, not the individual.

Mokhtar et al (2014) studied the usefulness and importance of adopting cloud computing technology in organizations. The researcher identified several issues to be addressed while integrating technology which encompasses environmental factors, technological factors, and organizational factors. Researchers in this study found that organizational dimension is one of the most important factors for an education institute when adopting such new technology. These factors which include: needs assessment, readiness assessment, organizational change, budgeting, and return on investment (ROI), are aspects that must be taken into account before shifting to new technology, especially e-learning. Further, the authors also recommended further studies on organizational context as limited studies exist regarding the adoption of technology specifically in the education sector.

Picoto et al (2014) analyzed the importance of mobile- business for organization. The researcher's conceptual model to analyze the value and usage of technology in the post-adoption phase study is based on Resource Based theory, Diffusion of Innovation theory, and Technology-Organization-Environment theory. The study is done from an organizational perspective. The results of the research showed that relative advantage, technology competence, technology integration, managerial obstacles, competitive pressure and partner pressure are found significant antecedents of technology adoption together they explain a substantial variance in technology usage.

Fidani A and F Idrizi (2012) conducted a study on investigating the student's acceptance of IT-enabled Learning Management System (LMS) in University education. LMS was found to be an important education tool with strong effectiveness and interactive study modules. The study analyzed the factors affecting the acceptance of LMS education modules by University students. Factors like Performance expectancy, Effort expectancy, Attitude, Facilitating Conditions, Social Influence, and Behavioral Intention were tested for their validity utilizing the Unified Theory of Acceptance and Use of Technology (UTUAT) model. They used SPSS for reliability coefficients and explanatory factor analysis and Structural Equation Modeling (SEM) approach for confirmatory factor analysis (CFA)

on sample data collected from first year university students. the findings implicate that students' perception of the performance expectancy is crucial in fostering their behavioral intention to accept and use of technology, similar to prior findings that the strongest driver of technology use is perceived usefulness. They also stated that Students' intentions to use the ICT-enabled LMS modules need to be further researched using other variable factors affecting the perceived usefulness by students and adaptability of technological advancements by the students and instructors.

Costello P. and Moreton R. (2009) studied the adoption of Information Communication Technology (ICT) by the Small and Medium-scale enterprises (SMEs). They applied the Diffusion of Innovation Theory and Technology Acceptance Model to the data collected from 200 SMEs, whose core business was ICT. The research studied the technological adaptability issues and the required skills by SMEs to engage positively in the business community, increasing productivity. The research involved the analysis of Government Initiatives for the Adoption of advanced technology by SMEs / EDI e-business and Internet Adoption Models, Methodology, and Development of a new Model.

Timothy Teo (2008) conducted a study to identify the attitudes of computer usage and adaptability by Pre Service Teachers, in educational institutes involving computer education systems. The attributes /factors studied were focused on the usage of computers in education delivery. Four factors: affect (liking), perceived usefulness, perceived control, and behavioral intention to use the computer, by the pre-service teachers, were analyzed to examine the pre-service teacher's readiness and effectiveness towards using computer-based education delivery. In their study, they suggested that there is a need for teacher educators to provide a conducive and non-threatening environment for pre-service teachers to experience success in using the computers, intending to allow pre-service teachers to gain competence and confidence in using computers for teaching and learning. This study provides a glimpse of selected variables that affect the computer attitudes of pre-service teachers. Future research may include a comparison of the results of this study against a larger sample using a longitudinal design to examine computer attitudes over time. Other variables could be added to examine their impact on computer attitudes.

Numerous studies have been done on the factors influencing the adoption of technology in organizations but from the user's perspective. But need for study from the organization's perspective towards consistent use is still lacking and the need for research from the organization's owner's perspective is thus required.

## Research Methodology

Research Method: Online survey method was employed to collect data for this study, taking the benefit of its cost and time-effective nature as well as manageable efforts of its collection.

Population: There are numerous higher education institutes HEIs in Madhya Pradesh which include universities, medical colleges degree colleges, nursing colleges, engineering colleges, pharmacy colleges, management colleges, law colleges etc. As per the All India Survey on Higher Education, a total of 2124 colleges (including government, government-aided, private), 314 stand-alone institutions, and 52 universities are located in Madhya Pradesh.

Respondents were representatives of Indian higher educational institutes (HEIs) to know the consistency in technology adoption of online teaching from an organizational perspective, and the unit of observation was the individuals who were working as Heads (Director) and earned a minimum of three years of experience. This selection of seniors was selected because they remain well-informed about the organization's strategies and decisions such as adopting new technology.

Madhya Pradesh is a central state and its major cities Indore, Bhopal, Gwalior, and Jabalpur, all together, can all be taken as its representatives. In these cities, we approached Higher Education Institutes to find out whether they have used technology i.e. online teaching process during Covid 19 pandemic time, and continuing its use or not. They were asked about different aspects of TOE framework to identify the most influential factor in the adoption and usage of technology-based teaching.

**Sample and Sample Size:** Samples were taken using purposive non-probability sampling techniques, as those owners or directors of institutes, both Govt. and private, were taken under study who agreed to respond and fit into criteria. A total of 213 HEIs agreed to respond and among them, 162 were those who used technology-based teaching processes during COVID-19 and many of them continued it during regular courses even after the pandemic. Out of 162 only 107 HEI's Directors (Head) completely filled our questionnaire. Data of these respondents were then analyzed for the result.

**Data collection and measurement of variables:** A structured questionnaire was designed based on TOE theory, to identify factors that impact this motivation of consistent use of technology in teaching. The variables were measured on a 5-point Likert-type scale from 1- completely disagree, to 5- completely agree, with respondents having to indicate their degree of agreement with the statements presented. Completely filled questionnaires were first checked for their understandability and reliability by two Directors, one Private and one Government HEI, and two research experts from the education field. This was carried out from 16 May 2022 to 15 June 2022, aiming to identify any failure to understand the questions and their main purpose, issues with interpretation, or any improvements that needed to be done. The suggestions proposed by the respondents were considered and incorporated in the questionnaire. The revised final format of the questionnaire was then sent to the email ID of the Directors (Heads), also shared on their WhatsApp number. A brief note on the purpose of the study was also shared with them. Around 15 October 2022, we stopped collecting the filled questionnaire and decided to take one hundred and seven (107) completely filled questionnaires received so far, for analysis.

## Theoretical Background

This research is based on Technology-Organization-Environment (TOE) framework, created by Tornatzky and Fleisher (1990). TOE framework identifies three aspects, namely the technological, organizational, and environmental contexts that affect an HEI in implementing, adopting, and making consistent use of technology based concepts like online teaching. By using the TOE framework, it can be identified which factors play a vital role in motivating HEI to use technology in the teaching process consistently. Therefore, three aspects of the TOE are introduced to suggest influential factors that could be beneficial to higher educational institutions.

The determinants of variables under the TOE framework include:

I) **Technology factor (TF):** this dimension is measured by finding i) the perception of comparative advantage of technology usage, ii) complexities involved in its usage, and iii) identifying whether the key personnel can assess the benefits of adopting the online teaching method. II) **Organizational Factor (OF):** this factor refers to i) Education Culture comprised of Vision, mission, plans, and standards followed by top management, staff, and students ii) the support extended by the management committee members who take all crucial strategic decisions which are demonstrated by providing supportive regulations and decisions, ii) organizational readiness in terms of awareness related to its usage and skills, III) **Environmental Factor (EF):** this factor consists of environmental characteristics that surround the HEIs which includes affiliating bodies like UGC, AICTE, Government, society,

etc. and compliances. These stakeholders may either support or prevent technology adoption (Pudjianto, 2011).

### Statistical Methods

Statistical analysis was conducted by using factor analysis first which was performed to identify the most relevant determinant statements influencing the respective observed variable eigenvalue, the percentage of variance, and the cumulative percentage of variance. Then, a matrix of factor structure was made after Varimax rotation. This process confirmed the construct validity of the various factors. This result led to the identification of 7 variable groups (3 variable groups comprise the technology dimension, 2 variable groups comprise the organizational dimension, and 2 variable groups comprise the environmental dimension). In the second step, Cronbach's alpha analysis was calculated for each of the 7 variable groups within the technology, organization, and environmental dimensions. Since Cronbach's alpha values came to 0.971, this confirmed the reliability of the research.

### Result and Analysis

Demographic view:- Out of 107 HEIs, 27 universities (16 out total 25 Private and 11 out of 16 Government) and 80 colleges (52 Private and 28 Government). Almost all the different disciplines were covered for study like medical colleges, nursing colleges, pharmacy colleges, engineering colleges, law colleges, management colleges, etc

**Table 1: Demographic Profile**

Variable	Type	Frequency	Percentage
Experience	: <5 years	53	49.5
	5 years to 10 years	38	35.5
	More than 10 years	16	14.9
Ownership	Government	32	29.9
	Private	75	70
Respondent profile	Owner	45	42
	Employed: Director/HOD	62	57.9

**Source:** Data collected from HEI (Higher education Institutes) of M.P. India, compiled by Author

### Reliability Analysis

The reliability of the research instrument was measured with the help of the Cronbach Alpha method, which is a widely used method for reliability testing.

**Table 2: Reliability Analysis of Questionnaire**

Description	Alpha value	Number of statements
Questionnaire	0.971	28

**Source:** Data collected from HEI (Higher education Institutes) of M.P. India, compiled by Author

Interpretation: It was found that the alpha value for the questionnaire used for the individual telecom users was 0.971, which is near or close to one which shows that the questionnaire was reliable and there is a consistency in the responses of the respondents. Hence, the questionnaire can be used for further analysis.

## Factor Analysis

Exploratory factor analysis has been used to find out the relevant factors under three components using the Varimax rotation and the Principal component method in the study.

**Table 3: KMO and Bartlett's Test**

Kaiser-Meyer-Olkin (KMO) Value		.933
Bartlett's Test value	Chi-Square Value	43862.780
	Degree of Freedom	990
	p-value	.000

**Source:** Data collected from HEI (Higher education Institutes) of M.P. India, compiled by Author

Interpretation: The above data shows the results of KMO and Bartlett's test. The value of the KMO test was 0.933, which shows that the data is adequate for applying factor analysis and the number of variables is adequate along with the sample size (Fabrigaret al., 1999). Similarly; the value of Bartlett's test was found to be significant as the value of chi-square was 43862.78 at a p-value of 0.000, which shows that there is an unequal variance in the sample used for factor analysis

**Table 4: Total Variance Explained**

Comp.	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% Variance	Cumulative % of Variance	Total	% Variance	Cumulative % of Variance	Total	% Variance	Cumulative % of Variance
1	20.050	44.555	44.555	20.050	44.555	44.555	9.019	20.042	20.042
2	6.185	13.745	58.300	6.185	13.745	58.300	6.405	14.232	34.275
3	4.063	9.029	67.329	4.063	9.029	67.329	6.063	13.473	47.747
4	3.161	7.025	74.354	3.161	7.025	74.354	5.319	11.821	59.568
5	2.189	4.865	79.219	2.189	4.865	79.219	5.296	11.768	71.336
6	1.983	4.406	83.625	1.983	4.406	83.625	3.608	8.019	79.355
7	1.621	3.602	87.227	1.621	3.602	87.227	3.543	7.872	87.227
8	.465	1.033	88.260						

**Source:** Data collected from HEI (Higher education Institutes) of M.P. India, compiled by Author

Interpretation: Eigenvalues and the variance table show that there are a total of seven factors whose eigenvalues are more than one, hence total factors extracted during the study were seven factors. The total variance explained by these seven factors was 87 percent and the rest of the 13 percent variance can be explained by other chance factors. The total variance explained by the first factor is 20.042 percent, the second factor explains the variance of 14.232 percent, variance explained by the third, fourth, fifth, and sixth factors was 13.473, 11.821, 11.768, and 8.019 percent respectively. The lowest percentage of variance was explained by the last factor which was 7.872 percent.

**Table 5: Factors Loadings using Varimax Rotation**

S. No.	Description	Factor Loadings
<b>Factor 1: Technology Usage Factor TF1</b>		
TF1_1	Using Technology in your institute/department can help you to save cost and time.	.915
TF1_2	The cost-effectiveness of online teaching is higher than that of other mode of teaching.	.903
TF1_3	The use of online teaching helps you make better. quick and correct decision.	.900
TF1_4	The use of online teaching enables faster execution of actions and decision-making.	.900
TF1_5	Online teaching method simplifies the administrative tasks of an institute making most of the information available on a digital platform	.892
TF1_6	The use of online mode allows you to have better control over the business.	.890
<b>Factor 2: Complexities with the usage of Technology</b>		
TF2_1	Understanding and working with Online Teaching System is complex and requires certain ICT skills.	.809
TF2_2	Implementation and introduction of an Online Teaching System is difficult.	.806
TF2_3	Online Teaching System requires user training for its effective use.	.797
TF2_4	As Online Teaching System usage is complex it attracts primary resistance to its introduction.	.786
<b>Factor 3: Assessment by Key Personnel</b>		
TF3_1	The return of investment in implementing an Online Teaching System is known to key personnel.	.879
TF3_2	Key personnel clearly understand the importance of implementation of the Online Teaching System.	.866
TF3_3	The market value and existence of the Online Teaching System are known to Key Personnel.	.857
TF3_4	Key Personnel evaluate the importance of Online Teaching System usage in other organizations.	.849
<b>Factor 4: Management Support</b>		
OF1_1	Implementation of the Online Teaching System is well supported by the Management Committee	.860
OF1_2	Management Committee formulates the strategy for working with Online Teaching System	.849
OF1_3	The risks involved in implementing the Online Teaching System are known to Management Committee and they are ready to go with them.	.836
OF1_4	The Online Teaching System implementation in the organization is given strong backing by Management Committee personnel by highlighting its importance.	.828
OF1_5	Personnel at the Management Committee strongly advocate the importance and benefits of Online Teaching System adoption in the organization.	.821
<b>Factor 5: Organizational Readiness</b>		
OF2_1	Management Committee and all users (teaching, non-teaching staff, and students) in the organization are aware of the usage of the Online Teaching System.	.892
OF2_2	Online Teaching System is well understood by the faculties and students both, in the organization.	.886
OF2_3	Management Committee and all users (teaching, non-teaching staff, and students) have the required technical and managerial skills for using the Online Teaching System.	.850
OF2_4	The organization is well equipped with the required financial and technological resources for effective implementation of the Online Teaching System.	.789
<b>Factor 6: Competitive Pressure</b>		
EF1_1	The competition in the education sector brings pressure to adopt the latest means of teaching	.887

S. No.	Description	Factor Loadings
EF1_2	To maintain a competitive advantage in the sector, we have adopted a digital mode of teaching	.873
EF1_3	Organization have knowledge that most of the competitors in the market are already using Online Teaching Systems.	.847
<b>Factor 7: Compliances</b>		
EF2_1	The organization knows that the adoption of technology-based teaching is a part of the requirements for accreditations like NAAC, NBA	.902
EF2_2	To fulfill the AICTE and UGC requirements, organizations have to keep the provisions of technology-based teaching.	.900

**Source:** Data collected from HEI (Higher education Institutes) of M.P. India, compiled by Author

Interpretation: There are a total of seven factors that represents, seven major factors influencing technology adoption in HEIs. The first factor represented by six statements, all related to technology usage advantage, Second factor represented by four statements reflects the related complexities with the online teaching system, Third factor is related to assessment of online teaching system by Key personnel and comprises total four statements all shows the realization of importance of system by key personnel's like Directors, HODs, faculties etc, Fourth factor is related to the management support which include support from committee members who takes all major policy related decisions and includes five statements, Fifth factor is related to the Organization readiness; it includes four statements which shows to what extent all the stakeholders are prepared to accept and use this mode of teaching and this factor have four statements, Sixth factor is related to the competitive pressure which includes total three statements and all are related to the pressure to compete and prove one's excellence and Seventh factor includes two statements, one is related to the Compliances like NAAC, NBA, AICTE, UGC etc. as in today's time, accreditations like NAAC / NBA makes HEIs to stand in front line and other reflects the role of AICTE, UGC in motivating the institutes to use technology in teaching.

## Conclusion

The research study so carried found that Education entrepreneurs have strong realization of importance of technology in terms of cost, time and can achieve efficient working by making quick decisions and executing them timely and with effectiveness. Technology supports them to have better control over the working of their Institutes. Further, the majority of the respondents agreed that working with Technology is a bit complex and requires skills, training, and interest and all this creates initial resistance by its users. Further, the financial aspects matter a lot as they are directly responsible for its successful implementation. This all can be taken as overall benefits of technology considering its challenges, which is one of the dimensions of the TOE framework that influences Technology adoption. Our research study finds that being the owner or director of a HEI one has to realize the relative advantages, compatibility, and complexities associated with the technology so adopted for teaching.

Our research also found that the success of the adopted technology lies in its smart implementation. Members of the Management Committee, who play a key role in all strategic decisions themselves support it and formulate strategy such that it can be successfully implemented at the operational level. They understand the risk involved but strongly advocate its advantage. The reason may be that HEIs have redefined their vision and mission accordingly, looking to the need of time. There was acceptability found on the teaching, non-teaching, and student front. Appropriate skills were developed for its use which was well supported through financial and technical resources. These factors all together talk of the second factor of TOE ie organization.

Further, in our research study, the environment which is formed by the education regulatory bodies like AICTE and UGC under which all HEIs work, has a strong impact on its adoption of technology. Accreditations like NAAC and NBA further provide a platform to prove their excellence in the education sector and stand ahead of their competitors. This formed the third dimension of the TOE framework ie Environment.

We have seen that the above factors had sufficient loadings and thus found effective in studying the adoption of technology specifically in the education sector by education entrepreneurs.

### Limitation

One of the limitations of our research study is that a limited number of adoption factors have been empirically tested here. In reality, there can be more contextual variables and potential factors that can be explored. We recommend that future researchers explore further potential factors of technology adoption and test whether their effects vary in different contexts.

This study is limited to a standard sample size considering all the HEIs in a particular state however, further research can be carried out with sample data from different HEIs, post their classification on various factors based on Education Level (UG/PG), Stream/Disciplines (Science/Arts/Technical/Medical), Authority (Autonomous/Govt Aided/Govt Owned/Private). This will further enhance the study covering more specific dependent variables.

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