Higher Education in India – Vision 2047
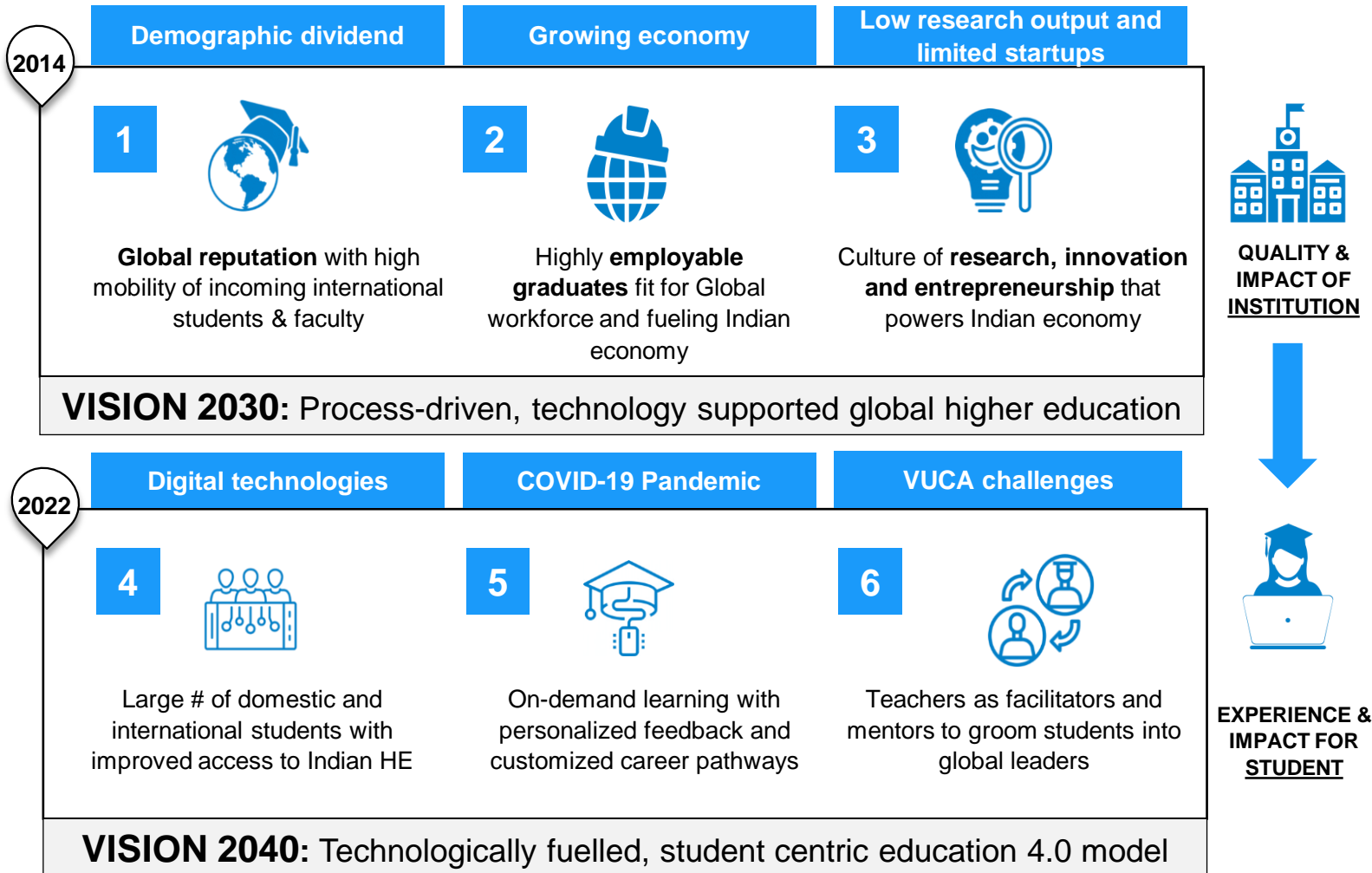
November 2022

Agenda

▸ **HE Overview**

▸ Vision 2047 for Higher Education

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Success of global competitiveness of our HEIs is now becoming more driven by student centricity

2014

Demographic dividend	Growing economy	Low research output and limited startups
1	**2**	**3**
Global reputation with high mobility of incoming international students & faculty	Highly **employable graduates** fit for Global workforce and fueling Indian economy	Culture of **research, innovation and entrepreneurship** that powers Indian economy

VISION 2030: Process-driven, technology supported global higher education

QUALITY & IMPACT OF INSTITUTION

2022

Digital technologies	COVID-19 Pandemic	VUCA challenges
4	**5**	**6**
Large # of domestic and international students with improved access to Indian HE	On-demand learning with personalized feedback and customized career pathways	Teachers as facilitators and mentors to groom students into global leaders

VISION 2040: Technologically fuelled, student centric education 4.0 model

EXPERIENCE & IMPACT FOR STUDENT

Commentary

Progress so far:

- **3 Indian Institutions** (IIT Bombay, IIT Delhi and IISc Bengaluru) in **top-200** of QS World University Rankings

- India among **top 15 countries** in Employability Rankings 2020*

- 21st century regulation and governance reforms pushed by **National Education Policy, 2020** by Govt of India

Way forward:

- Innovative **technological solutions** to transform universities delivery and operations to **meet students' needs**

- **Integration of faculty with industry** connect and coaching experience into Indian varsities

While FICCI's HE Vision for 2030 focussed on building process-driven & technology supported global HEI's in India, the Vision 2040 places a higher emphasis on improving overall student experience by developing a tech focussed, student centric model

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HE enrolments in India expected to increase by ~34M by 2035 on account of increased GER; Private UG institutions will continue to lead the market

Additional Capacity Requirement by 2035, Indian Higher Education
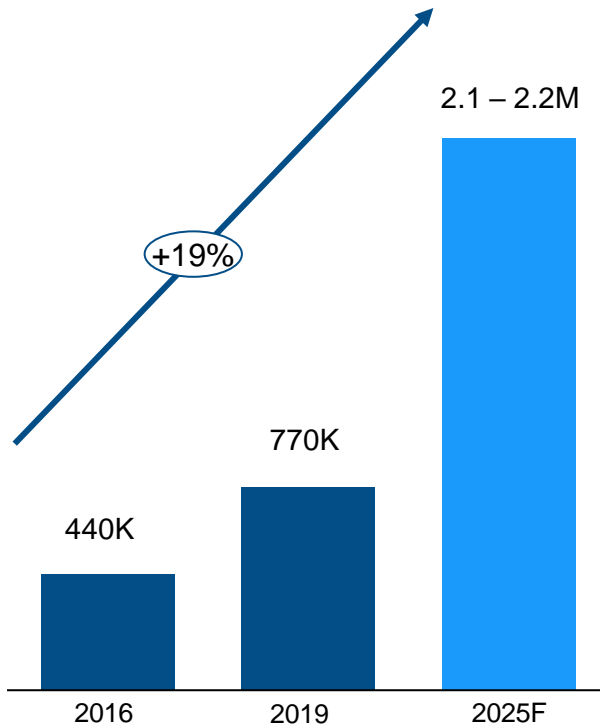Number of students (in millions)

Current Capacity 2020	Additional Capacity Required	Government Target 2035
39 M	~34M	~73M

GER ~27% → +23% → 50%
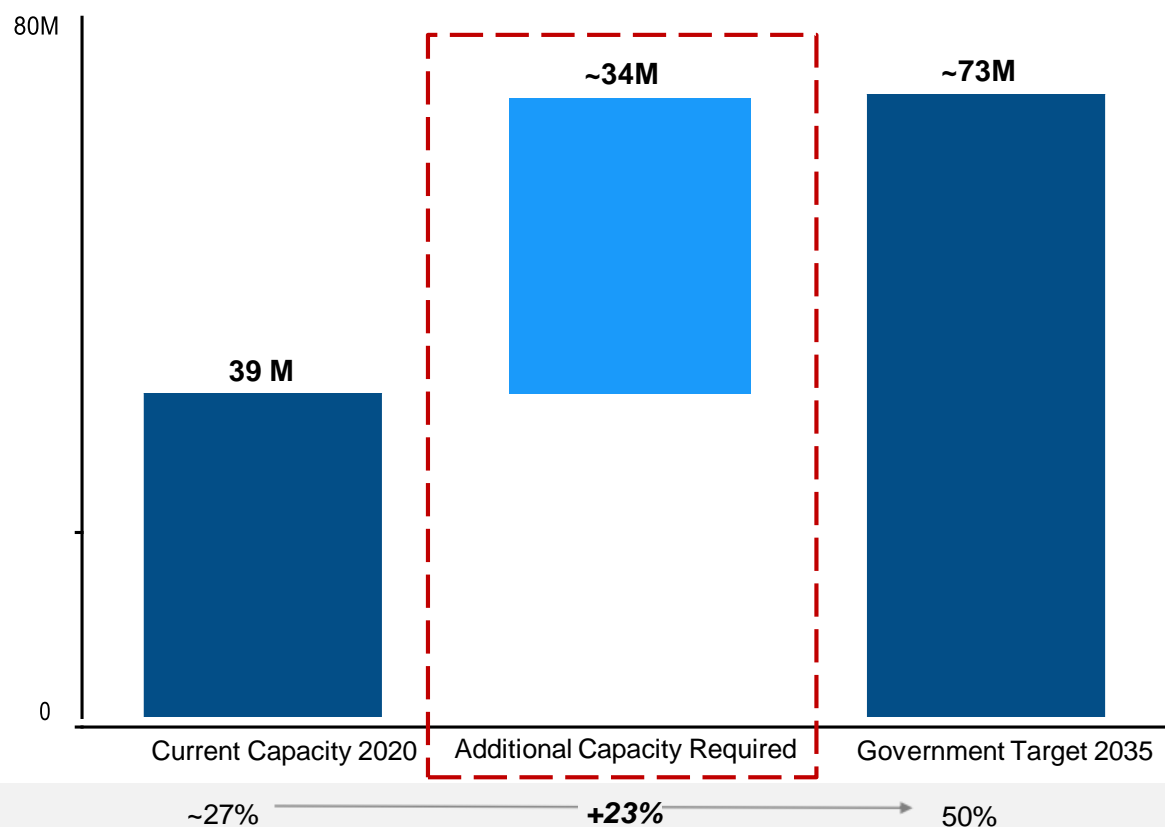
Commentary

- **Increasing household affordability** and **higher number of K-12 graduates** are expected to accelerate demand for HEIs

- **Private higher education** enrols ~22M students and accounts for **58% share** of total HE enrolments **in 2020** (compared to 27% in the US)

- **~80%** students are enrolled in **undergrad** programs, whereas **postgraduate** programs witness only **11%** of the total HE enrolments (compared to 16% in the US)

- Along with maintaining adequate **staff** and **infrastructure,** Indian HE needs to **add additional capacity** for **~34M** students by 2035

- However, **complex regulatory framework** and **not-for-profit nature** of the education sector in India often deters FDI from entering Indian education market

Enhancing course intakes mandated by UGC / AICTE, **expanding course offerings**, **relaxing complicated reforms** for setting up more HEIs and IBCs can help meet additional capacity requirements
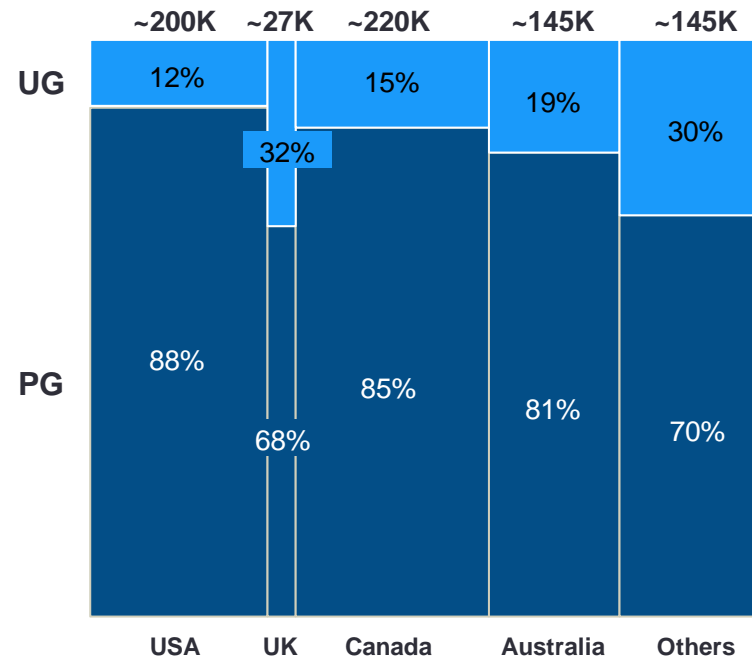
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Indian students seek foreign universities for post graduate degrees while India attracts students primarily for undergraduate degrees

Cumulative No. of Indians Studying Abroad, 2016-25F

+19%

2.1 – 2.2M

770K

440K

2016   2019   2025F

Indian Higher Ed. Students Going Abroad
Number of students, 2019

	~200K	~27K	~220K	~145K	~145K
UG	12%	32%	15%	19%	30%
PG	88%	68%	85%	81%	70%

USA   UK   Canada   Australia   Others

Commentary

- **~588K** Indian students went abroad to pursue higher education in 2019. **~770K commutative** Indian students were studying abroad in 2019. The cumulative number is **expected** to reach **2.1-2.2M** students by **2025**

- **USA** and **Canada** continue to be the preferred destination of Indian students for studying abroad. **70 - 90%** of Indian higher education students across major geographies were **enrolled in post graduate** courses

- Whereas only **~50,000** foreign students were studying in India in 2020; of which **74.3%** were enrolled in undergraduate courses, and **16.6%** in postgraduate programs

Students take up foreign programs due to -

- **visa and immigration advantages** along with foreign work experience opportunities

- **better courses** in fields of interest (STEM, Data Analytics, AI, Cybersecurity) and **foreign exposure**

- **positive perception** and brand recognition of international HEI's

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Higher Education is faced with challenges based on the current regulatory frameworks, funding inadequacies and institutional shortcomings

Key Challenges in Indian Higher Education

Key Structural Challenges

Low Public Spending

NEP 2020 called for a spend of **6% of GDP** on education, which is **double** the current allocation of **3%**. Current HE spend to be raised from **1% to 2% of GDP**

Absence of Private Investment Framework

Complex regulations and procedures surround setting up of a higher education institute. Need to **permit all types of organizations** to set up and **operate schools and HEI's** .University endowment funds are not allowed to **invest in alternate investment funds** and other asset classes

Student Financing

High nominal **education interest rates** of 10-14% deter students to purse education. Need to bring the nominal rates **down to ~4-5%.** Also, need to **build robust mechanisms** to provide **grants and scholarships** directly to students

Key Implementation Challenges

Inadequate Global Repute & Internationalization of Indian HEIs

Lack of **internationally recognized accreditations** like **EQUIS** in Indian HEIs has deterred foreign students from considering them as an option. Also, **complex regulatory framework** makes India **unattractive** to foreign universities seeking overseas expansion.

Insufficient Infrastructure & Student Research Opportunities

Insufficient **technological infrastructure** to meet increasing digitalization of higher education and shortfall in proper physical facilities such as **labs and adequate classrooms** in **rural areas**

Also, as per QS, India's scholarly and research output is **less than a third** of what is produced by countries like **UK** in cross border research

Suboptimal Student & Faculty Skills

Many **research scholars** and **postgrad students** are **not skilled** enough to get equipped in the industry or corporate world.

Various HEI faculties have **inadequate skills and training** to **implement and deliver** the programs effectively

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There is potential for Higher Education Institutes to capitalise on opportunities while addressing the key challenges

Measures to overcome challenges in Indian Higher Education

Unlock Private Funding via CSR Channel

Huge amount remains **unutilized in CSR funds**. There's a need to **develop a pragmatic CSR policy** to attract more donation in the Indian HE space.

Use of EdTech to Gain Global Stronghold

Leverage **strong Indian EdTech** ecosystem. Promote **co-development of content** between HEI-EdTech that can be disseminated to Indian and **global learners** to provide necessary **upskilling and vocational trainings** to bridge student's skills gaps

Allowing Foreign Investment and Institutions

UGC is preparing regulations for **allowing** foreign universities to set up in India. UGC Regulations 2022 announced to offer **Twinning, Joint Degree and Dual Degree Programs** with foreign partners. Development of GIFT City can also serve as a **hub for IBCs**

Prioritization of Research

The Government is **prioritizing research** and in line with FICCI's recommendation, has announced allocation of **INR 50,000 crores** over **five years** for the **National Research Foundation (NRF)**

Provision for Greater Autonomy – NEP 2020

NEP 2020 aims to allow institute governance with **lesser external interference** by 2035. The regulatory system is being transformed with the formation of **HECI**[1] that will include and combine **4 key areas of HE functions** – regulatory council, accreditation, grants and graduate outcomes

New Age Education System

NEP 2020 calls for disruption of existing Indian education system to meet todays and future skill requirements. It also focuses on **flexible curricula structures, large multidisciplinary universities, academic credit banks,** and formation of **degree granting colleges**

Notes: 1. HECI – Higher Education Council of India
Source: FICCI Reports, Secondary Research, EY Parthenon Research & Analysis

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Agenda

▸ HE Overview

▸ **Vision 2047 for Higher Education**

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Using policy and technology as a key enabler, Indian higher education system needs to improve and develop capabilities across 5 key pillars to unlock the true potential

Vision

" *An equitable, inclusive and accessible higher education of world-class standards with a student-centric approach that encourages lifelong learning and harnesses the vast human resource potential of India and the world.* "

1 Student Centricity

2 Research and Innovation

3 Faculty

4 International Mobility

5 Digital Learning

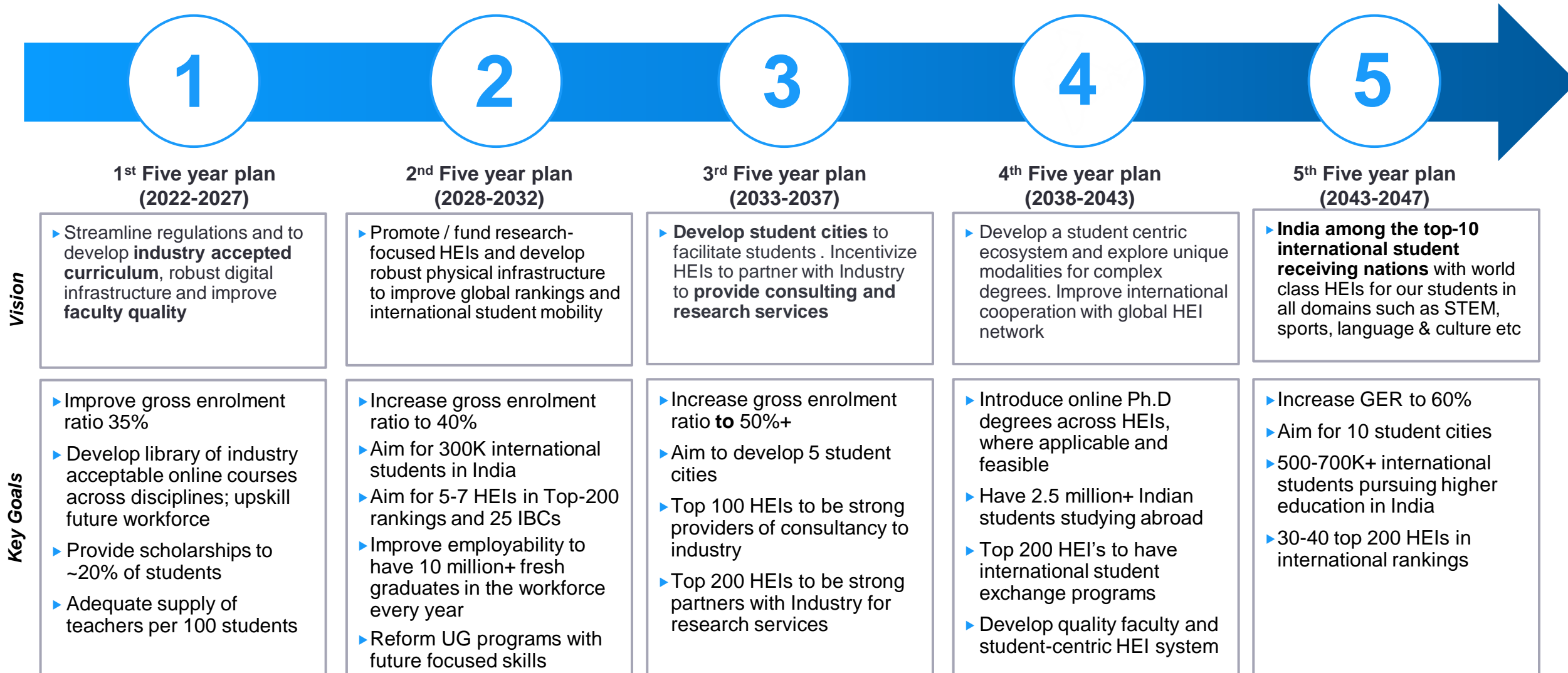| 1 Student Centricity	2 Research and Innovation	3 Faculty	4 International Mobility	5 Digital Learning
▸ Build **an ecosystem of flexible credit-based** curriculum across the HEI landscape ▸ Allow students the flexibility to undertake MOOCs on ed-tech platforms, **credits for which should be recognised by HEIs**	▸ Promote and fund research-focused HEI's to increase spend on R&D (as a proportion of GDP) to reach 1.5-2%; invest in faculty development pro ▸ Develop **state-of-the-art physical & digital infrastructure** for research facilities	▸ **Allocate adequate funds and resources** to ensure acquisition and retention of talented and qualified personnel in the teaching profession ▸ Develop clear policies of permissible student teacher ratios for HEIs. At present, **student teacher ratio is 28:11** for universities and colleges. Aim to bring this to **~20:1**	▸ Focus on **developing research capabilities** and **improving perception** of Indian HEI's and leverage this to achieve 30-40 Indian HEIs in global top 200 rankings ▸ Attract universities from the **"Top 200 category"** that offer relevant programs for advancing the needs of the country	▸ Allocate **US$ 1.5 billion funding** to develop digital infrastructure within central and state government run HEIs ▸ Partner with various **ed-tech players** to develop a national level content library that will include high quality e-courses for all discipline

Governance and Regulations

Physical & Digital Infrastructure Development

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To achieve India @100 years vision for Higher education, the Indian education system must transform by 2047 with the following strategic 5-year plans

1 — **2** — **3** — **4** — **5**

	1st Five year plan (2022-2027)	2nd Five year plan (2028-2032)	3rd Five year plan (2033-2037)	4th Five year plan (2038-2043)	5th Five year plan (2043-2047)
Vision	▶ Streamline regulations and to develop **industry accepted curriculum**, robust digital infrastructure and improve **faculty quality**	▶ Promote / fund research-focused HEIs and develop robust physical infrastructure to improve global rankings and international student mobility	▶ **Develop student cities** to facilitate students . Incentivize HEIs to partner with Industry to **provide consulting and research services**	▶ Develop a student centric ecosystem and explore unique modalities for complex degrees. Improve international cooperation with global HEI network	▶ **India among the top-10 international student receiving nations** with world class HEIs for our students in all domains such as STEM, sports, language & culture etc
Key Goals	▶ Improve gross enrolment ratio 35% ▶ Develop library of industry acceptable online courses across disciplines; upskill future workforce ▶ Provide scholarships to ~20% of students ▶ Adequate supply of teachers per 100 students	▶ Increase gross enrolment ratio to 40% ▶ Aim for 300K international students in India ▶ Aim for 5-7 HEIs in Top-200 rankings and 25 IBCs ▶ Improve employability to have 10 million+ fresh graduates in the workforce every year ▶ Reform UG programs with future focused skills	▶ Increase gross enrolment ratio **to** 50%+ ▶ Aim to develop 5 student cities ▶ Top 100 HEIs to be strong providers of consultancy to industry ▶ Top 200 HEIs to be strong partners with Industry for research services	▶ Introduce online Ph.D degrees across HEIs, where applicable and feasible ▶ Have 2.5 million+ Indian students studying abroad ▶ Top 200 HEI's to have international student exchange programs ▶ Develop quality faculty and student-centric HEI system	▶ Increase GER to 60% ▶ Aim for 10 student cities ▶ 500-700K+ international students pursuing higher education in India ▶ 30-40 top 200 HEIs in international rankings

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Key Unlocks Required – Now *(Fix the basics)*
Some immediate imperatives for HEI stakeholders include building industry partnerships, providing flexible curriculum, and liberalizing regulations

KEY THEMES **UNLOCKS** ■ **HEI** Level ■ **Industry** Level ■ **Policy-maker** Level

1 Student Centricity
- Develop **multidisciplinary courses to make students 'industry ready'.** Introduce an option for 'flexible degrees' that allow students to pick and choose disciplines they are interested in studying during their graduation program
- Industry must move beyond premier HEI's and look at **engaging with other institutions**
- Build an ecosystem of **flexible credit-based curriculum** across the HEI landscape; Allow students the flexibility to undertake MOOCs on ed-tech platforms, credits for which should be recognised by the HEIs

2 Research and Innovation
- Collaborate with **industries and research organizations** to impart knowledge on technological advancements and industry research problems
- **Facilitate need-gap discussions / conclaves** with HEI's to bridge the gap between academic curriculum and industry needs
- Facilitate identification of **local "problem statements"** through **large local administrative bodies,** and engage with relevant **research institutions** to attempt to solve such problems

3 Faculty
- Ensure that there is an **SOP in place for recruitment** of faculties; define a faculty **evaluation framework & dedicated annual budget** for faculty professional development
- Develop **low cost training modules** that are flexible and **available in different modalities**
- Allocate adequate funds and resources to **ensure acquisition and retention** of talented and qualified personnel in the teaching profession. By ensuring focus on quality, aim to fill the current vacant positions in HEIs nationally

4 International Mobility
- Increase access of **exchange programs** beyond select HEIs, assisting students and faculty with insufficient means to gain **cultural & intellectual exposure**
- Initiate investment in areas with scope **for setting up of IBCs** (e.g. GIFT City) on an international scale to ensure maximum **global participation**
- Set **liberal frameworks and investor-friendly regulations** to attract IBCs in India

5 Digital Learning
- Develop institute wide **SOPs for deploying digital tools**; ensure HEI leadership, faculty and students buy-in on the use of digital interventions
- Ed-tech players should **build low cost and mass implementable tech** tools that can be deployed within the academic & non activities of HEIs
- Allocation **US$ 1.5 billion funding** to develop digital infrastructure within central and state government run HEIs

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Key Unlocks Required - Next *(Explore Adjacencies)*
In order to prepare Indian HE students for Industry 4.0, HE stakeholders must focus on attracting private investments, democratize HE & upskill students as next steps

KEY THEMES

UNLOCKS ■ **HEI** Level ■ **Industry** Level ■ **Policy-maker** Level

1 Student Centricity
- Inculcate concepts of **vocational education** within the curriculum of academic degrees
- Develop a socially **conscious alumni network** and ensure that in the next 10 years a cohort of **socio-economically disadvantages groups students move up the ladder**
- Companies can partner with universities to **operate satellite centres** and set up **technology development centres** within universities
- Aim to create at least **5-10 safe and thriving student cities** for Indian and international students

2 Research and Innovation
- Develop **research-intensive academic programmes** at the undergraduate level to expose and attract young minds towards doctorate programs
- Liaise with Indian research HEIs for business problems, **helping industries and incubators gain specialist knowledge**
- **Increase earmark funds** for developing Indian research journals to improve the efficiency of editorial processing of submitted manuscripts; enhancing the funding will improve the **attractiveness and visibility of Indian research journals**

3 Faculty
- Promote autonomy to teachers to choose the pedagogy that is most effective for their students. Recognize and reward teachers that maximize **learning outcomes**
- Provide low cost tech enabled solutions that reduce the administrative burden of faculties; provide teachers a live dashboard on key performance
- Develop shorted focussed **teaching education programs** that can be pursued by the existing teachers in the ecosystem
- Simplify the enrolment process of teacher education for **international candidates**

4 International Mobility
- Facilitate university partnerships with research collaboration, **student exchange programmes** with the Top 200 HEIs of the world
- Develop and **provide affordable student housing solutions** to facilitate the envisioned student intake ramp-up
- **Focus on research** and improving perception of Indian HEIs and leverage this to achieve **20-40 Indian HEIs in global top 200 rankings**

5 Digital Learning
- Inculcate **basic modules on coding, AI/ML, design thinking etc.** within curricula across all disciplines
- Collaborate with **private ed-tech companies to integrate and develop new technological capabilities** and learning methods in the HE ecosystem
- **Democratize quality private higher education**. Develop an ecosystem that hosts courses from multiple leading universities with plenty options

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Key Unlocks Required - New *(Explore Frontiers)*
Innovative alternate financing mechanisms and new industry-academia collaborative methods can be explored as new frontiers by HE stakeholders

KEY THEMES

UNLOCKS ■ **HEI** Level   ■ **Industry** Level   ■ **Policy-maker** Level

1 Student Centricity
- Tie-up with education finance NBFCs to provide financial assistance to students
- As a part of the CSR program, companies can aim to partner with select individual HEIs; HEIs can use CSR and government funds to build capacity
- Introduce micro credentials as an accepted model of higher education that allows students to decide – what they want to learn; how they want to learn and build a personalized learning pathway

2 Research and Innovation
- Have a dedicated **"outreach resource"** which engages with industries to **understand their R&D** needs, & explore possible ways to **collaborate**
- Partner with Top 100 HEIs, collaborating with industry needs for research support and collaboration with incubators on campus
- Ensure that policies for improving research output in the country not only focuses on quantity, but quality as well. Emphasis on improving research metrics such as bibliometrics, altimetric, citation analysis etc.

3 Faculty
- Launch a faculty rotation program within and outside the country to help teachers explore and develop new teaching styles and pedagogies
- Faculty training workshopping by industry experts to enable faculties to understand and teach job-ready skills to students
- Develop and extend the chain of NITTTR (National institute of technical teachers' training and research) institutes across the country and establish it as a world-renowned institute for teacher education

4 International Mobility
- Set up **30-40 IBCs** of leading Indian institutes abroad
- Set up **supporting social infrastructure** i.e, hostels, eateries, etc, in the upcoming education cities
- Rebrand the Indian higher education particularly in allied subjects like STEM and medical education as a **"Modern Higher Education Destination with Strong Heritage"**

5 Digital Learning
- **Set up high end in-campus tech-based facilities** such as AR/VR labs, 3D printing labs, research facilities with high-end computing facilities etc
- Ed-tech players can aim to **develop a "one-stop-shop" student financing portal** where easy financing and scholarships are readily available
- Develop **a fully digital university with high quality faculty**; university will provide both academia as well as vocational degree programs

Thank You

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