

A large, circular network diagram composed of numerous grey nodes connected by thin lines, with several nodes highlighted in red, orange, and yellow. The diagram is centered on the page and serves as a background for the main text.

World Future Skills Index

**Transforming higher education
for the skills economy**

Skills Fit | Academic Readiness
Future of Work | Economic Transformation

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and we work closely with higher education institutions to help them take a data-driven approach to their strategic thinking.

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We gather billions of data points from our global network of employers, academics and prospective students, providing unrivalled insights into the higher education landscape. We are known and respected globally for our data-driven expertise, including the QS World University Rankings portfolio which incorporates data from millions of academic papers, and the views of academics and employers. The QS International Student Survey measures the preferences and motivations of over 100,000 prospective students each year.

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We are proud to have worked with government bodies in many geographies including the Middle East, Central Asia and South Eastern Asia, helping them to build quality assurance frameworks and deliver national-level projects that bring together government, higher education institutions and QS to provide insights and actionable advice.

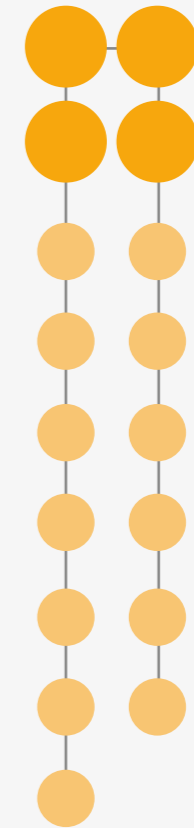
We are a trusted student recruitment partner for the sector

We reach over 60 million unique visitors per year through our digital platforms and our recruitment support covers every stage of the student journey, from initial awareness to offer acceptance and enrolment.

The QS World Future Skills Index in numbers



190+
countries analysed



4
indicators
powered by
13
sub-indicators



280m job postings studied



5,000+ universities assessed



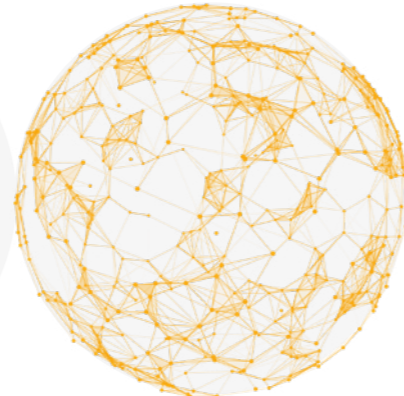
5m+ employer skill demands reviewed



17.5m research publications examined



Matteo Quacquarelli
Vice-President of
Strategy and Analytics
QS Quacquarelli Symonds



Executive summary

Employers today require a workforce with skillsets that didn't exist 20 years ago – artificial intelligence (AI), digital and green skills have all come to the fore. McKinsey's 'Jobs lost, jobs gained' report¹ estimated that, by 2030, up to 375m, or 14% of the global workforce, would need to switch occupational categories due to automation, digital disruption and industrial change.

The future generation needs new skills, current workers need to upskill or retrain, and governments must activate their higher education institutions to enable future economic growth and help this transformation through targeted workforce reskilling. The unprecedented pace of technological advancement has accelerated the need for a dynamic response from governments in tandem with their higher education institutions.

The QS World Future Skills Index evaluates how well countries are equipped to meet the evolving demands of the international job market. It aims to empower governments to align education and skills with future demand, fostering innovation, sustainable global competition and talent development. In this report, we explore key findings and in-depth analysis from the Index.

- 1 Rapid industry innovation**
There is a cluster of countries that are seeing their economies and future industries transform faster than the new skills adoption of their workforce. This requires reskilling of their workforce and increased investment in attracting highly skilled talent to their country. Learn more on page 38.
- 2 Skills supply outpacing skills demand**
Some countries are seeing economic stagnation despite an excess of transformational talent. Stimulus needs to be provided through research innovation and industry partnerships to drive economic growth. We discuss this in the global analysis section, starting on page 36.
- 3 Education key to thriving economy**
There is a strong correlation between good economic performance and higher education success. We discuss what higher education must do to improve performance at a country-level. Our recommendations are on page 50.

The findings of the QS World Future Skills Index are clear – innovation in a country's higher education system and ensuring the sector's long-term sustainability is fundamental to a growing national economy. It's an important time for governments and higher education institutions to recognise that a huge disruption to workforce norms is on the horizon.

The potential for higher education to enable this transformation is huge – but there are private providers, online education providers

and education arms of major global companies, including Google, Microsoft and Amazon who are increasingly certifying skills and competence.

To support economies to make this workforce transition, higher education systems need to build greater agility through modular learning² and curricula advancement to ensure that the skills that businesses need are available in the fifth stage of education.

Key recommendations

Higher education

Establish lifelong and personalised learning paths for students.

Implement modularised learning, advancing curricula in alignment with the skills necessary for future innovation and aligning academia to industry needs.

Develop targeted international research partnerships aligned to local industry needs to drive research innovation and deliver economic growth.

55% of prospective international students would like to live and work in their country of study for 1-3 years post-graduation³.

These recommendations require investment, but with a confluence of economic challenges globally, this necessary investment has stagnated. For the betterment of society, it is vital that the supply of world-class education is sufficient

Governments

Utilise the strength of higher education to attract international talent to fill short-term, high impact skills gaps within economies.

Introduce smart and targeted immigration policy to enable these high-skilled workers to contribute to society, gaining the work-based skills to thrive on returning home.

Connect industry and higher education's capacity for research innovation and foster partnerships to drive economic stimulus and industrial diversification.

for the needs of innovative businesses that will help solve the climate crisis, intelligently engage AI to achieve growth and more effective processes, and drive creative solutions and digital innovation.

¹ McKinsey Global Institute (Jobs lost, jobs gained: What the future of work will mean for jobs, skills, and wages)

² OECD Skills Outlook 2023: Skills for a Resilient Green and Digital Transition
³ QS International Student Survey 2024

*While this report focuses on higher education's critical role in equipping the future workforce, it is important to recognise the complementary role of Further Education institutions in skills development globally. In this context, 'higher education' includes tertiary institutions offering advanced degrees, while Further Education often addresses vocational and technical skills that bridge immediate labour market needs.

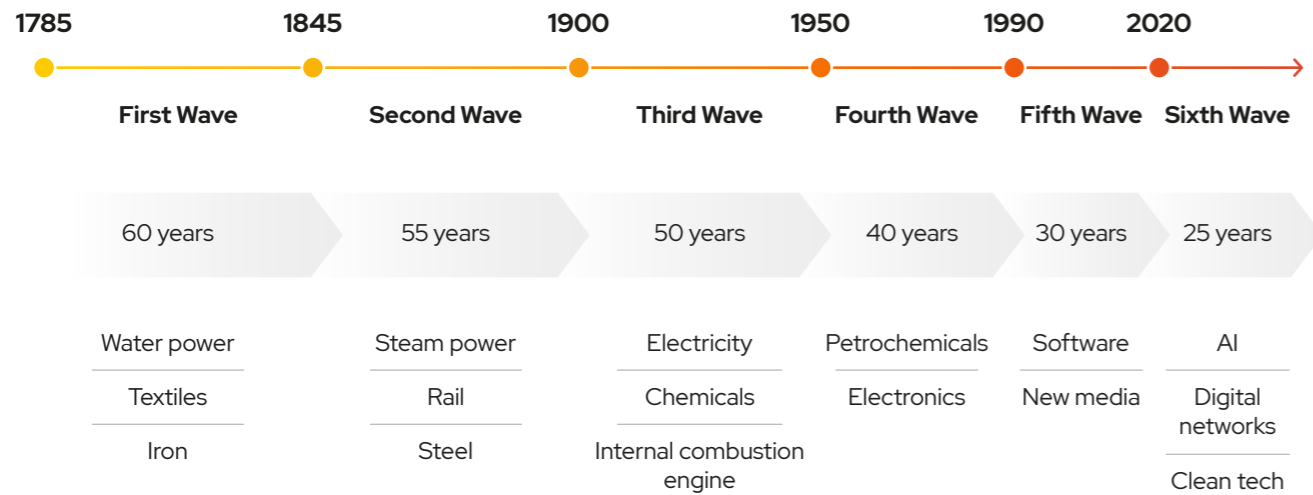


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Understanding the landscape

Industrial innovation is 'half-lifing' and with it has come an increased speed with which the workforce must learn new skills to adapt, retain employment and drive productivity and growth for their economy.



Source: Visual Capitalist: The history of innovation cycles

Baby boomers

- Lifelong careers / longterm employment
- Full time employment
- Hierarchical growth
- Very little job hopping

Internet millenials

- IT careers
- Internet-based recruitment
- Job hopping becomes common

GenZ portfolio careers

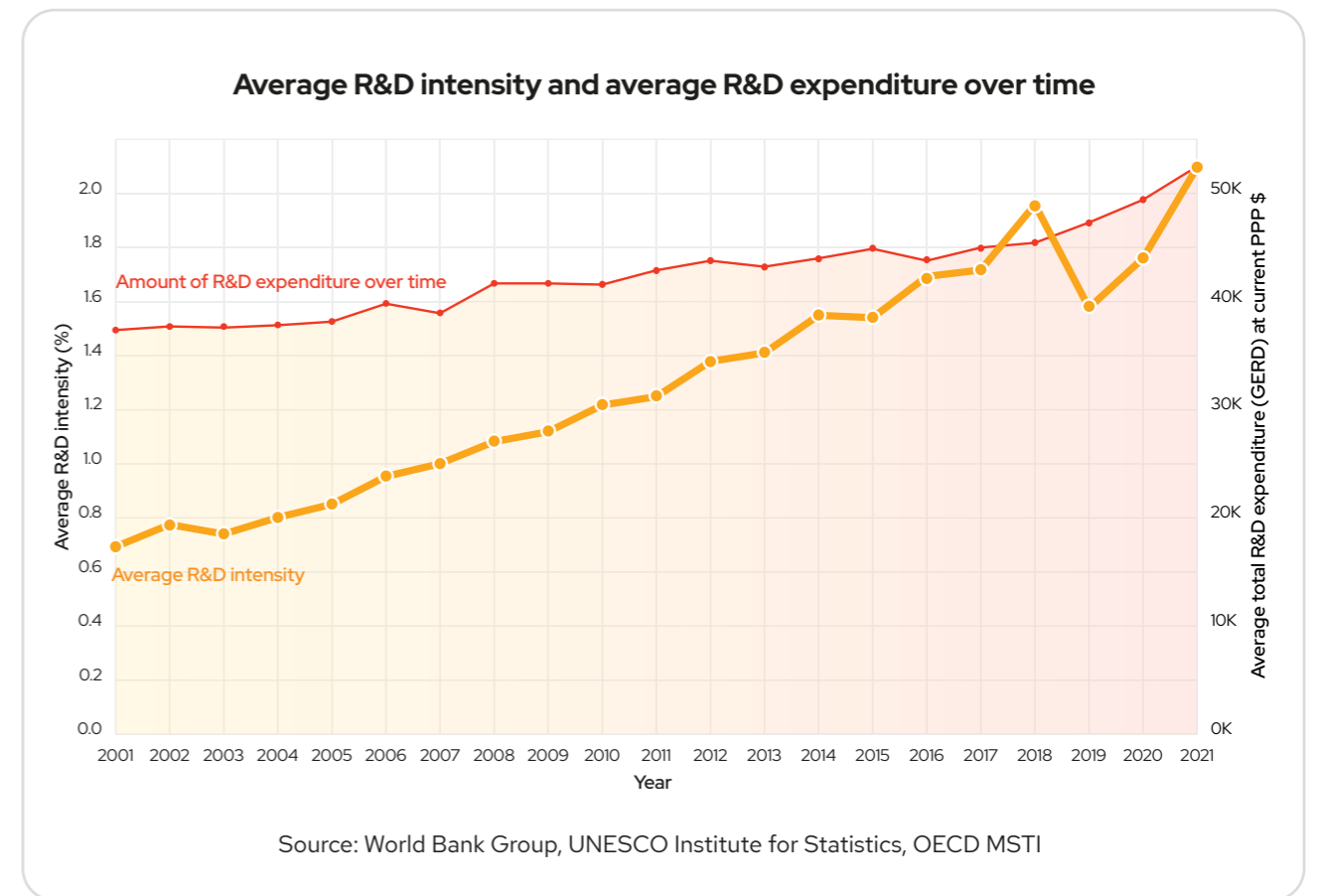
- Remote working
- Gig work
- Contract work
- Constant education
- Mindfulness
- Wellbeing
- Postpone family
- Labour shortage

Source: The Josh Bersin Company 2024

Rapid and accelerating industrial innovation

From steam power and railways, to digital networks and clean technology, each wave of innovation has reshaped industries, economies and careers. What makes the 2020s different is the speed of industrial innovation. It's unlike anything we've seen before. In response, countries are ramping up their investments in research and development (R&D) at record levels, recognising that keeping up with this pace is crucial for economic resilience and growth. Global R&D spending has risen steadily, reflecting the urgency for nations to stay competitive and equip their workforces with the skills needed to thrive in a rapidly changing world.

Higher education institutions are pivotal in driving R&D across various countries. There has been a steady increase in R&D intensity with a sharp rise in R&D expenditure over the past two decades. This signals rapid and accelerating industrial innovation and significant financial investment in innovation. The upward trend in both intensity and expenditure demonstrates how countries are prioritising R&D to drive industrial advancements, with recent years (since the COVID-19 pandemic) showing especially robust growth indicative of accelerated innovation efforts.



The global perspective: How are universities crucial to a nation's R&D?

The below examples illustrate how universities worldwide are at the heart of R&D efforts, serving as hubs for knowledge creation and technological progress.

United States

Academic institutions are large contributors to the US' R&D, with expenditures totalling USD\$81 billion in 2020. This equates to 11% of the US' total R&D expenditure, reflecting their essential role in innovation⁴.

United Kingdom

The UK higher education sector invested around USD\$20 billion in R&D in 2020, making universities central to scientific and technological advancements⁵.

Japan

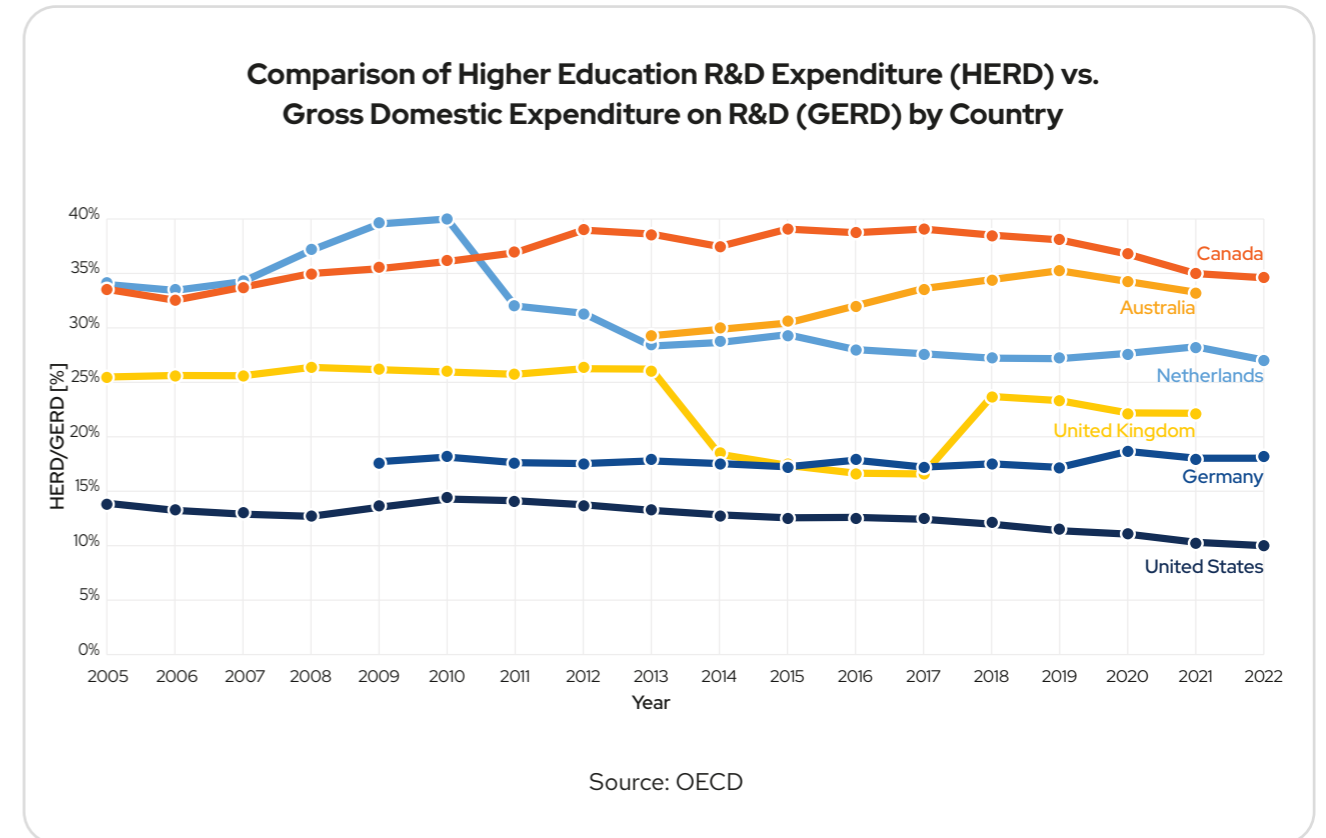
Universities contributed significantly to the nation's USD\$20 billion R&D expenditure in 2020, showcasing their integral role in the country's research ecosystem⁶.

France

Higher education institutions spent about USD\$15 billion on R&D in 2020, highlighting their influence in driving innovation⁷.

Australia

Higher education R&D expenditure nearly reached AUD\$13 billion in 2021/2022, marking a 10% increase from 2020. However, this growth has not kept pace with the overall economy, as higher education's share of GDP fell from 0.61% in 2020 to 0.55% in 2022⁸.



If we look at the proportion of a country's total R&D expenditure (GERD) that is achieved by their higher education sector (HERD), Australia and Canada consistently prioritise funding for research within universities, with

HERD making up a substantial part of their total R&D budgets. The Netherlands has also increased its focus on higher education research over time.

⁴ US National Science Foundation: Academic R&D comparisons
^{5,6,7} OECD iLibrary: Higher education expenditure on R&D (HERD) at current prices and PPP
⁸ Australian Bureau of Statistics (Universities spending more on R&D, but not keeping pace with GDP)

The introduction of new skills into the workforce: AI, digital and green

The faster rate of skills change is already evident

The World Economic Forum predicts a 60% growth in AI skills and a 35% growth in digital skills by 2030, fuelling industry transformation and workforce demands. 24 million new green jobs are expected by 2030, driving a global shift to sustainability.

In only a five-year period, the relevancy of certain skills is declining in favour of new AI, digital and green skills. While the declining skills are still valuable to employers, the quick pace of change within these innovative skills clusters is noteworthy.

Top 5 AI skills growing in relevancy in last 5 years

1. Machine learning tools
2. Data science, analytics & data visualisation
3. Natural language processing & chatbot development
4. Cloud computing, encryption & infrastructure
5. Data engineering, big data tools & data modelling

Top 5 AI skills declining in relevancy in last 5 years

1. Legacy AI & machine learning libraries
2. Legacy NLP & voice recognition tools
3. Older cloud & computing platforms
4. Statistical and data analysis tools & knowledge-based systems
5. Human-machine interface software & robotics

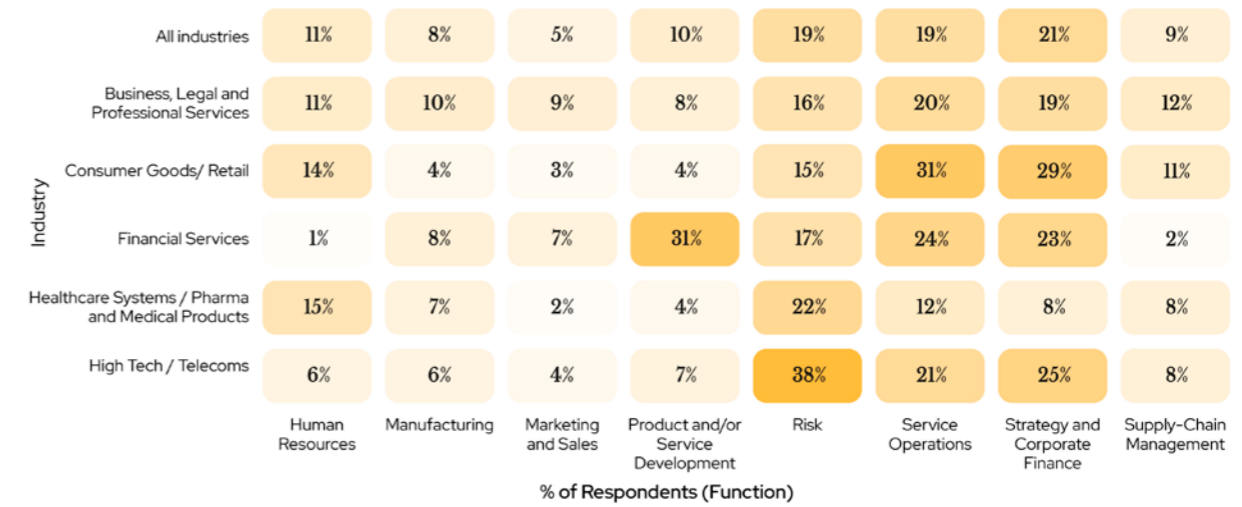
Top 5 digital skills growing in relevancy in last 5 years

1. Cloud computing & infrastructure inc. Amazon EKS/ Microsoft Power Automate
2. AI & machine learning
3. Web, application and chatbot development
4. Data science & analytics
5. Security & compliance inc. AWS Security

Top 5 digital skills declining in relevancy in last 5 years

1. Programming languages & frameworks inc. Jython
2. Enterprise software & CRM systems inc. Sage Simply Accounting
3. Data & database management
4. Testing, monitoring & automation tools
5. Graphics, multimedia & design software inc. Adobe Social

AI adoption by industry and function 2022



Source: McKinsey & Company Survey 2022 | Chart 2023 AI Index Report

Top 5 green skills growing in relevancy in last 5 years

1. Environmental science, conservation & climate change mitigation
2. Agriculture, agroforestry & soil ecology
3. Water & hydrology management inc. hydrological modelling software
4. Renewable energy, geothermal heating & carbon management
5. Wildlife & biodiversity conservation

Top 5 green skills declining in relevancy in last 5 years

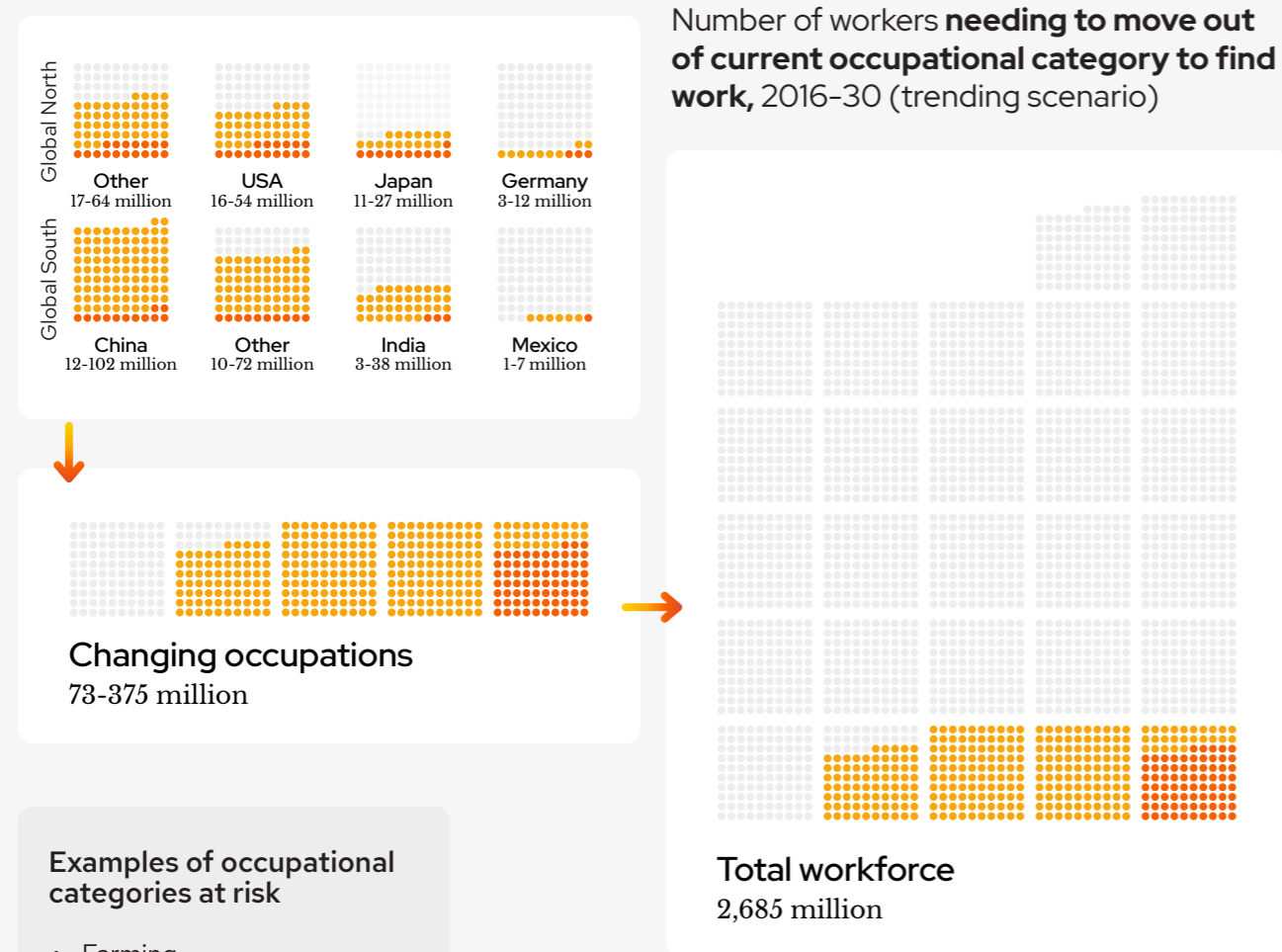
1. Legacy environmental tools & software inc. Envirodata Solutions
2. Agricultural & crop management practices inc. crop rotation
3. Garden design & ecological practices
4. Solar architecture & energy efficiency tools
5. Animal control & livestock management

AI is increasingly transforming industries by reshaping roles and workflows across key functions. In high tech and telecoms, nearly 40% of AI adoption is focused on product and service development, while financial services have a strong emphasis on risk management. Sectors like healthcare, consumer goods, and financial services also show significant AI use in areas such as service operations and strategy.

This shift towards automation brings greater efficiency but also challenges traditional roles, particularly in fields like manufacturing and supply chain management. As AI becomes embedded in more industry functions, many jobs will evolve, while others risk disappearing altogether, reflecting the broad disruption AI is driving across sectors.

Source: QS IMentor, JobDig

14% of the global workforce is at risk of occupational displacement



Examples of occupational categories at risk

- Farming
- Administrative and Executive Secretaries
- Data Entry and Business Intelligence
- Business and Project Managers
- Machinery Workers

Some occupational data projected into 2016 baseline from latest available 2014 data.

Source: McKinsey, HolonIQ

Up to **375 million** workers or **14%** of entire workforce **affected by 2030**

By 2050, University of Oxford economist Dr Carl Frey and Professor of machine learning Michael Osborne predict that at least 40% of current jobs will be lost to automation⁹. By aligning curricula with the evolving needs of industries, especially in areas like AI, digital, and sustainable technologies, higher education institutions help to bridge the skills gap and mitigate workforce risk to support economic resilience and growth.

Green talent is defined in LinkedIn's Green Skills Report as a LinkedIn member who has explicitly added at least one green skill to their profile and/or are working in a green job. Demand for this talent increased by 11.6% between 2023 and 2024, compared to just a 5.6% rise in available talent.

By 2030, one in five jobs will lack the green talent needed.

This gap is expected to rise to one in two jobs **by 2050.**¹⁰

⁹ BBC Science Focus: We will work in the future | University of Oxford: The Future of Employment: How susceptible are jobs to computerisation?
¹⁰ LinkedIn: Global Green Skills Report 2024

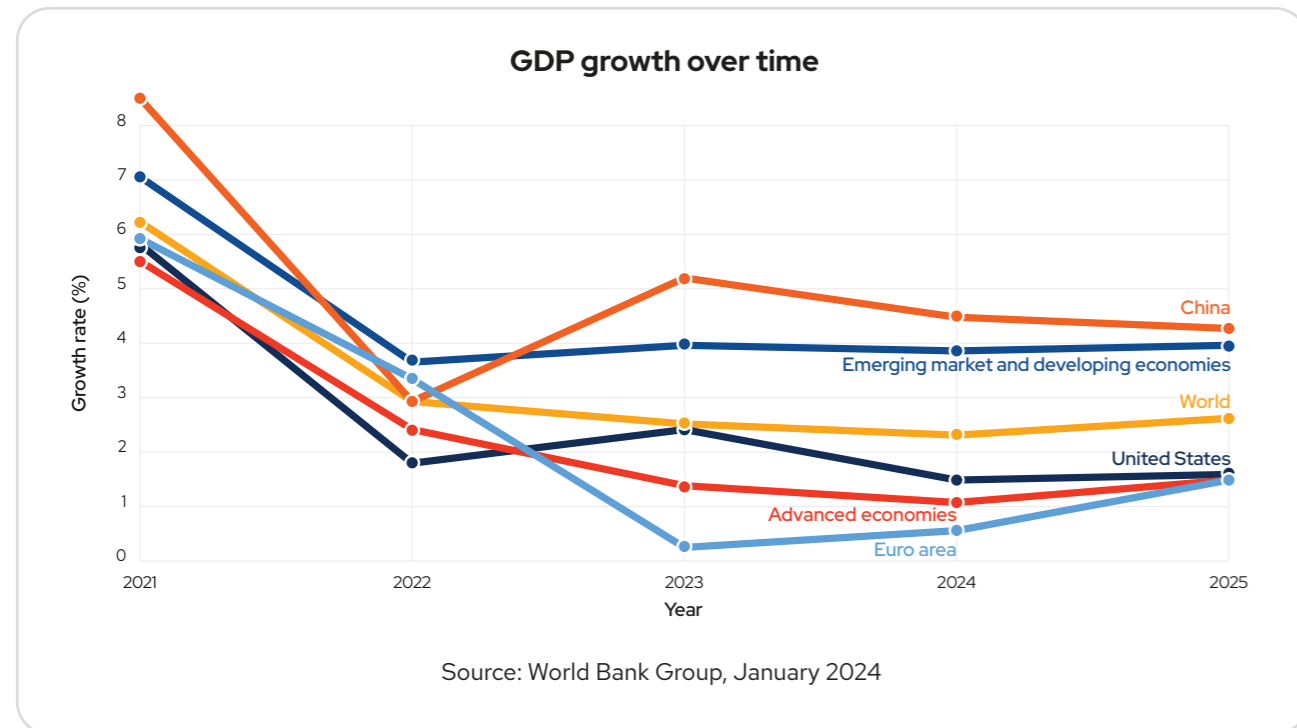
Projected global economic growth slowdown amid rising workforce skill requirements in AI, digital, and green sectors

The projected decline in global economic growth highlights the challenges economies face as new skill demands in AI, digital, and green industries reshape the workforce. With technology advancing rapidly and sustainability becoming a priority, there's an urgent need for workers with specific, updated skills. However, many economies are struggling to adapt quickly enough, leading to a skills gap that affects productivity and growth.

Both advanced and developing economies are feeling the strain, with growth rates slowing as they work to bridge this gap. If countries can't equip their workforces with the necessary

skills, we may see a prolonged impact on global growth in the years to come. Despite the global growth rate being largely in decline, the global economy is set to stabilise for the first time in 2024, but at a weaker level than historical standards¹¹.

As industries adapt to AI, digital, and green technologies, sectors such as renewable energy, health services, and electrical equipment manufacturing (including components critical for AI technologies) are seeing strong growth. However, traditional industries are experiencing steep declines.



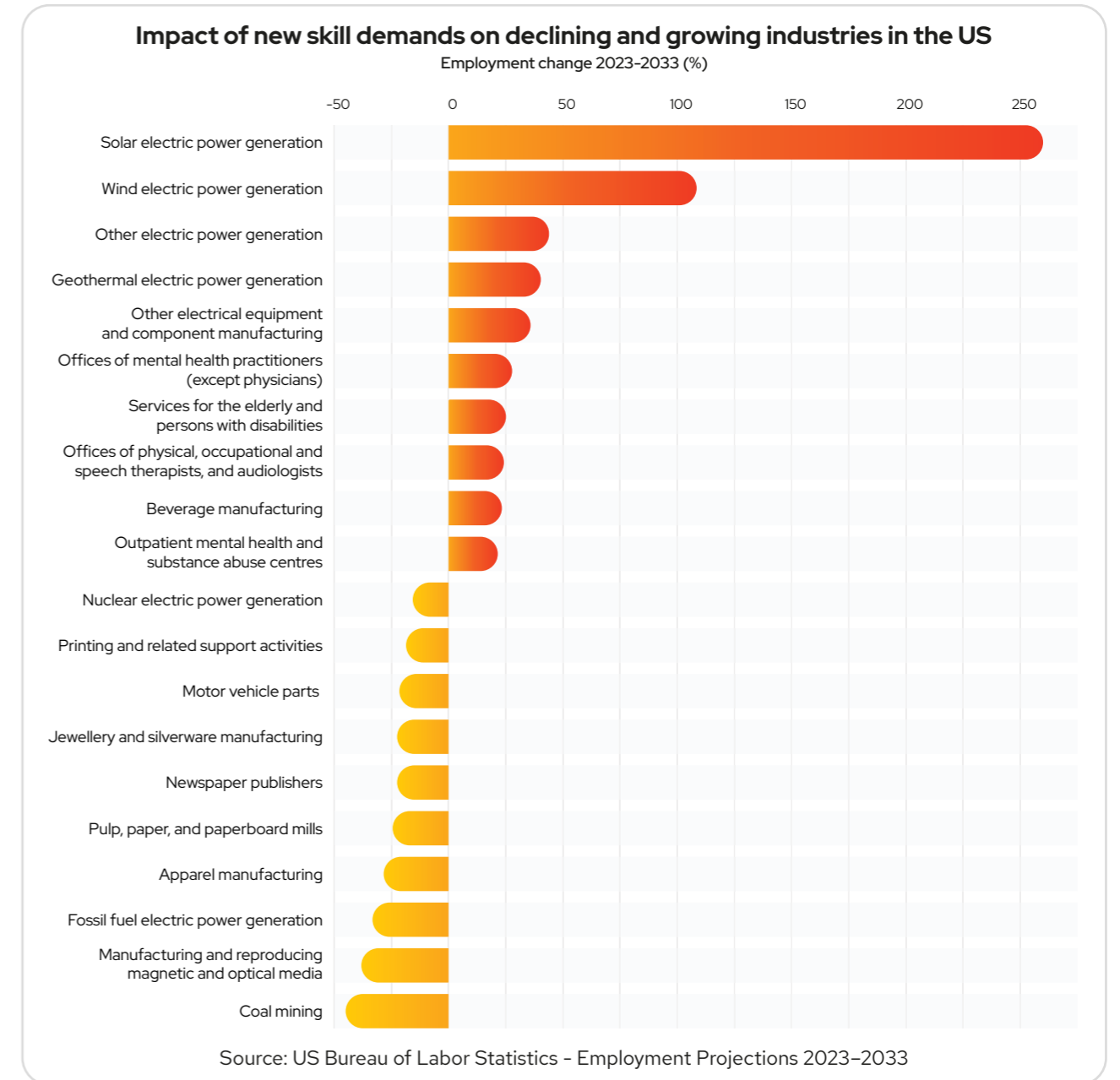
¹¹ World Bank Group: Global Growth Is Stabilizing for the First Time in Three Years



Top declining industries in major economies

Source: QS IMentor, US Bureau of Labor Statistics

- 1 Fossil fuels and traditional manufacturing**
 Coal mining jobs are decreasing sharply as the demand for fossil fuels declines in favour of renewable energy. Skills in areas like traditional solar architecture and green building codes are also waning, giving way to more modern, integrated sustainability practices across the energy and construction sectors.
- 2 Agriculture and natural resource management**
 Traditional practices in forestry and logging face reduced demand due to shifts in land management, as newer roles in sustainable land stewardship emerge. Similarly, agricultural skills like crop rotation and soil tilling are losing ground to advanced, technology-led methods prioritising sustainable approaches.
- 3 Legacy software and digital platforms**
 IT roles supporting outdated systems are diminishing, especially in sectors where legacy software maintenance was once crucial. Legacy tools like RETScreen, ESRI ArcSDE, and WAsP are becoming obsolete, overtaken by cloud-based, scalable digital solutions better suited to current technological needs.
- 4 Environmental and ecological management**
 Older roles in environmental conservation, often linked to traditional methods, are seeing a decline, especially as employment trends in environmental support evolve. Meanwhile, older skills in wildlife conservation and previous standards like LEED are being replaced by new, comprehensive sustainability frameworks.
- 5 Animal and livestock management**
 Traditional roles in animal husbandry and livestock handling are impacted by agricultural technology advancements, reducing the need for such specific skills. Skills in poultry science, animal control, and older transport methods are in decline, with automated disease management and modern husbandry practices taking precedence.



In the US, industries like coal mining, fossil fuel power generation, and certain manufacturing areas are projected to face reduced employment over the next decade. With an estimated 14% of the global workforce at risk of displacement due to these shifts, the challenge is clear: reskill workers to meet the needs of emerging industries. This high workforce risk carries economic implications, as these declines and the skill gaps could contribute to a broader slowdown in growth.

The US serves as an example of how major economies are grappling with industry transitions, balancing the need for new skills with the pressures of job displacement in

declining sectors. Higher education plays a crucial role in this skills-led industrial transformation. Universities and colleges are at the heart of equipping the next generation with the knowledge and abilities required for emerging fields, while also upskilling the current workforce.

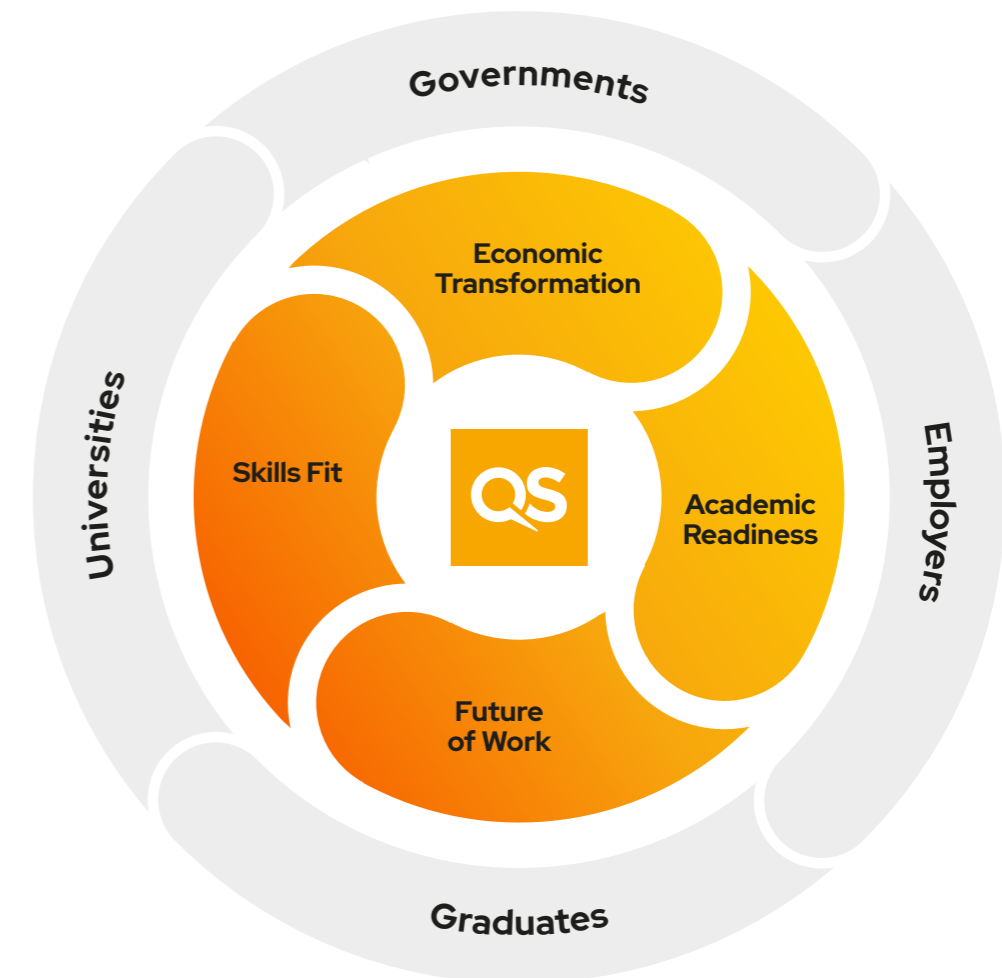
By aligning curricula with the evolving needs of industries, especially in areas like AI, digital, and sustainable technologies, higher education institutions are helping to bridge the skills gap and mitigate workforce risk. In doing so, they support economic resilience and growth, positioning countries to remain competitive as industries transform.

The QS World Future Skills Index

A skills-led transformation impacts the full ecosystem of society, but in an intensely complex landscape of different economies and higher education systems, the world is at varied levels of preparedness to tackle and take advantage of the next wave of industrial change. Higher education must be at the heart of this change.

To support governments and higher education to benchmark their readiness and set a skills-led transformation agenda, we have designed our inaugural QS World Future Skills Index.

Drawing on QS and external datasets with the proprietary measure you have come to know and trust from QS – the Index interprets higher education performance in the world of skills-led industrial change, helping to align with future demands in AI, digital, and green economies, foster innovation, talent development, and sustainable workforce competitiveness globally.



What are future skills?

Industrial innovation is shifting the future of work as rapid changes take place across the world. With a huge risk of occupational displacement in the global workforce and the slowing of global economic growth

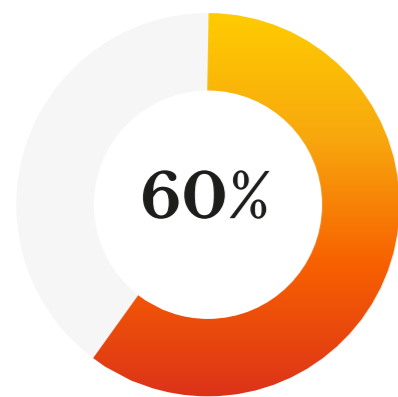
due to declining industries across major economies, countries must become more agile and prepared for a future driven by new technological automation and a transition to greener economies.

The QS World Future Skills Index is designed to assess how prepared countries are to tackle the shifting demands of the global workforce, particularly in the context of digital transformation, AI, sustainability, and the broader economic changes impacting jobs.

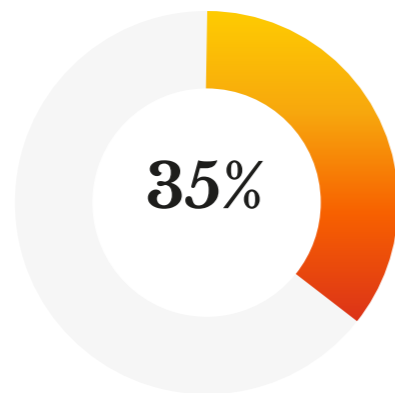
The QS World Future Skills Index uses data from over 280 million job postings via QS 1Mentor, the QS Global Employer Survey, and economic and demographic statistics from the World Bank Group. The Index assesses countries across four key indicators: **Skills Fit, Academic Readiness, Future of Work, and Economic Transformation**. Each indicator plays a vital role in providing a comprehensive view of a country's preparedness to thrive in an increasingly skills-driven global economy.

We need higher education to drive the skills-led industrial transformation

AI, Digital and Green skills are leading the future of work



growth in **AI** skills by 2030, fuelling innovation and job opportunities

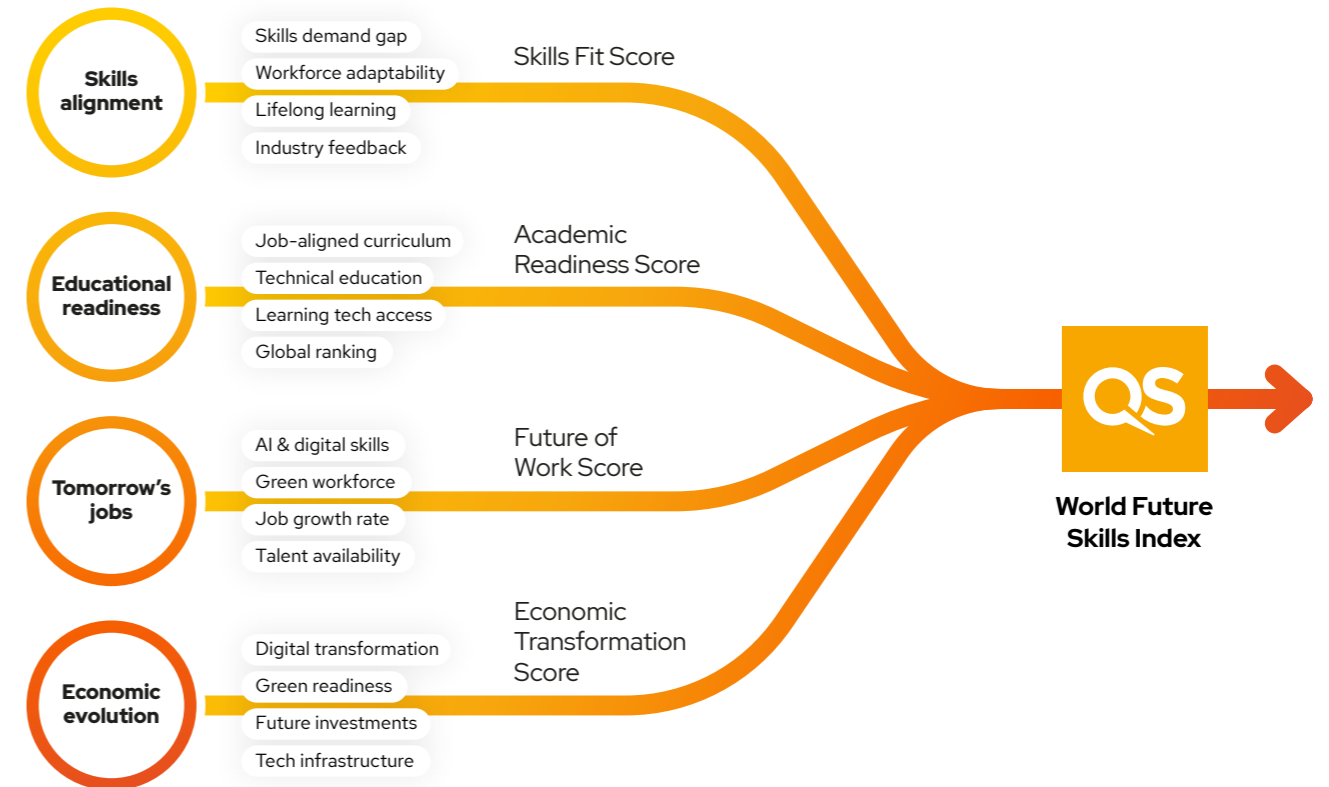


growth in **digital** skills by 2030, transforming industries and workforce demands



new **green jobs** by 2030, driving the global shift to sustainability

Source: World Economic Forum



The QS World Future Skills Index

Key findings

The Index reveals a significant gap between nations at the forefront of skills development and those which are still emerging. Leading countries are making concerted efforts to integrate new technologies into their education systems, while emerging countries are working to address critical gaps, often lacking the infrastructure and capital necessary for rapid adaptation.

The recommendations presented in this report are aimed at guiding policymakers and ministries in shaping the future of work through a focus on foundational capacity, talent development, global adaptation, and future alignment.

Powered by:

The **QS Global Employer Survey** with over 100,000 employers surveyed annually

The **QS World University Rankings**, the most trusted brand in higher education (Google Trends, 2024)

QS 1Mentor, with over 280m job postings analysed

What is Skills Fit?

Skills Fit measures how well a country's education systems are aligning with employer demands.

Understanding which country's universities are providing graduates with the skills that

employers need is key to understanding a nation's future readiness. A country with a high Skills Fit score has an education system that is well-aligned with the needs of industry and employers, helping to close the skills gap.

UK higher education is most aligned to employer needs

87% of businesses worldwide have a skills gap, or will within a few years¹².

56% of hiring managers anticipate technological inventions will cause a shift in necessary skills¹³.

UK universities have a longstanding reputation for delivering world-leading skilled graduates into the workforce. However, the skills shortage in the UK is a growing issue and the country's ability to produce top skilled graduates is not guaranteed in the future. In the UK alone, skills shortages are forecast to cost the UK economy £39bn a year from 2024 to 2027¹⁴. The Index shows that countries in the Global North are progressing well in aligning academia with industry and the proportional coverage of top universities in the UK is what gives the country an edge against its competitors.

To maintain its success, UK institutions have work to do to improve scores in underlying areas including human-centred leadership, emotional intelligence, interpersonal skills, leadership, communication and teamwork.

Rank	Country	Skills Fit score
1	United Kingdom	100.0
2	United States	99.4
3	Canada	90.9
4	Germany	89.2
5	Netherlands	88.6
6	Australia	87.2
7	France	84.8
8	South Korea	84.4
9	Singapore	83.2
10	Ireland	81.8

70% of US business leaders report critical skills shortages within their organisations, impacting business performance¹⁵. Despite this, the United States ranks second in Skills Fit. Although challenges exist in meeting the demand for certain skills, such as semi-conductor manufacturing, the US excels in aligning its educational outputs with industry requirements.

¹² McKinsey: Mind the skills gap 2021

¹³ Salesforce: The Future of Workforce Development

¹⁴ Edge Foundation: Skills shortages in the UK economy 2024

¹⁵ Springboard: Workforce Skills Gap Trends 2024: Survey Report

What is Academic Readiness?

Academic Readiness measures how well a country is positioned to deliver the skills necessary for future industries.

It is vital for a country’s higher education system to support high-quality learning and skill development. As industries evolve with the advancement of technologies and the rise of digital economies, universities need to stay

ahead by providing education in fields that are most relevant to the future workforce. Countries that excel in AI, digital, and green subject areas are better prepared to face the challenges and opportunities of the evolving job market. These subjects are critical for future economic development, as they enable innovation and problem-solving in sectors that will dominate in the coming decades.

The United Kingdom leads the way in academic readiness

According to Deloitte¹⁶, 1.8 million tech skills will be needed by 2030 if workers are to keep pace with the rate of change. As a sector, higher education is uniquely positioned to deliver high volumes of future-ready graduates. Nowhere is this more evident than in the UK.

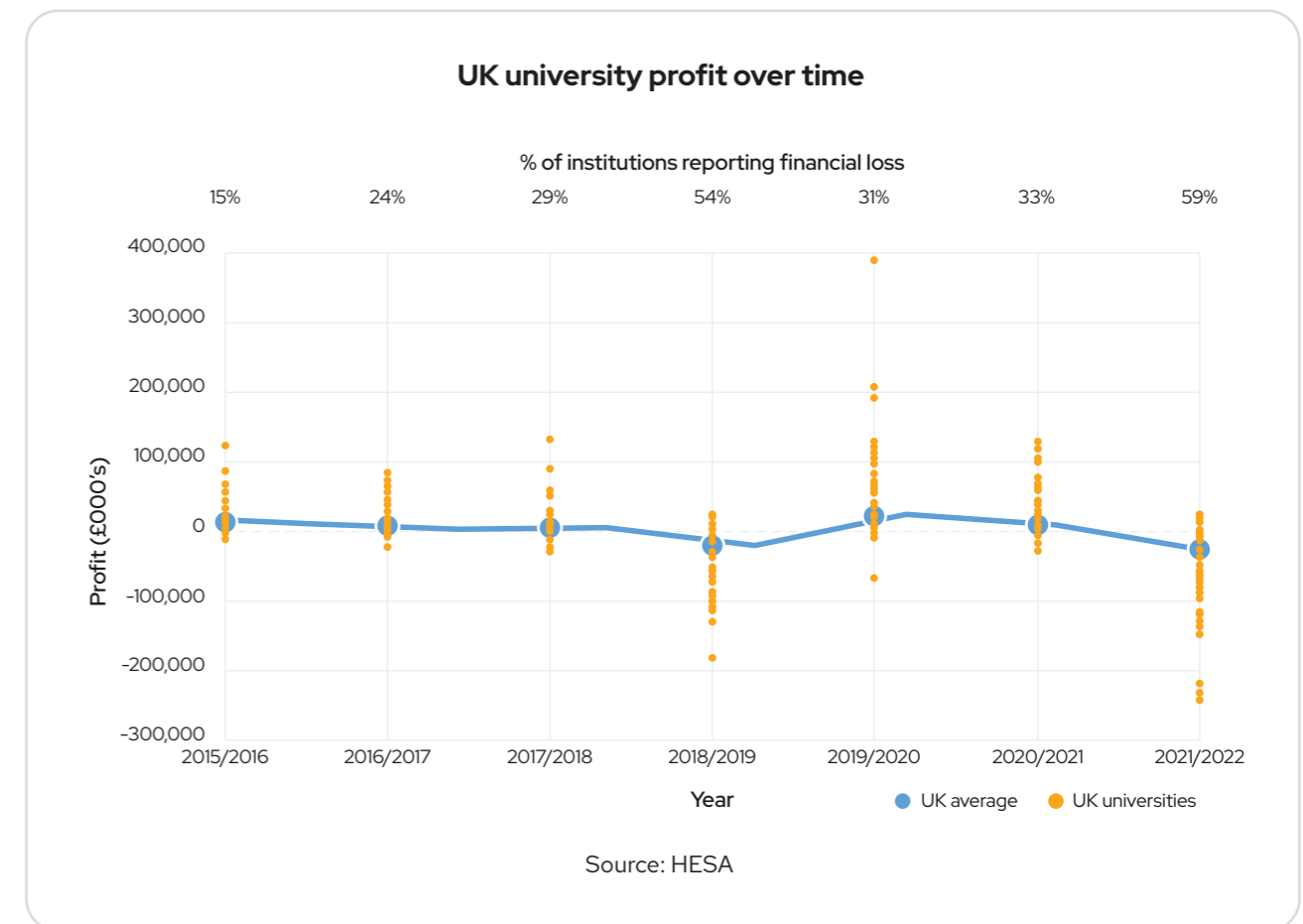
Institutions in the UK are preparing students for successful careers in these innovative industries, with over 100 universities featured in the QS World University Rankings by Subject 2024, and many UK institutions display strong performance in AI, digital and green-related subjects.

The UK has a great history of academic performance and research innovation, but recent performance indicates a downward trajectory. While income from tuition fees has increased, it's not enough to keep up with rapidly growing expenditure. 59% of UK universities reported a financial loss in the 2021/22 academic year¹⁷. This Academic Readiness score is unlikely to be maintained unless more is done to align research & curricula with industry need.

Rank	Country	Academic Readiness score
1	United Kingdom	100.0
2	Germany	99.6
3	Netherlands	99.3
4	Australia	98.9
5	Hong Kong SAR	98.6
6	United States	98.2
7	Canada	97.8
8	Italy	97.4
9	Switzerland	97.1
10	Denmark	96.7

¹⁶ Deloitte: Mind the (digital skills) gap 2024
¹⁷ HESA: Income and expenditure of UK universities

Note: In many systems, Further Education institutions serve as critical partners to higher education, providing targeted vocational training and technical skills that underpin economic transformation. Including this broader ecosystem ensures a comprehensive approach to workforce readiness.



The data shows strong competition from other countries in the top 10, with only 3.3 points separating first from 10th.

The Netherlands could pose significant risk to the UK's standing. Globally, the Netherlands has the highest score in Academic Readiness' Green sub-indicator, and shows strong performance in preparing graduates for green jobs. As mentioned on page 15, green talent is going to be in high demand in the future, with one in two jobs lacking the required green talent by 2050.

What is Future of Work?

The **Future of Work** indicator measures the readiness of a country’s job market to recruit for the most in-demand skills of the future.

Job listings are a strong indicator of a job market’s maturity. A high volume of job postings seeking AI, digital and green skills shows that a country has businesses that are ready to innovate, or are already doing so.

The QS World Future Skills Index looks at the volume of job postings seeking innovative skills, and compares the prevalence of future skills compared to traditional skills in job listings to see how the labour market is shifting to meet the demands of future industries.

Worldwide, there has been a

↑ 230%
increase in demand for green skills

↑ 200%
increase in demand for AI skills

↑ 100%
increase in demand for digital skills
between 2017-2023

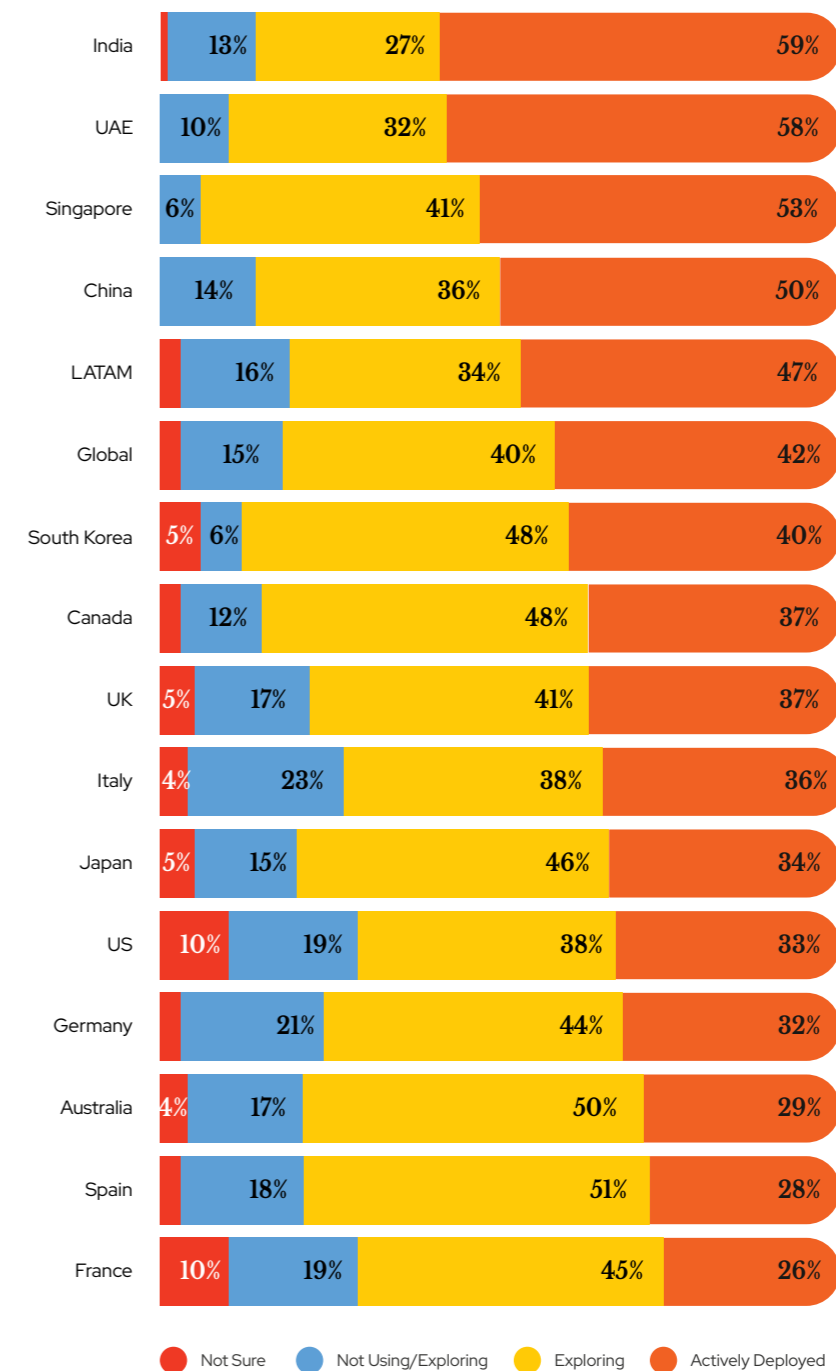
Source: QS IMentor

The India job market is primed to recruit graduates into AI, digital, and green jobs

Ranking just behind the US in second place, India is one of the leading nations in contributing to the future of work. The IBM Global AI Adoption Index – Enterprise Report¹⁸ highlights India as a leading nation in the active deployment of AI in business operations, with a notable 59% of companies actively using AI. This aligns closely with the Future of Work indicator, where India scores 99.1. Such a high score reflects India’s readiness to integrate AI into the workforce, suggesting a strong market for skilled graduates.

Despite a global decline in venture capital (VC) funding, India has maintained its status as the second-largest destination for VC and growth funding in the Asia Pacific region. This resilience underscores the country's robust investment ecosystem, which is crucial for fostering innovation and creating future-ready job opportunities.

Has your company adopted or explored using AI as part of its business operations and digital transformation?
(% my company has actively deployed AI as part of its business operations)

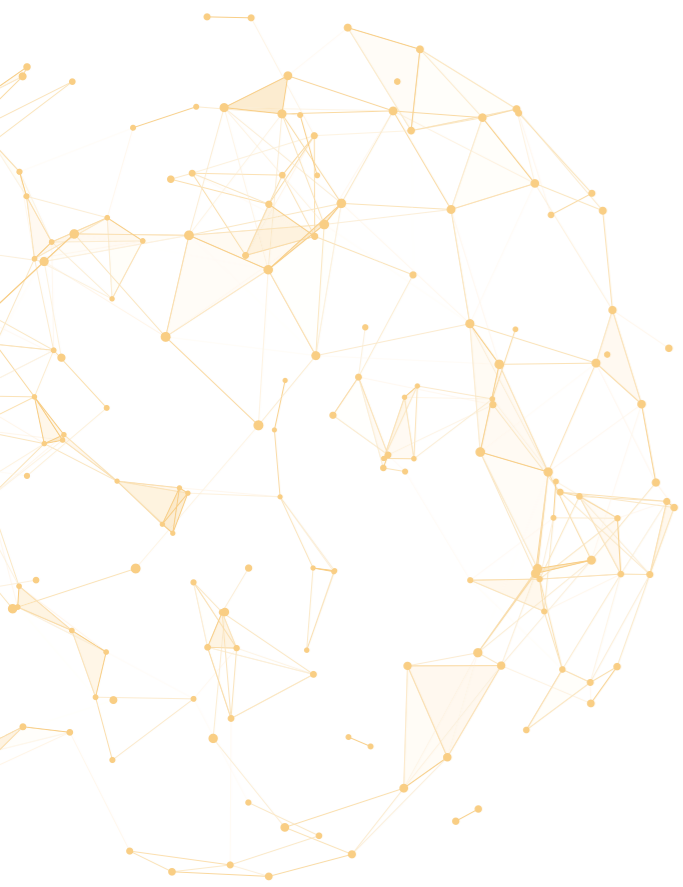


Source: The IBM Global AI Adoption Index – Enterprise Report

¹⁸IBM Global AI Adoption Index Report 2023

The India Venture Capital Report 2024 by Bain & Company¹⁹ highlights several factors that position India favourably for the future of work and contribute to its strong performance in the Future of Work Index. The report notes a shift in investor focus towards traditional sectors with strong fundamental tailwinds, such as banking, financial services, insurance (BFSI), and healthcare. Additionally, emergent themes like electric mobility and Generative AI have gained traction.

These developments indicate a dynamic economic environment that is adapting to new technologies and industries, thereby preparing the workforce for future demands. Ongoing investment in diverse sectors contributes to a robust job market and enhances the country's readiness for future work scenarios.



Rank	Country	Future of Work score
1	United States	100.0
2	India	99.1
3	Mexico	98.2
4	Canada	97.4
5	Australia	96.5
6	United Kingdom	95.6
7	Germany	94.7
8	Philippines	93.8
9	Spain	93.0
10	Singapore	92.2

The connection between national AI strategies and a country's readiness for the future of work

The AI Index Report 2024 by Stanford University²⁰ reveals an interesting connection between the timing of national AI strategies and a country's readiness for the future of work. Countries such as Canada and Mexico were among the early adopters of national AI strategies in 2017 and 2018 respectively and now rank highly in the Future of Work Index. This early commitment to AI may have contributed to their strong positioning, suggesting that proactive national policy can significantly bolster a country's preparedness for AI-driven job markets.

Yearly release of AI national strategies by country

Year	Country
2017	Canada, China, Finland
2018	France, Germany, India, Mauritius, Mexico, Sweden
2019	Argentina, Bangladesh, Chile, Colombia, Cyprus, Czech Republic, Denmark, Egypt, Estonia, Japan, Lithuania, Luxembourg, Malta, Netherlands, Portugal, Qatar, Romania, Russia, Sierra Leone, Singapore, Slovakia, United Arab Emirates, United States of America, Uruguay
2020	Algeria, Bulgaria, Croatia, Greece, Hungary, Indonesia, Latvia, South Korea, Norway, Poland, Saudi Arabia, Serbia, Spain, Switzerland
2021	Australia, Austria, Brazil, Hong Kong SAR, Ireland, Malaysia, Peru, Philippines, Slovenia, Tunisia, Türkiye, Ukraine, United Kingdom, Vietnam
2022	Belgium, Ghana, Iran, Italy, Jordan, Thailand
2023	Azerbaijan, Bahrain, Benin, Dominican Republic, Ethiopia, Iraq, Israel, Rwanda

Source: AI Index Report 2024 by Stanford University

By establishing strategic frameworks early on, these nations have demonstrated foresight in nurturing AI capabilities, helping them stay competitive as the demand for future-ready skills grows. Mexico's impressive score (98.2) reflects its dynamic approach to technological advancement, particularly in the realm of AI. Between 2018 and 2024, the country witnessed a staggering 965% increase in AI companies, totalling 362 firms²¹. This growth rate outpaces that of other Latin American nations, with Colombia at 669% and Brazil at 487% during the same period.

The consistent growth of the Philippines' Information Technology and Business Process Management (IT-BPM) industry underscores the country's strong position in adapting to the future of work. This sector has shown remarkable resilience and expansion, with revenues increasing from USD\$26.3 billion in

2019 to a projected USD\$38 billion in 2024, and employment rising from 1.3 million to an anticipated 1.82 million over the same period²².

Such robust performance reflects the Philippines' strategic focus on digital transformation and its commitment to developing a skilled workforce capable of meeting evolving global demands. This dedication is further evidenced by the country's place in the Future of Work indicator, with a score of 93.8.

India, Mexico, the Philippines and Singapore all rank among the top 10 in the Future of Work indicator – this represents each country's only top 10 placement. Of these four, India and Mexico are most ready to recruit into digital roles, Singapore achieves its highest score for AI, and the Philippines scores highest for green skills.

¹⁹ Bain & Company: India Venture Capital Report 2024

²⁰ Stanford University: The AI Index Report 2024

²¹ Santander (Mexico leads growth of Artificial Intelligence companies in LATAM)

²² Reuters (Philippine outsourcing to grow 7% this year despite AI threat)

What is Economic Transformation?

The **Economic Transformation** indicator measures how ready a country’s economy is to leverage the next wave of skills-led industrial growth.

A country's economy must be able to sustain growth in AI, sustainability and digital industries to ensure ongoing economic success. Investment in infrastructure, R&D, and workforce capabilities are crucial to drive productivity and economic growth in the chosen areas.

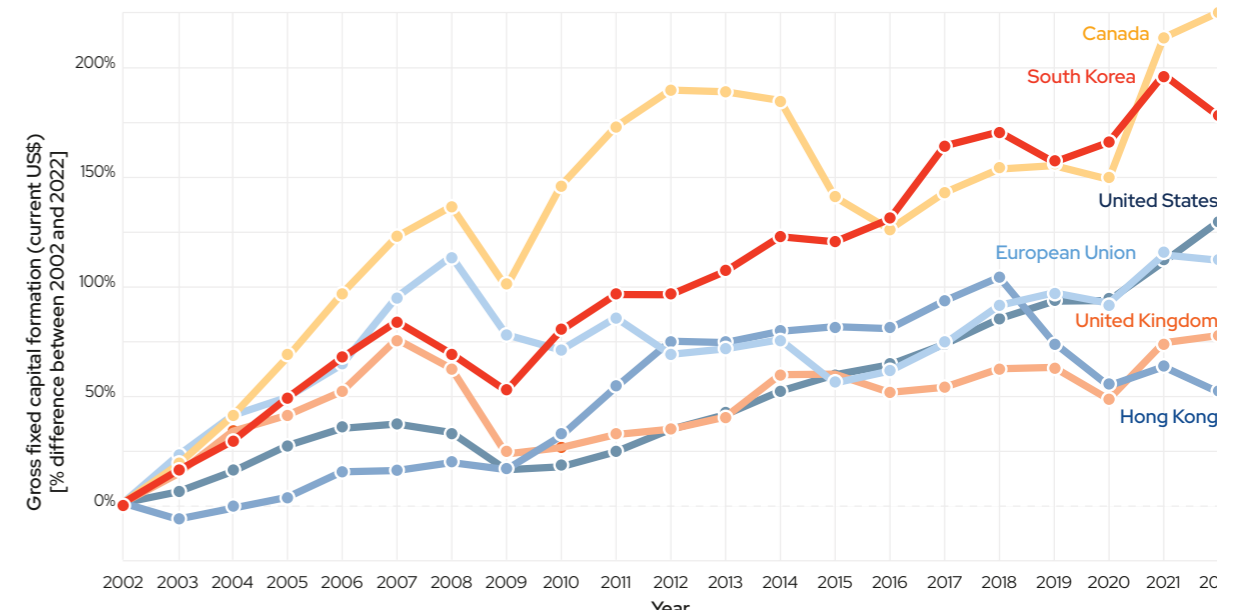
South Korea shines in economic transformation

Aligning with trends seen elsewhere in the QS World Future Skills Index, countries in the Global North perform strongly in economic transformation. Low unemployment rates, high labour productivity, and high Gross Domestic Products (GDPs) all drive strong performance for Global North countries.

With perfect scores in the three sub-indicators – Economic Capacity, Workforce Readiness and Future-Oriented Innovation and Sustainability – South Korea has the economy that is most ready for the next wave of industries and innovations.

Rank	Country	Economic Transformation score
1	South Korea	100.0
2	Israel	98.9
3	United States	97.9
4	Switzerland	96.8
5	Japan	95.8
6	Germany	94.7
7	Denmark	93.7
8	United Kingdom	92.7
9	Belgium	91.6
10	Australia	90.6

South Korea's growth in Gross Fixed Capital Formation (US\$) compared to other economies (2000-2022)



Source: World Bank Group

South Korea has skilfully reshaped its economy, emerging as a global leader in high-tech industries like semiconductor production and IT, while managing the decline of traditional sectors like mining. The nation’s focus on Gross Fixed Capital Formation (GFCF) has been instrumental in building robust infrastructure and driving productivity, forming a sturdy backbone for its advanced industries.

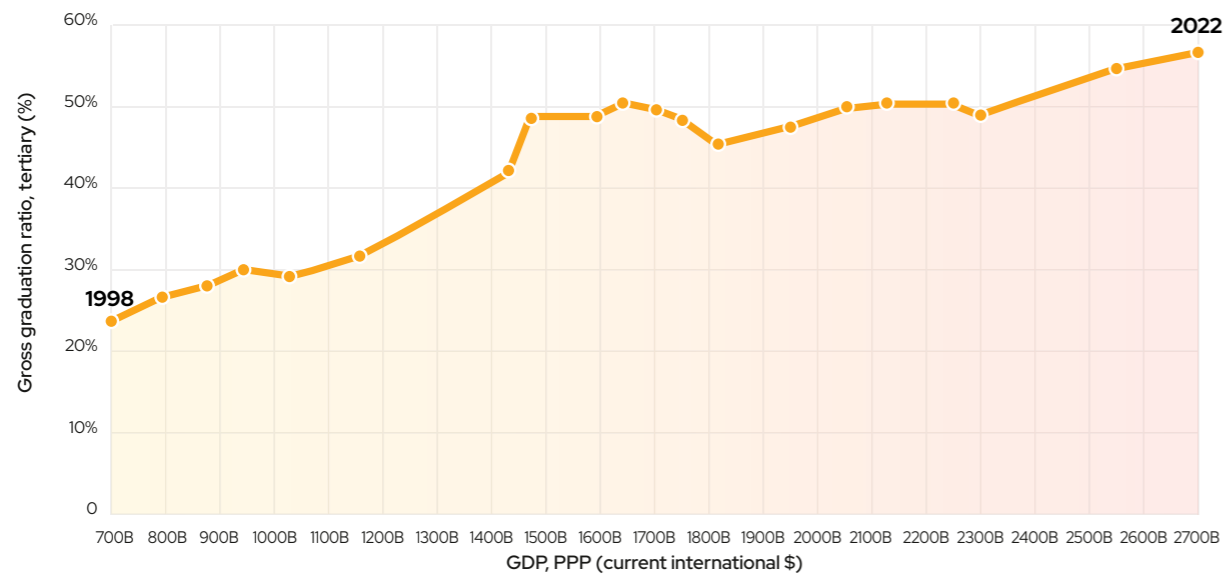
The semiconductor sector has become a pillar of South Korea’s economic strength. Major players like SK Hynix and Samsung Electronics have positioned the country at the forefront of the global market. SK Hynix, for example, has committed to a USD\$6.8 billion investment in a new plant to meet the soaring demand for AI chips and plans to develop a significant semiconductor cluster in Yongin²³.

Such developments reflect South Korea’s focused ambition to remain a leader in the semiconductor field, showcasing a strategic shift from traditional industries to high-tech. Yet, South Korea shares a similar challenge with the US: a shortage of skilled workers in the semiconductor industry.

Overcoming these gaps calls for renewed recruitment initiatives and a rethinking of workforce development to keep pace with the industry’s demands. As technology rapidly advances, South Korea’s commitment to GFCF and its proactive support for high-tech sectors have secured its status as a leading global player. Addressing workforce challenges will be crucial to preserving this edge in the competitive semiconductor market.

²³ Investopedia (Nvidia Supplier SK Hynix To Spend \$6.8B on South Korea Plant To Meet AI Chip Demand)

South Korea's GDP and Tertiary Education Graduation Rates (1998-2022)



Source: World Bank Group, OECD, and South Korean Ministry of Education

There is a clear positive correlation between South Korea's GDP and its tertiary education graduation rates over the period from 1998 to 2022. During this time, South Korea's GDP (measured in purchasing power parity) experienced significant growth, while the proportion of young adults (aged 25-34) attaining tertiary education increased steadily. In 1998, the tertiary graduation rate was approximately 30%, rising to nearly 60% by 2022.

This trend suggests that the country's substantial investment in higher education has been instrumental in fostering a skilled workforce. South Korea's emphasis on education has been a cornerstone of its economic development strategy, enabling it to capitalise on innovation and advanced industries for sustained prosperity.



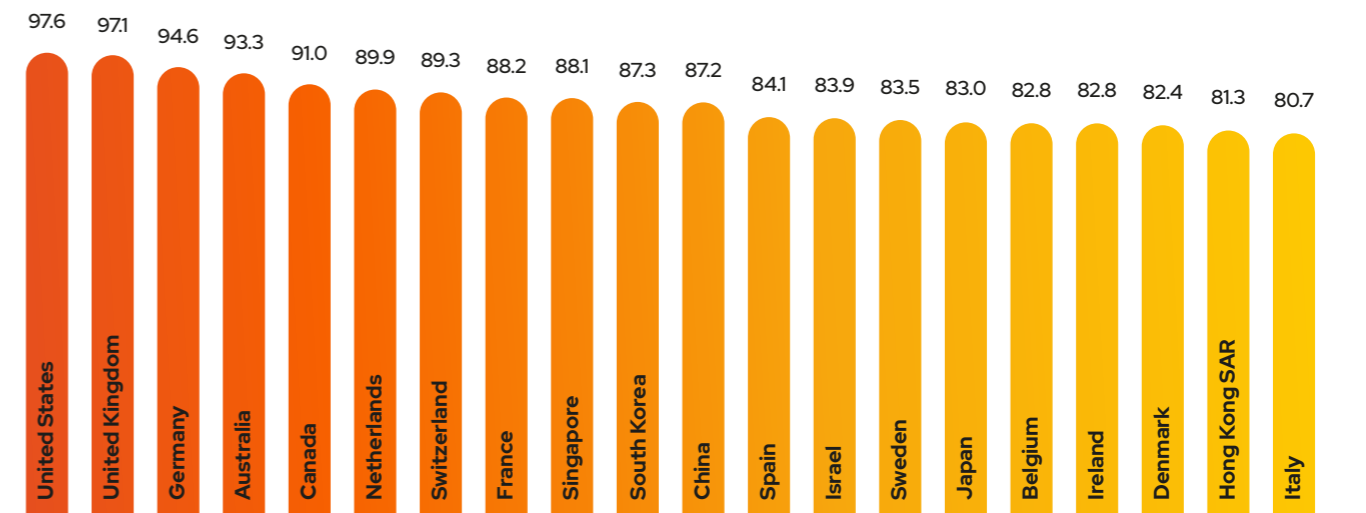


The QS World Future Skills Index
Global analysis

Top 20 prepared economies (2024)

Country/Region	Skills Fit	Academic Readiness	Future of Work	Economic Transformation
United States	94.4	98.2	100.0	97.9
United Kingdom	100.0	100.0	95.6	92.7
Germany	89.2	99.6	94.7	94.7
Australia	87.2	98.9	96.5	90.6
Canada	90.9	97.8	97.4	78.1
Netherlands	88.6	99.3	90.4	81.2
Switzerland	80.7	97.1	82.6	96.8
France	84.8	92.6	91.3	84.3
Singapore	83.2	91.7	92.2	85.4
South Korea	84.4	88.4	76.5	100.0
China	78.5	93.9	87.8	88.5
Spain	76.4	96.3	93.0	70.8
Israel	70.6	93.0	73.0	98.9
Sweden	80.4	95.1	72.2	86.4
Japan	73.4	87.9	74.7	95.8
Belgium	72.4	95.9	71.3	91.6
Ireland	81.8	95.5	86.1	67.7
Denmark	73.0	96.7	66.1	93.7
Hong Kong SAR	77.0	98.6	69.5	80.2
Italy	70.3	97.4	85.2	69.7

Final score



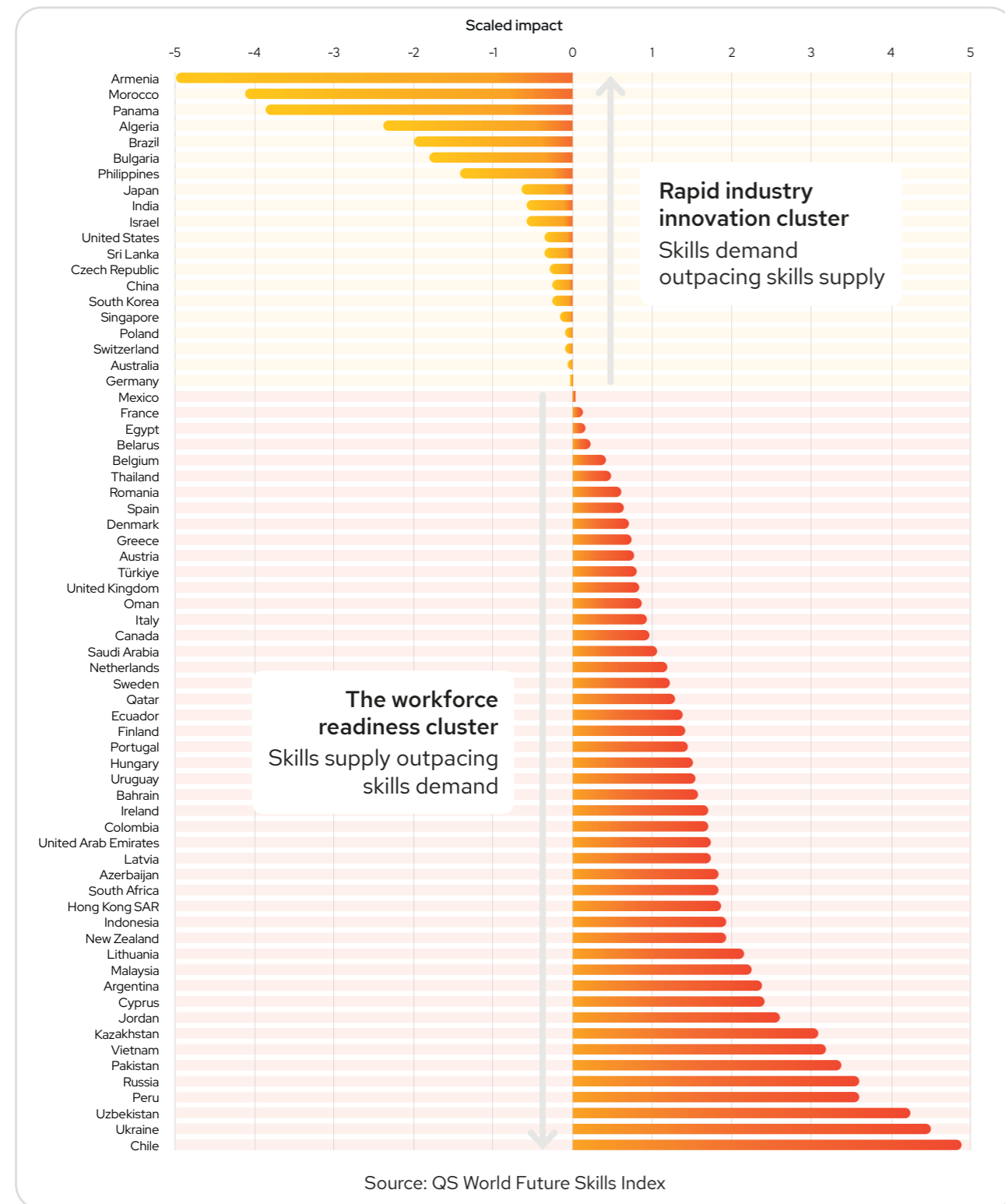
Skills demand vs skills supply

The rapid industry innovation cluster

30% of countries in the Index are seeing their industries evolve at a rate that is faster than their workforce can adopt new skills.

The workforce readiness cluster

The remaining 70% of countries fall into a cluster where the workforce potential outstrips the pace of economic and industrial innovation.



Transformation gaps

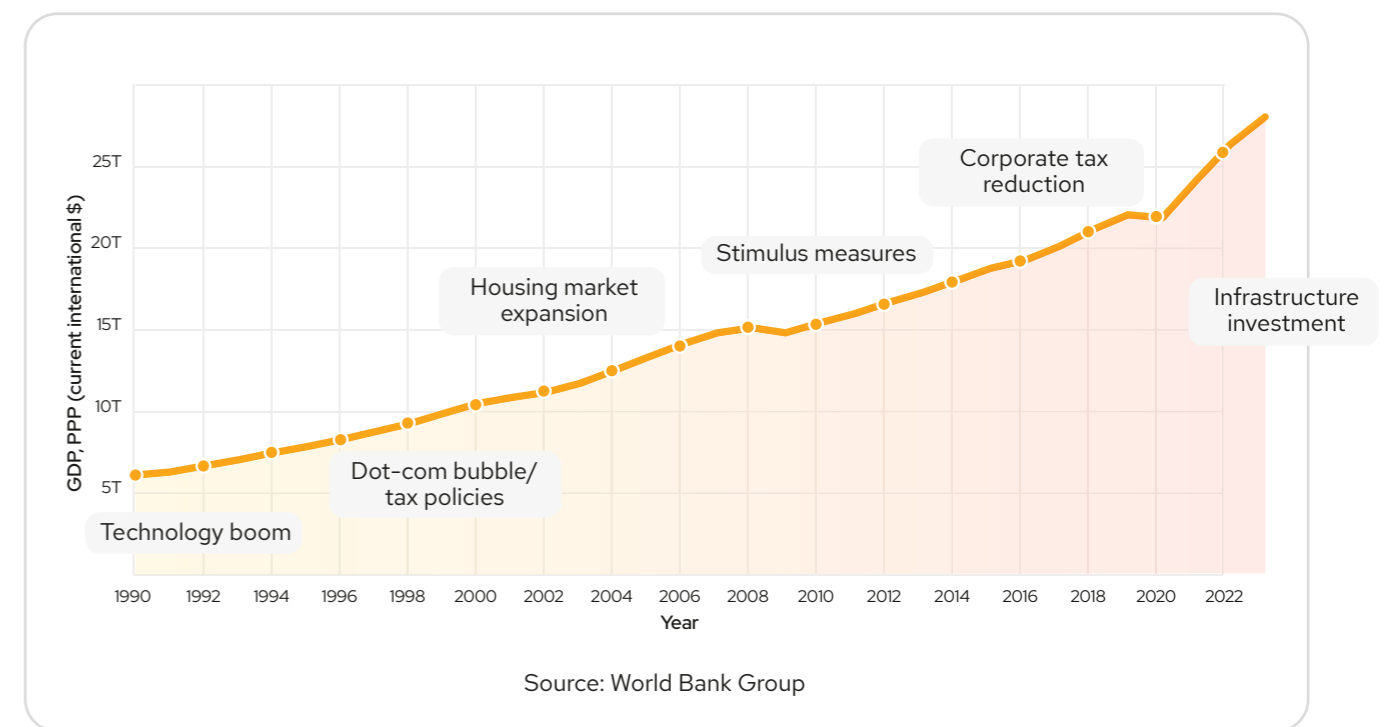
Countries with skills demand which outpaces the skills supply have a transformation gap – they have a high demand for skills but the limited skills supply means they are not able to transform their economies. As a result, even with a skilled workforce and robust academic systems, they may still experience a gap due to rapid economic growth surpassing their current talent levels. Short- and medium-term levers should be implemented to prevent this gap from growing, including industry-wide reskilling policies and lifelong learning.

For countries with a talented workforce which outpaces the skills demand, the transformation gap means that there is a large "reserve" of talent potential that isn't being fully utilised because there aren't enough suitable jobs or growing industries. To solve positive transformation gaps there is often a need for economic policies, research investment, or industry partnerships to create more opportunities and put this talent to use.

Spotlight on the United States

The United States must reskill its workers at pace and at scale to realise the potential provided by its strong economic performance

As the rate of innovation continues to increase in pace, the US, and countries that perform similarly, will be left with even greater proportions of their workforce who are ill-equipped to work in future industries, and have a higher education system that is struggling to match the upskilling and reskilling demand.



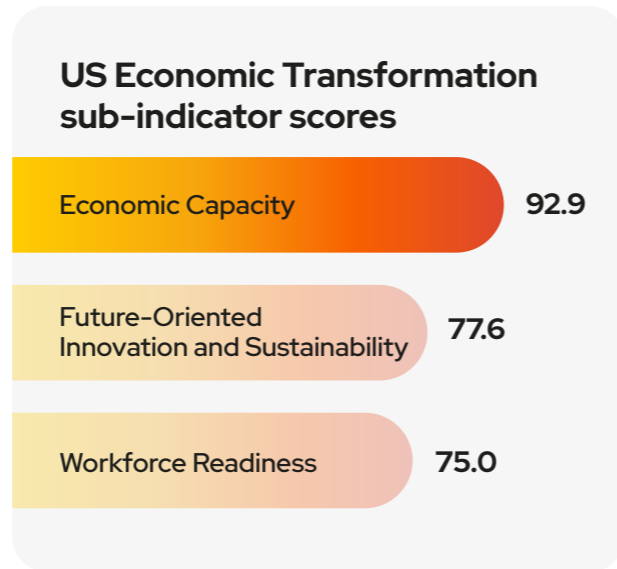
We are already seeing this issue arise with the CHIPS (Creating Helpful Incentives to Produce Semiconductors and Science) Act in the United States. The 2022 legislation directs USD\$280 billion in spending over the next decade to bolster US semiconductor manufacturing capacity, catalyse research and development, and commercialise new technology while also creating a larger STEM workforce. However, the US lacks the skilled workers to be productive in the field of semiconductor manufacturing.

In the context of the 2024 US election, this investment may take on added significance. There are expectations of a heightened emphasis on import tariffs and the domesticising of manufacturing aimed at reducing dependence on foreign suppliers, especially in critical industries like semiconductors.

A focus on self-reliance and economic resilience

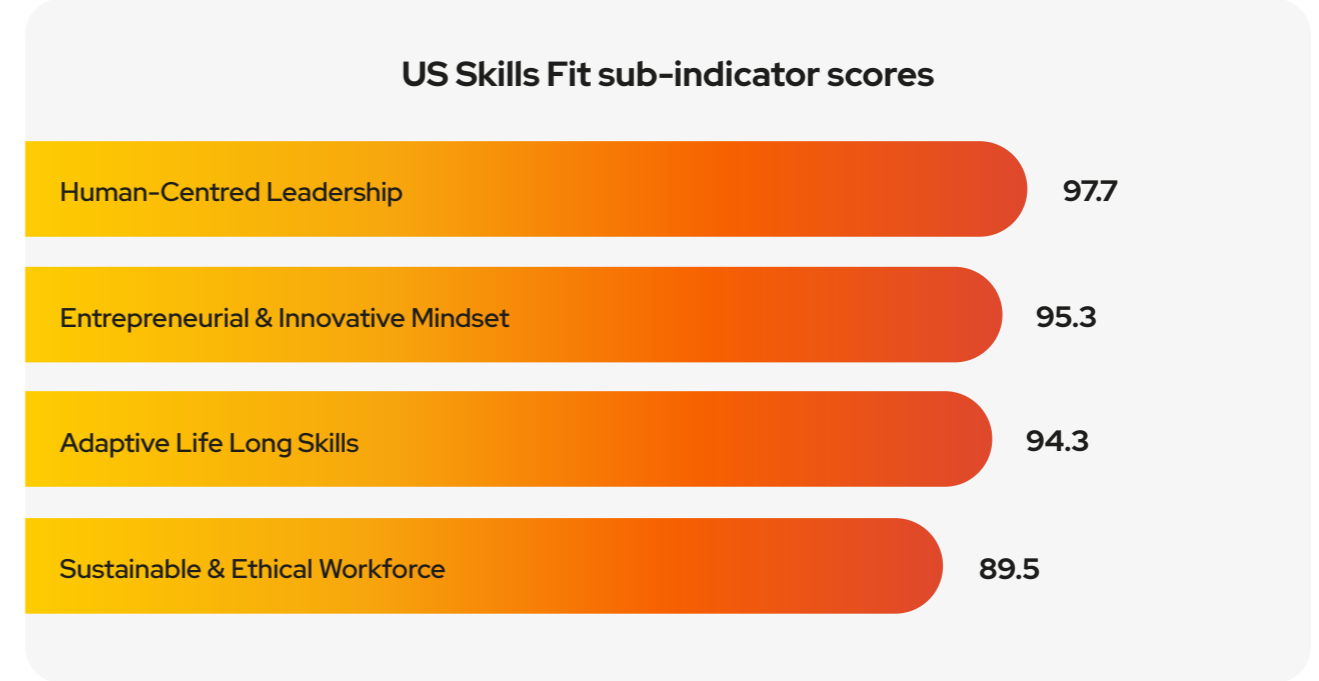
This focus, paired with substantial federal funding, contributes to the US's strong Economic Capacity score of 92.9/100 in the QS World Future Skills Index, underscoring the nation's commitment to securing its position in future-oriented industries.

However, there are signs that the US will not be able to fully utilise the potential benefits afforded to it by such significant investment. To create a bigger workforce, people will need to be upskilled at scale, and the US higher education sector is not totally prepared.



While the US' performance in the Skills Fit indicator is strong, there remains a misalignment between employer needs and the skills graduates leave university with across the key skill groups.

This skills mismatch comes at a difficult time, with the rise of AI meaning the rate of skills change is increasing²⁴, and requisite skills are also becoming more complex. Similarly, the number of green jobs has grown by 8% per year in the past five years, but employees don't have the skills required to fill them²⁵.



Short- and longer-term solutions should focus on attracting international talent and reskilling domestically

For the US, the short-term solution is attracting international talent. International students and skilled worker visas are able to fill these skill gaps. The US must align their immigration policy to the requisite occupations and programmes that are going to drive economic growth in the years to come – such as green, AI and digital skills.

In the long term, the domestic workforce must reskill so they can work in economically more profitable job roles. Singapore has taken the initiative on this, investing S\$35m (USD\$26m) in sustainable finance upskilling to support the region's transition to net zero²⁶.

Speaking at the World Economic Forum Growth Summit in 2023, Soon-Joo Gog, the Chief Skills Officer at SkillsFuture Singapore explained how Singapore is upskilling and reskilling its workforce²⁷. One example was the Skills Future credits programme, which gives people S\$400 when they reach 25 to invest in upskilling.

In the QS World Future Skills Index, Singapore has the highest Human Capital Index score of any country – contributing to its high score in our Skills Fit indicator. This shows that, while there is work to be done for the Singaporean higher education system to improve skills satisfaction of graduates domestically, the collective skilling of Singaporean graduates through local reskilling and international education has resulted in elevated productivity in comparison to its global peers.

²⁴ eit Digital: AI and the skill revolution 2024

²⁵ World Economic Forum: With green jobs booming, here's how to plug the sustainability skills gap

²⁶ ESGtoday (Singapore Invests S\$35 Million in Sustainable Finance Upskilling of Financial Sector)

²⁷ World Economic Forum (6 lessons from Singapore on upskilling for the future)

Spotlight on the UK

The UK must invest in international collaboration for research innovation and industry partnerships to drive economic growth

There is a consensus among academics that the UK has ‘a productivity growth problem, with chronic underinvestment across both the public and private sectors being a key cause.’²⁸ The overall investment rate in the UK is around 17%, but in typical G7 countries, that figure is around 20–25%.²⁹ This is corroborated by the QS World Future Skills Index, and the UK’s poor score in the Economic Capacity indicator – a warning sign for the UK as economic stagnation on this scale could mean that the country falls behind and fails to capitalise on the future skills revolution.

However, change may be afoot

In the UK Government’s budget in October 2024, the Chancellor Rachel Reeves announced it would invest GBP£100 billion in capital spending over the next five years. In its bi-annual economic outlook, the International Monetary Fund said that the UK economy would grow faster than previously thought in 2024 – UK growth is expected to be 1.1% rather than the previously forecast 0.7%. In the October 2024 budget, the Office for Budget Responsibility predicts the UK economy will grow by 2% in 2025 and 1.8% in 2026.

Should the economy achieve this level of growth, UK higher education stands ready to capitalise. In the QS World Future Skills Index’s Academic Readiness and Future of Work indicators, the UK performs well.

UK Economic Transformation sub-indicator scores



UK Future of Work sub-indicator scores



With 103 ranked universities, and generally strong employer and academic reputation and good graduate outcomes, UK universities clearly have the capacity and in-built talent to teach the skills necessary for the future of work. Some UK universities, such as Oxford Brookes University and Loughborough University, have a low QS World University Ranking position, but still have a high employer reputation, indicating a strong alignment between industry and academia³⁰.

To fully realise this potential, the UK government must drive innovation and productivity in future industries.

In the medium- to long-term, the UK government must invest in higher education and encourage international collaboration, research innovation and industry partnerships to drive economic growth³¹.

UK Academic Readiness sub-indicator scores



The Economy 2030 Inquiry report, ‘How higher education can boost people-powered growth’ corroborates this, stating that: ‘It is not enough to pay lip-service to the excellence of our universities. They should be supported and promoted so that they can fully play their role in boosting our economy and strengthening our society.’

As a strong example, Canada’s higher education sector plays a critical role in its research and development efforts, with C\$16.6 billion allocated to R&D activities in 2021/2022—a 4.5% increase from the previous year³². This investment in R&D by universities and colleges is supported through various channels, including internal funding, private non-profit contributions, and government grants. Despite a slight decrease in federal support, Canada’s higher education sector remains highly active in R&D, contributing to one of the highest R&D intensities among G7 countries. These efforts foster innovation and productivity – seen in Canada’s rising GDP per capita – highlighting the economic benefits of a strong research-focused higher education sector.

²⁸ London School of Economics: Boosting growth and productivity in the United Kingdom through investments in the sustainable economy 2024

²⁹ The Productivity Institute (Boosting productivity: why doesn’t the UK invest enough?)

³⁰ These universities’ rank will have been brought down by other indicators used to compile the rankings.

³¹ The Economy 2030 Enquiry: How higher education can boost people-powered growth

³² Statistics Canada: Spending on research and development in the higher education sector, 2021/2022



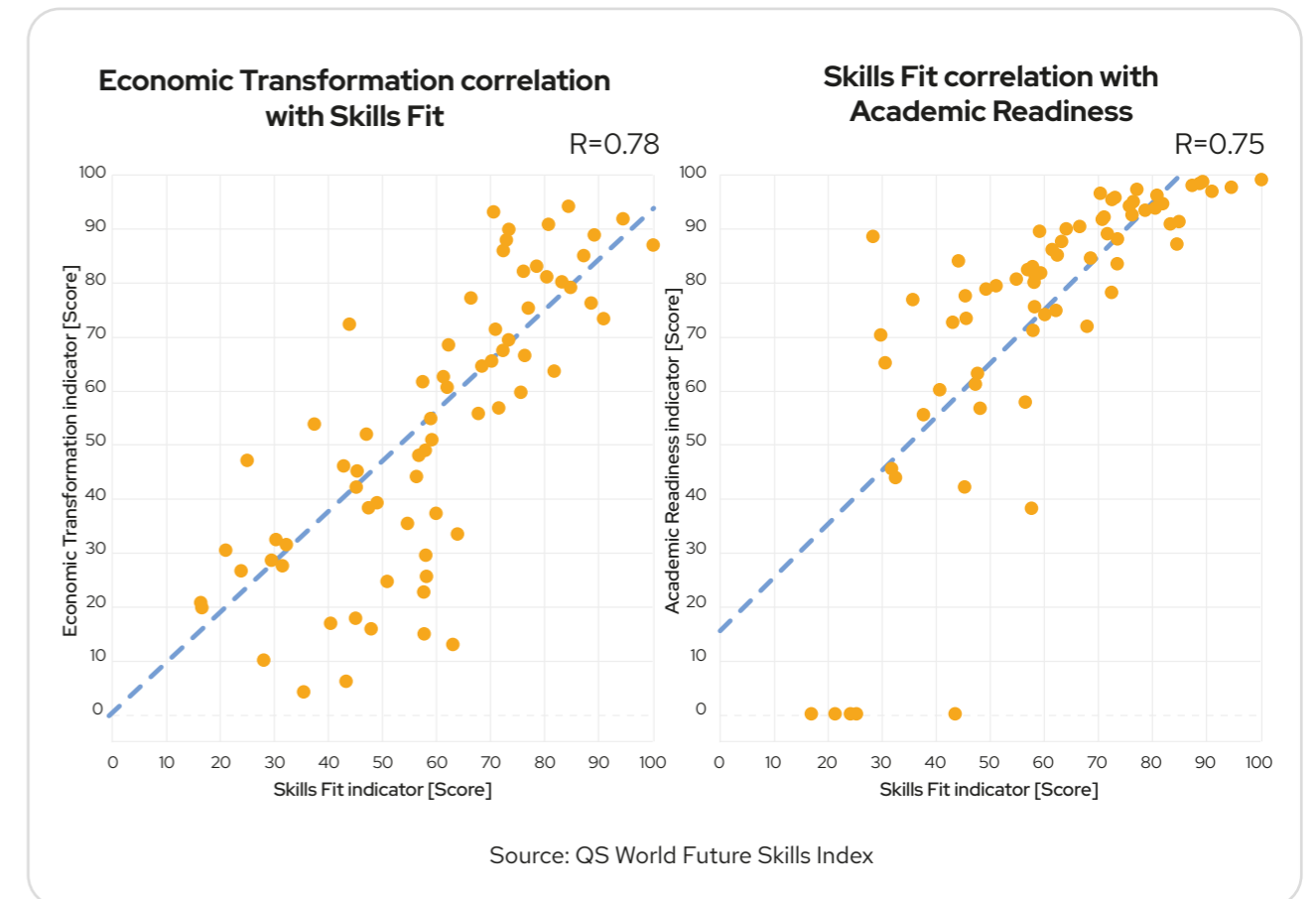
Higher education innovation and continued financial sustainability is fundamental to a thriving economy

Strong positive correlation is clear between a thriving economy and the satisfaction of that country's employers with the skills of its workforce. Equally, the correlation is clear between that satisfaction and the excellence of that country's higher education system.

Countries with a high Academic Readiness score stand ready to produce graduates with skills that align to future industries. Countries that have a strong Skills Fit performance have alignment between higher education and businesses.

The future workers that are taught the skills necessary to realise their potential will drive economic productivity and further boost economic transformation.

The correlation score between the Economic Transformation and Skills Fit metrics, and the Academic Readiness and Skills Fit metrics are relatively high. Scores of $R=0.78$ and $R=0.75$ indicate a strong positive correlation, meaning that as one variable increases, the other tends to increase as well, and the relationship is fairly consistent.



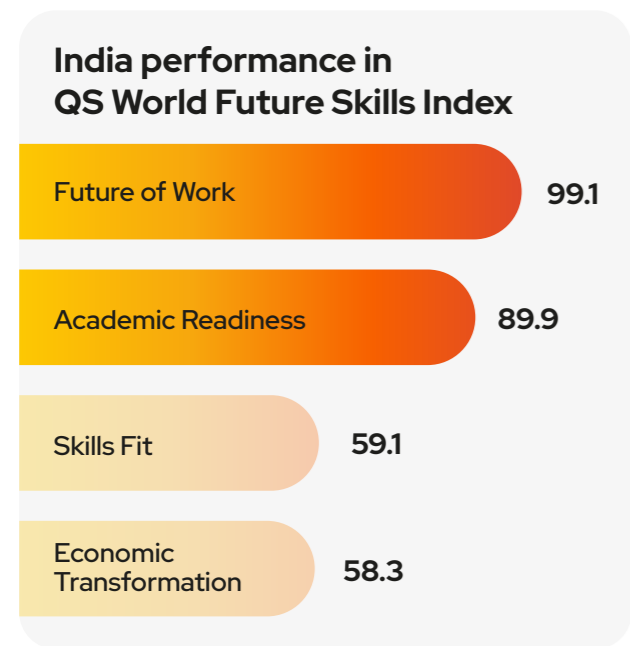
Spotlight on India

The Indian National Education Policy 2020 (NEP 2020) is a well-documented example of alignment between higher education and government policy. The policy has been called "a significant step forward in the modernisation of the higher education system and provides a roadmap for the future of education in India."³³

The QS 'All Eyes on India' report highlights this alignment and discusses the ongoing work to upgrade higher education in the country³⁴.

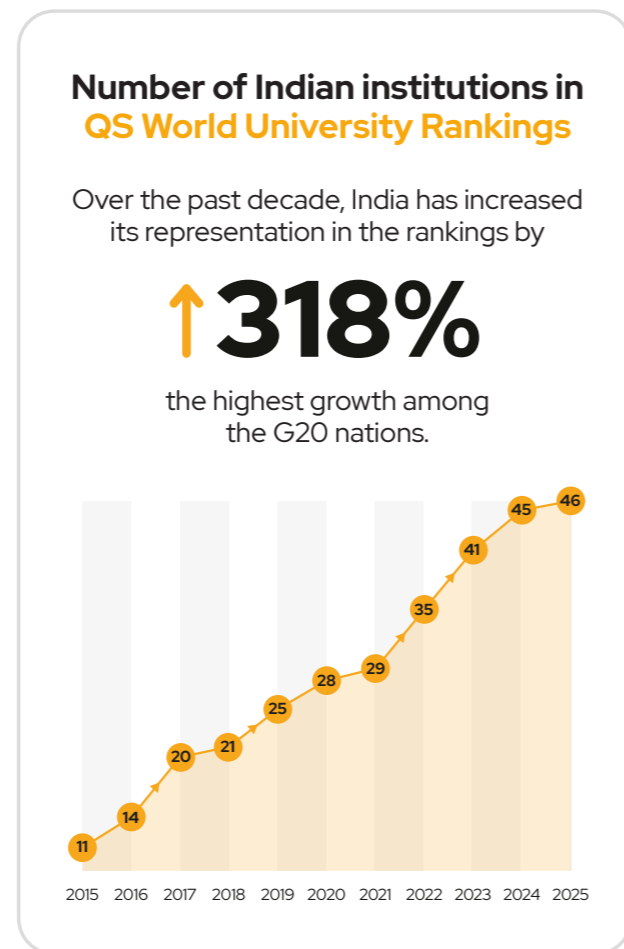
For higher education, the NEP "proposes several reforms in higher education, including the establishment of a single regulator, a multidisciplinary approach, flexibility in curriculum, and increased use of technology. It aims to increase the Gross Enrolment Ratio (GER) in higher education and promote research and innovation."³⁵

The QS World Future Skills Index shows India's potential, and its current challenges.



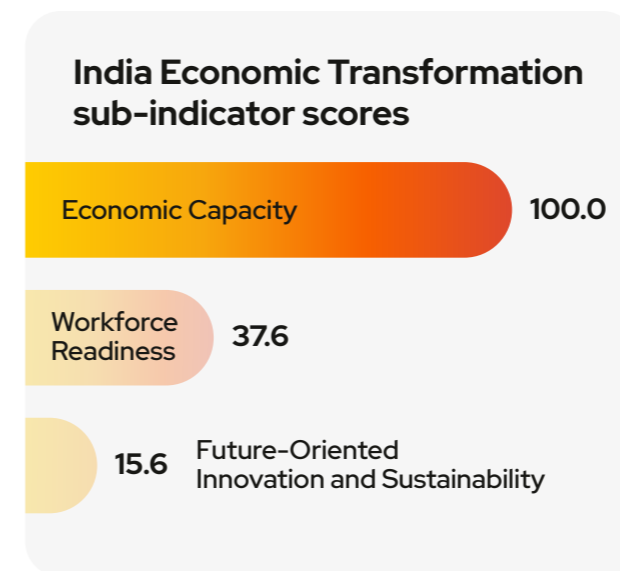
With a very strong Academic Readiness score, India's universities and business schools performed well in the QS World University Rankings by Subject 2024 in AI, green and digital subjects. Indeed, the number of Indian institutions in the QS World University Rankings has increased by 318% since 2015, so there are wider ongoing improvements in Indian higher education.

A high volume of India's businesses are looking for employees that have skills in those areas too, as evidenced by the country's Future of Work score, highlighting that the job market stands ready to utilise innovative graduates.



India's challenge lies in developing 'skills fit' and in building economic transformation

The low Skills Fit score shows that, despite strong university performance in QS rankings, there is scope for improvement for India to prepare graduates with the digital, AI and green skills that employers are looking for. While India remains the fastest-growing major economy³⁶, the scale of workforce transformation that is required will take time. The National Education Policy identifies this issue and central to this will be the facilitation of partnerships to establish foreign university integration into the local Indian university higher education system.



With an unemployment rate of 7.8%³⁷ and a gross graduation ratio from tertiary education that's almost half of the US or the UK³⁸, India has work to do to build the necessary workforce for AI, digital and green jobs. With just 0.6% of its GDP invested in research and development, India must increase this investment to drive innovation in the country. For comparison, the US invests 3.5% of its GDP in research and development, and the UK invests 2.9%.

India must pivot to a greener economy

The Environmental Performance Index³⁹, which we use as part of the QS World Future Skills Index, provides 'a gauge at a national scale of how close countries are to established environmental policy targets.' India scored 27.6, whereas the US and UK scored 57.3 and 72.7 respectively.

It's clear that for India to make full use of the potential made available by its astounding GDP growth it must pivot to a greener economy and upskill its young population with the necessary skills. India's higher education system stands ready, with a large number of good and improving universities, but it must partner closely with industry to ensure curricula align with business needs.



³³ Impact of New Education Policy on Indian Economy

³⁴ QS All eyes on India: Global partnerships to build a new education superpower

³⁵ Impact of New Education Policy on Indian Economy

³⁶ World Bank Group: India's economy to remain strong despite subdued global growth

³⁷ Centre for Monitoring Indian Economy (CMIE): Steady rise in salaried employment

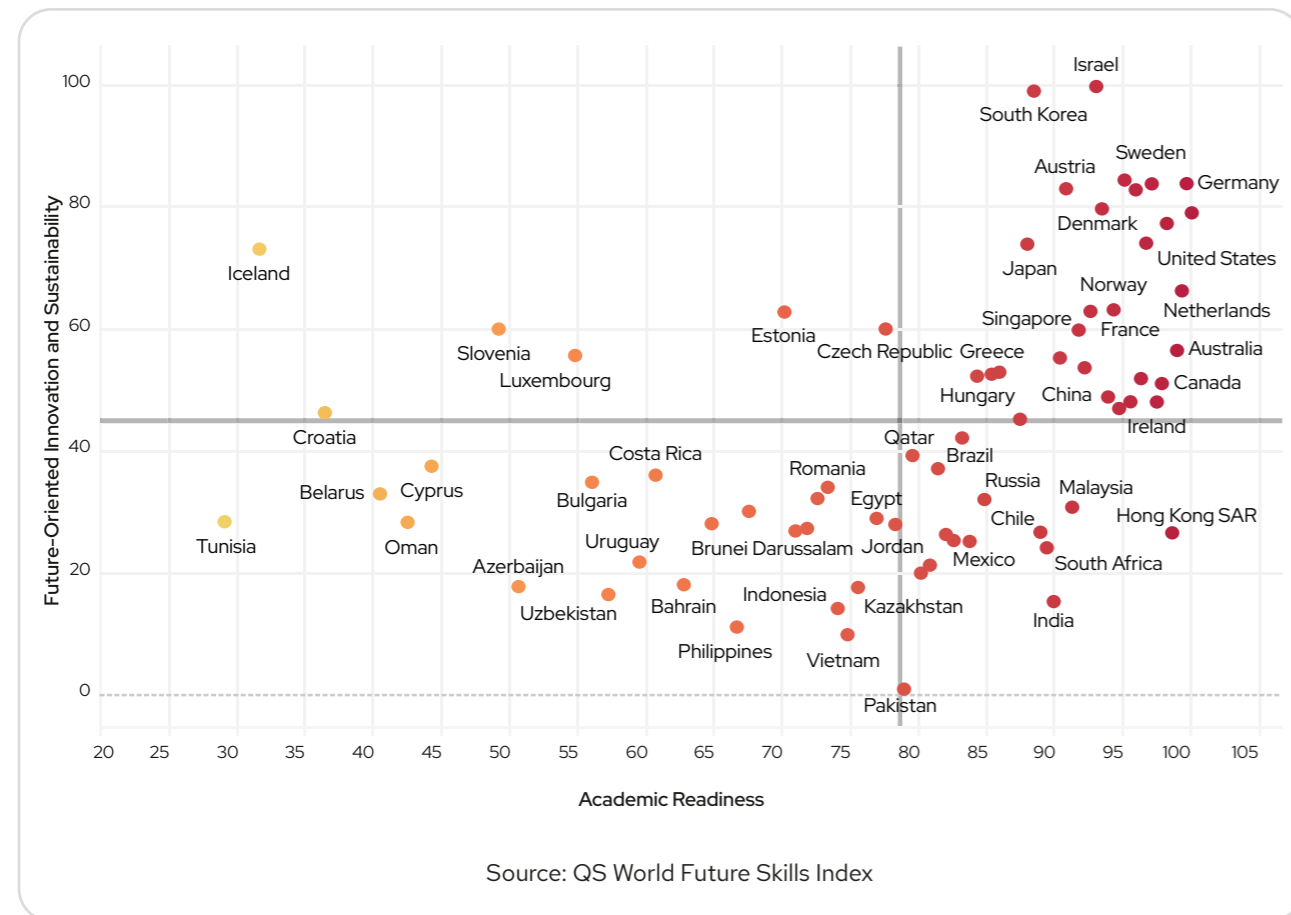
³⁸ UNESCO Institute for Statistics

³⁹ 23 degrees: Environmental Performance Index

Many countries are ready for academic innovation

A country's higher education system is one of the key pipelines for producing talent. Countries that invest in high-quality academic programmes in AI, digital, and sustainability are setting themselves up for long-term success. A higher score in this indicator reflects that a country is more capable of meeting global standards for education, research, and skills development.

While a number of countries are academically ready to contribute to economic growth and are well-prepared to support future-focused industries and sustainable innovation, there is a broad spread of countries in need of strengthening their academic readiness.



Spotlight on Norway

Norway scores highly in both Academic Readiness and Future-Oriented Innovation and Sustainability. This high Academic Innovation Readiness reflects Norway's strong educational framework, which not only prepares students academically but also aligns well with future-focused, sustainable innovation sectors. Norway's educational policies emphasise green technology and sustainable development, making it a leader in preparing a workforce capable of meeting future industry demands.

Spotlight on Vietnam

Vietnam, on the other hand, scores moderately for Academic Readiness but scores lower in Future-Oriented Innovation and Sustainability. This indicates that while Vietnam's education system is progressing, it has not yet fully integrated sustainable and innovative practices to prepare students for future-oriented sectors. The country is focusing on improving foundational education and digital skills but lacks sufficient alignment with sustainable industry needs, which places it in a lower Academic Innovation Readiness bracket.



What can higher education do?

Working with government

Enable medium-term policy development around workforce reskilling through the deployment of innovative new products across lifelong and personalised learning paths for at-risk workers, introducing modularised learning and advancing curricula to adapt to the skills needs of tomorrow's workforce. In the short-term, support governments in closing identified industry skills gaps through the attraction of international talent.

Working with industry

Drive industry innovation through establishing international research partnerships targeted to the areas of aligned industrial need. Feed research innovation to industry with industry partnerships that drive commercial growth. Work with industry to advance the curricula to deliver relevant skills adoption.

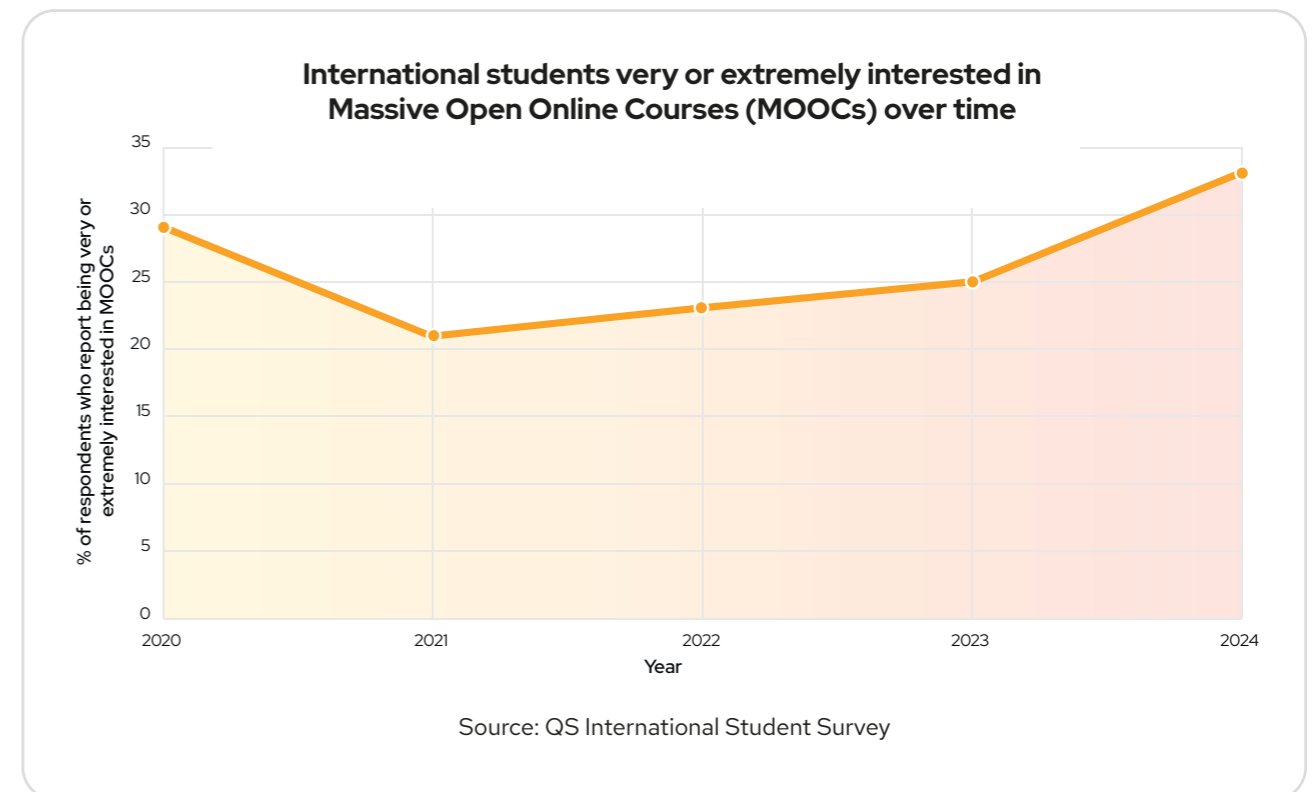
Supporting students to thrive

Innovate by designing personalised, flexible pathways that support lifelong skills development, ensuring learners can continuously adapt to changing career landscapes and societal needs. Advance academic curricula by modularising learning experiences to empower individuals with the relevant skills required for success in today's dynamic world.

Modular learning is of increasing interest to international students

Higher education systems need to build greater agility in modular learning to nurture graduates that are ready for future skills. The student recruitment climate indicates that now is a good time to invest in modular learning and demand for MOOCs (free online courses without accreditation) is rising, according to the QS International Student Survey.

Universities should act to meet this demand and develop 'lifelong learning systems that are responsive to changing circumstances and ensure that individuals are proficient in the range of skills needed to support economic growth and social cohesion.'⁴⁰

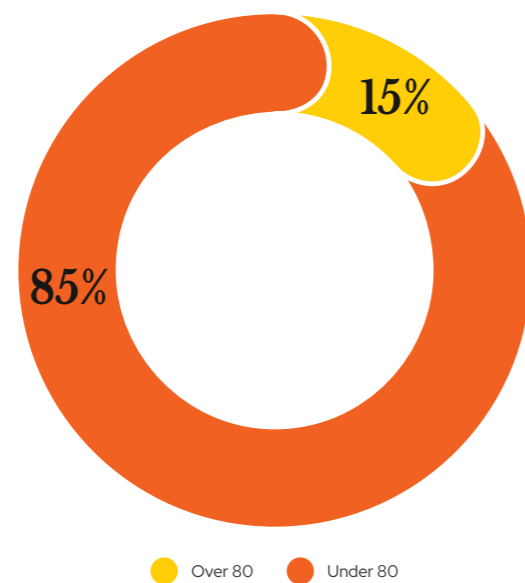


⁴⁰ OECD Skills Outlook 2023: Skills for a Resilient Green and Digital Transition

Higher education must align to business demands and close skill gaps

In the QS World Future Skills Index, the average Skills Fit score is just 58.8, showing there is still room for higher education sectors globally to improve their alignment between industry and academia. 85% of countries have a Skills Fit score below 80.

Proportion of countries with a Skills Fit score over or under 80 in the QS World Future Skills Index



Source: QS World Future Skills Index



Professor Ian White, former Vice-Chancellor and President at the University of Bath, said:

“Increased academia-industry partnerships enable the University to ensure that it better serves society – through the kinds of research that we do, the curricula that we teach and the way that we envisage the relationship between academic learning and society at large.”⁴¹

This means universities and businesses must come together and explore what each party needs from the other, and use these learnings to adapt curricula and research strategy to better align.

⁴¹ [QS.com \(How to nurture academia-industry partnerships with Professor Ian White\)](#)

⁴² [QS.com \(How can partnerships help to close skill gaps?\)](#)



At the QS India Summit 2024, Saurabh Sinha, Executive Dean at the University of Canterbury gave a concrete example of good partnership:

“I’m particularly proud of the setup between science councils and our university because it had a transdisciplinary format. Members from science councils presented problems that they’re looking at and we developed a strategy across disciplines on how that could be resolved. This led to multidisciplinary projects and a programme over a multi-year period.”⁴²

It is essential that partnerships are equitable. Businesses globally should make better use of the research and development resource universities provide and maximise the academic potential available in higher education.

Your future workforce and skills partner

Connecting higher education, government policy, employer demands and student needs



Attract high value international talent and fill short-term skills gaps

Enrich your academic environment and meet specific talent needs

Use globally-recognised frameworks to ensure institutions incorporate skills-led teaching into the curricula

Adapt your programme portfolio and curricula with the help of expert QS consultants

Engage with industry experts, government leaders and prospective partners at QS Summits



Utilise market intelligence and benchmarking to diagnose current and future skills gaps

Understand evolving industry demands

Accelerate your decision making with global insights, advanced analytics, data-visualisations and AI-powered tools



Create and track personalised and skills-led journeys for students

Align individual student goals with the competencies required for their dream job

Leverage the insights of higher education sector experts to inform and guide your employability strategy



Appendix

How do we calculate each of our indicators?

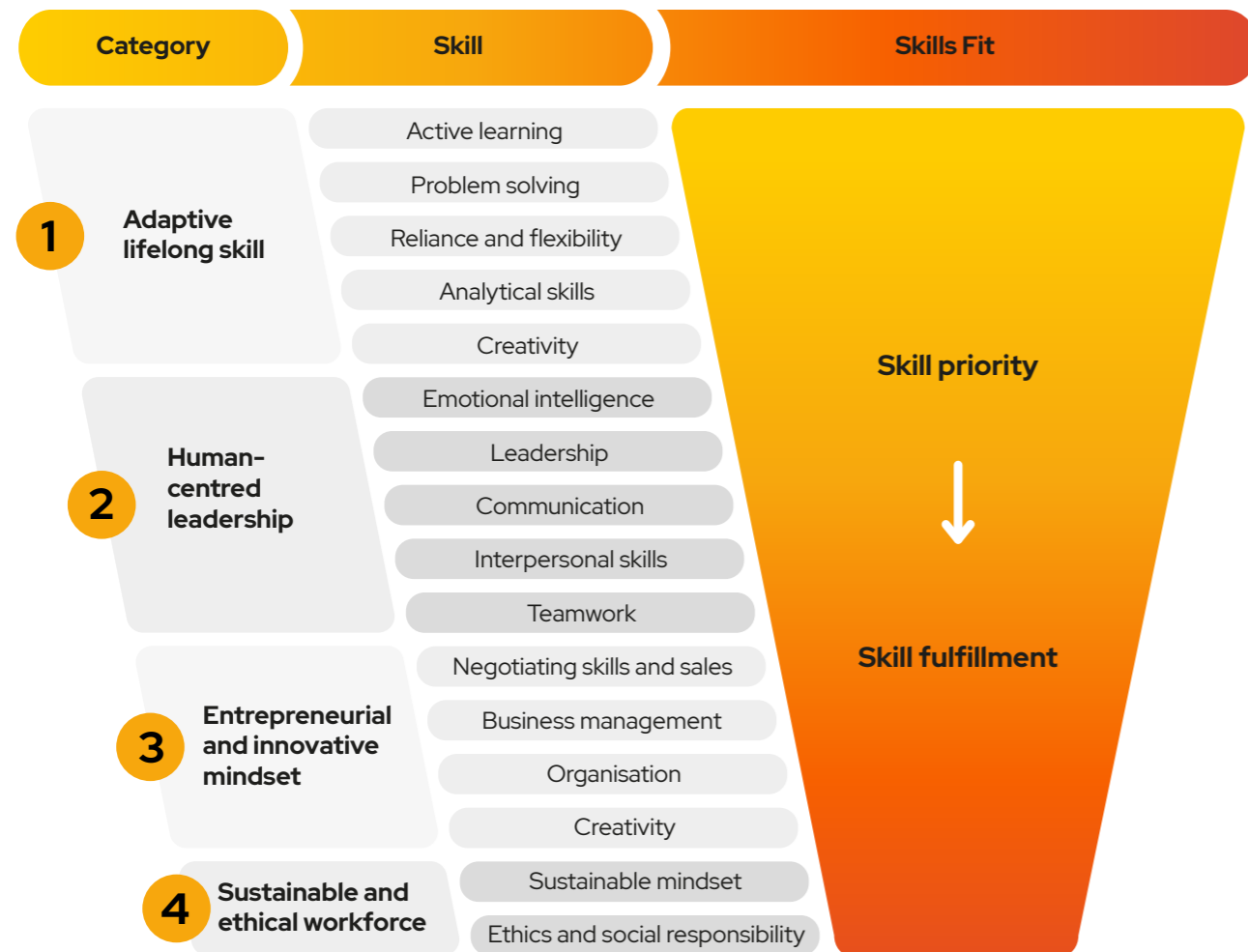
A range of proprietary QS data and third-party data informs the QS World Future Skills Index. Our four indicators: Academic Readiness, Economic Transformation, Future of Work and Skills Fit, make up a country's final score, with each indicator weighted equally at 25%.

By assigning equal weight to each, the Index provides a well-rounded assessment. A country cannot solely rely on strong academic performance or a booming economy; it must show that its job market and educational system are aligned with future demands.

Skills Fit

The Skills Fit indicator measures how well countries are equipping graduates with the skills that employers desire. This is assessed by determining the gap between what employers find important and their level of satisfaction with the skills provided by graduates.

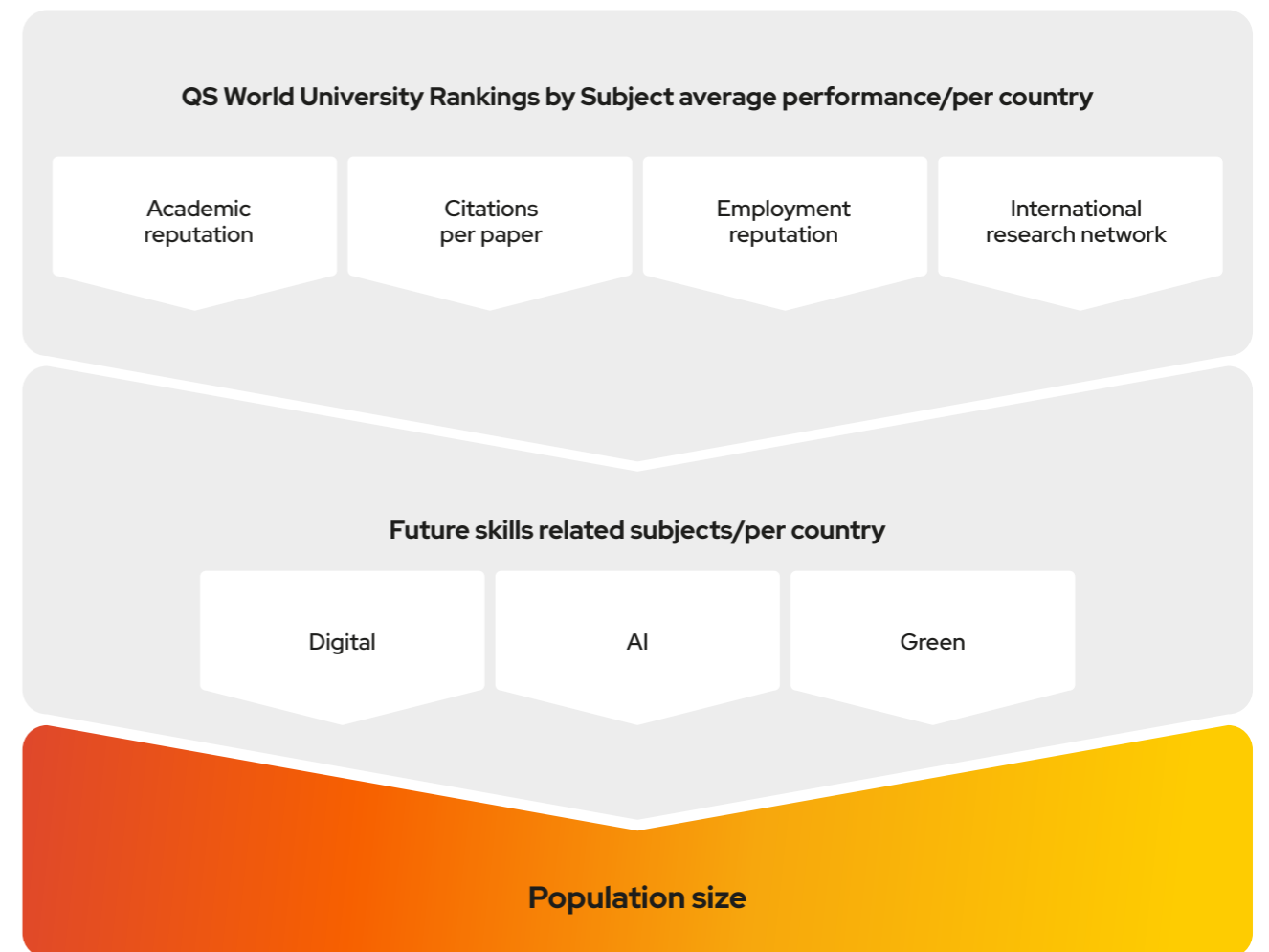
This is done using data from the QS Global Employer Survey, the largest of its kind, and data from the World Bank Group. Since 2021, over 100,000 employers have rated the importance of certain skills and their satisfaction in their graduate hires.



Academic Readiness

This dimension measures how well a country is prepared for the future of work. We look at the number of universities assessed for the QS World University Rankings by Subject, and how they perform.

We then measure this in tandem with population size – if a country has a large population but few well-ranked institutions, for example, the country will be penalised.

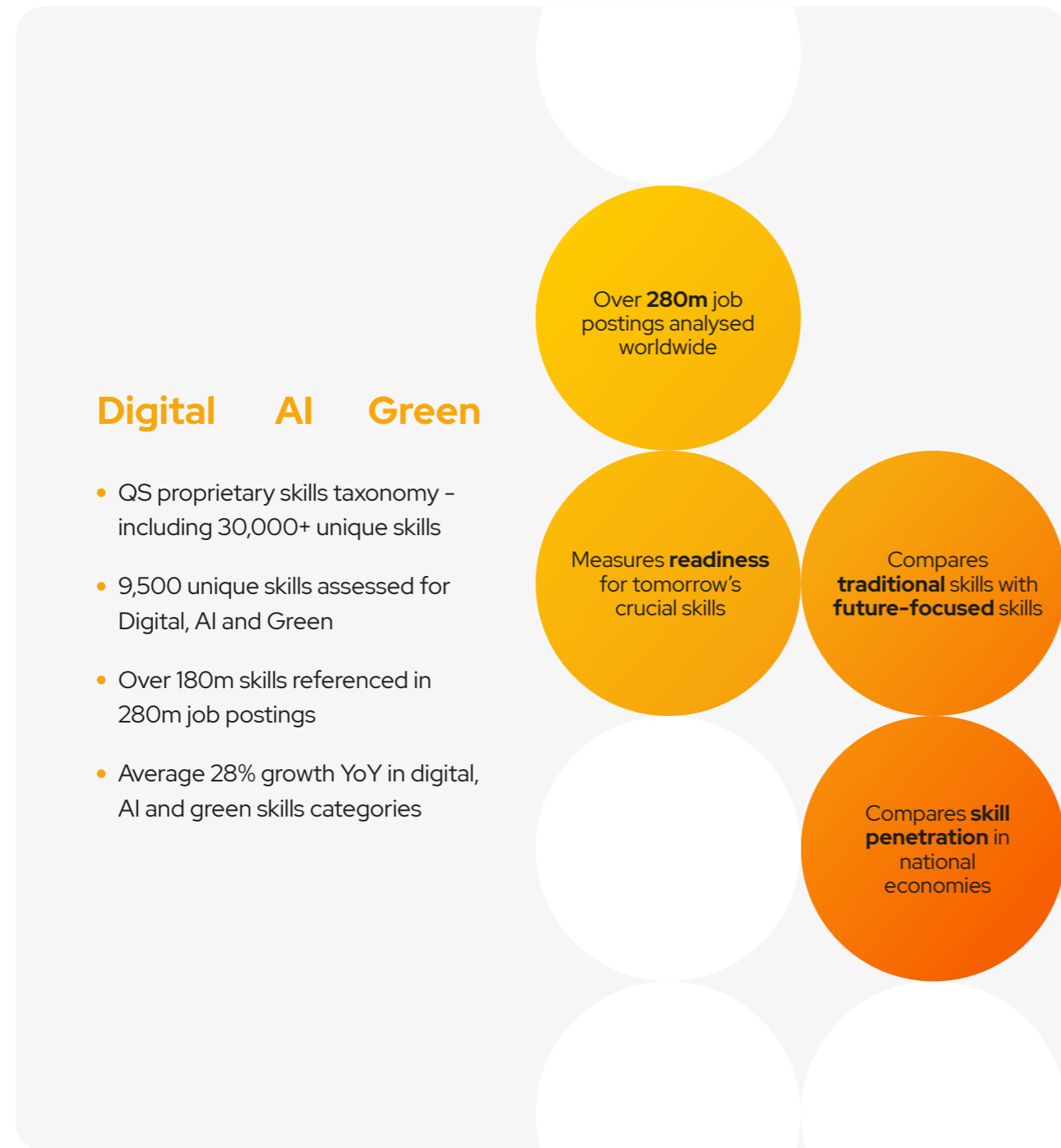


Note: For the purpose of this report, 'higher education' refers to institutions delivering degree-level and research-based education. We acknowledge the distinct yet complementary contributions of Further Education in vocational training and immediate skill delivery.

Future of Work

The Future of Work indicator evaluates a country's readiness to recruit for the skills needed in the jobs of tomorrow. Specifically, it measures how well the job market is prepared

to meet the growing demand for digital, AI, and green skills, all of which are becoming critical as economies transition towards technology-driven and sustainable industries.



Economic Transformation

Economic Transformation uses a weighted formula to assess a country's readiness to support the growth and future of work and skills by examining various key indicators. The Index highlights whether a country has the infrastructure, investment power, and talent

available to transition to industries driven by AI, digital transformation, green technologies, and high-skilled work, using data from the World Bank Group, UNESCO Institute for Statistics and the Education Policy Institute.



Each bar corresponds to the weight assigned.

QS World Future Skills Index: Full results

Country/Location	Skills Fit	Academic Readiness	Future Of Work	Economic Transformation	Final Score
United States	94.4	98.2	100.0	97.9	97.6
United Kingdom	100.0	100.0	95.6	92.7	97.1
Germany	89.2	99.6	94.7	94.7	94.6
Australia	87.2	98.9	96.5	90.6	93.3
Canada	90.9	97.8	97.4	78.1	91.0
Netherlands	88.6	99.3	90.4	81.2	89.9
Switzerland	80.7	97.1	82.6	96.8	89.3
France	84.8	92.6	91.3	84.3	88.2
Singapore	83.2	91.7	92.2	85.4	88.1
South Korea	84.4	88.4	76.5	100.0	87.3
China	78.5	93.9	87.8	88.5	87.2
Spain	76.4	96.3	93.0	70.8	84.1
Israel	70.6	93.0	73.0	98.9	83.9
Sweden	80.4	95.1	72.2	86.4	83.5
Japan	73.4	87.9	74.7	95.8	83.0
Belgium	72.4	95.9	71.3	91.6	82.8
Ireland	81.8	95.5	86.1	67.7	82.8
Denmark	73.0	96.7	66.1	93.7	82.4
Hong Kong SAR	77.0	98.6	69.5	80.2	81.3
Italy	70.3	97.4	85.2	69.7	80.7
Finland	76.1	93.4	62.6	87.5	79.9
New Zealand	75.6	94.7	80.0	63.5	78.5
Norway		94.3	56.5	83.3	78.0
Poland	68.5	85.3	86.9	68.7	77.3
India	59.1	89.9	99.1	58.3	76.6
Portugal	71.0	92.1	66.9	76.0	76.5
Czech Republic	72.4	77.5	82.6	71.8	76.1
Austria	66.5	90.8	64.3	82.2	75.9
United Arab Emirates	71.6	90.3	77.4	60.4	74.9

Country/Location	Skills Fit	Academic Readiness	Future Of Work	Economic Transformation	Final Score
Greece	62.3	85.9	65.2	72.9	71.6
Brazil	44.1	83.1	78.2	77.0	70.6
Malaysia	64.0	91.2	88.6	35.4	69.8
Thailand	58.1	81.4	80.8	52.0	68.1
Mexico	54.8	80.8	98.2	37.5	67.8
Lithuania	61.4	87.4	52.2	66.6	66.9
Hungary	59.3	84.2	68.6	54.1	66.6
Russia	73.4	84.8	33.8	73.9	66.5
Saudi Arabia	56.9	82.5	73.8	51.0	66.1
Türkiye	62.1	73.3	60.0	64.5	65.0
Colombia	58.3	82.0	89.5	27.0	64.2
Costa Rica		67.5	79.1	45.8	64.1
Argentina	57.8	83.7	84.3	23.9	62.4
Philippines	47.6	66.6	93.8	40.6	62.2
Estonia		70.1	53.0	61.4	61.5
Kazakhstan	67.8	75.5	40.8	59.3	60.9
Egypt	45.4	76.9	75.6	44.7	60.6
Indonesia	60.0	74.0	67.8	39.5	60.3
Lebanon	45.9	86.4	46.9		59.7
Chile	63.1	88.9	70.4	13.5	59.0
Qatar	45.5	79.5	59.1	47.9	58.0
Romania	43.0	72.5	58.2	48.9	55.7
Vietnam	58.1	74.7	57.4	31.2	55.4
Jordan	49.2	78.2	49.5	41.6	54.6
Slovenia		49.1	35.6	79.1	54.6
Bulgaria	37.6	56.0	61.7	57.2	53.1
Peru	51.0	80.1	54.7	26.0	53.0
Latvia	56.4	60.7	46.1	46.8	52.5
South Africa	28.3	89.4	81.7	10.4	52.4

Country/Location	Skills Fit	Academic Readiness	Future Of Work	Economic Transformation	Final Score
Bahrain	47.2	62.7	33.0	55.2	49.6
Ukraine	57.9	71.8	51.3	15.6	49.1
Bangladesh	39.1	65.7	42.6		49.1
Luxembourg		54.8	47.8	43.7	48.7
Kuwait	36.3	69.3	40.0		48.5
Belarus	57.6	40.4	29.5	65.6	48.3
Iceland		31.6	20.0	89.5	47.0
Pakistan	35.7	78.9	63.4	4.1	45.5
Croatia		36.4	35.6	62.5	44.8
Uruguay	40.6	59.5	60.8	17.7	44.7
Brunei Darussalam	29.8	70.9		30.2	43.6
Ecuador	30.6	64.8	41.7	34.3	42.8
Armenia	25.3		45.2	50.0	40.2
Uzbekistan	48.1	57.2	29.5	16.6	37.9
Cyprus	45.2	44.2	37.4	18.7	36.4
Azerbaijan	31.8	50.6	27.8	29.1	34.8
Oman	32.5	42.5	29.5	33.3	34.4
Panama	24.2		50.4	28.1	34.2
Sri Lanka	43.5		42.6	6.2	30.8
Morocco	17.0		53.8	20.8	30.5
Tunisia		29.0	37.4	19.7	28.7
Algeria	21.3		22.6	32.2	25.4
Tajikistan	16.7		26.9	21.8	21.8

*Where a country lacks an indicator score, this reflects insufficient data available to evaluate overall performance





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