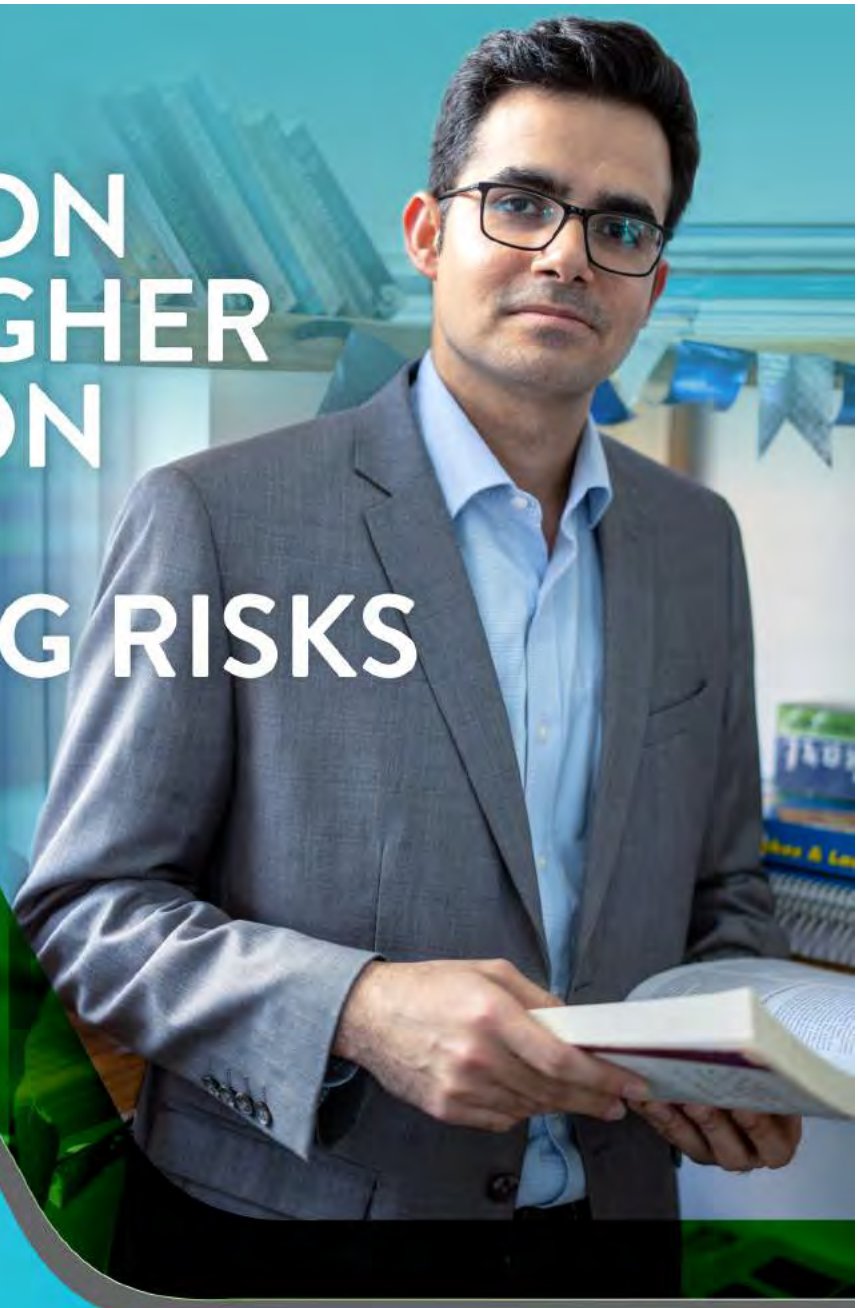
DISRUPTION IN THE HIGHER EDUCATION SECTOR- MANAGING RISKS



GRMI | GLOBAL RISK MANAGEMENT INSTITUTE

FICCI

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FOREWORD

FICCI

Risk management has assumed great significance in the global economic scenario and its landscape is evolving. Every organisation, industry, and economy around the world is confronting more risks than ever before. Risk professionals have before them a challenge to not only keep pace, but also think one step ahead in an attempt to foresee emerging risks and collaborate with business to build mitigation strategies.

The COVID-19 pandemic has changed the way students are educated around the world. The sector is experiencing an accelerated pace of change and has given us a glimpse of how education could change in the long term. It is extremely important for educational institutions to develop an "enterprise" approach to risk management as opposed to siloed plans that exist within specific divisions or units to deal with risks specific to their function or mission.

By adopting an "enterprise" approach to risk management, institutions can be more proactive and prepared and respond more effectively to issues, incidents, and crises. As the education sector continues to rapidly evolve, new risks will emerge, known risks will take new forms, and crises will inevitably unfold. Universities must be comfortable with a "new normal" of perpetual disruption.

Universities and institutions need to re-think on how to look at risk. While risk management has historically been confined to specific domains (compliance, internal audit, safety, insurance) and often managed in siloes, institutions today need to realise that their risk portfolio is inherently interconnected. Risk management will not only help improve decision-making, planning, and prioritisation, but also assist leadership to anticipate what may go wrong, thereby preventing a disaster or serious financial and/or reputational loss.

It is important to understand that institutions and universities will not have all the answers. Events and crises will occur. However, an effective risk-management ecosystem will largely ensure that the broader strategy of the institution is not affected by any unforeseen crisis.

The FICCI GRMI report 2021 has attempted to highlight the critical aspects of risk management with regard to the disruption and massive transformation of the higher education landscape. It has captured the good practices that are required for higher educational institutions and universities to build an ecosystem of resilience. The report has been developed based on the primary insights and reflections of several Indian higher education leaders and has thereby highlighted their "world view" on risk management. We hope the report is a good read for the stakeholders and helps them understand the significance of risk management in the higher education sector.



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FOREWORD

"The role of the higher education sector in India's sustainable economic and social development is undisputed. A key growth driver, it has grown leaps and bounds in recent years. And with the sector facing multi-dimensional disruption – technological, demographic, and the two-edged sword of a global pandemic – it is set for significant transformation.

In such a challenging environment, risk management is often an afterthought. But it shouldn't be. It is vital we understand the multi-dimensional disruption and evolving risks in higher education and focus on policy and governance reforms to create world-class institutions.

To this end, we are pleased to present the FICCI–GRMI 2021 report "Disruption in the higher education sector: Managing risks." The report sheds light on the spectrum of risks facing education institutions in the country, their risk awareness, and how best they can manage these risks.

With interesting insights from leading academicians and corporate risk leaders, we believe the report will be a tool to create value and achieve higher levels of performance for institutions.

Our findings highlight the need for a structured approach to integrate risk management into the core of strategy and operations of institutions. It is time to quickly transform the nature and delivery of the programmes our educational institutions offer, the mode of student assessment, and faculty competencies.

We find all stakeholders – educational institutions, faculty, regulators, corporates – will need to act resourcefully and decisively to build resilience and grow in a reframed risk landscape. They will also have to address the clear gap when it comes to managing student and industry expectations, adopting digital technologies, and collaborating internationally.

We trust this report will help all stakeholders understand how critical it is for them to be proactive, look through a risk lens, and use the right mitigation steps to win India the honour of being a top-notch hub for higher education.

We hope you enjoy reading this report. As always, we welcome your feedback and would love to continue the conversation on the subject."



Prof. Rajan Saxena
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GRMI



Prof. Madhu Vij
Academic Council Chair,
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OBJECTIVES AND INTENDED OUTCOMES OF RESEARCH

1. Identifying risk factors institutions face based on primary and secondary research exercises
2. Assessing how far the higher education sector is aware of the risks it is facing
3. Gauging what institutions are currently doing to manage those risks
4. Outlining risk-management best practices in higher education sectors across the world
5. Offering recommendations and proactive measures for improved risk management



RESEARCH SCOPE AND METHODOLOGY – SURVEY, INTERVIEWS, AND RESEARCH ANALYSIS



This research examines the state of higher education in India and different aspects of disruptions and risk factors facing higher education institutions. It also discusses the role of different stakeholders, including institutions, faculty, regulators, corporates, and the government, in managing disruptions through a structured approach and build a robust, forward-looking higher education sector in India.

As part of this research initiative, we have used both primary and secondary research methods to garner better insights, gauge the awareness of the sector around its risks, and come up with practical recommendations.

Primary research

A survey on the 'Disruption in India's higher education sector – Managing risks' was conducted by the Global Risk Management Institute (GRMI), Gurugram, in collaboration with the Federation of Indian Chambers of Commerce & Industry (FICCI) during January 2020. The survey questionnaire had 17 questions involving a mix of multiple choice and questions requiring ranking of various parameters. We received responses from 132 respondents in various academic roles, representing 120 educational institutions in India. To achieve relevant, purposeful results, the survey majorly targeted experienced leaders and senior faculty members of reputed educational institutions with exposure to different facets of risk management.

We also conducted interviews with senior academic leaders to get their perspectives on the disruption being witnessed by the higher education sector and how institutions are managing the risk factors. These interviews provided us with high-value insights and highlighted the practical nuances of various issues related to the major themes of the survey.

Secondary research

We used extensive secondary research methods to enhance the research paper including the use of various white papers, survey reports, newspaper articles, and websites relevant to the subject. There is a detailed list of references for all source materials we used to prepare this paper at the end of the report.

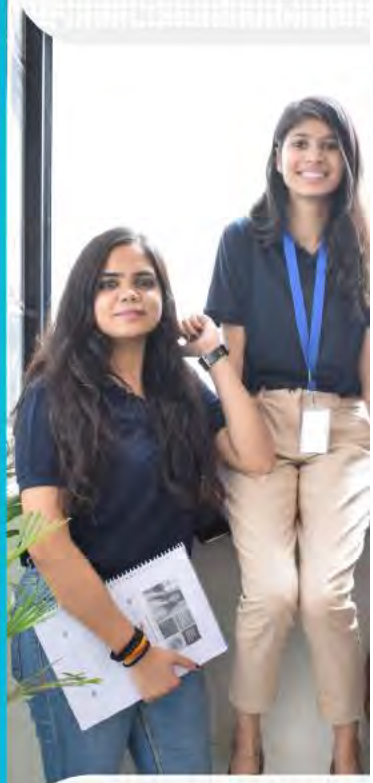
SUMMARY OF RESEARCH

PARTICIPANTS / RESPONDENTS

Out of the 132 respondents who participated in the survey, 36% were senior leaders of higher education institutions including vice chancellors, pro-vice chancellors, principals/ heads, deans, and directors. About 61% of the respondents were faculty members such as senior professors, professor, assistant or associate professors, and lecturers. The remaining 3% respondents comprised research fellows, marketing managers, and registrars.



CATEGORY	NUMBER OF RESPONDENTS
Vice chancellor	06
Pro-vice chancellor	02
Principal / Head 6	06
Dean	20
Director	14
Senior Professor	04
Professor	14
Assistant/ Associate Professor	60
Lecturer	02
Research fellow	02
Marketing manager	01
Registrar	01
TOTAL 132	132



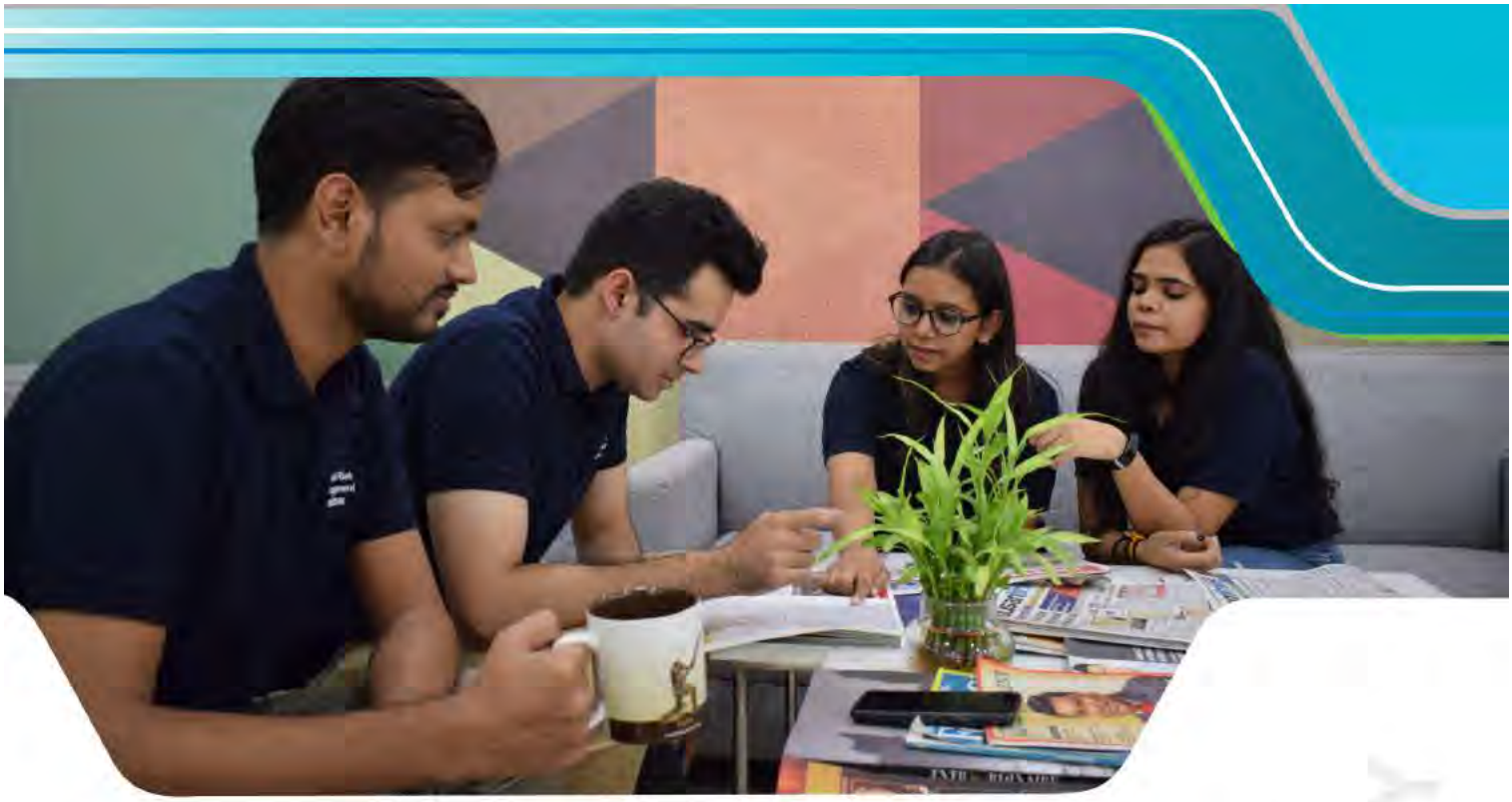


EXECUTIVE SUMMARY

India's higher education sector continues to be the key pillar for India's economic supremacy as it churns out business leaders, managers, entrepreneurs and skilled resources for tomorrow. The focus of the sector continues to be on providing superior quality best-in-class education in a fair, equitable and transparent environment. However, the sector is witnessing multi-dimensional disruption which has thrown open challenges for higher education institutions and the regulators. If the impact of disruptions in Technology and Demographics were not enough, the Covid-19 induced lockdowns and health risks further only accentuated the disruptions. The sector got exposed to severe risk factors be it with respect to digital infrastructure, faculty, students, curriculum, pedagogy or regulations.

Leveraging digital tools and technologies be it for conducting sessions, running assessments, student communications and engagement or preserving data systematically had already been a key differentiator for higher education institutions. However, the disruption only got accelerated by the pandemic as students, faculty members and management were left with no other options but to resort to digital mode for continuity of operations. The preparedness of India to embrace the technology disruption was exposed as digital infrastructure and connectivity made it difficult for both teachers and students to enjoy a seamless learning experience. Conducting fair and effective online assessments emerged as one of the biggest challenges for institutions as use of unfair means by students got easier in the absence of safe and secure AI enabled platforms to run assessments. On one hand institutions dealt with the disciplinary issues of poor attendance and students turning off videos, but on the other hand they were also concerned with the mental health of students, low attention span of students and the limited student-faculty inter-personal engagement. Risk of cyber-attacks, compromise of intellectual property and infringement of copyrights in the digital mode also continued to baffle institutions.

However, the sudden transition to digital mode also expedited adoption of concept of blended learning and flipped classroom which are not new concepts but could never become a norm earlier. The disruption also made case for adoption of learning management systems to enable enhanced learning experience, evaluation and student engagement. The multi-dimensional disruption also led to opening up of minds and the art of possibility as institutions saw collaborations with international universities, faculty and corporate leaders through online seminars, webinars, conference and guest lectures which one could not have imagined earlier. The perception towards online degree programmes and digital learning has also seen a significant transformation. This on one hand may have downward pressure on cost of higher education, but on the other hands opens up a new door for institutions to working professionals who could pursue online degree programmes because of its acceptability now by corporates.



The Indian higher education sector also witnessed a re-shaping of expectations of students, parents from the institutions. With penetration of internet and access to public information, the students and parents are getting more and more placement oriented and expectations from the institutions are increasing. Institutions are facing a challenge to transform its offering of delivering knowledge to one of delivering skill sets learning. Hence, institutions need right set of measures and enhancements to the faculty group who are the key catalyst for the higher education sector to successfully embrace the disruptions. Corporates also have a partnering role to play to support in the process to impart practical industry knowledge to students. In a way, the disruption is a blessing for institutions as they are being pushed to re-think, redesign their curriculum and pedagogy, making it industry relevant, use digital tools to differentiate the offerings and get better equipped to improve the student learning and experience.

The disruption caused by Covid-19 also exposed the financial risks faced by the institutions in India. Huge dependency on student fee to meet cost commitments, liquidity risk, credit risk, falling student enrolments and capital management issues grappled the institutions. This financial disruption is at a time when Indian institutions need significant investments to be made to enhance the digital infrastructure and tool licences. The Research infrastructure which was already in poor state is at the risk of further taking a back seat unless corporates and the government make the much needed investments to fund the research capacities at institutions..

As institutions deal with the disruption, their ability to leverage technology, innovate and re-design offerings will be instrumental in defining their reputation and acceptance amongst students and corporates. Inability to deal with the disruption brings with it the risk of poor placements, faculty attrition and student issues which can have a significant bearing on the reputation of the institution.

The regulator also has a key role to play to provide the right quantum of autonomy and flexibility to institutions and facilitate the transformation and at the same time give direction, framework, supervision and be a mentor to institutions. Needless to say Government also has a critical role to play and the NEP 2020 is a huge step in the right direction be it in terms of its vision for multi-disciplinary institutions, autonomy to institutions, research capacities, flexibility of curriculum or professional development of faculty. However, the key to success of the sector will be on the implementation of the vision.

The multi-dimensional disruption is certainly a double edged sword for the higher education sector, but a joint effort by the institutions, faculty, corporates, regulators and the government to take a structured approach to addressing the risk factors and disruptive challenges can pave way for creation of world class institutions in India over the next decade.

AN OVERVIEW OF THE INDIAN HIGHER EDUCATION SECTOR

Higher education is a pivotal contributor to a nation's development through dissemination of specialized knowledge and skill sets. Being at the apex of the educational pyramid, it also plays a crucial role in producing quality teachers for the education system.

According to the 2018-19 All India Survey on Higher Education (AISHE), there were 993 universities, 39,931 colleges, and 10,725 stand-alone institutions in India.[Refer figures 1.1 and 1.2 for category distribution of universities and colleges.

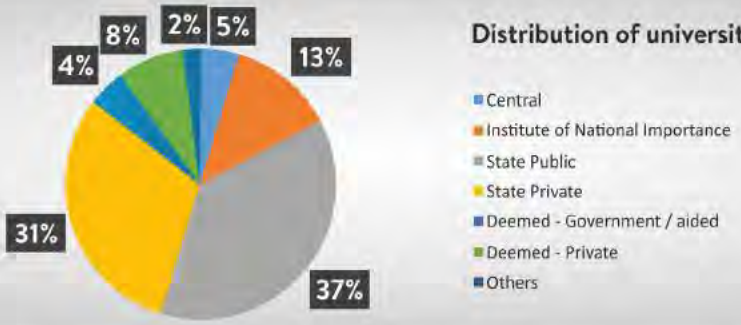


Figure 1.1



Figure 1.2

The density of institutions in India, that is, the number of colleges per lakh of eligible population (age group 18-23 years) varies from 7 in Bihar to 53 in Karnataka compared to the all-India average of 28. 60. About 53% of the colleges are in rural areas, while 11.04% of all colleges are exclusively for female students.

The survey reports the total enrolment in higher education to be around 37.4 million, out of which 48.6% are female. Gross enrolment ratio (GER) in higher education in India is 26.3%, which is calculated for the age group 18-23 years. The total number of teachers in India are 1.42 million and the Pupil-Teacher Ratio (PTR) stands at 29.

Out of the total higher-education enrolments, about 79.8% of the students are enrolled in undergraduate level programmes[Refer figure 1.3]and less than 0.5% are enrolled forPh.D. At undergraduate level, 35.9% of enrolments are in Arts/ Humanities/ Social Science courses, followed by 16.5% in Science, 14.1% in Commerce, and 13.5% in Engineering and Technology [Refer figure 1.4]. Overall, only 10% programmes cover more than 80% of the total students in higher education.

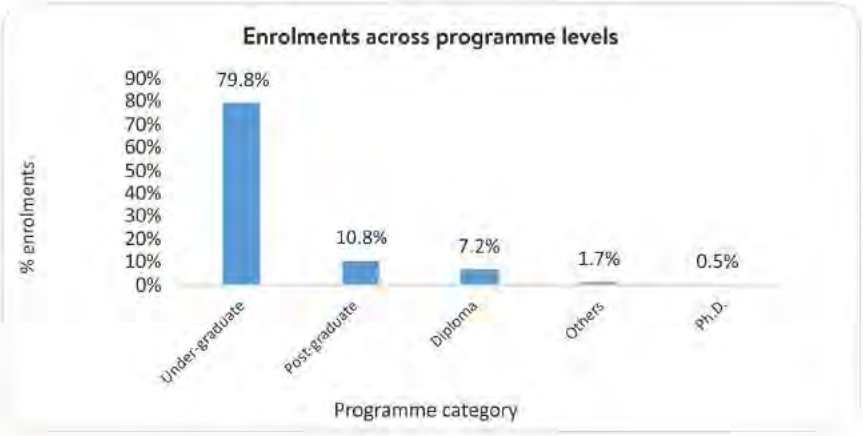


Figure 1.3

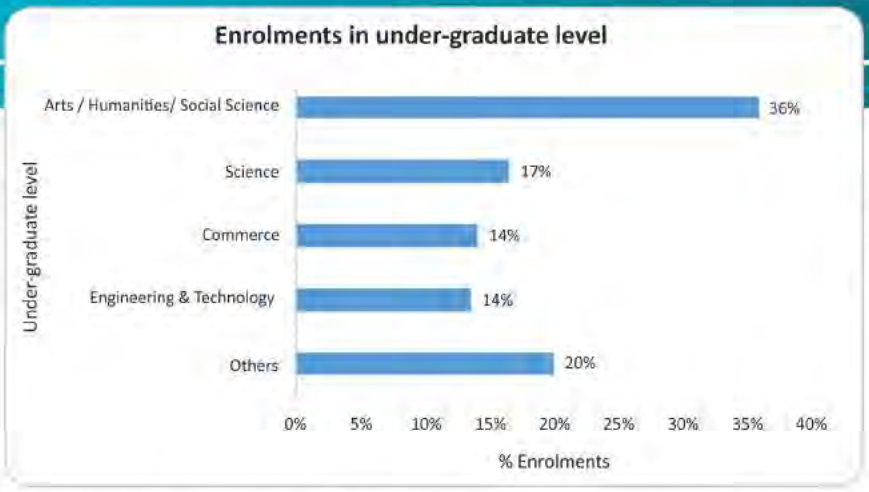


Figure 1.4

India is ready for the massive expansion of its higher education sector. The current GER of 26.3% is expected to grow to 50% by 2035 according to an NEP 2019 projection.

The NEP 2020 also envisions an Indian higher education sector with large, vibrant multi-disciplinary institutions. The current 993 universities and 39,931 colleges maybe consolidated into 15,000 large, well-resourced vibrant institutions with teaching programmes across disciplines and fields. It also envisages an imaginative and broad-based liberal undergraduate education with rigorous specialisation in chosen disciplines and fields and a flexible curriculum structure.

India has the potential to emerge as a top destination for global universities, considering the size of its youth population and the country's exciting growth prospects. By using the latest digital technologies, innovative pedagogy, and enhanced corporate engagement, India can attract students from the global market and climb up the global ranking lists.

DISRUPTORS IN THE INDIAN HIGHER EDUCATION SECTOR

The Indian higher education sector has been witnessing a raft of changes over the last few years, and the pandemic has only accelerated their disruptive impact on institutions. The sector has to not only deal with technological, demographical and financial disruptions but also has to address regulatory, governance,and student and faculty issues that may otherwise have a significant bearing on the reputation of institutions.

Here are the six major types of risks facing India's higher education institutions:

- **Technology risks** – Institutions are tackling several challenges as they adopt and deploy digital tools and technologies for learning, assessments, communications, engagement and data management.
- **Demographic risks** – The sector is under pressure from the evolving expectations of students and parents in the Internet Age. Institutions are expected to offer top-quality learning programmes that will set students up for success in the future.
- **Reputation risks** – Every higher education institution works towards building a stellar reputation. But poor digital adoption, campus placements, student learning and experience, high faculty attrition, financial instability and student in discipline can be major barriers to overcome.
- **Regulatory, compliance and legal risks** – Being a highly regulated sector, higher education institutes are at risk of having limited flexibility to customise, innovate, and adapt. To address changing student expectations and create better learning experiences, they have to offer the right faculty, curriculum, and assessments.
- **Financial risks** – The pandemic has led to serious financial risks for the higher education sector in the form liquidity risk, credit risk, falling student enrolment, and more.
- **Operational risks** – Higher education institutions deal with several issues related to student engagement and experience, faculty evaluation, faculty motivation, and physical and digital infrastructure maintenance on an ongoing basis.





TECHNOLOGICAL DISRUPTORS AND RISK FACTORS

Across sectors, technology has become a critical differentiator and disruptor with data as its supporting pillar. In education too, technology is now a major facilitator and tool for institutes to deliver knowledge and become more performance centric. Accelerated by the pandemic, this transformation has been further enabled by wider smartphone penetration and low-cost data which are revolutionising learning methods.

1. CHALLENGES TO TRANSITIONING TO ONLINE TEACHING FOR INSTITUTIONS AND FACULTY

Proctoring online assessments is the biggest challenges to online learning according to our survey while training the faculty/staff seems to the least daunting. The 132 respondents assigned scores to various challenge factors on a scale of 1 to 5; with 5 being 'most severe' and 1 being 'least severe. The risk scores were added up to compute the total score for each factor on a base of 132 respondents and are shown in figure 2.1. Higher the total score, more severe the challenge.

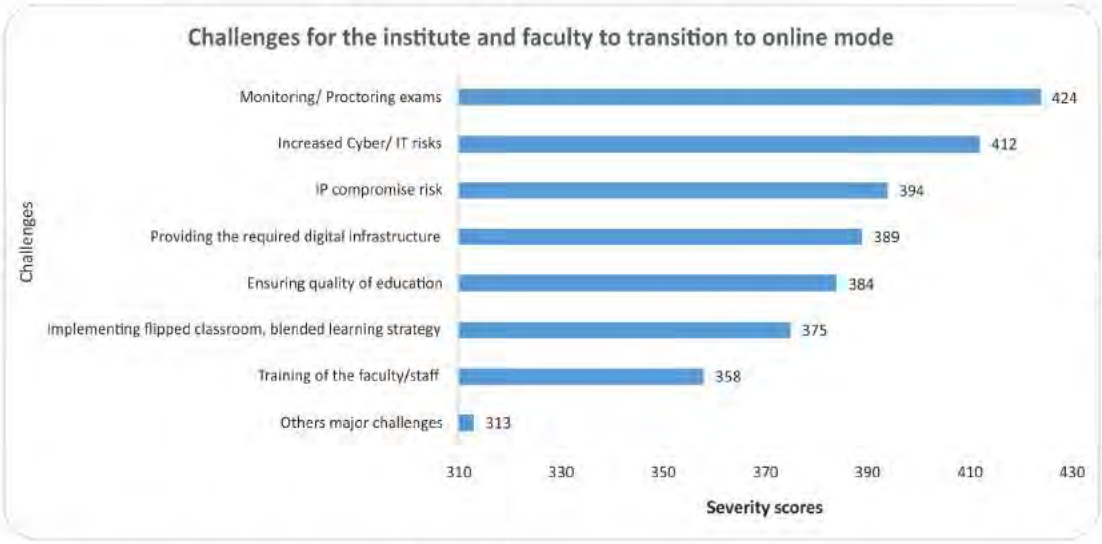


Figure 2.1

a. Ineffective monitoring and proctoring of examinations

Proctoring examinations and assessments stood out as the biggest challenge as institutions transitioned to the online mode. There were multiple reported instances of institutions struggling to effectively monitor the exams and student bypassing the system and using the internet to do better. Even third-party online examination tools were not adequately secure and also came at a significant additional cost for institutions.

Institutions did try to manage the issue by designing question papers and assessments that required students to answer more analytical and application-based questions, so they could gain little copying from external sources. Institutions also need to run mandatory plagiarism checks on all answer scripts and try AI-monitored webcams that continuously analyse students' behaviour to weed out unfair means.



Example - Several Mumbai University students scored exceptionally high when tests were conducted online. Until 2019, the pass percentages ranged from 60-70 percent for most courses. There has been a significant spike in the performance of students in 2020 and allegations of academic dishonesty have been made.

b. Lack of infrastructure and preparedness

Respondents believed a lack of digital infrastructure was one of the major challenges. The pandemic has higher education institutions scrambling to ensure online sessions go on without a hitch. But infrastructure and connectivity issues made it difficult for both teachers and students to enjoy a seamless experience. For instance, erratic power supply and poor internet connectivity in rural or high-terrain areas during the lockdown have interrupted the rhythm of online learning.

Students couldn't keep the video on during the sessions which further limited engagement and effectiveness. Institutions did resort to tools which require minimum bandwidth, but then they had to compromise on the safety features of a particular tool. There needs to be significant investment into building the digital infrastructure in the country to ensure proper connectivity and bandwidth. The government has recently announced setting up a National Digital Educational Architecture (NDEAR) to build digital infrastructure for education institutions, which may help in the cause.

Availability of laptops or digital devices to attend or run classes online was also a challenge for students and faculty members specially in non-urban areas. Students either could not attend sessions regularly or attended on mobile phones which limited the effectiveness of learning.

Institutions should work towards enhancing their digital libraries and data sources to make the learning process better. As we go digital, institutions will need to promote the use of e-articles, e-books, and other electronic content in the student library, however, at the same time they would have to restrict read/ download access as required.



Prof. Alok Mohan Sherry - Professor, Arun Jaitley National Institute of Financial Management, Faridabad

"There is an urgent requirement of capacity building, digital resource creation and sharing, dynamic pedagogy, and training of teachers to upscale their technological skill sets to embrace digital tools including AV tools, design delivery content per the requirements of the target-student audience in addition to continuously improving to keep abreast with contemporary tools used in the knowledge sector."

c. Rising risk of cyber-attacks

Another major challenge institutions have had to deal with is the risk of cyber-attacks given institutions suddenly transitioned to the new platforms without considerations and evaluation of data safety and security on the platforms. The intellectual property of the institutions including study material, case studies, articles, and confidential data lying on digital platforms and servers is vulnerable to theft during a potential cyber-attack.

Institutions must get dedicated cyber experts to evaluate the risk on the platforms and their students and implement security and safety controls.

Examples:
In September 2020, Newcastle University and Northumbria faced cyber-attacks. They were 'ransomware' incidents that blocked access to computer systems.

Michigan State University, University of California, San Francisco, and Columbia College, Chicago, were all targeted by hackers in 2020 using malicious software known as NetWalker and given a deadline of six days to pay.



Prof. T Sasipraba - Vice Chancellor at Sathyabama Institute of Science & Technology, Chennai

"Digital Platforms, online library, access to Journals, online certification programs have given more exposure to students which in turn has increased their knowledge base and inquisitiveness. To cope with the expectation of students, faculty members have also started investing time in upskilling their knowledge and equipping themselves with skills by attending online programs and domestic and international conferences. However, technology though a boom, can act as a predator to intellectual property and confidential data. Cyber hackers can track, steal, and sell data and also disrupt the operations and functioning of the institution. But since the dependency on technology has heightened, the government should come up with stringent policies to protect institutions, who in turn should also invest in strong and secure cyber security mechanisms to protect against potential cyber breaches."

d. Risk of compromise to intellectual property

Respondents also believed compromises to intellectual property was also a major risk. Institutions were having to share course material and case studies in digital models, while faculty members were also required to deliver pre-recorded lectures and worried about students recording their online classes. Hence, in online mode, faculty members also tend to be unoriginal and defensive in their lecture delivery, which takes away the uniqueness and creativity of examples they use.

e. Risk of copyright infringement

According to the Indian Copyright Act of1957, reproduction of any work by a teacher or a pupil in the course of instruction shall not be an act of copyright infringement. But it is not clear whether online teaching will fall within the ambit of the fair dealing provisions on education enumerated in the Act. Also, whether pre-recorded video modules (that contain third-party copyrighted material) uploaded on a digital platform can be treated the same as face-to face class room teaching remains in question.

What is also not clear is whether university libraries can claim protection under the fair dealing provisions if they upload a digital copy of the textbooks available in the physical library. Institutions could unintentionally end up infringing copyrights of other third parties or publishers. As we embark on this journey of digital transformation, one needs clarity and confidence on the usage of data in the digital mode. And the onus is on policymakers to address this issue through thorough debates and eventually redraw the contours of exceptions dealing with educational fair dealing and the rights of the copyright holder.

2. CHALLENGES TO CONDUCTING ONLINE ASSESSMENTS

As institutions were forced to embrace digital platforms and technology in early 2020, one of the major challenges undoubtedly was conducting online assessments effectively on digital platforms. The respondents identified the key challenges they encountered in conducting online assessments [Refer figure 2.2]

132 respondents assigned scores to various challenge factors on a scale of 1 to 5, with 5 being 'most severe' and 1 being 'least severe'. The risk scores were added up to compute the total score for each factor on a base of 132 respondents and are shown in figure 2.2. Higher the total score, more severe the challenge.

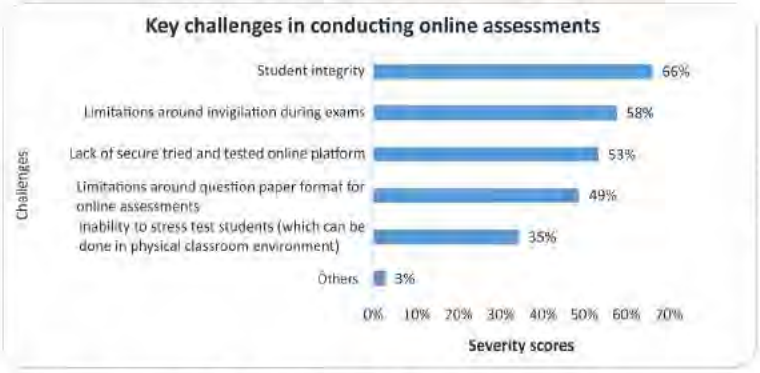


Figure 2.2

a. Impact of technology disruption - Putting integrity to test during online assessments
Based on responses from senior academicians, it was noted that 66% of the respondents believed behavioural and integrity issues were the key challenge in enabling effective and impartial assessments. The disruption put the integrity of students to test in ways it never had before by forcing examination to happen in a digital environment – which is likely to be less controlled and ripe for cheating.

b. Impact of technology disruption - Rendering invigilation less effective
About 58% of senior academicians we surveyed believed there were limitations around the effectiveness of the invigilation process during online examinations. Faculty had limited control around activities of the students sitting at home beyond what is visible in the online videos. As a result, their ability to conduct impartial assessments was limited.

c. Impact of technology disruption - Redesigning assessment methods and question papers
Limitations around setting a question paper effectively was a challenge said 49% of the respondents. It is very convenient for students to refer traditional questions on the internet and answer them in online exams. So, teachers need to be creative and think out-of-the box to create question papers where students have to apply logical and analytical thinking, limiting the possibility of students finding answers from external sources.

3. CHALLENGES TO TRANSITIONING TO ONLINE LEARNING FOR STUDENTS

132 respondents assigned scores to various challenge factors on a scale of 1 to 5, with 5 being 'most severe' and 1 being 'least severe'. The risk scores were added up to compute the total score for each factor on a base of 132 respondents and are shown in figure 2.3. Higher the total score, more severe the challenge.
While we saw what faculty and institutions considered major barriers to shifting to an online mode, here we discuss the student's perspective. Network connectivity and internet bandwidth continued to be one of the main challenges to effective communication and engagement between students and faculty members [Refer figure 2.3].

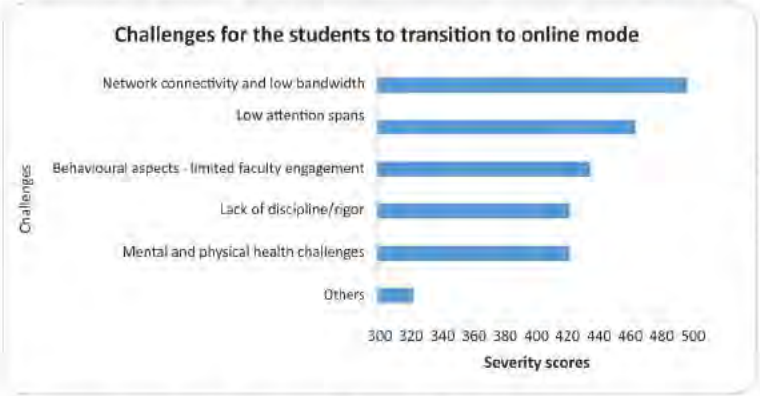


Figure 2.3

a. Impact of technology disruption - Mental and physical well-being of students
One of the biggest challenges for students was to maintain their well-being during online learning. There were instances of students infected with COVID-19 having to take a break from classes.

With students forced to stay indoors and take all their classes online, their mental well-being took a hit. Students were feeling the strain of long hours spent sitting in front of their computers to attend classes remotely. And the limited engagement among students and faculty members has had a negative impact as well. Also, students had to deal with myriad distractions at home which reduced their attention span.

Institutions curtailed the duration of online classes to partly address the issue. The combination of the online classes and restricted physical movement due to COVID-19-induced lockdowns had a significant impact on students' mental and physical well-being.

Institutions need to provide counselling and holistic support for students who need help to deal with the pandemic's consequences. A buddy or mentor programme would also help wherein every new student joining the institution is assigned a senior who could act as a mentor or a one-stop solution for the newcomer.

b. Impact of technology disruption - Inability to maintain discipline and attendance rigor
As figure 2.3 shows, a lack of discipline and rigor was one of the factors hampering a successful transition to a digital learning environment. Many students were irregular in their attendance, showed very limited participation in class, and kept their videos switched off – making it more difficult to track and maintain the class rigor.

c. Impact of technology disruption - Limited engagement with faculty
Limited face-to-face interaction also limited opportunities for students to engage with faculty in online sessions. Our survey found it was one of the key challenges students faced as learning shifted online. The faculty also found difficult to develop the interpersonal bonding with the students which typically helps in the learning process.

Dr. Sekar Viswanathan – Vice President, Vellore Institute of Technology



"In the current online education mode, student engagement has come across as the biggest challenge, apart from financial constraints and infrastructure constraints. Disruption caused by a friendly home environment, an uncontrolled atmosphere, absence of physical faculty guidance at laboratories, online project work, inadequate team engagement activities have compromised the quality of education. And this has major repercussions on the soft skill and interpersonal development of students.

Having said that, the online mode has given a boost to corporate relationships and international collaborations with universities and faculties across the globe. The option of an online mode of interaction for a prolonged period of time has broadened the mindset and scope of engagement across. Cross-border interactions, meetings, interviews, and conferences involving senior academia and corporate leaders have significantly improved, both in terms of quality and quantity. This has significantly reduced logistical challenges and removed demographic barriers to the betterment of both institutions and students."

4. IMPACT OF TECHNOLOGY DISRUPTION - EXPEDITED ADOPTION OF FLIPPED CLASSROOMS

The concept of flipped classroom, a form of blended learning, has existed for decades, but the disruption has fast-tracked its adoption. The flipped classroom allows for deeper understanding, more engagement with faculty, and more opportunities for one-on-one interaction and collaboration. It is an innovate style for engaging experiential learning where classroom time is devoted to hands-on activities and interactive learning.

5. IMPACT OF TECHNOLOGY DISRUPTION - PRESSURE ON THE COST OF HIGHER EDUCATION AND INCREASE IN COMPETITION

Institutions have started delivering programmes online or through a blended model, and there is increased acceptance for such programmes. This may result in a downward pressure on the cost of education. Students taking more of their classes online may not be willing to pay the same tuition fee they would otherwise have been willing to when taking classes in person. Competition among institutions increasingly embracing online education may also increase, which could affect the pricing of learning programmes too.

6. IMPACT OF TECHNOLOGY DISRUPTION - POSSIBLE ACCELERATION IN GER IN HIGHER EDUCATION

With greater acceptance of online under-graduate and post-graduate programmes among students, parents, and faculty, there may be an opening of doors for working students or professionals to sign up for degree programmes. Travel constraints due to geographical location or not being able to commit to a full-time course are no longer barriers to learning.

7. IMPACT OF TECHNOLOGY DISRUPTION - BRIDGING THE DEMOGRAPHICAL LANGUAGE BARRIERS

Institutions need to consider using digital language neutralisation technology to be able to make content and lectures available in regional or international languages. Eliminating the language divide in education will encourage sharing of knowledge and best practices among students, faculty, and institutions.



8. IMPACT OF TECHNOLOGY DISRUPTION - HYBRID LEARNING MODELS TO STAY

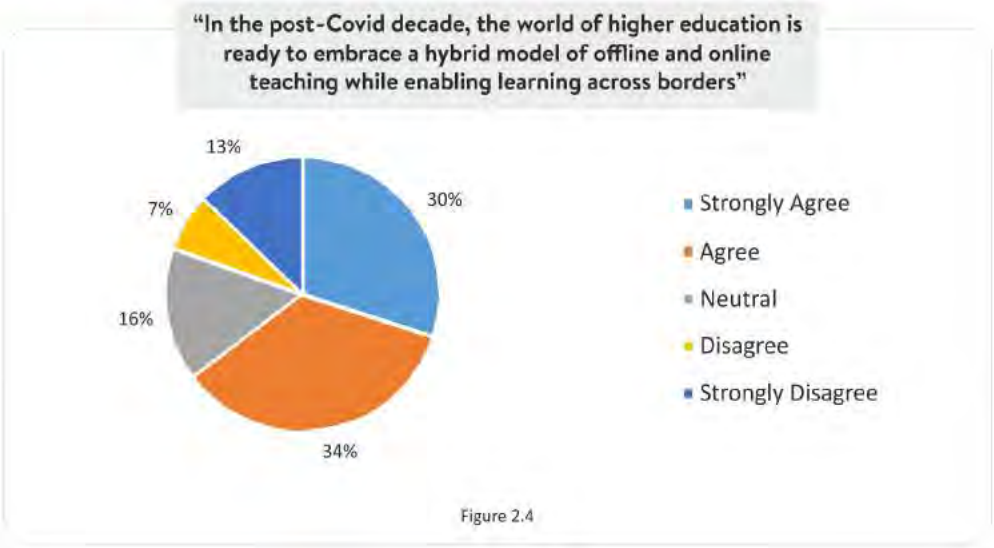


Figure 2.4

At the onset of COVID-19 pandemic, higher education institutions were forced to suddenly resort to online model of delivery and subsequently to a hybrid model as lockdowns started easing. A year ago, one could not imagine teaching under an online or a hybrid model, but the sudden disruption forced the stakeholders to embrace the change and adopt new ways.

Based on the survey response, 64% respondents agreed that the hybrid model of education is here to stay in the post-COVID world. Only 20% respondents did not believe the model will continue in future [Refer figure 2.4].

The hybrid model also made us realise that it is possible for students indifferent states and across borders to bond and study together. This openness and expansion in the thought process mean newer opportunities for students everywhere and for the faculty members and institutions to collaborate effectively without worrying about logistics. Thanks to this new operating model, people have easy access to high-impact leadership sessions, guest lectures from global companies, and international conferences.

9. IMPACT OF TECHNOLOGY AND COVID-19 INDUCED DISRUPTION – EXPEDITED ADOPTION OF LEARNING MANAGEMENT SYSTEMS

Though learning management systems (LMS) have been a part of the education industry for more than a decade, the adoption of LMS was very limited because people stuck to brick-and-mortal classes and were resistance to change. But the pandemic has induced institutions to embrace change and consider using LMS to enhance the quality of learning and sharing of information between students and across student and faculty groups.

132 respondents assigned scores to various parameters which should be considered for evaluation of a LMS on a scale of 1 to 5; with 5 being 'most relevant' and 1 being 'least relevant'. The scores were added up to compute the total score for each factor on a base of 132 respondents and are shown in figure 2.5; higher the score, more relevant the parameter.



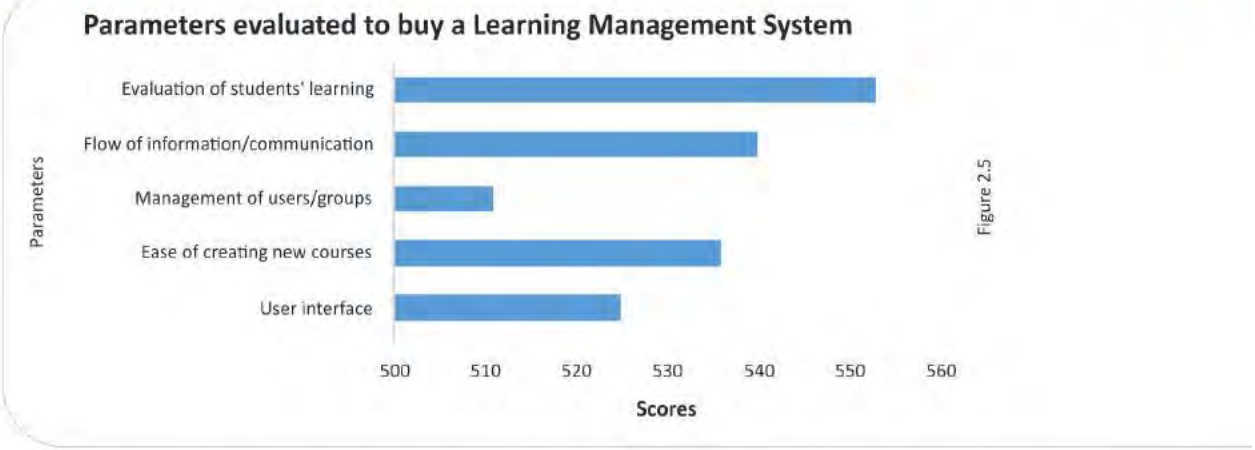


Figure 2.5

Based on our survey responses, we noted that effectiveness of students' learning was the key criterion under consideration [Refer figure 2.5]. This is in line with the institution's intent of adopting an LMS to enhance student experience and learning quality. Other key parameters were the ease of communication and information flow enabled by the LMS. The software should allow sharing of articles andviewpoints, and enable fruitful discussions in forums among students and faculty members. Students and faculty could also work together on assignments and case studies in ways that could not done as easily before.

Example - National University of Singapore built a new learning management system where gamification principles were applied to make the learning process and assignments more engaging. The platform has an auto-grader functionality, an interactive discussion forum, work bin, a survey tool as well as game elements like 'experience points', a leader board, and badges to motivate students to complete their assignments and keep up with the class.

10. CONSTRAINTS ON TECHNOLOGY SPEND BUDGETS

Higher education institutions have started leveraging, or considering options for, digital tools, platforms, and learning management systems, and this is just the beginning of the digital transformation journey. Institutions are facing constraints in terms of investment budgets for procuring off-the-shelf solutions which are expensive. Even research for in-house platforms will come at a significant cost.

Upgrading technology would include a one-time setup and recurring costs, which will be over and above the current operating costs of the institutions. So, they do run the risk of lagging behind when it comes to digitalisation and not being able to level up to newer platforms. Institutions do need to make a separate provision for technology investments as part of their budgetary exercise.

DEMOGRAPHIC DISRUPTORS
AND RISK FACTORS

As student demographics are changing, so are the expectations that higher education institutions will offer relevant, sophisticated, and flexible programmes to enhance the learning experience. Technology advances and demographic factors are forcing universities to rethink their curriculum and teaching approach, and how they attract, engage, and retain top faculty and students.

We asked senior academicians what they might considered the key factors leading to the change in learner profile and expectations. Figure 3.1 indicates the percentage of respondents who believed the particular parameter is driving the change in learner profile and expectations.

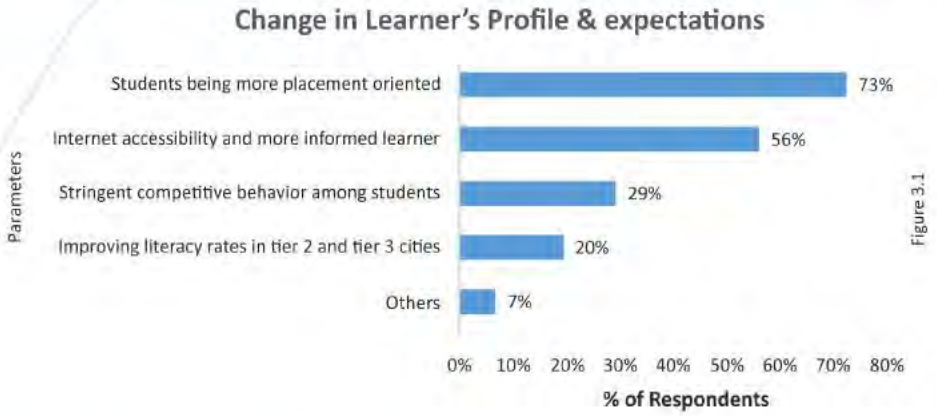


Figure 3.1

1. STUDENTS BECOMING MORE PLACEMENT ORIENTED

According to our survey, 73% of our respondents believed students getting more placement oriented now has led to the change in the learner's expectation [Refer figure 3.1].To be gainfully employed, students must graduate with the right portfolio of skills. However, there are institutions whose curriculum is out of sync with the current industry trends and the requirements of the corporates.

Example - The Annual Employability Survey 2019 report by Aspiring Minds reveals that 80% of Indian engineers are not fit for any job in the knowledge economy and only 2.5% of them possess tech skills in artificial intelligence that industry requires.

It is a challenge now for Indian higher education institutions to rise to the occasion and meet the expectations of the students, and at the same time preserve the values of quality education and learning. For this, the curriculum needs to be continuously reviewed and updated to align with changes in industry practices and regulations, adding live case studies and making it more useful and relevant from both a student's and a corporate's perspective.



Prof. Ramesh Bhat, Vice Chancellor, Narsee Monjee Institute of Management Studies

"For any institution, for its programs to be effective, one of the critical parameters is the employability of its students. The curriculum of all courses / programs needs to be regularly reviewed and re-calibrated in consultation with industry people and made viable enough to fulfil the requirements of the recruiter. The program curriculum team and Academic Council need to meet periodically and review its curriculum to ensure it delivers the right set of skill sets, and drives critical thinking ability so as to make students employable and desirable in the job market."

2. INCREASED INTERNET ACCESS, EVOLVING LEARNER EXPECTATIONS

Survey results [Refer figure 3.1] indicate that 56% of the respondents believed learners having access to the internet and public information have led to the change in their expectations. With a plethora of information sources at hand, they seek to make more informed choices. This is a blessing for institutions as they are now forced to think beyond the traditional methods to enhance the quality of learning and value offered to students.

3. IMPACT OF DEMOGRAPHIC DISRUPTION

a. Need for personalization in education

Given the diversity in a country like India, students have different languages, are from different socio-economic backgrounds, and have different aspirations and skill sets. Following a regular pedagogy for all students and pressuring them to do everything the same way has been killing their creativity, individuality, and intellect. Not nurturing originality and innovativeness has been undermining the students' creative and critical thinking abilities.

Albert Einstein, Nobel-prize winning theoretical physicist

"Everybody is a genius, but if you judge a fish by its ability to climb a tree, it will believe its whole life that it is stupid."

So, institutions need to move towards personalisation of education as every student is different and has different learning and absorption capabilities. Institutions should offer a more diverse set of electives for students where students can personalise their curriculum based on areas of interest. This is essential to bring out their best and introduce them to fields they are passionate about. The assignments, tasks and engagement activities can also be tailored made to suit their expertise and passion rather than applying a one-size-fits-all approach.

b. Embrace niche programmes

Students and parents are increasingly focusing on programmes that offer better employment opportunities. Corporates also want students who have the requisite skill sets rather than employing students from traditional programmes. This is because of the time and resources they need to invest in getting the students up to speed, so they properly perform their roles and responsibilities in the organisation. It is therefore imperative higher education institutions embrace the change and focus on offering niche programmes based on feedback from corporates.

In our survey, 132 responses from senior academicians indicated the major challenges they face in adopting new programmes. Figure 3.2 indicates the percentage of respondents who believed the particular parameter is a challenge in the process.

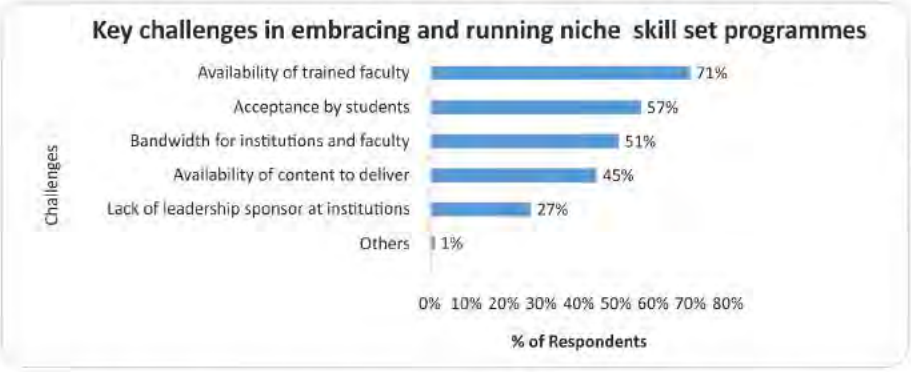


Figure 3.2

Based on the survey responses, we noted that 71% of the respondents believed the availability of trained faculty members on niche skill sets is the biggest challenge. Further, 57% of respondents believed acceptance of niche programmes by students also stands in the way of running such programmes successfully.

Though students are much more demanding in terms of how much existing courses will enhance employability, their conviction to take up niche programmes, and to an extent awareness about such programmes, has been a challenge. Also, 51% of the respondents believed institutions and faculty have limited surplus bandwidth to focus on new programmes as they require skill set training for faculty, creating curriculum and content, and developing innovative pedagogy.

c. Need for greater collaboration with corporates

Corporates and universities have a symbiotic relationship. While higher education institutions have the primary responsibility and proactive ownership of dealing with the disruptive challenges, corporates also have a partnering role to play to impart practical industry knowledge to students.

We asked senior academicians what are the major aspects of collaborating with the corporates [Refer figure 3.3]. Of 132 responses, 87% of the respondents believed internships and live projects is the most critical aspect as they can be a very effective learning ground for students to enhance their practical knowledge. However, the process for on boarding students is fragmented at corporates and institutions struggle to provide adequate opportunities for students with internship and even more so for live projects.

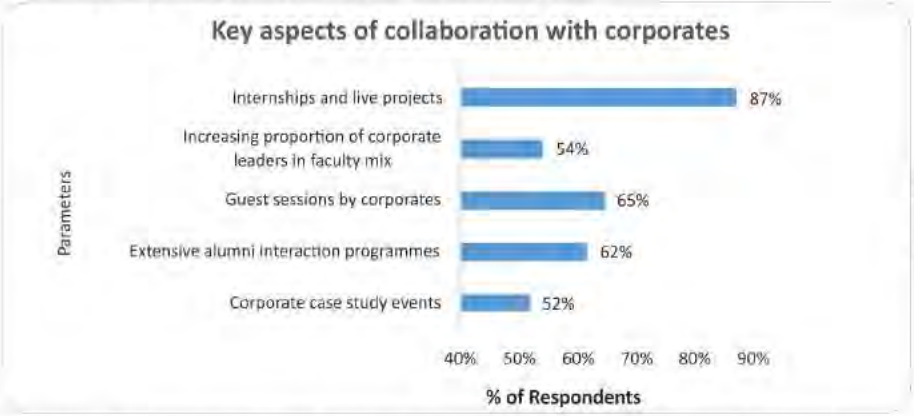


Figure 3.3

And 65% of the respondents believed interactive guest lectures and leadership talk sessions are another key area of collaboration where industry speakers address students at institutions and share their journey and experience. The disruption due to the pandemic, and the technological disruption, has expanded possibilities and opened up access to senior corporate leaders across different geographies.

Similarly, 62% of the respondents believed alumni interaction programmes are important, too. Along with speaking about their journey, they can help institutions during campus placement and become mentors. Given their corporate knowledge and experience, they could also help enhance the curriculum to make it more industry relevant.

d. Ensuring faculty is better equipped

As the higher education institutions adapt to the new normal and deal with the ongoing disruptive phase, there needs to be the right set of measures and enhancements to the faculty group. Even the government has announced establishing National Professional Standards for Teachers (NPST) by 2022 to support teacher competence development for better learning outcomes.

In the survey, senior academicians indicated key enhancements to make the faculty group better equipped to deal with the disruption [Refer figure 3.4].

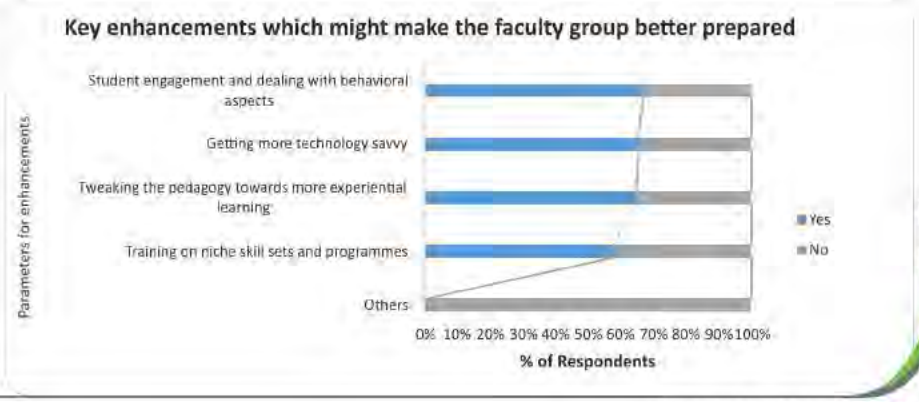
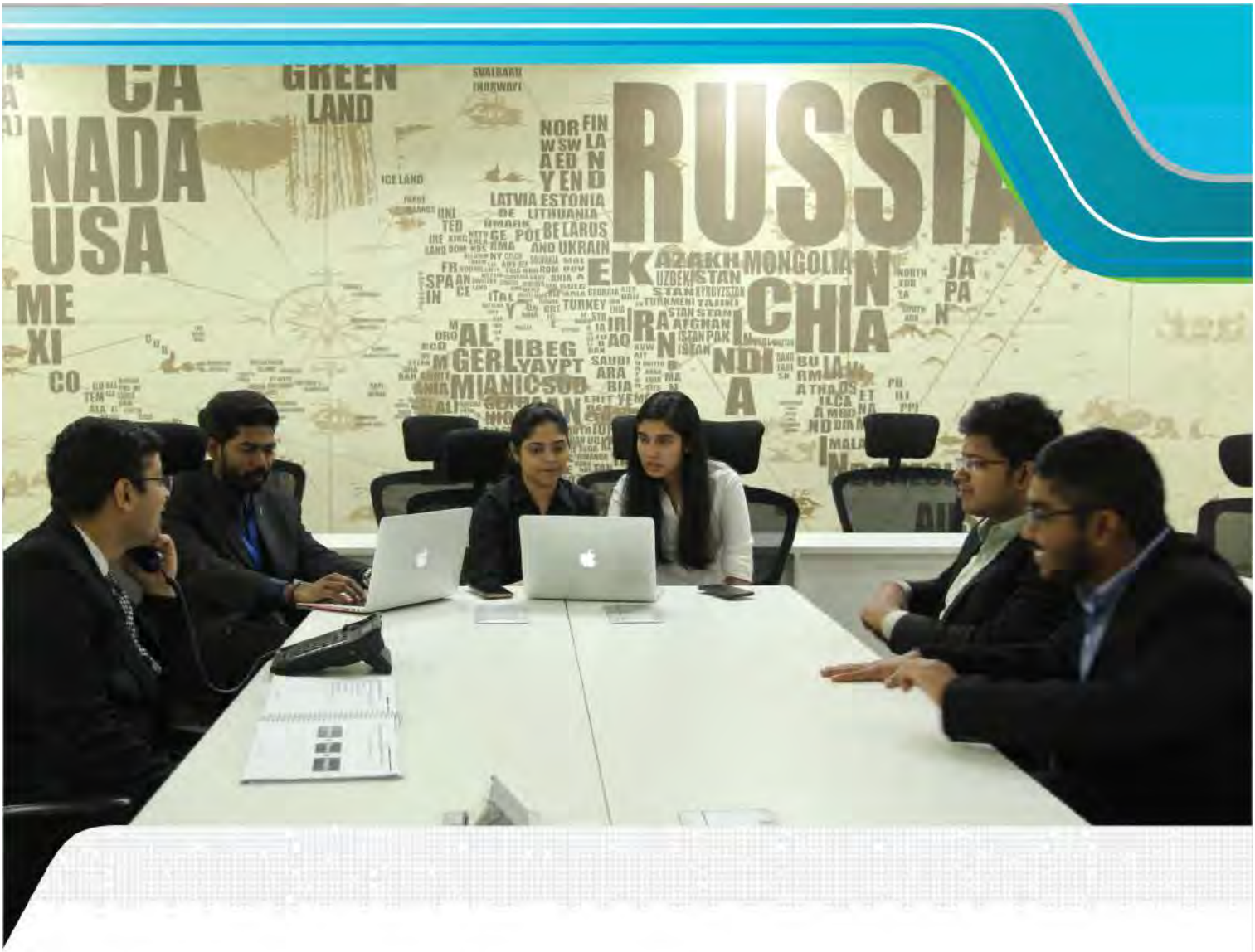


Figure 3.4



• Improve student engagement and behavioural aspects

Based on responses from the senior academicians, we noted that 71% of the respondents believed better engagement with students and dealing with their behavioural aspects will solve a lot of issues related to learning quality, attention span, mental well-being, interpersonal relationships, and integrity. Training faculty members on imparting and driving behavioural change and developing and encouraging interpersonal bonding with and among students may help the cause.

• Get faculty to become more tech savvy

About 68% of the respondents believed initiatives to make the faculty group more tech savvy will support and make the sector stronger to deal with digital disruption that is likely to continue for a while. Institutions do need to have robust faculty training programmes on new tools and technologies. User-friendly training manuals be could be made available to faculty members for ready reference. Appointing technology champions internally from the faculty group would also help to identify opportunities and oversee implementation.

• Tweak the pedagogy

We found that 65% of the respondents believed it is imperative for the faculty members to tweak the pedagogy and adopt experiential learning. The concept of flipped classroom – where students spend more time in the classroom applying concepts and dealing with real-life problems and study about theoretical concepts at home – will help. Introduction of interactive digital modes into the pedagogy including moving towards gamification may significantly enhance the learning experience of the students.

REPUTATION
RISK FACTORS

Managing risks to reputation adequately in higher education institutions is crucial as reputation is everything in this industry. Universities rely on their positive reputation to attract students, faculty, business relationships, and funds. They cannot afford to run the risk of negative headlines causing irreparable harm to their brand.

132 respondents assigned scores to various risk factors impacting reputation of institutions on a scale of 1 to 5, with 5 being 'most severe' and 1 being 'least severe'. The risk scores were added up to compute the total risk core for each risk factor on a base of 132 respondents and are shown in figure 4.1.

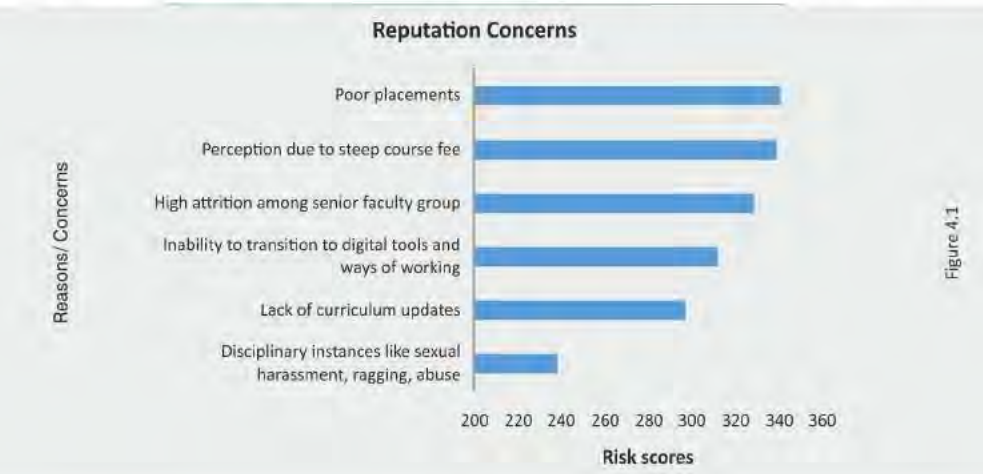


Figure 4.1

1. A POOR PLACEMENT RECORD SEVERELY IMPACTING REPUTATION

Based on the survey responses [Refer figure 4.1], we noted that a poor placement track record is believed to cause the most severe impact on the reputation of the institution. Poor campus placements also affect student enrolment, which then weakens the financial position of the institution. So, institutions do need to tweak their existing curriculum and pedagogy and also focus on developing niche programmes which are relevant for the industry.

2. PERCEPTION OF STEEP COURSE FEE IMPACTING REPUTATION

Senior academicians said the perception of students and parents coupled with media creating perceptions of hefty tuition fees has a major impact on the reputation of institutions [Refer figure 4.1]. Even during the pandemic, there were multiple reports of agitation against institutions for not reducing student fees. But one has to consider that there is no significant drop in the operational and fixed costs for institutions even during the pandemic. Additionally, institutions are having to make significant investments to tackle the technological disruption and invest in licences and digital tools.

3. HIGH SENIOR FACULTY ATTRITION IMPACTING REPUTATION

Faculty quality is one of the key parameters for ranking of institutions. Also, the quality of curriculum delivery and pedagogy to a great extent depends on the faculty. Faculty attrition [Refer figure 4.1] can severely impact the reputation of the institution as teachers are the key catalyst in effecting student learning and development. Attrition is likely to be high especially in case of faculty members with niche skill sets as other universities or companies tend to poach them offering better recognition or opportunities.



Professor Ajit Kumar Chaturvedi – Director, IIT Roorkee

"There is a gulf between the governance of private institutes and government institutes. Media attention is high on government institutions as they run on the taxpayer's money. Social media vulnerability and inaccurate or careless reporting have impacted freedom of institutions. The need for being politically correct can adversely affect uniqueness or innovativeness. Media needs to be careful to avoid unwanted or unnecessary details getting reported. The legal framework should also strive to ensure that if individuals try to take advantage of a situation for their personal benefit, effective action can be taken against them. Basically, we need to facilitate institutes to act freely but responsibly."

4. LACK OF RESEARCH INFRASTRUCTURE AND FACILITIES IMPACTING REPUTATION

Though research and innovation are at the heart of an education institution and have a significant bearing on its reputation, Indian institutions still fall short of international standards. Inadequate investment in research infrastructure and limited incentives for faculty to do research continue to prevent India from building world-class institutions.

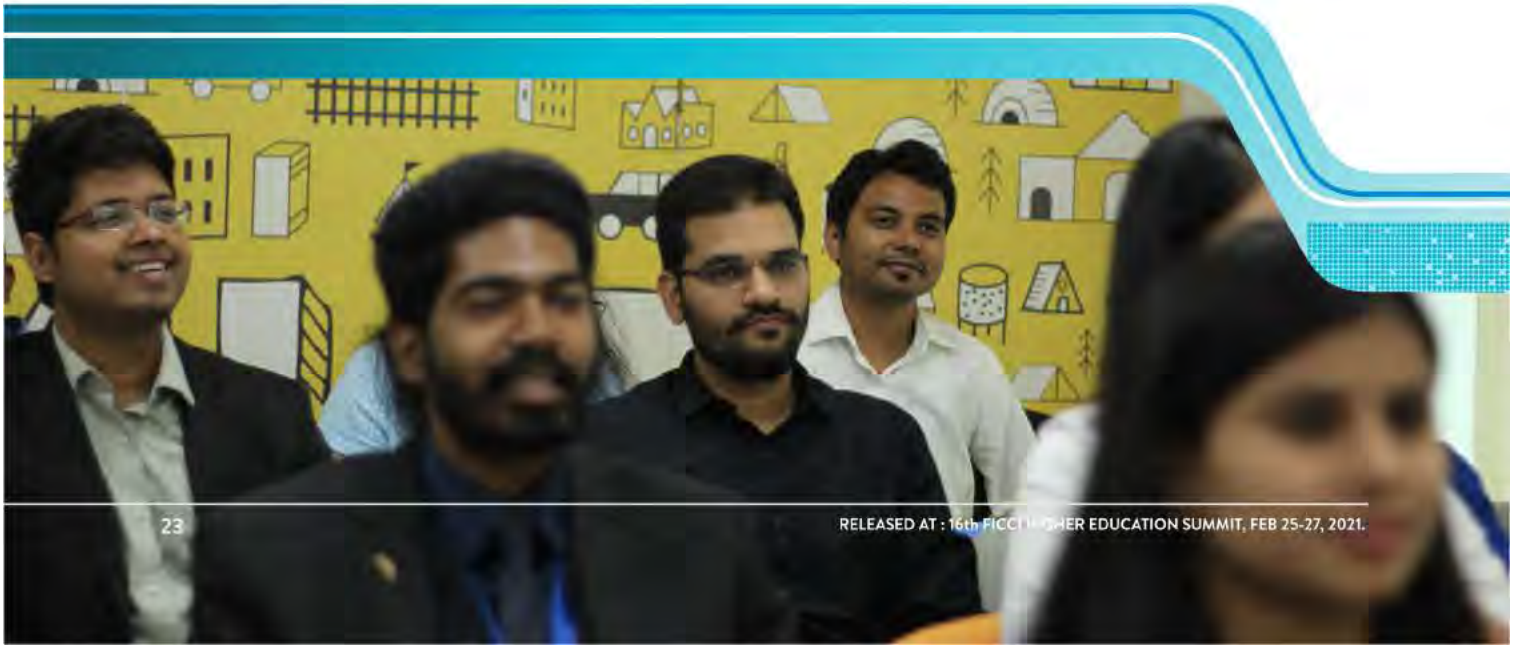
The quality of research in Indian universities is not good enough, so they lag behind in global rankings. Even corporates have limited interest and incentive to fund research initiatives at institutions as part of their corporate social responsibility (CSR) activities because the companies do not get exclusive rights, such as patent rights, over the outcomes of this research.

India needs substantial funding for research work. Providing tax incentives or other innovative incentive structures to corporates to fund the research may help.

Indian government has setup the National Research Foundation (NRF) to significantly expand research and innovation work in the country and build research capacity and Indian institutions. Government has also allocated a budget of INR 50,000 crores over five year for the creation of NRF. The NEP also talks about empowering faculty members to pursue research with academic freedom.

5. STUDENT DISCIPLINARY ISSUES AT CAMPUS IMPACTING REPUTATION

While disciplinary issues are not unusual at campuses, lack of proper control measures for instances of ragging/hazing, sexual misconduct, or drug abuse can have repercussions on the reputation of institutions. Institutions need to organise counselling sessions for students periodically, have dedicated officials for ensuring campus safety and, in case of misconduct, take stern actions to set a precedent. Roping in youth ambassadors to motivate and positively influence students could help.



REGULATORY, COMPLIANCE & LEGAL RISK FACTORS

Higher education institutions have to comply with a raft of everchanging and complex regulations and policies. Non-compliance can lead to loss of accreditation or funding, reputational damage, lawsuits, and even criminal charges against management.

1. KEY GOVERNANCE ISSUES

In our survey, 132 respondents scored various governance issues in the higher education sector on a scale of 1 to 5, with 5 being 'most critical' and 1 being 'least critical'. The scores were added up to compute the total score for each factor on a base of 132 respondents and are shown in figure 5.1.

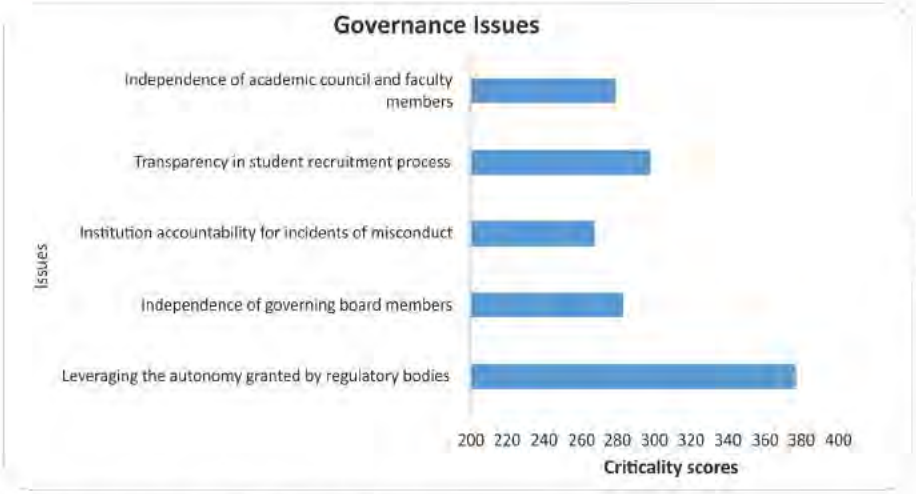


Figure 5.1

a. Insufficient autonomy granted by the regulator

Autonomy granted by the regulator turned out to be the key governance issue facing higher education institutions. While financial autonomy is not granted to institutions that are government or government aided, limited managerial, administrative and academic azutonomy has been given depending on whether it is a central, state, deemed, or private university and also on the leadership and management at the institution.

Institution shave limited autonomy in terms of managing finance, administration, faculty recruitment, academia recruitment, syllabus and pedagogy. Excess governance and control may take away the uniqueness and creativity of institutions. Institutes should have the right to discredit/ discourage decisions to protect and improve them. Autonomy is central to creating world-class institutions and lack of it may be one of the reasons Indian higher education institutions are largely missing in the top global rankings.

Example - In 2020, some of the Indian Institutes of Management (IIMs) decided to convert their one-year executive management diploma into a one-year MBA. The UGC, which believed postgraduate degrees must be of a two-year duration, had immediately challenged this. And the ministry of education had written to the IIMs to act in conformity with the UGC guidelines. This was despite having promised them academic and administrative autonomy through the IIM Act in 2018.

However, there are divergent views on the adequacy of autonomy granted by regulatory bodies on academic, managerial, and administrative issues. A section of the institutions also believes institutions do have autonomy from the regulator, but it is on the institution to be able to leverage it effectively. Regulators also have to ensure that universities are prepared to take up their new responsibilities and establish a phased system of stage-gating autonomy. Universities and institutions should incrementally receive additional rights as they are ready, creating a system of earned autonomy. NEP 2020 does indicate the intent to give near-complete autonomy for top institutions, but the key to success will be the implementation.



Prof. Sandeep Sancheti–Vice Chancellor, SRM Institute of Science and Technology

"Financial autonomy can never be granted, while managerial and administrative autonomy depends upon the impact of leadership and management. However, academic autonomy has always been there, but it is for the institution to leverage and implement it. In terms of status of autonomy, the central government universities are the best followed by deemed universities. However, state universities and private universities are worst in terms of their degree of freedom. Having said that, Academicians need to realise that autonomy cannot be given, rather it has to be taken. If institutions are able to showcase ability to operate independently, take decisions and put their skin in the game, then autonomy will be granted automatically to them."

b. Lack of transparency in student recruitment

Transparency in the student recruitment process was also one of the key governance issues that institutions have had to deal with [Refer figure 5.1]. Instances of recruitment or admission based on factors other than merit severely impairs the right of equal access to education for all students. Such an unfair process significantly tarnishes the reputation of the sector and trust of students and parents.

c. Political influence on regulatory bodies

There have been instances of political influence on institutions that impact decision making and the academic freedom of institutions. To ensure development of world-class institutions in India, any sort of external influence on the regulator or institutions would need to be eliminated. The decisions by regulatory and institutions should have a singular objective of enhancing the quality and relevance of education and the right supporting curriculum. What can help are mentoring sessions to discourage politicising of issues to decrease the political divide among students as it does not align with the overall goal of quality education.

d. Compromise in education quality due to inconsistency in accreditation process

India has multiple accreditation agencies and there is a lack of clarity due to role overlap among different agencies. There have been alleged instances of corruption in acquiring and maintaining accreditations which may compromise the quality of education.Merging accreditation bodies to remove any overlap and making the mode of assigning accreditations transparent will be steps in the right direction.

The article 'Corruption penetration into the Indian education system' by Dr V.K.Maheshwari and Manjul Lata Agrawal talks about how many education institutions do not fulfil the eligibility criteria for affiliation to these regulatory bodies. They do not have minimum teaching and non-teaching staff, laboratory, and equipment as prescribed by the regulatory body. These institutions do not fulfil even minimum demands of basic facilities for essentials like water, electricity, ventilation, toilets, sewerage, etc. However,they have managed to get affiliated even without following rules and regulations.

2. KEY POLICY CHANGES REQUIRED IN HIGHER EDUCATION

For India to achieve its vision of being home to world-class institutions, it has to address some key challenges at a policy level. In our survey, 132 respondents identified factors which need re-considerations at a policy level [Refer figure 5.2].

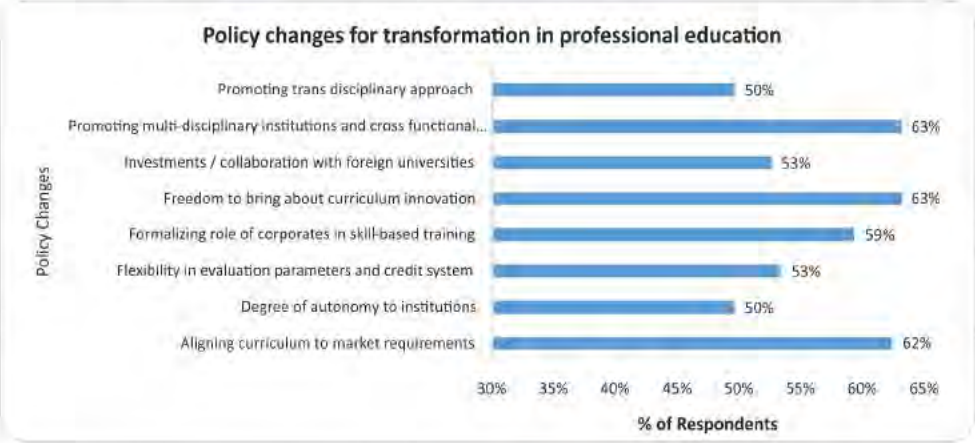


Figure 5.2

a. Independence in designing curriculum and pedagogy

According to 63% of the survey respondents, institutions and faculty needs greater independence and flexibility to tweak the curriculum and pedagogy to make it more effective and engaging for the students and 62% of the respondents also believed institutions need flexibility to redesign and align the curriculum to market requirements.

With the change in demographics, and more students and parents seeking curriculum which attracts employers, the onus is now on institutions and faculty members to make the curriculum industry-relevant and impart real-life problem-solving skills. Faculty members need to tailor their offerings for students. Using digital tools and techniques and blended learning models effectively can make personalising programmes easier.

b. Flexibility in evaluation system and assessments

We noted that 52% of the respondents believed the evaluation and assessment system of students needs to be more flexible. It has to be modified to enable critical thinking and business analysis rather than testing memory recall. International institutions have also been leveraging gamification techniques to make the evaluation process way more engaging, participative and motivating for the students.

c. Need for multi-disciplinary institutions and cross-functional learning

Promoting multi-disciplinary institutions and cross-functional learning are key to driving transformation in higher education sector in India said 63% of the respondents [Refer figure 5.2]. This would give students flexibility to choose from a wide range of subjects be it science, economics, fine arts or sports. Students will stand a chance to explore their areas of interest with a creative combination of subjects. NEP is indeed a step in the right direction to achieve this.

d. Need to enhance international strategic partnerships

Institutions also need to strengthen collaborations with international universities. Partnering with them will boost India's reputation as a higher education hub. It will also enable institutions to share and learn best practices, adopt technological enhancements, and innovative techniques from the collaboration partners, set up exchange programmes, and improve the overall quality of student learning.

Though logistics issues have been addressed to an extent by technology and COVID-19 induced disruption, institutions need to deal with language barriers, faculty openness to international partnerships, cross-cultural issues, and partnership agreements.

e. Reluctance of corporates to participate in real-life case study development

Real-life case studies help students develop problem-solving skills, analytical skills, and diverse perspectives. However, companies shy away from giving approvals for case studies to be written and published, or for their problems to be discussed in classrooms. By disguising confidential information so that sensitive data is not accessible to competitors, the story can still be shared for educational purposes. This is a win-win situation for both institutions and corporates as it helps enhance their brand awareness and attract good talent from the audience.

3. ADDRESSING LEGAL RISKS

Along with regulatory and compliance risks, higher education institutions also have to avoid legal risks. 132 respondents assigned risk scores to key legal issues in higher education sector on a scale of 1 to 5, with 5 being 'most severe' and 1 being 'least severe'. The scores were added up to compute the total risk score for each factor on a base of 132 respondents and are shown in figure 5.3.

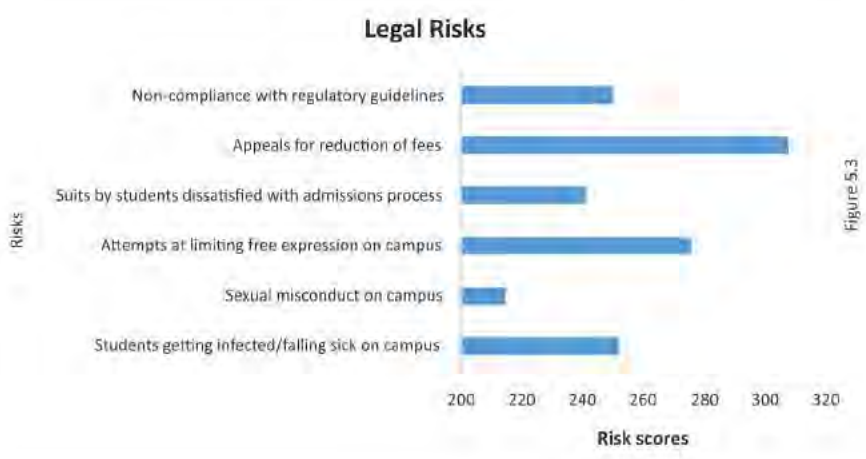


Figure 5.3



a. Suits for reduction of student fee

Based on the risk scores assigned by senior academicians to the legal risks faced by institutions today, the legal cases around appeal for reduction of student fee stood out as what worries them the most [Refer figure 5.3]. Even with transition to online and hybrid models during the pandemic phase, there has not been a significant drop in the operational and fixed costs of higher education institutions. So, there's little room to cut tuition fee for institutions. However, there are multiple of instances of legal suits and representations from students and parents demanding rebates in tuition and fee refunds. Reduction in the collection of fees due to delayed payments or non-payments has anyway severely impacted the financial position of institutions.

b. Limiting free expression on campus

Institutions' attempt to limit free expression on campus also is one of the major risk factors they face [Refer figure 5.3]. While the right to expression cannot be taken away from the students, it is also the responsibility of institutions to not allow students to deviate from the primary objective of quality learning and commitment towards the curriculum.

c. Students getting infected on campus

Respondents believed there may be legal repercussions from students getting infected with COVID-19, for instance, or multiple students facing heath issues on campus. It is therefore important for institutions to follow health ministry guidelines and setup healthcare facilities and maintain hygiene. If not, they leave themselves open to legal hassles.

Example - In December 2020, IIT Chennai reported that more than 350 students were COVID-19-positive after asking students to attend classes in person.

d. Students dissatisfied with the assessment and evaluation process

Dissatisfaction with assessment and evaluation processes can have legal repercussions said senior academicians in our survey. Also, such instances are attempts to indirectly curtail the flexibility and creativity of institutions by questioning their judgement on student assessment.

Example - In 2020, a petition was filed in the Gujarat High Court, challenging the method of assessment and weighting given to the interview round after the Common Admission Test (CAT) examination.

FINANCIAL
RISK FACTORS

As COVID-19-induced lockdowns and other restrictions came into force in India, higher education institutions faced a series of challenges which they are struggling with even after a year into the pandemic. However, the results clearly pointed out that they were most severely hit by the financial disruption and the impact was unprecedented. 132 respondents assigned risk scores to key challenges faced by higher education sector on a scale of 1 to 5, with 5 being 'most severe' and 1 being 'least severe'. The scores were added up to compute the total risk score for each factor on a base of 132 respondents. [Refer figure 6.1].

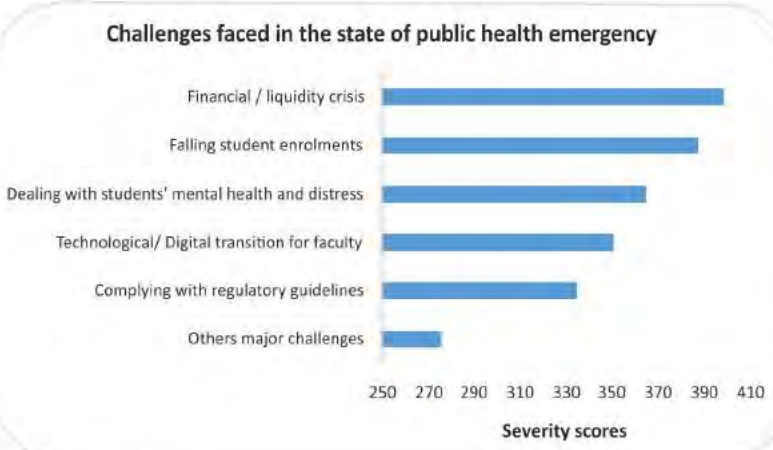


Figure 6.1

KEY FINANCIAL RISKS

Though the sudden disruption created a serious liquidity crisis for institutions, other financial concerns including dependency on student fee, credit risk, unstructured budgeting, and cash flow planning also pushed higher education institutions to the wall.

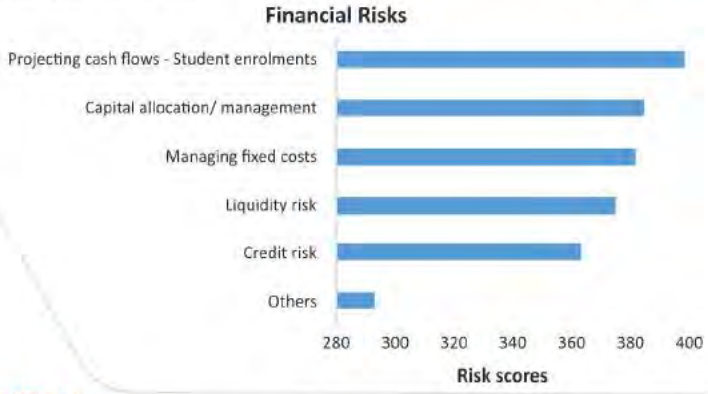


Figure 6.2

1. LIQUIDITY RISK

According to our respondents, managing the liquidity crisis was the biggest challenge for institutions [Refer figure 6.2]. While the revenue dried up as students delayed payment of fee, institutions had to continue to bear the operations and fixed costs including payment to faculty, technology setups, licenses, e-books, etc. To run operations smoothly and ensure quality learning, they had to continue to meet such expenses and manage financials during the pandemic.

President, Harvard University in April 2020 in an address to the Harvard community

"Our major sources of revenue—tuition, the endowment, executive and continuing education, philanthropy, and research support—are threatened, and we expect to see increased demand for financial aid as the economic fallout from the pandemic hits family budgets."



2. FALLING STUDENT ENROLMENT ADDING TO INSTITUTION'S WOES

Respondents believed falling student enrolment further added to the problems of institutions which were already financially distressed [Refer figures 6.1 and 6.2]. In the midst of COVID-19, with the sessions being done online, students and parents continued to be sceptical about taking up new admissions for online classes and even about sending student to attend classes in person.

There is tremendous pressure to increase student enrolments as a result. The uncertainty around admissions also impairs the ability of institutions to project cash flows with reasonable confidence and continues, adding to the financial woes of Indian institutions.

3. CREDIT RISK – NON-PAYMENT OF FEE BY STUDENTS

Apart from the liquidity crunch and challenges around meeting operating and fixed costs, credit risk also emerged as a risk for institutions which they did not have to deal with earlier [Refer figure 6.2]. There were significant delays or non-payments from students compounding the situation.

4. CAPITAL MANAGEMENT RISK

Institutions continue to face capital management issues [Refer figure 6.2]. Investments in research and technology in Indian institutions are far from the investment levels in developed nations like Singapore and USA. For India to have top-notch institutions, investments in have to go up exponentially. The already-poor investment scenario in institutions was further stressed by the pandemic. Institutions have limited finance available which has taken a toll on the research activities – the oxygen for education institutions to thrive. At the same time, institutions need to also fund digital tools and licenses to tide over the technological disruptions. There needs to be a structured annual budgeting exercise to evaluate the anticipated revenues from different sources, projected cost of delivery and investment required for research and infrastructure.

OPERATIONAL
RISK FACTORS

Institutions have to keep their operations – people, processes, and systems – agile and efficient as business models evolve. To ensure they stay relevant and competitive, especially when unexpected disruptions come into play, higher education institutions have to weed out inefficiencies and drive operational improvements.

1. POOR PHYSICAL INFRASTRUCTURE AT CAMPUS

Due to lack of regular maintenance of old structures, physical facilities at some of the institutions is in poor condition and can be hazardous for students and staff.

Example - In 2018, Delhi School of Journalism(DSJ) students protested against the poor infrastructure faced by them. Such poor maintenance often results in a high degree of inconvenience to students and staff; there were even cases of injuries to the students caused by the lumps of roofs falling on them.

2. INADEQUATE PROCESS FOR FACULTY EVALUATION

Many institutions have limited or unstructured processes around continuous evaluation and feedback mechanisms for faculty members, both from a student's and management's perspective. The evaluation can include parameters like research participation, case study development, curriculum enhancement, innovative pedagogy, etc. Absence of such a process also takes away the opportunity for the faculty to learn and adopt from the feedback process, and it results in a lack of motivation.



Prof. DP Goyal – Director, IIM Shillong

Institutions may have a mandatory faculty-feedback process, but by the time students fill the feedback, the course has already ended. In this regard, some institutes follow mid-term and end-term feedback. Apart from that, the faculty can ask for a feedback in the second or third lecture regarding the pace and absorption. One can also open some forums on digital platforms wherein students can write anonymous feedback which can be incorporated in the sessions.

3. INADEQUATE PROCESS TO MONITOR STUDENT EXPERIENCE AND FEEDBACK

Institutions have unstructured processes to collect feedback from students around faculty, infrastructure, pedagogy, placements, handling student issues, assessments and evaluation parameters, corporate engagements etc. In the absence of feedback and monitoring, institutions miss out on opportunities to work on pain points and improve. Institutions can consider putting up suggestion boxes, secure private mails, etc. and commit to taking action. Holding regular interactive sessions between stakeholders including student, faculty, management, support staff may also help.

4. POOR IN CENTIVISATION FOR FACULTY MEMBERS

A lack of meaningful incentives makes teaching an unattractive career option in India. Preference is rather given to corporates who offer better career prospects. Poor salaries, unclear careers paths, and an increasing workload are contributing factors. As a result, the pupil-teacher ratio (PTR) in India continues to be high at 29 (according to an AISHE 2018-19 survey) and the quality of education also suffers as faculty members are not adequately motivated.

Example - In December 2019, protests broke out in institutes of higher education in Delhi University. The adhoc faculty were worried about job security, lack of financial stability, discrimination, and promotions.

The article 'Corruption penetration into the Indian education system' by Dr V.K. Maheshwari and Manjul Lata Agrawal talks about how faculties in many private institutions are compelled to sign an affidavit saying that they are being paid according to the UGC scale although they are not even paid half of what is recommended by the government.

5. LACK OF AWARENESS AROUND SECURING PATENTS FOR STUDENT INNOVATION WORKS

Students have limited awareness about options and detailed processes around applications for patents for prototypes or other research work. Institutions may be losing out on opportunity to motivate students to think creatively and innovate in their field of interest.

They have now started taking proactive steps to safeguard the intellectual property rights (IPR) of their students. Institutions can consider setting up dedicated IPR cells to offer legal counselling, streamline paperwork, and help students identify their own IP while respecting the IP of others. IPR cells help students display their work and attract potential buyers of technology, ideas, or products, and help in the commercialisation of a product.



TAKING CUES FROM INTERNATIONAL UNIVERSITIES
TO DEVELOP WORLD CLASS INSTITUTIONS

In our survey, 132 respondents identified the key factors that differentiate international universities from Indian institutions. Based on responses from academicians [Refer figure 7.1], we noted that 68% of the respondents believed participation of corporates in higher education institutions is a key differentiat or which sets international universities apart from Indian institutions.

And 67% respondents believed the pedagogy in international universities is leans significantly towards experiential learning. There is extensive use of gamification techniques and other interactive tools to make the assessment of the students more interesting and engaging for the students.

More than 50% respondents believed the top quality of faculty members in top-ranked universities sets them apart from others. They are able to make huge investments on the faculty and attract the best of talent for teaching as a result.

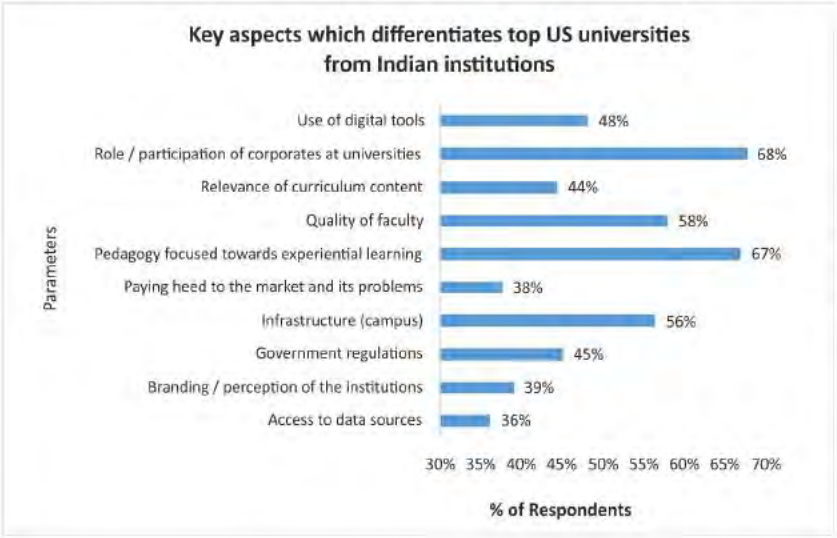


Figure 7.1

Respondents also believed physical and digital infrastructure on the campus are far advanced at top international universities. This also gives them an edge when it comes to technology disruption. In comparison, India needs significant investments to enhance, both digital and physical, infrastructure to transform the student experience and create superior educational institutions.

INDICATIVE RISK-MANAGEMENT PRACTICES IN HIGHER EDUCATION SECTORS WORLDWIDE

Dr. Anil Sahasrabudhe, Chairman, AICTE

"We rarely hear of educational institutions incorporating risk-management processes into their framework. However, this pandemic has taught us that risk assessment, risk mitigation, risk management, and risk control are necessary for the education sector, too."

Education at all levels, especially at a higher level, should not simply resort to reactive responses in the face of risk. Various developed countries and many top-rated universities have already started investing in risk-mitigation plans.

Here are some global best practices to consider while developing a comprehensive risk-mitigation plan across educational institutes.

• ASSOCIATION TO HANDLE RISK MANAGEMENT

The US has a dedicated body –University Risk Management and Insurance Association (URMIA), which is an international non-profit educational association serving colleges and universities. It has been set up with the primary purpose of promoting the advancement and application of effective risk-management principles and practices in institutions of higher education.

URMIA's members includes thousands of professionals at more than 600 institutions of higher education and 100 companies supporting those institutions. Its mission is to advance the discipline of risk management in higher education and provide its members with a variety of benefits to help build the professionalism of higher education risk management. It offers a platform for the members to interact with each other and share the risks and challenges they are facing and best practices to deal with them.

• EMPLOYING UNIVERSITY 'RISK CHAMPIONS'

Risk champions are usually representatives from the management team or the faculty group, who by virtue of their expertise, champion a particular aspect of risk management. They assume responsibility to continuously identify newer issues and risk factors which may be impacting the institution and develop mitigation action plans to address those issues. They also take responsibility to socialise those specific aspects of risk management and drive risk mitigation more effectively across the institution.

• BUDGET FOR RISK MANAGEMENT

Institutions need to have a dedicated function and set of resources to oversee the risk management practices. The function has to be viewed as a value preserver and not as a cost centre for the institution. There needs to be a continuous process to foresee and identify newer factors which may adversely impact the achievement of the institution's objectives and at the same time drive enhancements in the process. The risk management function is thus a key value preserver and a driver for institution. Adequate budgetary allocations need to be made for the function to operate effectively.

• SETTING UP A RISK COMMITTEE

Set up a dedicated committee or a sub-committee to oversee the operations of a risk-management function at institutions. The committee is usually a cross-functional team with representatives from the administrative function, faculty, legal and finance teams and the governing council. They are assigned specific roles and responsibilities, including ensuring the integration between the risk-management function and the core operating team.

• FRAMEWORK FOR EVALUATION OF PRIVATE UNIVERSITIES

Robust corporate governance is necessary to maintain the viability of an institution and help the institution to achieve its vision and mission. The Good University Governance framework in Indonesia includes transparency, accountability, responsibility, independency, and fairness as parameters to evaluate private universities. These principles are required for higher education institutions to achieve sustainable performance while keeping their stakeholders' conflicts in check:

a. **Transparency** - openness in executing the decision-making process and openness in expressing material and relevant information about the institution
b. **Accountability** - clarity in the functions, structure, system, and accountability of the institution's stakeholders for any adverse events or scenarios
c. **Responsibility** - adhering to robust corporate governance principles, laws, and regulations applicable to the institution
d. **Independency**- a situation in which a company is professionally managed without a conflict of interest, influence, or pressure from the management
e. **Fairness** - fair and equitable treatment in fulfilling the rights of different stakeholders of the institution

• ENCOURAGE INSTITUTIONS TO HAVE A RISK-MANAGEMENT FRAMEWORK

Institutions should be encouraged to have robust risk-management practices and frame works and give them due weighting while considering applications for accreditations and funding. This initiative should be considered at a policy level by regulators, realising the need for risk management at higher education institutions.

• INCLUDE RISK MANAGEMENT AS A PARAMETER IN THE RANKING FRAMEWORK

Consider including the 'robustness of the risk-management framework including identification and management of key risks' as an integral component of the institutions' ratings exercise.

• CULTURE OF OPENNESS AND TRANSPARENCY

Create an open and transparent culture which allows different stakeholders to come out and disclose any event or scenario which needs attention. One needs to get input from all concerned parties (management, faculty, students, staff, parents, alumni) to develop the risk-assessment framework, using surveys, open meetings, open debates, heat maps, etc. to perform assessments.

• ENTERPRISE RISK-MANAGEMENT (ERM) IMPLEMENTATION

Enterprise risk management is a comprehensive, systematic approach for helping the organisation to identify, measure, prioritise, and respond to the risks challenging its most critical objectives and related projects, initiatives, and day-to-day operating practices.

Institutions need to develop a robust ERM policies and framework which has a comprehensive risk coverage – including technology, demographics, reputation, competition, operations, regulatory, compliance, legal, behavioural, and cultural risk aspects among others. With the support of the governing team, ERM helps colleges and universities assess all types of risks to the establishment and take proactive steps to mitigate them.

a. Risk identification -Develop and maintain exhaustive risk registers including existing and emerging risks at institution level and actively manage those risks. For this, one needs to consider any major technological or process change, any change in external regulations, any significant adverse event, and external emerging risk factors.
b. Periodical risk assessment – Institutions need to assess and measure risk periodically based on the frequency of the events, impact of the adverse event leading to the risk, and the reaction time to risk. The exercise has to be integrated with the core operations and in consultation with faculty members, management, and administration – and not in silos.
c. Risk-mitigation plan – Institutions need to have a robust action plan to mitigate the key risks across impacting various functions. The action plans need to be practical, implementable, and in alignment with the institution's administration.
d. Monitoring and reporting of risks –To make the risk-management process effective, regulators and management teams would need to drive the tone at the top to promote robust risk management and governance practices. The effectiveness of the strategies and mitigation plans need to be reviewed and status should be reported periodically to the risk committee, governing body, and institution's management.
Consequently, the need to manage risk and disruption in institutions has become an indispensable part of good governance. Institutions that aim to stay ahead of the curve need to take the disruption head-on and implement robust and best-in-class risk management practices to be able to retain the edge.

Institutions need to evaluate and develop a customised, robust ERM framework to enable an end-to-end mechanism of risk identification, assessment, mitigation strategies, and reporting and monitoring of such risk factors. The mechanism needs to be led by a designated function and need to be oversee by governing council or governing body of the institution. The function has to be assigned adequate powers to navigate through the institution channels and be supported by a culture of transparency. It has to be integrated with the administrative and academic function of the institution for it to function effectively and provide the desired value and outcomes.

The ability of institutions to adopt such risk-management practices will be pivotal to an institution's future success. In parallel, the regulators also need to motivate and incentivise the institutions to include risk management as part of their core strategy by making it a key deciding factor in the ranking framework and an institution's eligibility for accreditation and funding.

KEY TAKEAWAYS

India's higher education sector is witnessing multi-dimensional disruption across technological, demographic, and financial aspects which has a significant bearing on the reputation of institutions and the sector as well. There needs to be a structured and integrated approach to overcome the disruption with participation from institutions, corporates, regulators, and the government by addressing risk factors across digital infrastructure, governance, faculty, students, curriculum, and pedagogy.

- Indian institutions need significant investments in digital tools and licenses to tide over the technological disruptions. There needs to be a structured annual budgeting exercise to evaluate the anticipated revenues from different sources, projected cost of delivery, and investment required for research and infrastructure. Higher education institutions need substantial investment not only from the government, but also from promoters or corporates to build up the fund if India has to transform the student experience and be on par with reputed global institutions.

- Building the digital infrastructure in the country to ensure connectivity and data bandwidth will need capital too. Government has recently announced establishing the National Digital Educational Architecture (NDEAR) to build digital infrastructure for education institutions, which may help in the cause.

- Institutions need to work towards enhancing their digital libraries and data sources to make the learning process more engaging and effective. They need to promote the use of e-articles, e-books, and e-versions of case studies in the student library.

- Institutions need to deploy dedicated cyber experts to evaluate the risk on all digital platforms and implement security and safety controls to address risk such as compromise to intellectual property and breach of confidential student data.

- Institutions need to consider using digital language neutralisation technology to make content and lectures available in regional or even international languages. This will drive the sharing of knowledge and best practices with students and among faculty members and institutions as we eliminate the language divide in education.

- Institutions need to have more robust processes around conducting online assessments. We need to have safe, secure platforms to run assessments including the use of AI-monitored webcams that continuously analyse student behaviour to weed out unfair means and also run automatic plagiarism checks on answer scripts.

- Institutions need to have robust faculty-training programmes around new tools and technologies being used at the institution. User-friendly training manuals could be made available to faculty members for ready reference. Appointing technology champions internally from the faculty group would also help to identify opportunities and oversee implementation.

- Policy makers need to debate and eventually redraw the contours of exceptions dealing with educational fair dealing and the rights of the copyright holder. Institutions need to be aware of these as well to give them clarity about using external data including books, videos, case studies, etc. in the digital mode.

- Indian institutions need to better collaborate with international universities. Partnering with international institutions will them to share and learn from best practices, adopt technological enhancements, and innovative techniques, set up exchange programmes, and overall, up the quality of education delivered. Though logistics issues have been partly addressed by the technology and COVID-19 induced disruption, establishing partnerships with international institutions still needs regulatory support, addressing of language barriers, faculty openness to international partnerships, and cross-cultural issues.

- To ensure the mental well-being of students, institutions should provide counselling support to students who need it. A buddy or mentor programme would also help where every new student joining the institution is assigned a senior who could act as a mentor or a one-stop solution for the new comer.

- Faculty members need to be more creative and think out-of-the box to create question papers which require students to apply logical and analytical thinking and eliminate the help student can take from external sources.



• To address the changing expectation of students, parents and corporates, higher education institutions must embrace change and focus on developing and implementing niche programmes based on engagement and feedback from corporates.

• Regulators needs to give more freedom and flexibility for institutions and faculty members to tweak the on the curriculum and pedagogy to make it more effective and engaging for the students. Institutions and faculty members need to continuously review and upgrade curriculum for change in industry practices and regulations, adding live case studies and making it more relevant for the corporates. This will make the programme more viable from a student's perspective.

• Faculty members need more flexibility in deciding the right evaluation and assessment processes for the students. Assessment models need to focus on critical thinking and business analysis rather than rote learning. International institutions have also been leveraging gamification techniques to make the evaluation process way more engaging, interactive, and motivating for the students.

• Institutions need to move towards personalisation of education as every student is different and has different learning and absorption capabilities. Institutions need to offer a more diverse set of electives where students can choose and personalise their curriculum based on areas of interest. The assignments, tasks, and engagement activities can also be more customised to suit their expertise and passion rather than applying a one-size-fits-all approach.

• India needs to have much more funding available for research work. Providing tax incentives or other innovative incentive structures to corporates to fund the research may also help. Government has setup the National Research Foundation (NRF) to beef up research capacity at Indian institutions.

• Students need to be given the option to choose from a wide range of subjects be it science, economics, fine arts, or sports. They need a chance to explore their areas of interest with creative combination of subjects. Growth of multi-disciplinary institutions and cross functional learning as promised by the NEP may help the cause.

• A robust implementation roadmap with well-definedresponsibilities is needed to implement the aspirational vision laid down by Government in NEP 2020 —be it in terms of its vision for multi-disciplinary institutions, autonomy for institutions, research capacities, flexibility of curriculum, or professional development of faculty.

The onus is now on us — institutions, faculty, corporates, regulators, and the government — to leverage this double-edged sword of disruption, take the right-sized steps towards creating first-rate institutions, and strengthen the pillars of the India's growth and development.



Prof. B.S. Satyanarayana - Vice Chancellor, C.V. Raman Global University, Bhubaneshwar, Orissa

"Philosopher Eric Hoffer had said, "In times of change, learners inherit the earth, while the learned find themselves beautifully equipped to deal with a world that no longer exists". In these changing times, Indian higher education sector needs significant transformation to keep pace with the technology, demographic, and financial disruptions, especially in a dynamic business and corporate environment. To enable this transformation, there needs to be a structured and systematic manner to manage the risks and disruptions it is witnessing. One needs to bring in an integrated approach by corporates, institutions, and regulators to, firstly, bring in a significant number of much-needed investments in infrastructure and research and, secondly, apply a "design-thinking" concept to transform the most critical aspects of having an innovative curriculum and an effective, engaging assessment model, and ensure professional development of faculty."

CONTRIBUTIONS FROM

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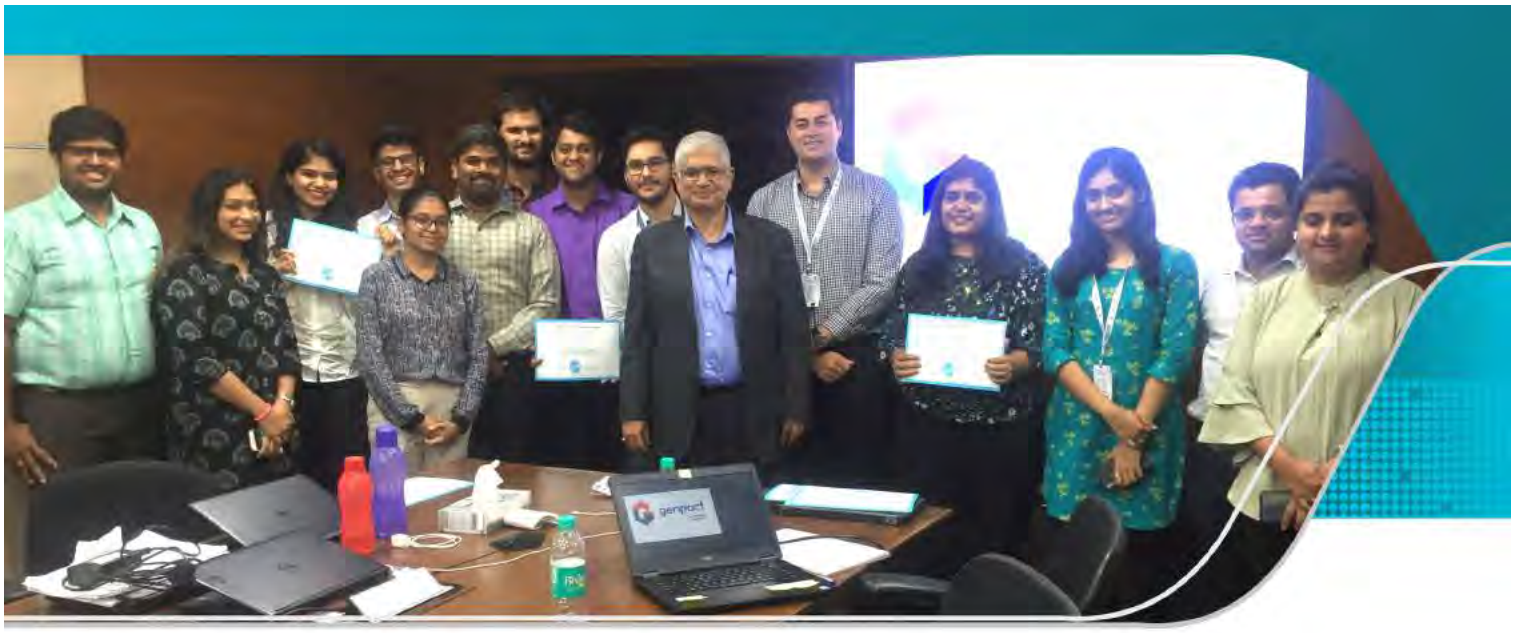
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