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TCS higher education study:

Digital readiness and student experience

Key findings report

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Foreword

The higher education sector stands at a pivotal moment. As revealed in this new TCS study, universities and institutions worldwide are navigating a landscape marked by geo-political changes that affect enrollments, evolving student expectations, and greater focus on skills. Yet, what emerges most clearly from our research is a spirit of optimism and resilience, a belief that the future is bright for those who embrace digital transformation and AI as strategic imperatives.

Today, more than ever, adaptability is the currency of success. Institutions that invest in AI and digital technologies are not only enhancing operational efficiency but are fundamentally reimagining the student experience. Our findings show that nearly 80% of university leaders are optimistic about future growth and sustainability, with digital transformation now recognized as a core enabler of innovation and institutional strategy.

Ankur Mathur

VP and Global Head, Education Unit, TCS

Universities that harness AI and advanced analytics are becoming more agile, able to pivot quickly in response to volatile environments and shifting demands. These technologies empower educators to personalize learning, streamline administrative processes, and foster deeper engagement, creating seamless, inclusive, and resilient experiences for students. The journey is ongoing, but the commitment is clear: nearly a third of IT budgets are now dedicated to digital student experience initiatives, with AI and machine learning topping the list of investment priorities.

However, transformation is not just about technology. It is about cultivating a culture of perpetual adaptability, where technological innovation and human experience evolve together. Institutions that embrace agility and adaptability as a continuous discipline will define the next era of higher education: one where every student is empowered to thrive, and every university is equipped to lead.

As we chart the future, let us be bold in our vision and steadfast in our commitment to progress. By embracing AI and digital transformation strategically, universities can unlock new possibilities and deliver the exceptional experiences that students deserve.

The future of higher education is bright, and together, we are shaping it.

Foreword

Lucinda Parr

Chief Operating Officer and Registrar
University of Bristol

The question universities face today is no longer whether higher education will change, but how intentionally we will lead and shape that change, or risk having it shaped for us.

Across the UK, USA and Australia, institutions are pulled in competing directions simultaneously: widening access, proving value for money, sustaining world-class research, prioritising student wellbeing, and securing financial resilience — all while regulatory and market pressures continue to evolve.

Digital technology lies at the heart of this tension. It can deepen complexity and fragmentation, or it can bring information together and support processes in ways that enable teams to perform at their best. Nowhere is this more evident than with artificial intelligence (AI), which is poised to reshape universities most profoundly by necessitating a fundamental rethink of core knowledge and skills, emphasising human creativity, ethical judgement, and critical collaboration in an AI-augmented world.

At the University of Bristol, we feel these tensions acutely: as a research-intensive civic university, we are committed to pushing disciplinary boundaries while ensuring every student experience education that is seamless, supportive, and transformative. We recognise that transformation requires coordinated shifts across culture, workforce, and technology to align with our mission and values. This means confronting legacy systems and resource constraints head-on and investing in staff and student digital capabilities and secure infrastructure. It's also important to foster visible senior leadership to drive real cultural adoption beyond policy alone.

What distinguishes this era from previous technological waves is the degree of convergence between the digital and physical world. Students expect one connected journey as they move through their university experience. Trust, belonging, and advocacy grow when every interaction, from enquiry to alumni engagement, is intuitive, personalised, responsive, and cohesive. At Bristol, we're taking a holistic look at the risks and opportunities presented by emerging technologies like AI and working with staff and students to upskill, define and capture value. By automating routine tasks, for example, we can redirect resources to high-value human interactions, delivering better and more affordable services that truly enhance outcomes.

In this rapidly evolving landscape, elevating the student experience has become of utmost importance, as exceptional human-centred experiences become the differentiator for fostering engagement, retention, employability, and institutional viability amid economic pressures. Digital tools enable us to reimagine this journey from end to end, but technology alone is not enough. The real imperative is to move beyond isolated projects toward integrated ecosystems purposefully designed around human-centred outcomes — engaging stakeholders early, building shared understanding, and nurturing collaboration to accelerate adoption and innovation.

This report, drawing on insights from over 200 senior leaders across universities in the UK, USA, and Australia, confronts these imperatives directly. It captures a sector at a critical inflection point: ambitious and optimistic about technological growth, yet grappling with persistent challenges of funding constraints, regulatory complexity, legacy infrastructure, and rising student expectations. It offers a benchmark of where the sector stands today and provides practical, evidence-based perspectives on converting technological possibility into sustainable, meaningful impact.

Speaking from our own experience at Bristol, I have no doubt that it will deliver real value to university leaders across the sector — and help inspire us all as we collectively shape the next era of higher education.

A new era beckons for higher education

This new study from TCS shares fresh insights about where higher education stands on digital readiness, the impact of technology on student experiences, and the strategic vision of university leaders.

The study explores the digital readiness of higher education institutions in the US, UK and Australia, focusing on technology's impact on student experiences, institutional challenges, and strategic priorities. It reveals optimism about growth and digital transformation despite ongoing challenges.

The insights suggest the higher education sector is at a crossroads: universities are investing more than ever in digital transformation, but most still see themselves as needing to make significantly more progress when it comes to digital maturity and keeping up with ever-increasing student expectations. The study also reveals a sector that's optimistic about the future but still wrestling with persistent challenges—especially around funding, alumni engagement, keeping up with regulatory demands, and defining the path forward to ensure their institutions thrive in a rapidly changing digital landscape.

This report translates those insights into actionable recommendations to help universities accelerate digital maturity, enhance student experiences, and build resilient strategies for long-term success.

Survey overview

This report, based on a survey of 200 leaders in education shares insights from large institutions in Australia*, the UK*, and the US*. Respondents include vice presidents, deans, chancellors, provosts, vice chancellors, and principals as well as registrars, chief information officers, chief technology officers, and chief data officers.

*Enrollment minimums: AUS: 5,000+, UK: 5,000+, US: 10,000+

Key insights

The education industry is embracing digital transformation with real investment and strategic focus, but the journey is ongoing. The most interesting aspect is the sector's optimism and willingness to invest in new technologies, even as it grapples with geo-political and financial pressures.

Student experience is a top priority

Student experience is a key strategic priority, right after Academics, Research, and Digital Transformation. This reflects a shift from traditional academic metrics to a more student-centered approach.

Enrollment is growing, but challenges remain

There's an average **19%** increase overall in student enrollment since 2022. And education leaders feel optimistic about current enrollments, both of which are positive signs for the sector, in spite of external pressures (such as financial aid reductions from federal governments). However, financial resources/fundraising, alumni engagement, and government regulations remain the top challenges, indicating that growth is not without its pressures.

Fragmented digital ecosystems have biggest impact to student experience

Most universities say the biggest challenge to an optimal student experience is a fragmented ecosystem resulting in complex administrative processes. This highlights the need for integrated platforms and personalized student experiences.

Universities continue to invest in digital initiatives

With **88%** of education professionals viewing technology as supportive or a core enabler of innovation and adaptability, digital transformation is clearly a strategic imperative. Institutions are backing this by allocating **29%** of their IT budgets to creating better digital experiences and another **19%** to overall digital transformation.

Digital maturity is still evolving

Most institutions rate their digital student experience and overall digital proficiency as "evolving," with email as the dominant communication channel, followed by web portals and chat platforms. This suggests there's still a long way to go before digital transformation is fully realized across the sector. The continued dominance of email and the prioritization of AI and machine learning indicate a contrast between the inertia mindset of legacy systems and the appetite for next-generation solutions.

Universities are embracing AI and digital transformation – but not fast enough

AI and machine learning are the top investment priorities for the next two years for universities. Most universities see technology as supportive or an enabler for innovation and adaptability. High adoption rates do exist for digital student registration (**96%**), financial services (**94%**), and library resources (**83%**), with cybersecurity, learning management systems, and online learning capabilities widely implemented. Lower rates of adoption are found in student wellness & health services (**57%**), career services (**64%**), and housing & accommodation services (**64%**). This signals that digital transformation is now central to institutional strategy, not just a support function – but there is opportunity to do more.

Country and persona highlights

US, UK, and Australia all show high enrollment growth with top challenges as financial/fundraising, alumni engagement, and government regulations. Overall, most academic personas in all countries are more optimistic about digital transformation compared to vice presidents.

Institutional health check

How are universities faring in a tumultuous age? We asked leaders to rate their institutions across key areas like enrollments, finance, innovation, research, sustainability, and regulatory environment. The results are encouraging: nearly **60%** say they're thriving in enrollments, and over half say they are thriving in finances, innovation, and research. However, sustainability and regulatory compliance are proving tougher, with fewer institutions feeling confident in these areas. Notably, US and UK universities tend to be a bit more optimistic than their Australian counterparts. Most universities understand the value of technology but are constrained by various factors.

Biggest challenges in higher education: Financial and fundraising resources

To chart the future of higher education, it's critical to understand the obstacles shaping institutional priorities. By identifying the biggest challenges, leaders can align resources and strategies to drive modernization, digital agility, and long-term competitiveness.

Financial resources and fundraising are the biggest headaches followed by alumni engagement and government regulations.

Challenges currently shaping the direction of universities

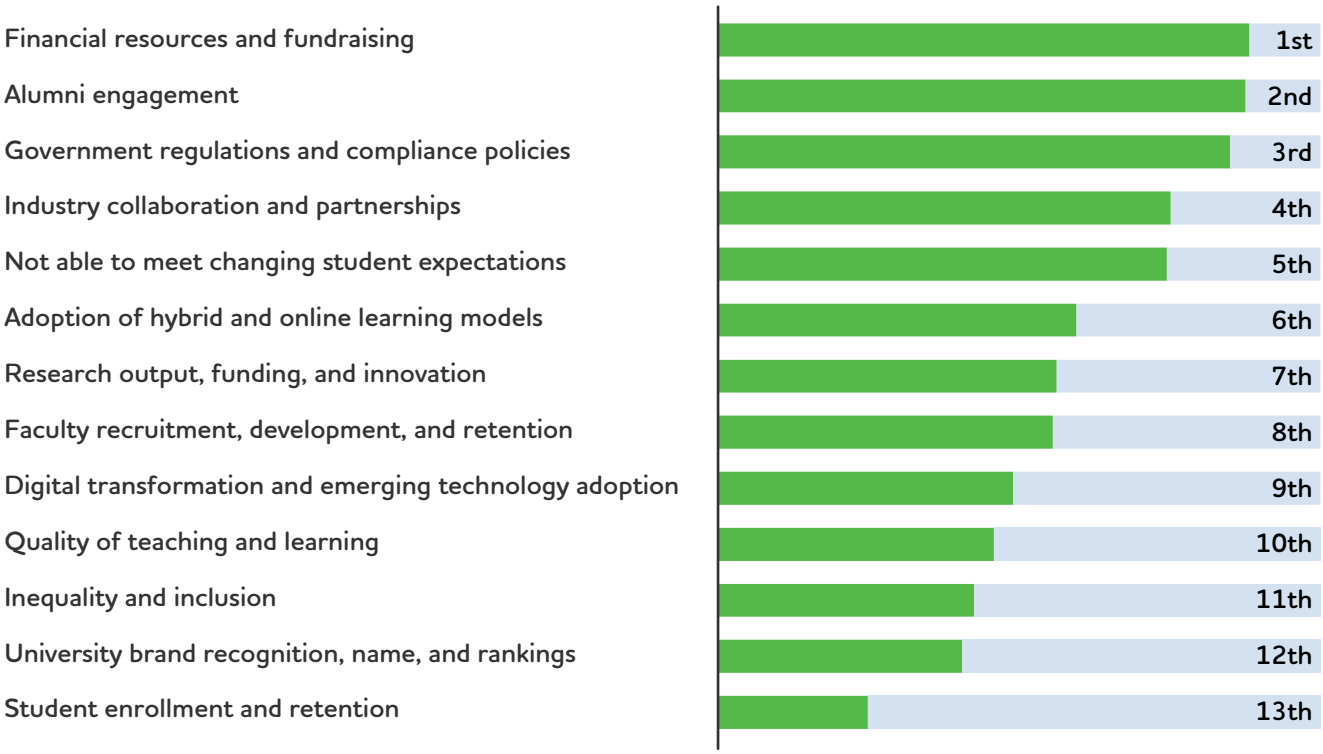


Figure 1. Factors currently shaping your university's direction as sources of challenges

The bigger picture

Higher education's triple challenge

Based on the survey of **200** senior leaders across higher education institutions, the top three challenges identified are financial resources and fundraising, alumni engagement, and government regulations and compliance policies. This reflects a sector grappling with constrained budgets while striving to build sustainable donor ecosystems and navigate complex policy landscapes. The broader industry trends reinforce this picture: universities are under pressure to modernize amid rising expectations for digital transformation, hybrid learning models, and personalized student experiences. Yet, challenges like changing student expectations, faculty retention, and technology adoption remain mid-tier concerns, suggesting that while innovation is desired, foundational issues like funding and compliance dominate strategic priorities. Interestingly, student enrollment and retention, often seen as a core metric of institutional health, ranks lower, indicating a shift in focus from volume to value—emphasizing quality engagement, brand positioning, and long-term impact. This synthesis highlights a sector in transition, balancing legacy structures with the imperative to evolve as digitally agile, student-centric, and globally competitive institutions.

Heriot-Watt University democratizes data

Heriot-Watt University partnered with TCS to build a secure, centralized data platform, enabling advanced analytics and Power BI dashboards. This improved data accuracy and decision-making, delivering **30%** staff efficiency gains, **20%** faster response times, and significant annual cost savings. Learn more.

Technology's impact on adaptability and innovation

When assessing the role of technology in shaping responsiveness and adaptiveness of the institution, just over half rank it as supportive to these related efforts but often constrained by budget, integration, or staffing challenges.

Only about one-third (35%) say technology is a core enabler to organizational responsiveness and adaptability.

The role technology currently plays in adaptability and innovation

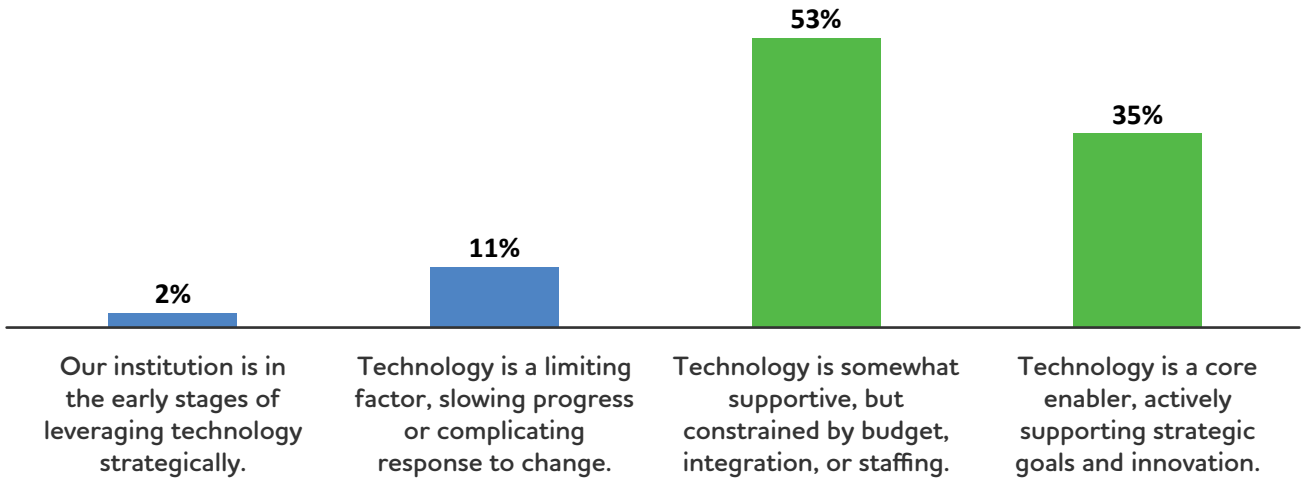


Figure 2. The role technology currently plays in enabling—or limiting—your institution's ability to adapt and innovate

The bigger picture

Despite progress, significant gaps remain in leveraging technology for innovation

The survey reveals a nuanced picture of how technology is shaping innovation in higher education. While **35%** of institutions view technology as a core enabler, actively driving strategic goals and innovation, a significant **53%** report it as only somewhat supportive, constrained by budget limitations, integration challenges, and staffing gaps. Alarmingly, **11%** feel technology is a limiting factor, and **2%** are just beginning to explore its strategic potential.

This suggests that while digital transformation is underway, its pace and impact are uneven across institutions. Industry trends echo this fragmentation—universities are increasingly investing in AI, data analytics, and hybrid learning platforms, yet many struggle with legacy systems, siloed operations, and talent shortages. It is important to note that while technology enables personalization, it is human-centered design in advising, alumni relations, and faculty development that drives real transformation.

The gap between aspiration and execution highlights the urgent need for scalable, interoperable tech solutions and strategic leadership to ensure technology becomes a true catalyst for innovation, not a bottleneck. This gap also points to a structural paradox: while leaders widely acknowledge the need for digital transformation, limited fiscal flexibility and regulatory overhead often slow progress, forcing institutions to prioritize compliance over innovation.

Hurdles in adopting new technologies

Faster technology adoption is no longer optional—it's a strategic imperative. Universities that embrace digital platforms, AI-driven tools, and cloud-based systems can deliver personalized learning, scale hybrid models, and strengthen operational resilience. Delays, on the other hand, mean higher costs, fragmented systems, and missed opportunities to enhance student experience and research capabilities.

Budget constraints and outdated infrastructure slow adoption of new technologies.

Biggest barriers to new technology adoption

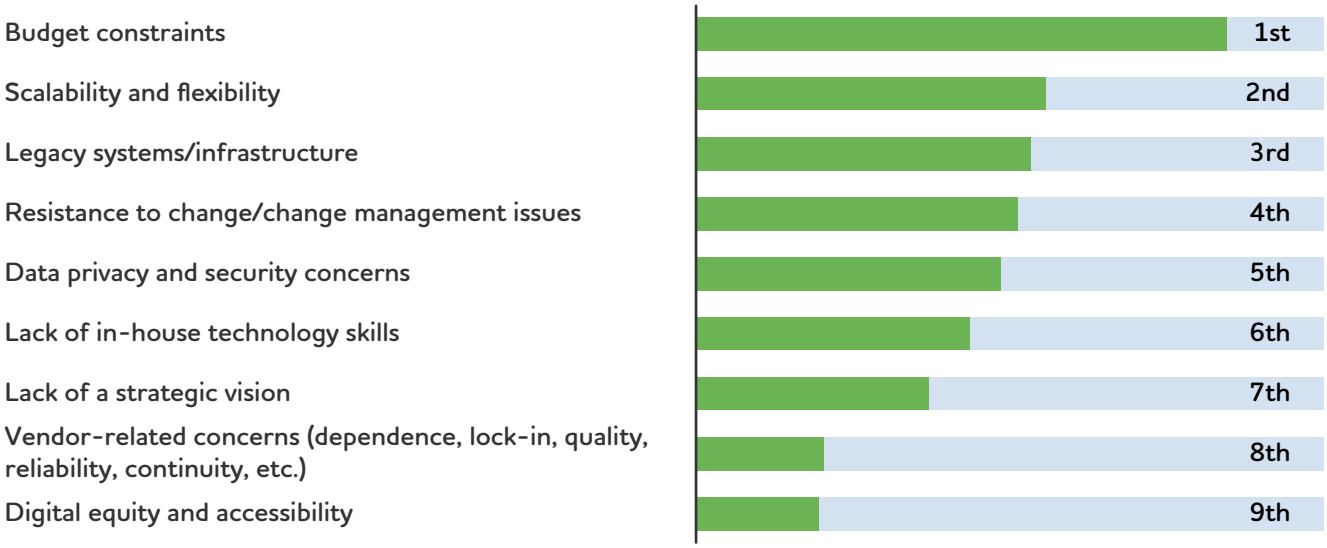


Figure 3. Top barriers to adopting new technologies

The bigger picture

Patchwork over progress

When schools and universities face tight budgets, they often patch problems instead of investing in long-term modernization. This slows digital transformation and keeps advanced tools like AI and analytics out of reach. In fact, many institutions dedicate less than a fifth of their IT spend to real transformation, leaving systems fragmented and progress stalled.

Legacy infrastructure adds another layer of complexity. It's expensive to maintain, hard to integrate with modern platforms, and creates inefficiencies that ripple through student services and administration. These outdated systems also make it difficult to scale for hybrid learning or deliver personalized experiences, and they block adoption of flexible, cloud-based solutions that could future-proof operations.

Institutions that can't modernize risk falling behind in competitiveness, enrollment, and rankings. They end up paying an "innovation tax," spending resources on upkeep instead of research or student engagement. And with older systems lacking robust security, the sector faces growing exposure to cyber threats and compliance risks—especially when handling sensitive student and research data.

University bright spots and pressure points

The survey findings reveal a mixed picture: about half of institutions surveyed are thriving/somewhat thriving in enrollment, finance, innovation, and research, while the remainder are stable or struggling to overcome challenges.

Most universities are thriving in enrollments and about half are thriving in finance, innovation, and research.

Where universities are thriving

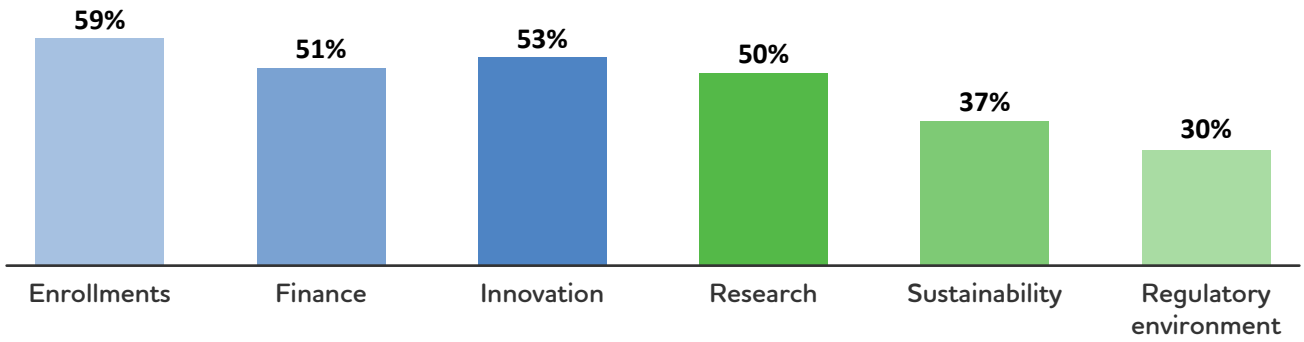


Figure 4. Describe the state of your university in these six key areas
(Shown: Thriving/Somewhat thriving)

The bigger picture

Universities are optimistic about the future but face significant challenges in regulatory and sustainability initiatives

The survey paints a picture of cautious optimism in higher education, with institutions reporting moderate success across key performance areas. About half of respondents say enrollments, innovation, finance, and research are thriving or somewhat thriving, suggesting that universities are managing to attract students and sustain academic output despite broader economic and regulatory pressures. However, sustainability and regulatory arenas lag significantly, highlighting a disconnect between institutional ambition and systemic constraints. This contrast mirrors industry trends: while many universities are embracing digital tools and new pedagogical models to drive innovation and enrollment, they remain hampered by outdated funding structures, fragmented policy frameworks, and slow progress on environmental goals. The data underscores a sector in flux—progressing in areas it can control yet challenged by external forces that demand more agile governance and long-term strategic planning.

A closer look

When asked about enrollments, 59% are thriving or somewhat thriving.

Enrollments

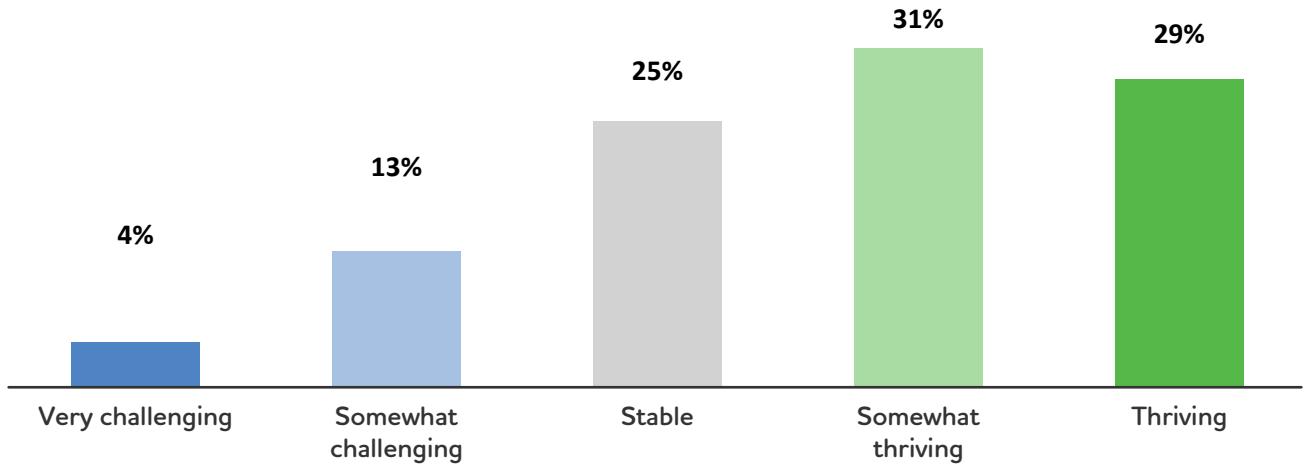


Figure 5. Describe the state of your university in enrollments

The bigger picture

Outlook positive for student demand

59% of universities report that they currently have thriving or somewhat thriving enrollments, showing a positive outlook in student demand. However, **41%** are underperforming, reflecting disparities across regions and institutional types. This aligns with industry trends where digital outreach, flexible programs, and brand strength increasingly determine enrollment success.

For the US, there are multiple factors for declining enrollment in some universities:

- Fewer college-age students due to declining birth rates
- Rising tuition costs and economic uncertainty
- A post-pandemic shift to online learning and nontraditional education and certifications
- Cultural shifts in the ROI of a college degree
- Demographic and social inequities where first-generation and historically marginalized groups face greater barriers to enrollment
- Non-traditional students seeking an affordable, flexible route to higher education
- State and federal budget cuts for funding for public colleges and universities and reduced financial aid to students
- Increased competition from international education

51% are thriving or somewhat thriving in the finance arena.

Finance

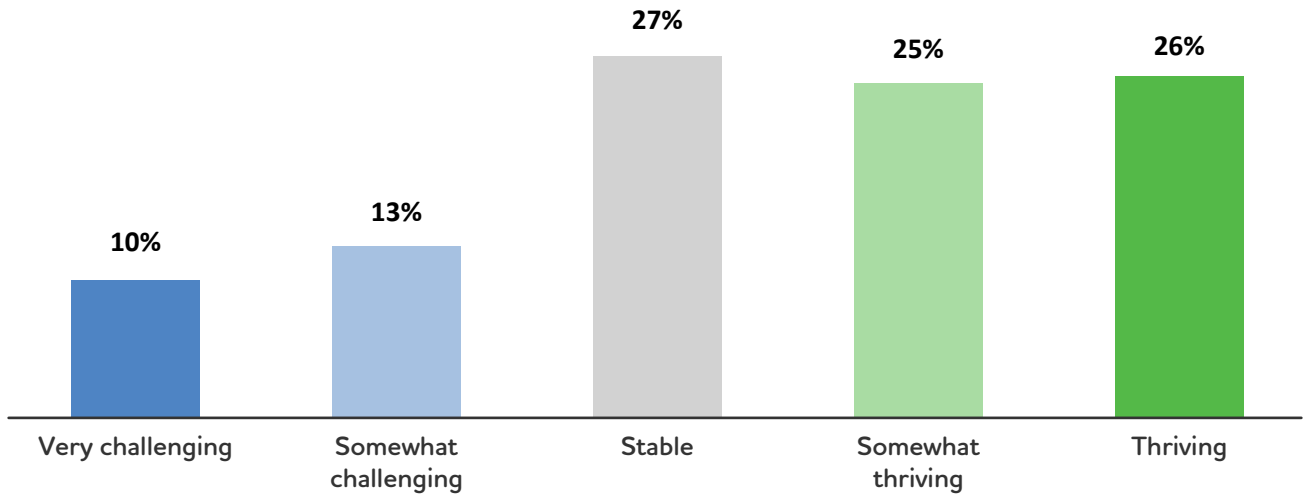


Figure 6. Describe the state of your university in finance

The bigger picture

Financial agility is key to thriving in 2026 and beyond

Over half of universities **(51%)** report thriving or somewhat thriving in financial health, while another **50%** say finance is stable or challenging. This contrast reflects an industry split—while some institutions benefit from diversified revenue and strategic fundraising, others struggle with rising costs and limited funding. Financial agility is emerging as a key differentiator in sustaining innovation and growth.

53% are thriving/somewhat thriving in innovation.

Innovation

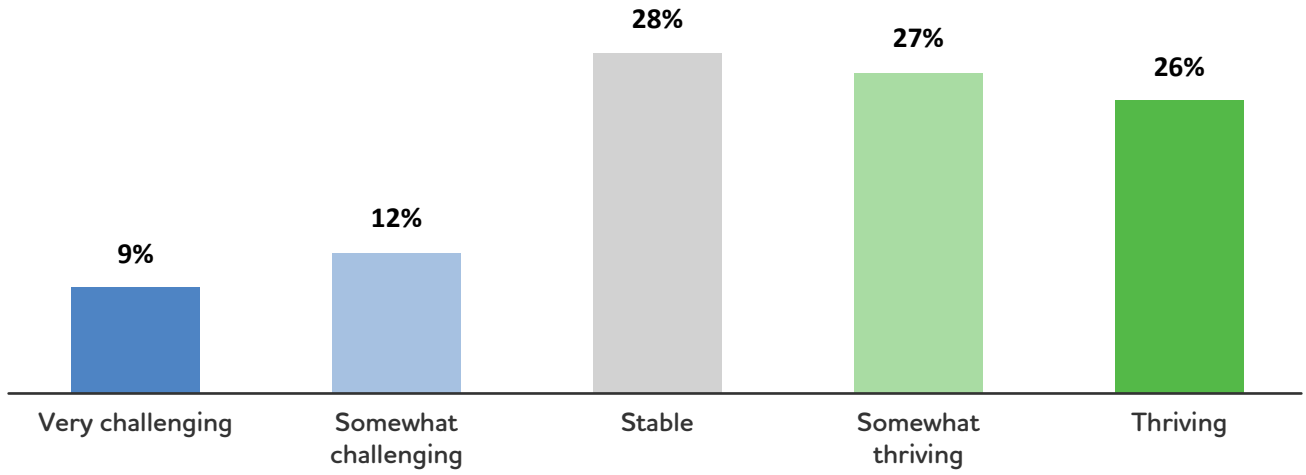


Figure 7. Describe the state of your university in innovation

The bigger picture

Not enough focus on innovation, a potential competitive differentiator

Over half of universities **(53%)** report they are thriving or somewhat thriving in innovation, yet **21%** still face challenges and the rest holding steady, pointing to uneven progress to what could be a distinct competitive advantage. While some institutions are embracing emerging tech and agile models, others struggle with inflexible and legacy systems and financial constraints. **(See Figure 2.)** Innovation success increasingly hinges on leadership vision, culture, and digital maturity.

50% say their research programs are thriving/somewhat thriving.

Research

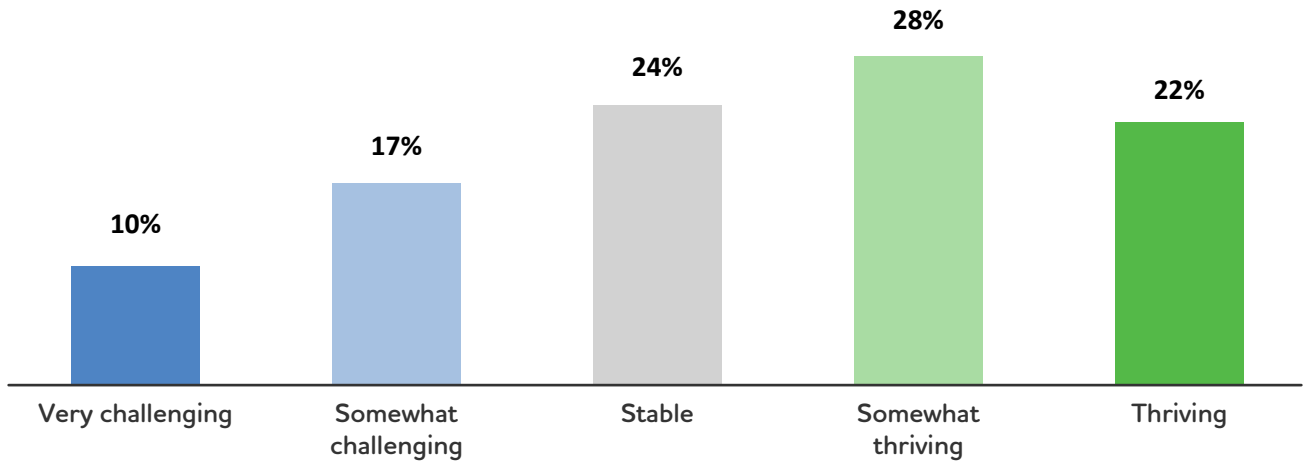


Figure 8. Describe the state of your university in research

The bigger picture

Research depends on digital ecosystems and partnerships

Just over **50%** of universities report they are thriving or somewhat thriving when it comes to research output, about a quarter **(24%)** say they are stable and another **27%** face challenges, highlighting uneven capacity across institutions.

While some are advancing through strategic funding and global collaborations, others struggle with budget constraints and competitive pressures. The research landscape is increasingly being shaped by innovation ecosystems and cross-disciplinary partnerships.

37% are thriving/somewhat thriving in their sustainability initiatives.

Sustainability

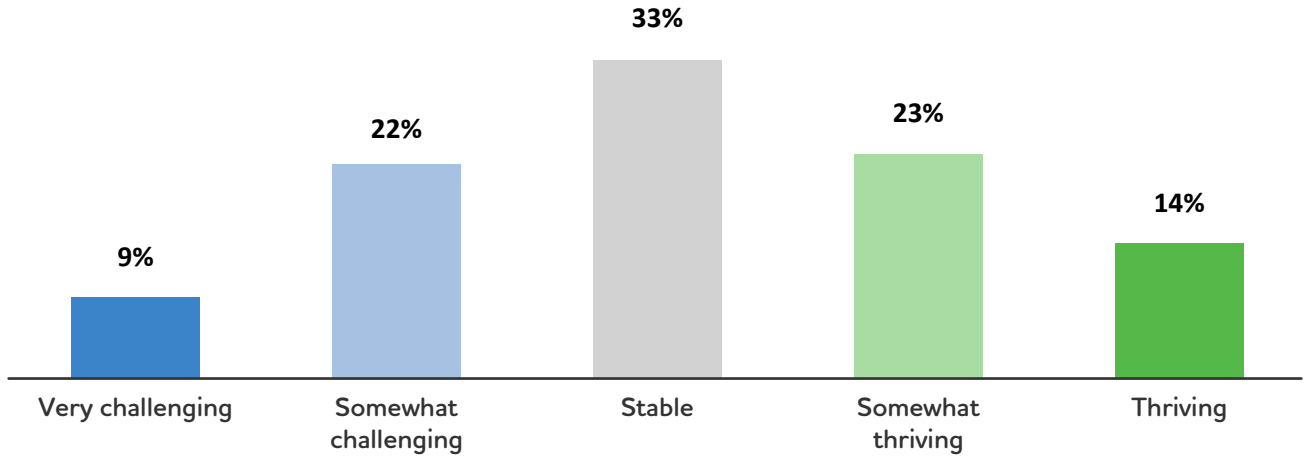


Figure 9. Describe the state of your university in sustainability

The bigger picture

For sustainability initiatives, is "stable" good enough?

Only **37%** of universities report thriving or somewhat thriving sustainability efforts, while a third **(33%)** is stable and another **31%** say they are facing challenges, revealing a significant gap in environmental progress.

This mirrors industry trends where sustainability is often deprioritized due to budget constraints and lack of strategic focus. Institutions must accelerate green initiatives to align with global regulations, societal expectations, and student values.

30% are thriving/somewhat thriving in navigating regulatory environment complexity.

Regulations and compliance

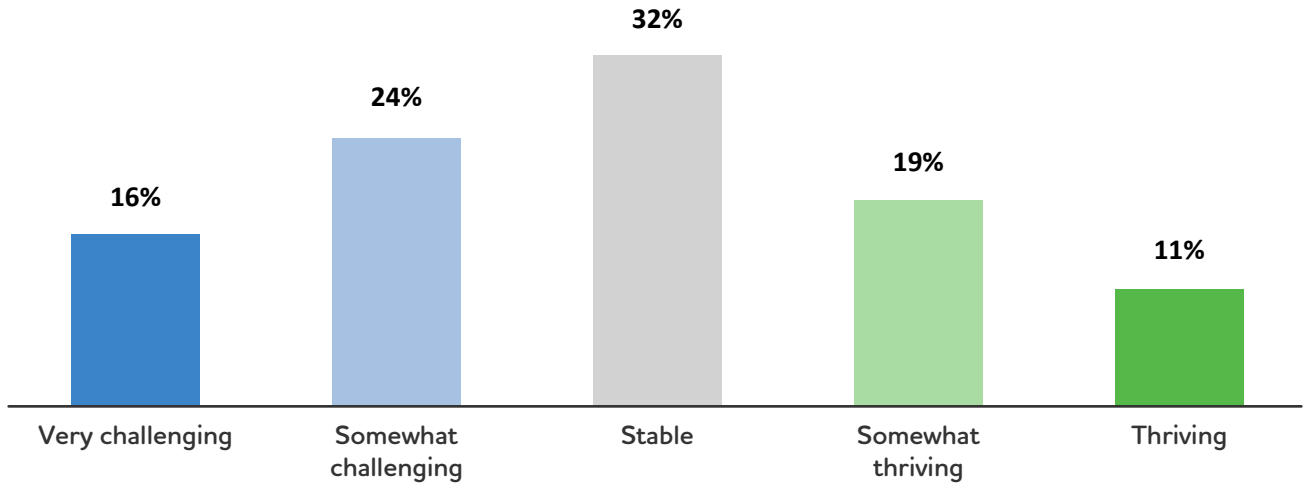


Figure 10. Describe the state of your university in regulatory environments

The bigger picture

The regulatory pressure is on

Only **30%** of universities report thriving or somewhat thriving in regulatory environments, while **40%** face challenges, revealing widespread compliance and policy hurdles. Another **32%** are holding steady. This reflects industry-wide concerns over shifting government mandates, accreditation complexities, and data governance. Navigating regulation is becoming a strategic imperative for institutional resilience and growth.

79% are optimistic about their institution's long-term growth.

Growth: Optimism about future growth and sustainability

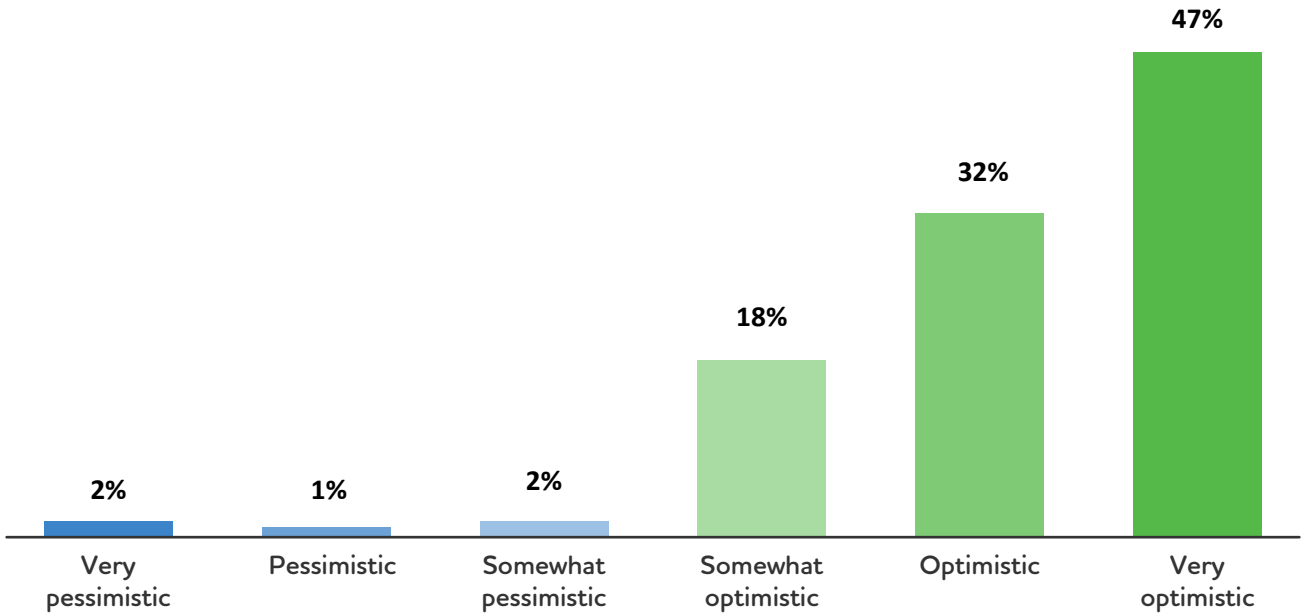


Figure 11. How optimistic are you about your university's future growth and sustainability

Regional variation: US and UK institutions show slightly higher optimism and enrollment growth than Australia.

The bigger picture

Is this optimism in future growth justified?

An overwhelming **79%** of university leaders are optimistic about future growth, with US and UK institutions showing slightly higher confidence than Australia. This optimism reflects strong momentum in enrollment, innovation, and digital transformation. However, regional disparities and financial pressures suggest that sustained growth will depend on strategic agility and investment in future-ready capabilities.

Catholic University of America elevates nursing education

Catholic University of America partnered with TCS to create a simulated virtual hospital using high-fidelity VR/AR technology, which has significantly reduced the churn rate (previously it was **35%**). This solution reduces costs by enabling **50%** reuse of assets and code and helps nursing students train for complex real-world scenarios without risking patient safety. Learn more.

Top drivers of growth

What's fueling growth? Not surprisingly, academic reputation tops the list as the biggest growth driver, followed closely by student enrollment/retention and digital transformation. Interestingly, while alumni engagement is seen as a major challenge, it's not widely viewed as a growth driver—suggesting a missed opportunity for many institutions.

Academic reputation and teaching quality ranks #1 as the top driver of growth

Top drivers of university growth

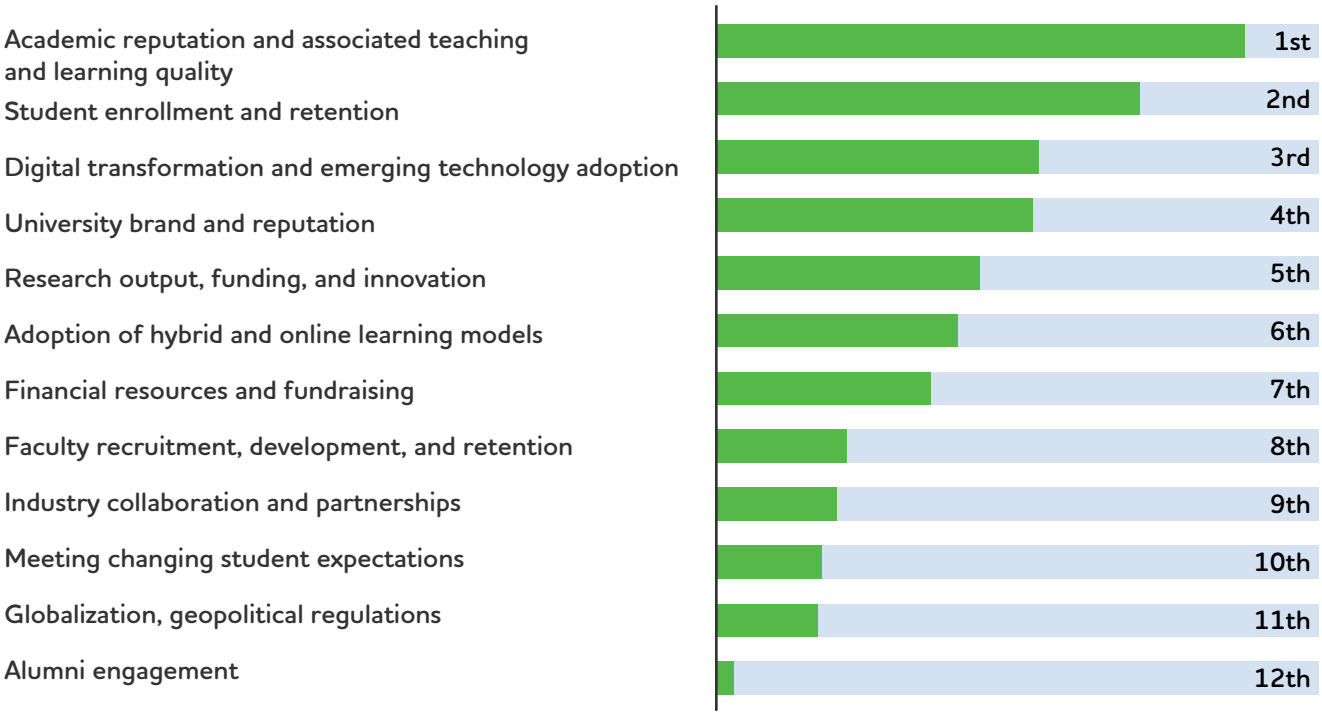


Figure 12. What are the top drivers of growth for your university?

The bigger picture

Institutional growth dependent on digital transformation technologies

The top growth drivers—academic reputation, student enrollment, digital transformation and adoption of emerging technology—stand in sharp contrast to the top challenges like financial resources, alumni engagement, and government regulations. This reveals a sector striving to scale innovation and brand value while grappling with foundational constraints. Institutions that successfully align their strategic priorities with tech adoption and quality teaching are better positioned to convert enrollment momentum into sustainable growth. However, bridging the gap between aspiration and execution remains critical in an increasingly competitive and digitally driven education landscape.

Alumni engagement is cited as a top challenge in this study (see Figure 1) and lowest in drivers of growth, but for forward-thinking institutions, alumni relationships represent a tremendous untapped opportunity. By actively investing in them, universities can unlock new avenues for fundraising, mentorship, brand advocacy, and lifelong learning partnerships. Turning alumni engagement into a strategic priority offers the potential to transform former students into passionate ambassadors and powerful advocates of institutional growth.

Maturity of digital proficiency

How do universities rate themselves when it comes to digital proficiency? Most leaders describe their institutions as “evolving”—not quite advanced yet making progress.

Over half (57%) rate the maturity of the overall digital proficiency as "evolving“ (compared to their peers), indicating significant room for improvement.

Universities' digital proficiency

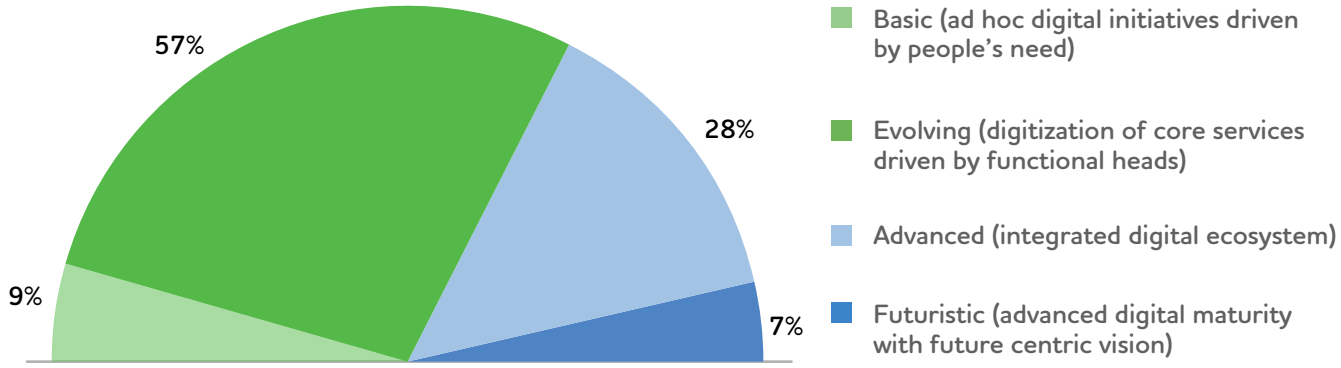


Figure 13. Rate your university’s digital proficiency (compared to peers)

The bigger picture

Most universities are not future ready

The survey reveals that **57%** of universities are still evolving digitally, with digitization driven by functional heads rather than a unified strategy. Only **35%** report advanced or futuristic digital maturity, underscoring a gap between ambition and execution. This aligns with earlier findings where digital transformation ranked high as a growth driver, yet technology was seen as only somewhat supportive by most institutions—constrained by budget, integration, and staffing. Industry trends show that institutions with integrated digital ecosystems are better positioned to innovate, personalize student experiences, and scale sustainably, while others risk falling behind in a rapidly digitizing education landscape.

The state of the student experience

When it comes to digital student experiences: over half say they're still on the journey. When it comes to communication, email is still king (used by **90%** of institutions), with web portals and chat platforms also popular. Mobile apps and virtual assistants are on the horizon, but adoption is still in the early stages.

55% rate the maturity of their university's digital student experience as "evolving" (compared to peers), suggesting there is a gap between execution and expectation.

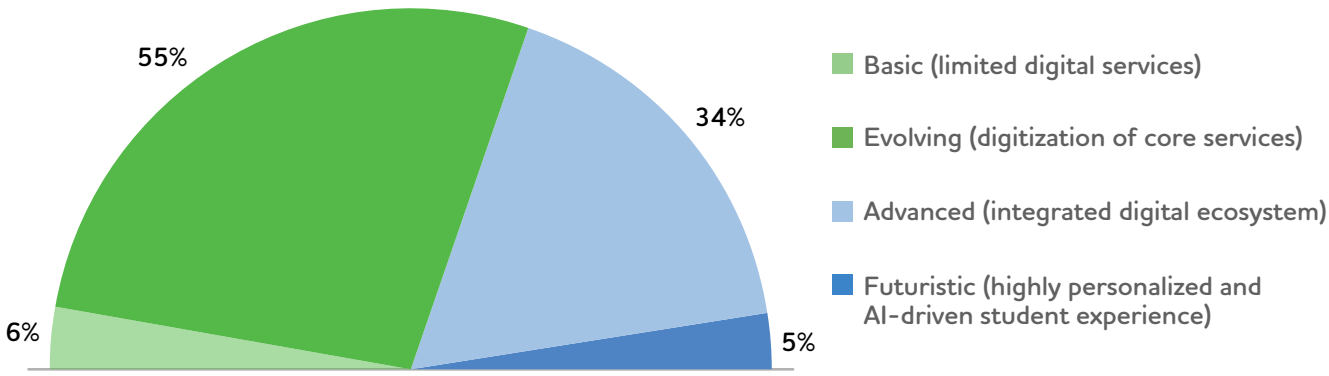


Figure 14. Rate the maturity of your overall digital student experience (compared to peers)

The bigger picture

For most universities, the digital student experience is still not hyper personalized

Most universities rate their digital student experience as evolving, with **55%** digitizing core services but not yet delivering fully integrated or personalized journeys. Only **39%** have reached advanced or futuristic maturity, indicating that while progress is underway, the sector still has a long road ahead. Institutions that prioritize seamless, AI-enhanced experiences are beginning to stand out, as student expectations shift toward more intuitive, tech-enabled engagement.

Universities are embracing digital technology to engage with students, some channels more than others. Surprisingly, email leads the way, but mobile apps, virtual assistants, and digital kiosk usage are set to significantly increase in future.

Key student digital touchpoints

90% say email is still the #1 digital channel to interact with students, suggesting a cultural disparity between school administration and younger students' technology preferences.

Most common digital channels to engage with students

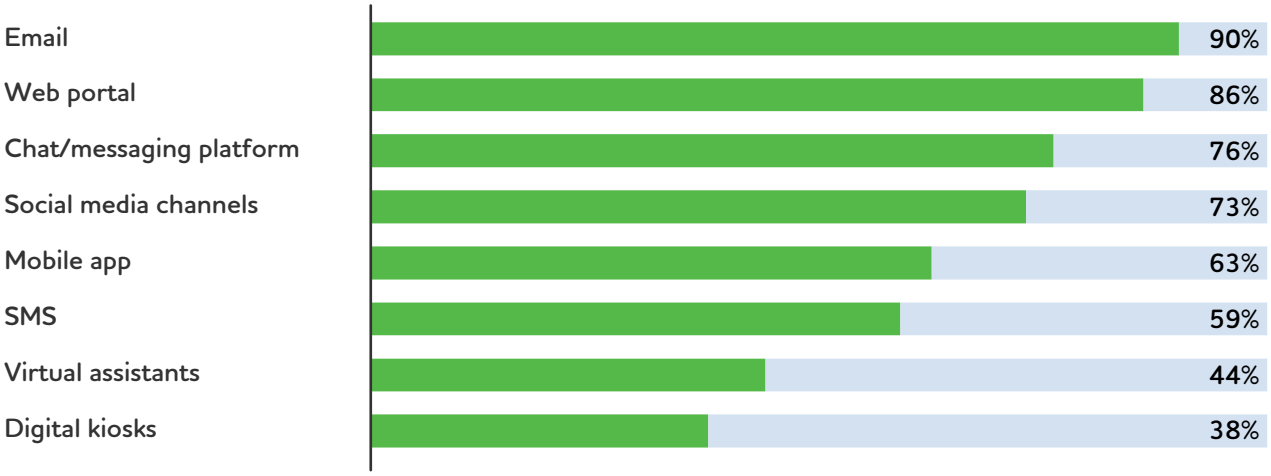


Figure 15. Which digital channels does your university use to interact with students?

The bigger picture

Most universities focused on conventional technology channels

The data shows universities rely heavily on traditional channels like email and web portals, while adoption of mobile apps (**63%**), chat platforms (**76%**), and social media (**73%**) is strong but still evolving. Emerging tools such as virtual assistants (**44%**) and digital kiosks (**38%**) have lower current usage but high future intent (**47%** and **48%** respectively), signaling a shift toward more interactive, AI-driven engagement.

This contrast reflects a sector balancing legacy communication methods with the growing demand for personalized, omnichannel experiences—where institutions that embrace automation and mobile-first strategies will likely gain a competitive edge in student engagement.

How digital are student services?

Student registration services (96%) and financial services (94%) are most mature in adopting digital technologies.

Maturity of digital technology adoption for student services

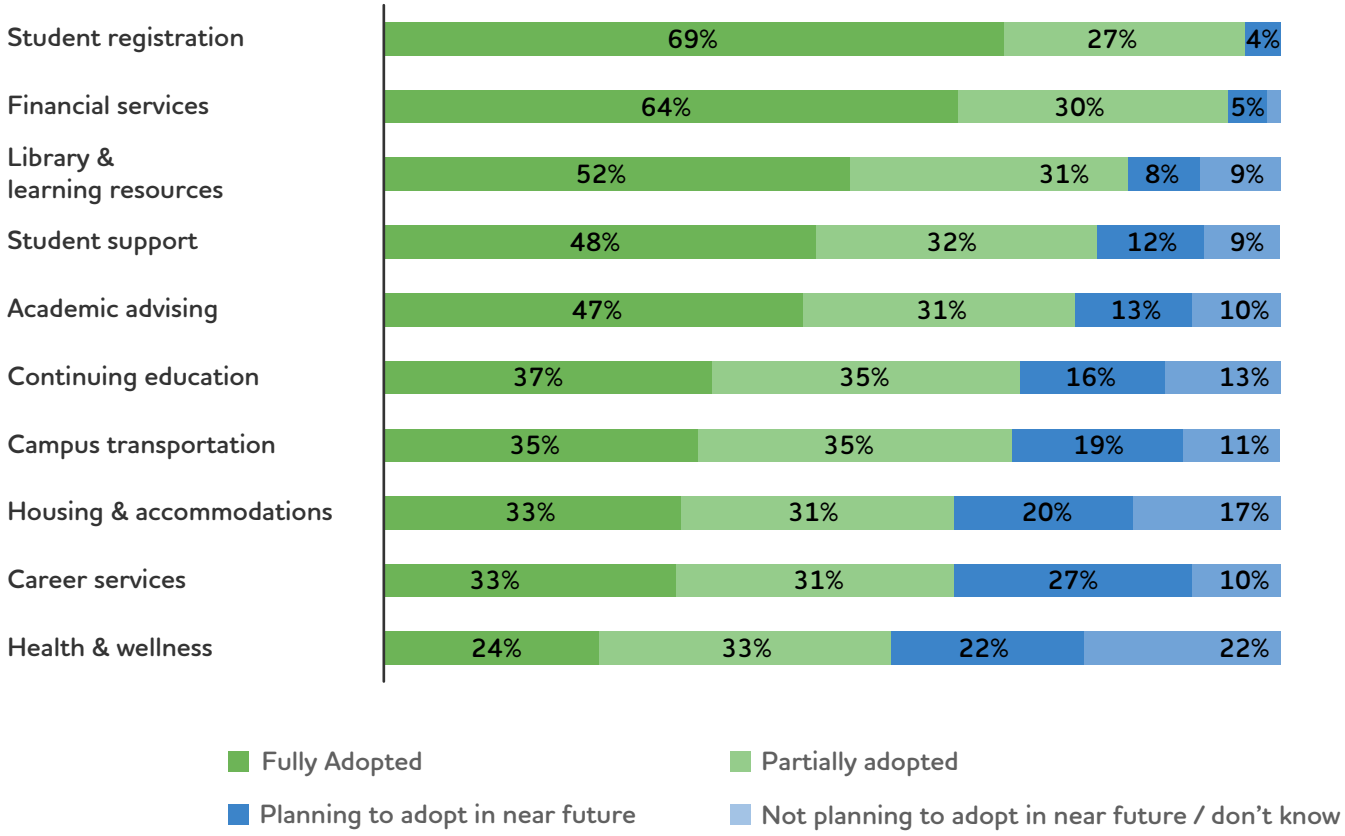


Figure 16. Which student services have adopted digital technologies?

The bigger picture

Digital adoption uneven, leaving gaps

The survey shows strong digital adoption in student onboarding (**69%**), financial services (**64%**), and library & learning resources (**52%**), signaling that transactional and administrative processes are leading the way. However, areas like student wellness **(24%)**, career services **(33%)**, and housing **(33%)** lag behind, with high percentages only partially adopted or planned for future implementation.

This contrast reflects a sector prioritizing operational efficiency over holistic student engagement, even as expectations shift toward integrated, personalized digital experiences. Institutions that extend digitization beyond core services to wellness, advising, and career pathways will be better positioned to deliver value and differentiate in a competitive market.

95% have adopted some level of cybersecurity technology to enhance the student experience, followed by online learning systems and solutions

Technologies used to enhance the student experience

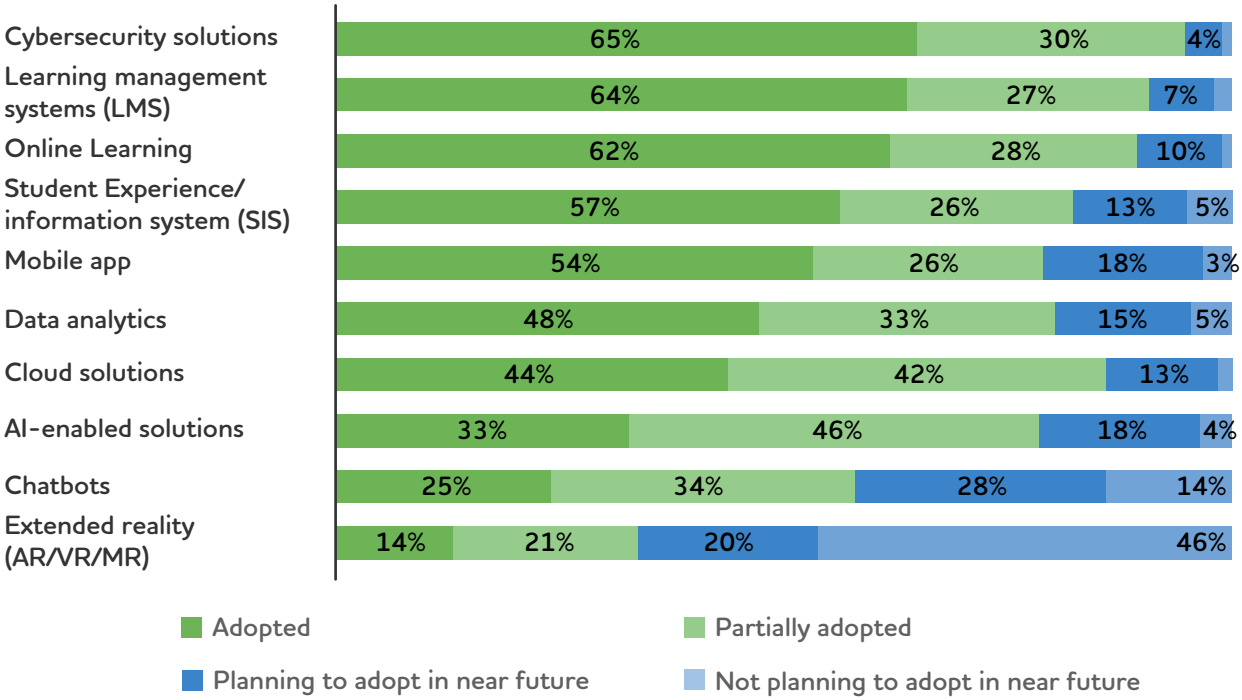


Figure 17. Which digital technologies has your university adopted to enhance student experience?

The bigger picture

"Needs improvement" is the digital technology adoption score for most universities

Cybersecurity **(95%)** has been a top priority to strengthen the student experience, which is good news for students. LMS **(91%)** and online learning capabilities **(90%)** come in second and third respectively as digital technologies that have been fully or partially adopted to enhance student experience.

The survey shows universities have adopted foundational technologies like cybersecurity **(65%)**, LMS **(64%)**, and online learning **(62%)**, reflecting a focus on operational resilience and core academic delivery. However, advanced tools such as AI-enabled solutions **(33%)**, chatbots **(25%)**, and extended reality **(14%)** remain underutilized, with high intent for future adoption.

This contrast underscores a sector still prioritizing stability over innovation, even as student expectations shift toward personalized, immersive experiences. Institutions that accelerate adoption of AI, analytics, and AR/VR will gain a competitive edge in engagement and differentiation.

DeakinCo. addresses digital skills gap in Australia

Driven by a shared vision of creating safer, more resilient societies, Deakin University and TCS have joined forces to accelerate research and innovation in cybersecurity. Through their collaboration in the Cyber Security Cooperative Research Centre (CSCRC), the partnership will spearhead breakthroughs in quantum automation for cyber defense, setting new benchmarks for proactive security in an increasingly digital world. Learn more.

Digital pain points

Education faces fragmented digital ecosystems, issues of digital equity and accessibility, and data privacy concerns as its top digital pain points.

Digital pain points impacting student experiences

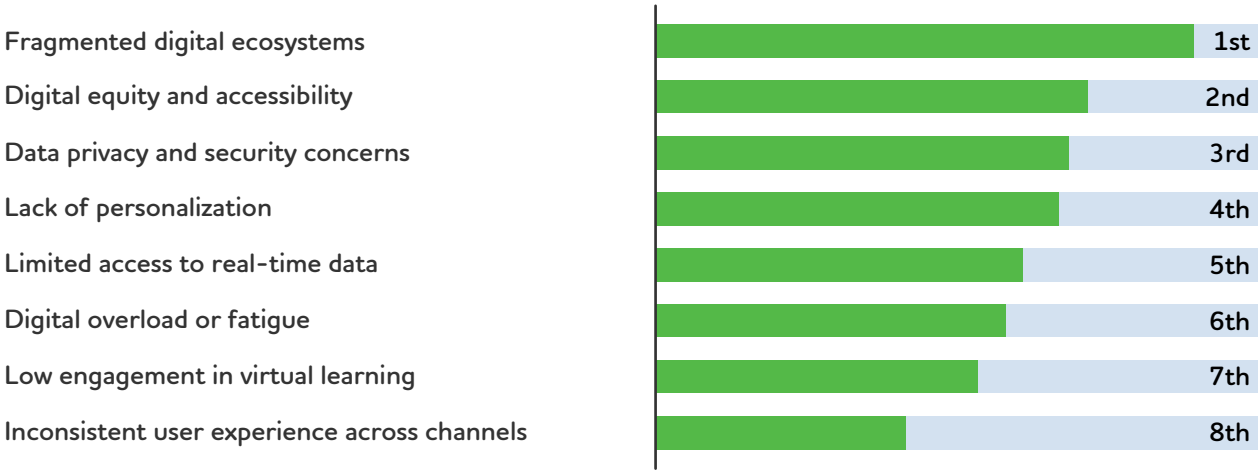


Figure 18. Digital pain points or challenges regarding student experience

The bigger picture

Integrated platforms key to the digital student experience of the future

The survey highlights that the top digital pain point is a fragmented ecosystem, making it difficult to deliver seamless experiences. Digital equity and accessibility ranks second, signaling persistent gaps in ensuring inclusive access, while data privacy and security concerns come third, reflecting growing compliance and trust challenges.

These issues contrast sharply with the sector's ambition to enhance personalization and adopt advanced technologies like AI and AR/VR. As universities push toward integrated platforms and future-ready experiences, overcoming fragmentation and equity gaps will be critical to meeting rising student expectations and regulatory demands.

Investing in a better student experience

Most universities surveyed (**52%**) have annual IT budgets between **USD $10 - $50** million, **25%** with an average overall IT investment of **$41** million.

Nearly half of budgets are earmarked for digital initiatives—with 29% specifically allocated for digital student experiences.

IT budget allocations

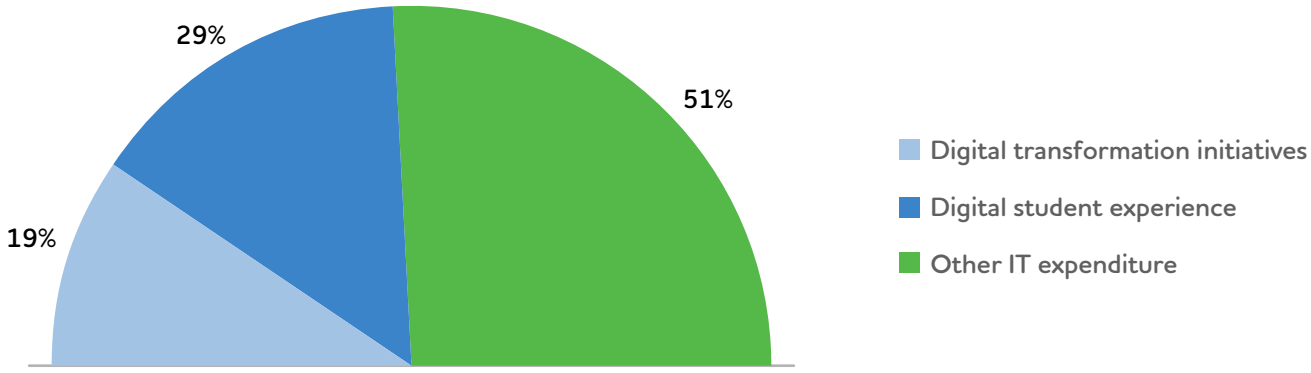


Figure 19. What percentage of the IT budget is allocated to digital transformation initiatives, digital student experiences, other IT expenditure?

The bigger picture

IT budgets focus on immediate technology needs, less on the future

Budget allocation further reveals that just **19%** is dedicated to digital transformation initiatives and **29%** to digital student experience, with the majority (**51%**) consumed by other IT expenditures. This imbalance highlights a critical industry trend: while institutions aspire to advanced digital ecosystems and personalized experiences, investment priorities still favor maintenance over innovation. Universities that reallocate toward transformation and student-centric technologies will be better positioned to meet rising expectations and remain competitive in a rapidly digitizing education landscape.

Universities said AI and machine learning is the top investment priority for digital student experiences over the next two years.

Top investment priorities for digital student experiences

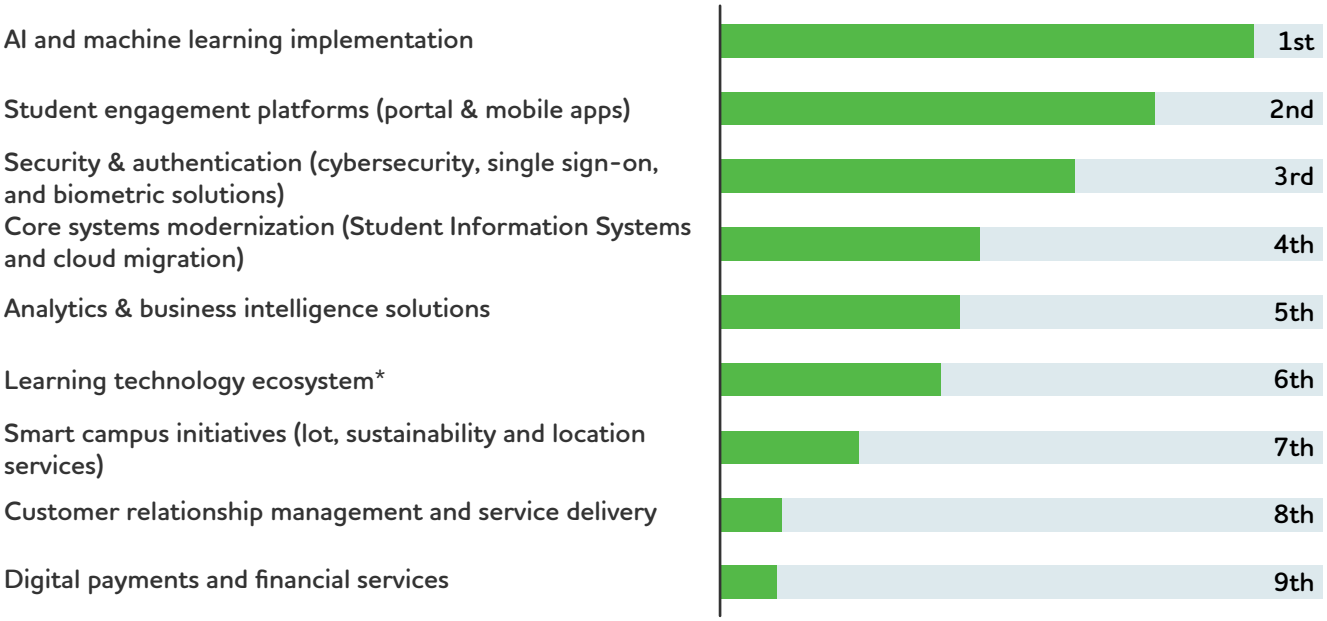


Figure 20. Top investment priorities for digital student experience over the next two years.

*Including Learning Management Systems and extended reality (AR/VR/MR) solutions

The bigger picture

Universities understand the value of AI to ensure seamless digital experiences

The survey reveals that AI and machine learning top the list of investment priorities, followed by student engagement platforms and security/authentication, signaling a clear shift toward personalization, automation, and trust-building. Core systems modernization and analytics rank next, while immersive technologies like smart campus initiatives and AR/VR remain lower priorities. This contrast shows universities focusing on foundational and high-impact technologies before moving to experiential innovations. As student expectations evolve toward seamless, intelligent, and secure digital experiences, institutions that accelerate AI-driven engagement and robust security frameworks will lead the next wave of transformation.

Priorities for 2026 - 2028

Looking ahead, what's on the agenda for university leaders? Academics and research remain front and center, but digital transformation including cybersecurity is now firmly in the top three strategic priorities for the next two years. Student experience is gaining ground, ranking fourth, which shows that institutions are starting to recognize the importance of delivering a seamless, engaging journey for their students. Interestingly, ensuring the employability of recent graduates and curriculum relevance ranked lowest. In an uncertain economy, however, placing a stronger emphasis on graduate success could provide a competitive edge.

Digital transformation/emerging tech/cybersecurity ranks as a top-three strategic priority

Top strategic priorities for the next two years

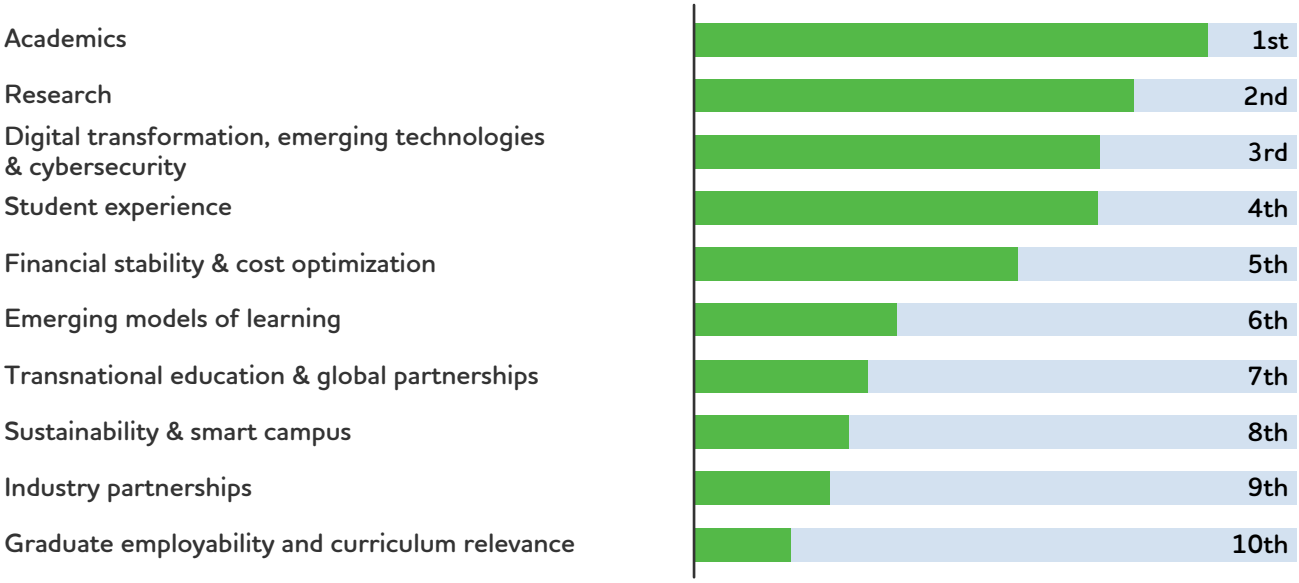


Figure 21. Top strategic priorities for the next two years.

The bigger picture

Digital transformation is a top priority, in spite of financial constraints

The survey shows academics as the top strategic priority, followed by research and digital transformation, signaling a strong focus on core educational excellence while accelerating modernization. Student experience and financial stability rank next, highlighting the balancing act between quality delivery and operational resilience.

Lower priorities like sustainability, industry partnerships, and employability suggest that while these areas matter, they are secondary to immediate imperatives of academic rigor and digital agility. This reflects a sector navigating transformation under resource constraints—where institutions that integrate technology into teaching and research while enhancing student experience will lead in competitiveness and long-term growth.

Charting the future: Strategic imperatives for higher education

As higher education navigates rapid digital disruption, institutions must act decisively to stay relevant and competitive. Based on this study's findings and TCS' industry experience, these recommendations outline strategic priorities—from embracing AI-driven transformation and personalizing student experiences to fostering innovation and ensuring digital equity. Together, these imperatives will help universities accelerate growth, optimize costs, and deliver meaningful outcomes for students, faculty, and alumni.

The top recommendations, based on our research and expertise in the education sector, universities need to:

Develop a clear digital strategy
to align stakeholders and overcome adoption barriers, focusing on high-impact use cases such as automating administrative workflows to free resources for innovation and deploying AI-powered student engagement tools with predictive analytics.

Redefine the student experience
by creating seamless, personalized journeys for students, faculty, and alumni using advanced technologies—including innovative alumni engagement platforms that can unlock new revenue streams and enhance institutional reputation.

Boost IT investments
in digital transformation, AI/ML, and student engagement platforms to deliver interactive experiences. Align these investments with strategic goals for digital equity, student success, and operational efficiency, while strengthening data privacy and security frameworks.

Create a culture of innovation
to meet rising student expectations, keep pace with change, and improve competitive advantage. Leverage digital tools and data-driven strategies to attract and retain students, resulting in increased enrollment. Invest in comprehensive staff and faculty training programs to continuously upskill them for emerging technologies and evolving pedagogical approaches.

Monitor ROI and outcomes
by tracking the impact of AI and ML investments on student success, retention rates, and operational efficiency. Use these insights to adjust strategies dynamically, ensuring decisions remain data-driven and aligned with long-term objectives.

Insights by country

It's always interesting to see how perspectives differ by region and role. US universities report slightly higher enrollment growth and digital adoption, while UK and Australian institutions face more regulatory and financial pressures. CIOs and tech leaders are generally more optimistic about digital transformation than academic leaders, who tend to focus more on research and student outcomes.

Common challenges

- Digital transformation is a universal priority and challenge.
- Budget constraints, legacy infrastructure, and scalability/flexibility are consistent barriers across all regions.
- Student engagement, personalization, and modernization of core systems are top investment areas everywhere.
- Fragmented digital ecosystems, digital equity & accessibility, and data privacy/security concerns are common pain points, highlighting the need for integrated platforms.

Key takeaways

The survey findings reveal a mixed picture: about half of institutions surveyed are thriving/somewhat thriving in enrollment, finance, innovation, and research, while the remainder are stable or struggling to overcome challenges.

US universities lead in digital adoption and enrollment growth but face similar barriers as other regions.

All countries rank digital transformation as a top strategic priority—Australia leads in core platform adoption (LMS, cloud, mobile), while the UK shows leadership in cybersecurity and LMS adoption.

All regions prioritize student experience and engagement but differ in their approach to technology investment and regulatory challenges.

Country-specific highlights

The survey findings reveal a mixed picture: about half of institutions surveyed are thriving/somewhat thriving in enrollment, finance, innovation, and research, while the remainder are stable or struggling to overcome challenges.

Aspect	United States	United Kingdom	Australia
Enrollment Growth	Highest growth (mostly in large institutions)	Steady growth (mostly in mid-sized institutions	Slightly less growth (mostly in large institutions)
Digital Adoption	Most advanced, rapid uptake	Evolving, strong in core areas	Evolving, high in student services
Strategic Priorities	Academics Research Student experience	Academics Digital transformation* Student experience	Research Emerging learning models Digital transformation*
Barriers	Budget constraints Legacy systems/Infrastructure Scalability & flexibility	Budget constraints Scalability & flexibility Data privacy & security	Resistance to change or change management issues Budget constraints Legacy systems / infrastructure
Pain Points	Fragmented digital ecosystem Digital equity & accessibility Lack of personalization	Fragmented digital ecosystem Data privacy & security concerns Digital equity & accessibility	Fragmented ecosystem Data privacy and security concerns Low engagement in virtual learning
Investment Focus	AI/ML Student engagement platforms Security & Authentication	AI/ML Student engagement platforms Security & Authentication	AI/ML Security & Authentication Analytics & business intelligence solutions

*Response options include emerging technologies, cybersecurity

Conclusion: Higher education at critical inflection point

The survey reveals a sector standing at a crossroads—optimistic about growth yet navigating deep structural and technological shifts. Academic excellence and research remain non-negotiable priorities, but digital transformation has emerged as a strategic imperative, signaling that adaptability is now the currency of success. Institutions are no longer asking if they should digitize; the question is how fast and how holistically they can evolve.

Yet, ambition contrasts with execution. Most universities are still in the "evolving" stage of digital maturity, with fragmented ecosystems and siloed initiatives slowing progress. This execution gap reflects not a lack of vision but structural inertia—legacy systems, decentralized decision-making, and limited change management capacity. While AI, engagement platforms, and security top future investment priorities, current budgets lean heavily toward maintenance rather than transformation. Core services like onboarding and fee payments are digitized, but wellness, career services, and immersive learning remain underdeveloped—revealing a gap between transactional efficiency and experiential innovation. Most universities have achieved digital fluency in operational functions such as admissions, payments and scheduling. Yet, experiential areas like student wellness, advising, and immersive learning lag, leaving the student journey digitally uneven. Bridging this divide requires more than technology—it demands cultural and structural agility.

The biggest pain points—fragmented systems, equity gaps, and data security—underscore the challenge of scaling innovation without sacrificing inclusivity or trust. In this context, perpetual adaptability becomes the defining trait of future-ready institutions: the ability to pivot quickly, integrate emerging technologies, and reimagine student experiences continuously. Future-ready universities will treat transformation not as a project but as a continuous discipline—where technology, equity, and experience evolve together. Those that build this capacity for perpetual adaptability will define the next era of higher education: seamless, inclusive and resilient.

Methodology

Demographics

200 institutions surveyed across 3 countries

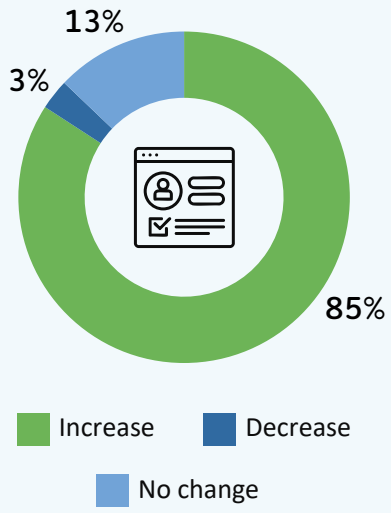
- USA 55%
- UK 35%
- Australia 10%

IT budgets:

- 52% ($10-50M)
- 25% ($50-100M)
- 18% (<$10M)
- 6% (>$100M)

Enrollments since 2022

9%
Average decrease



85% of universities say enrollments are increasing

19%
Average increase

Executive champions

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VP and Global Head, Education Unit, TCS

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About the study

The TCS Higher Education Study: Digital Readiness and Student Experience key findings report is designed to deliver fresh insights about where higher education stands on digital and AI readiness, the impact of technology on student experiences, and the strategic vision of university leaders.

The study was conducted in late 2025 and surveyed more than 200 senior education personas (including chief information officer, dean, principal, chancellor, vice chancellor, vice president, chief operating officer, registrar, provost, chief digital officer, chief financial officer, chief information officer, controller of examinations) across the US, UK and AUS. Some data presented may not add up to one hundred percent due to rounding or ranking factors, and not every insight gathered is included in this report.

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