

Vice-Chancellor Survey 2022

Transforming education in the digital age for accelerated and sustained outcomes

Third edition

September 2022





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Introduction

PwC is pleased to present the results of our third annual Vice-Chancellor Survey for South Africa.

The future of work has arrived and the digital age has disrupted the higher education sector globally and locally, with COVID-19 serving as an accelerator. While many institutions across the globe experience a return to campus', the concept of channelling education content across digital platforms and digitally enabling the learning experience is here to stay. The extent of this adoption, its impact on the sector and learning outcomes is yet to fully unfold.

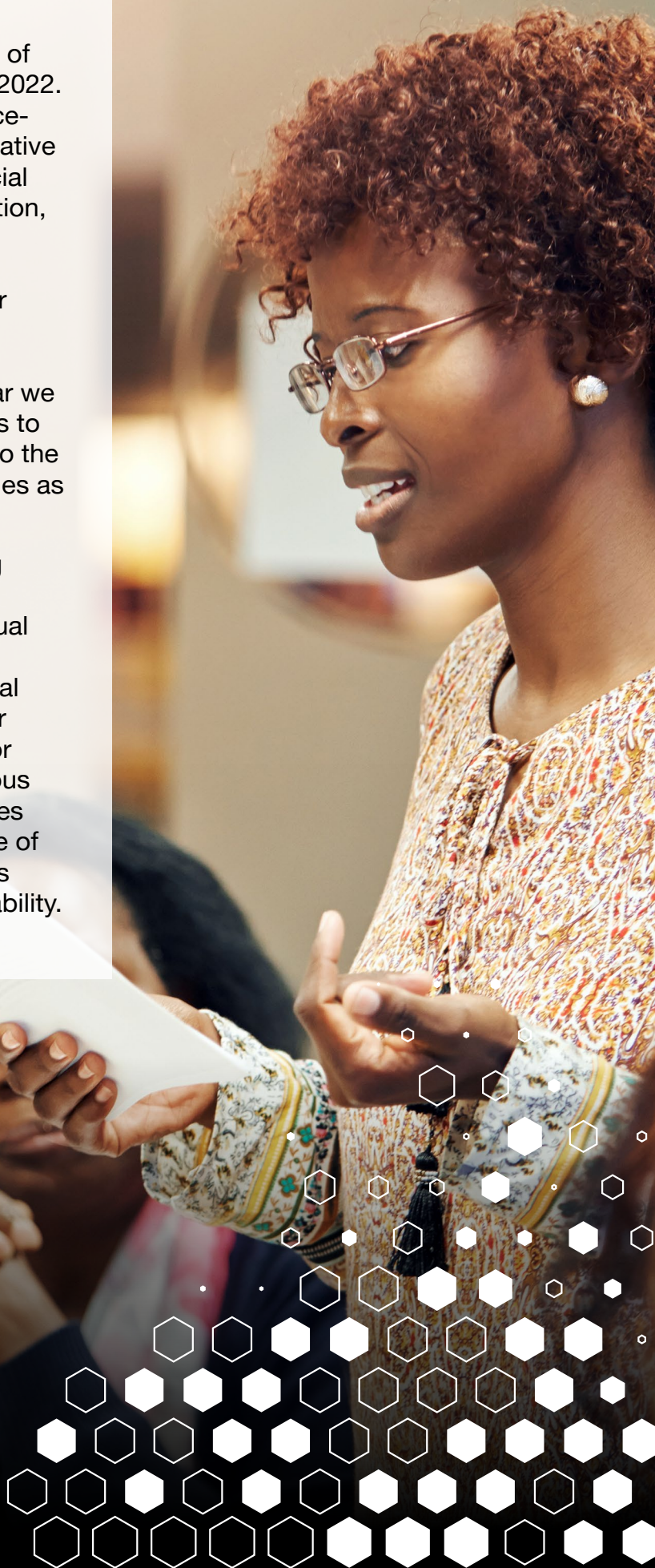
Our survey this year starts to explore the sector's intent on digital adoption both in its operations as well as the student experience, while continuing to monitor other factors, such as the growing financial constraints that local universities are operating within.

This document shares both the insights of the Vice-Chancellors (VCs) interviewed and PwC's insights and perspectives on the topics surveyed. As a leader in providing audit, tax and advisory solutions to the higher education industry, PwC has been honoured to work with many of the nation's educational institutions in addressing their most pressing challenges.

About this survey

PwC conducted the survey among the vice-chancellors or deputy vice-chancellors of South Africa's 26 public universities in July 2022. Of the 26 public universities targeted, 18 vice-chancellors responded, answering 19 qualitative and quantitative questions relating to financial sustainability, digital transformation, innovation, student wellbeing, student employability and their risks and priorities. The interviews were conducted either in-person, virtually or directly through a link to the survey by the vice-chancellors or deputy vice-chancellors themselves. This edition marks the third year we have conducted the survey, thus allowing us to gain deeper insight into the trends relating to the challenges faced by South African universities as well as their strategic priorities.

Additionally, we conducted a benchmarking analysis across South Africa's 26 public universities based on the 2021 audited annual financial statements. At the time of analysis (August 2022), ten of the university's financial statements were published and available for review. The ten financial statements used for the analysis incorporate universities of various sizes and locations, thus the sample provides some insights into the financial performance of universities and vouches for the implications drawn out of the theme of financial sustainability.



The survey in context

The right skills are needed to solve South Africa's socio-economic challenges. The country's long-term economic growth rate is barely enough to keep up with population growth and will do little to solve our society's unemployment, poverty and inequality challenges. The Rainbow Nation currently has the highest overall (34.5%) and youth (63.9%) unemployment rates in the world. Unsurprisingly, South Africa is also the most unequal society in the world, based on consumption patterns.

The World Economic Forum (WEF) Global Competitiveness Report 2019 ranks South Africa 101st out of 141 countries for the skills of its current workforce. **Of importance for tertiary education leaders is the ranking of 109th (i.e. in the bottom 25% of countries assessed) for the skill set of graduates.** What this tells us is that, **while the country's education system produces thousands of college and university graduates each year, the skill sets are not competitive in a global context.** Unsurprisingly, the ease of finding skilled employees in South Africa is ranked 98th out of 141 countries, according to the WEF.

In its 2020 Global Social Mobility report, the WEF ranked 82 countries according to five key metrics: healthcare, education, technology, work opportunities, and social protection. **The WEF placed South Africa 77th overall and 80th for access, equity and quality of education.** According to this report, **it will take nine generations for a South African born into a poor family to reach the country's median income.**

In order to respond effectively to these challenges, we need a high functioning, high impact education sector, from early childhood development through to vocational and higher education. For higher education institutions, there is a continued need for ongoing focus on delivering relevant, future-fit skills into the economy.

The challenges though do not only stem from within our borders. **On the international horizons, universities abroad have initiated strategies that will target and attract local students, with associated funding solutions.** Arizona State University (ASU) is a case in point. It has set the ambition to translate five of its business courses into 40 different languages and attract 100 million students by 2030. Already, ASU's more than ten year investment in digitising the learning experience has seen it successfully launch hard science qualifications online, and the number of its digital immersion students is set to surpass the number of its campus immersion students if current trends continue.

According to Statistics South Africa, the country had 730,000 unemployed tertiary educated graduates at the start of 2022. Job losses suffered during COVID-19 did not have a significant impact on this number: the number of **unemployed graduates has been steadily increasing over the past decade.** With graduate unemployment rising, South African universities have much to contend with to remain locally relevant and become increasingly internationally competitive. Within the context of a myriad of challenges facing public higher education institutions such as decreasing government grants in real terms, and government policies that may be viewed as constraining their ability to grow, shifts in learning and teaching requirements and enhancing the student experience, the question arises as to what universities would need to do in order to meet these challenges head on successfully.



Survey highlights

Financial constraints continue with **fundraising** topping the list for alternative income sources

Increased investment in **digital solutions** a popular approach to cost efficiencies

More than **70%** of respondents believe that the higher education sector is behind the corporate world when it comes to digital transformation but more than **30%** believe that they are ahead of their peers

50% of VCs described their budget for innovation being higher than previous years

Budget constraints and institutional culture cited as the most significant **barriers** to digital transformation

Universities are investing in **technologies** for learning and student support with more than half either having deployed or in proof of concept with technologies such as 3D printing, chat bots, augmented or virtual reality, robotics and artificial intelligence

100% Of respondents said they provide some form of support to measure the effectiveness of the methods they use to assess their students' health and well-being

Only **8** respondents have a specific focus on suicide prevention

Survey insights

Financial sustainability

The World Higher Education: Institutions, Students and Funding 2022 report by Toronto-based Higher Education Strategy Associates (HESA) analysed higher education enrollment and finance trends across 56 countries over the period 2006-2018. According to this report, the year 2010 was a turning point in public spending to public universities worldwide. In the Global North, the growth of government spending peaked and began to fall back after the global financial crisis.

While in the Global South, average annual spending growth plummeted from 12% in 2006 to 2% in 2018. Emerging market economies were experiencing tougher fiscal conditions which led to a renewed rise in public debt and pressure on spending priorities. This, in turn, reduced the speed at which tertiary education funding could grow.

In the Global North, total public spending per student was around US\$9,500 in 2018, compared to just under US\$3,000 in the Global South. This highlights the inherent financial strain that universities face in the Global South.

While South Africa's spend per student and spend as a percentage of GDP compared favourably to other Sub-Saharan African countries in the HESA study, changes to government grants post 2018 has resulted in increased financial strain since this study was concluded.

Our benchmarking analysis of the 10 universities based on the 2021 audited annual financial statements revealed the following results:

- The average total expenditure per student for 2021 was R115,000. This expenditure has increased by 7% as compared to the previous year (2020: R107,000).
- The operating subsidy received from the government increased by 6% as compared to 5% in the previous year.

- The payroll expenditure makes up 60% of the total expenditure. This has remained consistent for the past three financial years. Academic staff comprises 49% of the total payroll expenditure while non academic staff comprises 49% of the total payroll expenditure. 2% relates to other payroll expenditure.
- Although arrear student debt continues to increase, 7% in 2021 and 27% in 2020, universities are putting measures in place to recover arrears. Provision for student debt increased by 27% in the 2020 financial year whilst only increasing by 7% in the 2021 financial year.

Supplementing revenue

It is therefore no surprise that financial sustainability remains top of mind for most South African VCs. While some universities indicated that fundraising alone would unlikely be sufficient to close the funding gap, fundraising as a source of alternative income remained one of the more popular choices. Diversifying income generation through research opportunities and diversified academic programmes were next. Patents and commercialisation were not as high up the agenda and this potentially presents an opportunity for universities to leverage more.

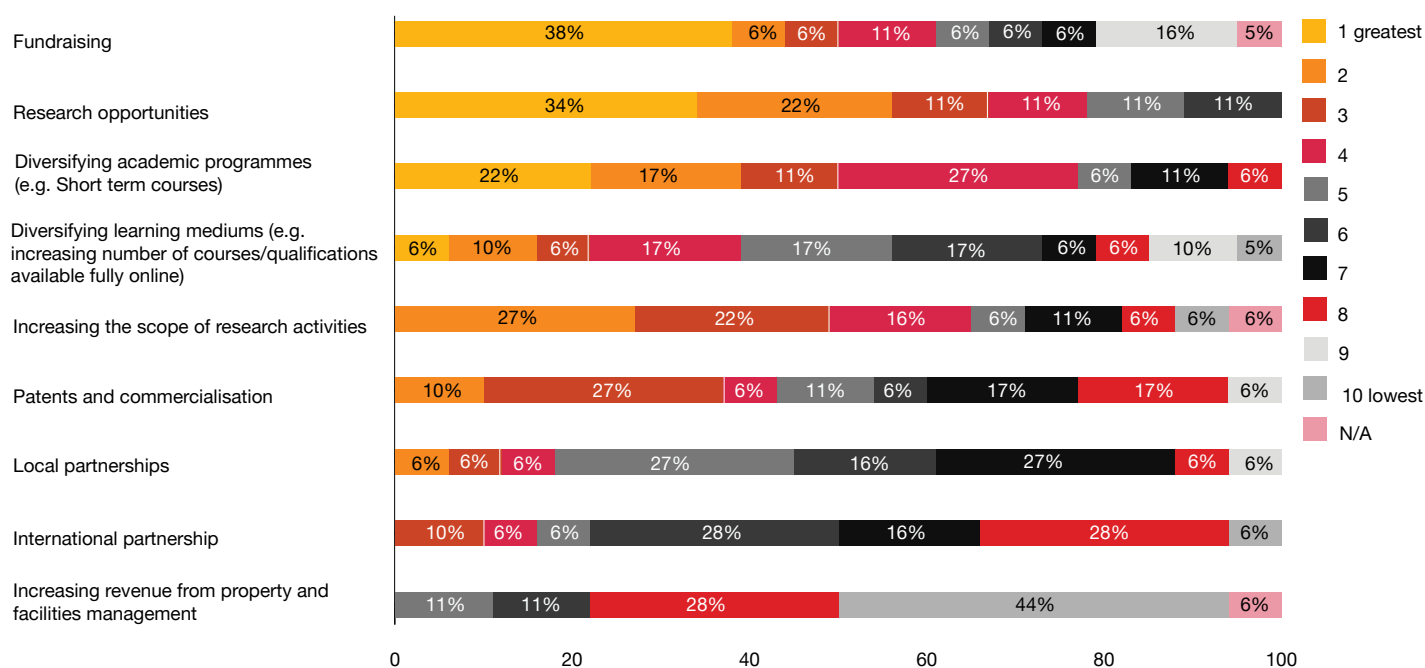
All VCs have indicated that they are exploring alternative sources of revenue. The analysis of the annual financial statements confirms this, reflecting an average increase in other revenue streams, for example research revenue increased by 6% from 2020 to 2021.





Figure 1. Supplementing revenue

Q. How do you anticipate supplementing your tuition fees and grant funding over the long term



Source: PwC analysis

In PwC's inaugural 2022 Voice of the Student Survey, students indicate a strong preference away from complete in-person learning. This suggests that opportunities to leverage physical infrastructure differently, and possibly for further revenue generation exist.

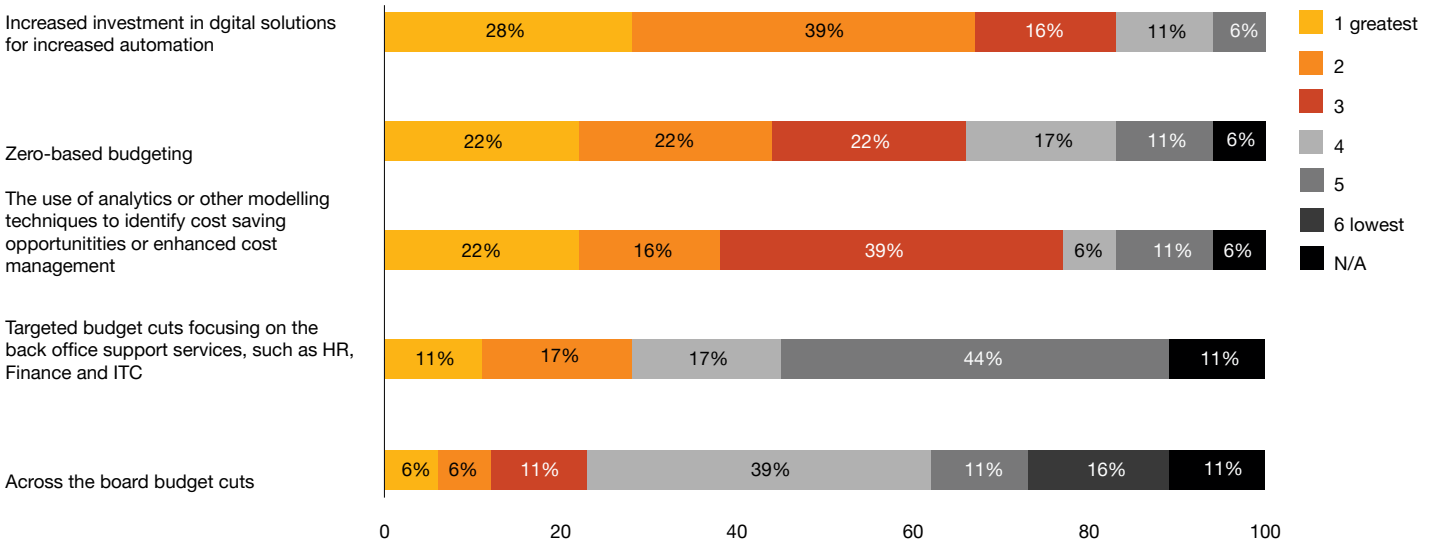
Cost-conscious environment

Containing costs should not only be about reducing expenditure but also understanding the impact this may have on the operations of the entity. In addition, it is of critical importance for every entity to ensure that value for money is derived when incurring costs.

All universities participating in our survey indicated that they were undertaking cost containment initiatives - though they differed in their approaches to this. An increased investment in digital solutions to leverage efficiencies was the most popular approach with zero based budgeting adopted by many as well. Across the board budget cuts were the least popular approach. Instead, universities prefer targeting specific areas for cost efficiencies.

Figure 2. Approaches to cost savings

Q. Universities are operating in an increasingly cost-conscious environment. How are you approaching this challenge?



Source: PwC analysis

The extent to which universities are successful at generating sufficient third stream income and realising cost efficiencies is likely to determine the extent to which they adopt more substantial cost containment measures in the future.



Digital transformation

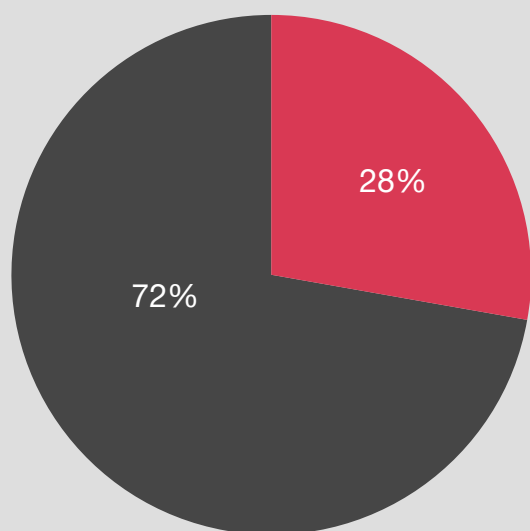
The past two years have forced the higher education community globally to take a closer look at many different aspects of their operations. This has included assessing and understanding the degree to which digital technology is disrupting their institutions, while at the same time taking advantage of the current circumstances to become highly functioning digital universities.

The number of students taking online courses is expanding rapidly. According to a Global Market Insights report, the global e-learning market was at \$250bn in revenue in 2020. This is expected to surge at a compound annual growth rate of 21% through 2027, to \$1tn (Global Markets Survey, E-Learning Market Trends 2021, Global Forecast Report 2027, gminsights.com).

All 18 respondents to our survey indicated that digital transformation was key to their institution's future post COVID-19, but when asked to compare the sector in this regard to the corporate world, over 72% of respondents believed that the sector lagged behind. When comparing themselves to one another, responses were more confident with only three respondents indicating that they lagged other universities and 15 indicating that they were either the same or ahead of their peers.

Figure 3. Innovation standing in contrast to the corporate world

Q. When it comes to the process of digital transformation, where does the higher education sector, in your view, stand compared to the corporate world?

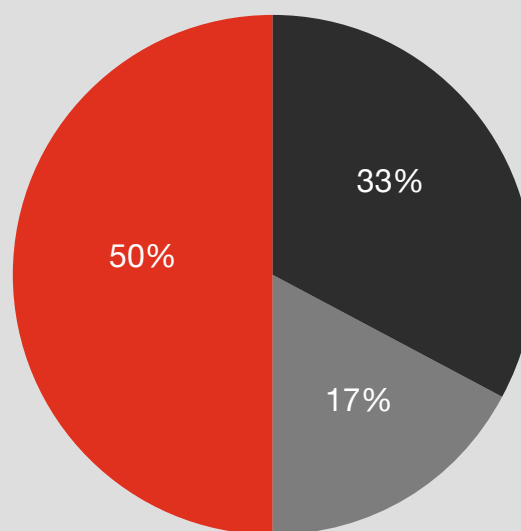


■ About the same
■ Behind it

Source: PwC analysis

Figure 4. Innovation standing in comparison to peers

Q. How would you rate your institution's standing on digital transformation compared to other institutions in your country?

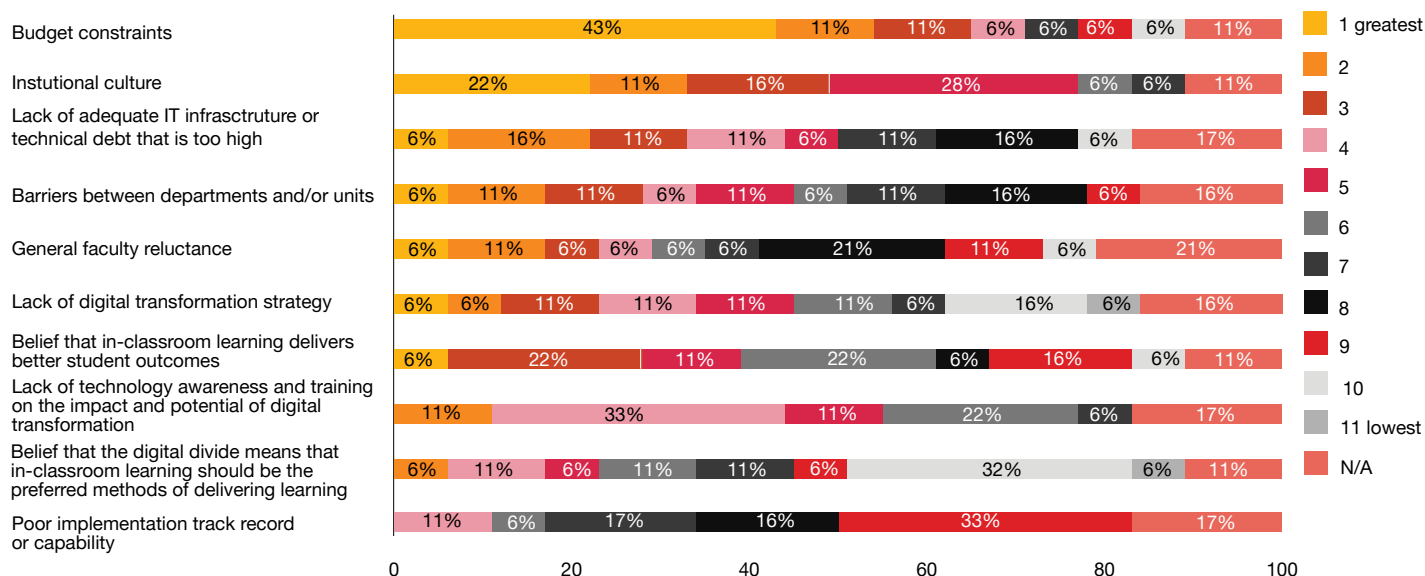


■ Behind other institutions
■ About the same as other institutions
■ Ahead of other institutions

Budget constraints and institutional culture were cited as the key barriers to digital transformation. This is unsurprising given the financial context and the historic perception of the sector as being slow to respond to rapid change.

Figure 5. Obstacles to digital transformation

Q. What are the biggest obstacles to digitally transform your institution? Please select all that apply. (Click and drag to rank your selection from greatest to lowest focus.)



Source: PwC analysis

The belief that the digital divide means in-classroom learning should be the preferred method ranks lower, thus university stakeholders remain positive about the shift towards virtual classrooms as a complementary learning medium. General faculty reluctance varies across the higher education institutions, thus a lack of cultural shift in the workforce may be holding back universities from making greater strides in the process of digital transformation.

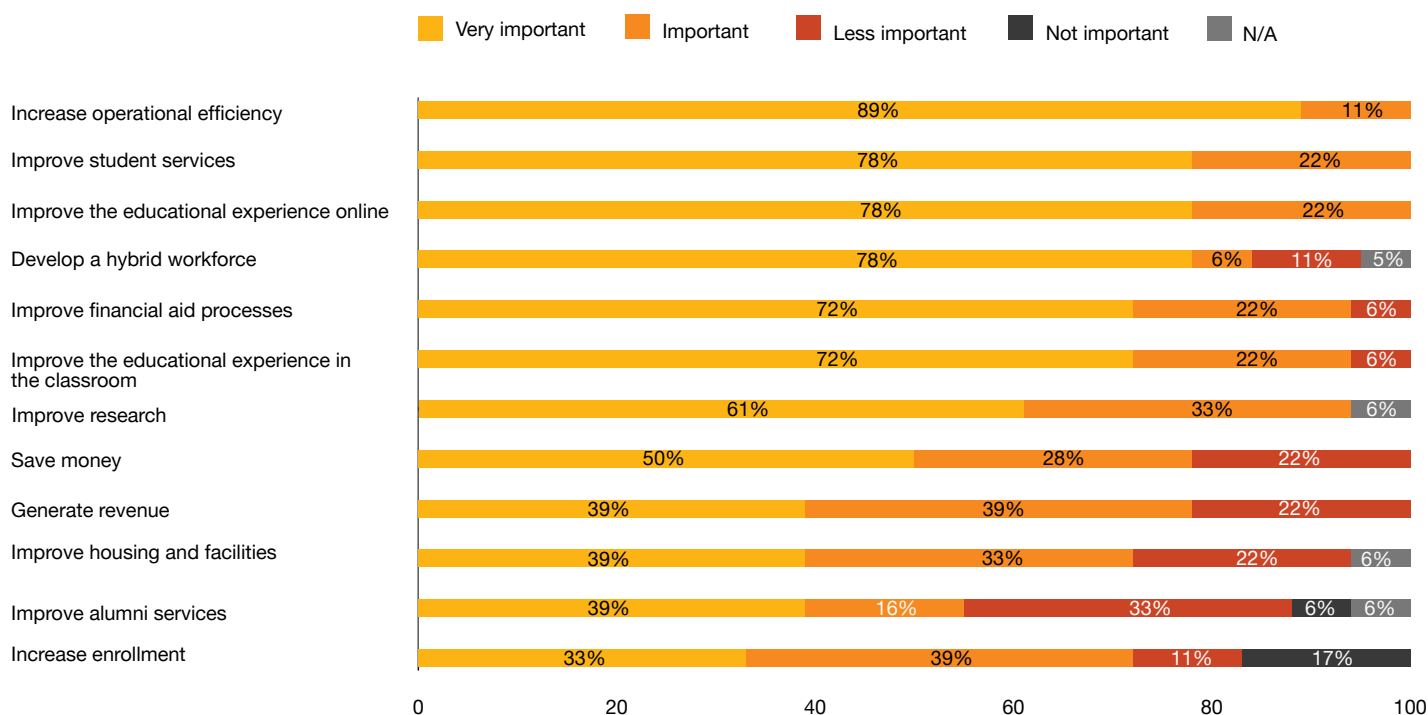
These survey results (i.e. digital transformation standing to the corporate world and peers, as well as obstacles) mirror a 2022 research brief by the Chronicle of Higher Education: Digital Transformation on Campus Assessing College Leaders' Attitudes on Strategic Technology Changes. The brief surveyed over 500 senior college administrators in the US.

Similarly, both this survey and the research brief indicate increasing operational efficiency, improving student services, and improving the educational experience online as the top three areas of importance for digital transformation.

Universities have an opportunity to create new teaching models, lead on lifelong learning and engage effectively with government and industry. But, at a time of transformational change in the higher education sector, university leaders must be supported to make bold and disruptive decisions. Universities must therefore drive transformation through technology and adapt to meet the changing demands of students and the future workforce.

Figure 6. Importance of digital transformation

Q. Please rate the importance of digital transformation at your institution according to the following topics, i.e. very important, important, less important, not important, not applicable.



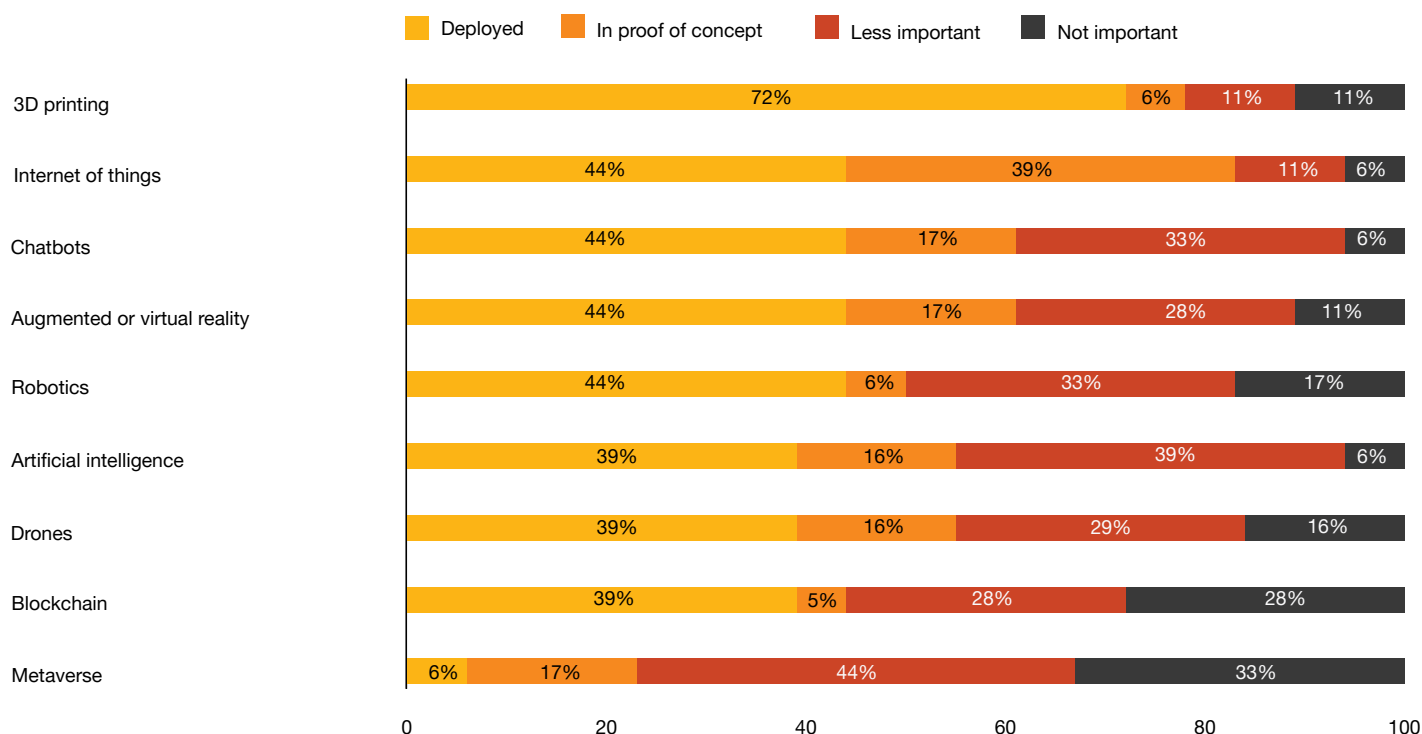
Source: PwC analysis

A key difference relates to enrollment. According to the Chronicles survey, in the US, 61% of respondents indicated that digital transformation was very important to increasing enrollment compared to only 33% locally. This indicates the relative strategic importance that US colleges are placing on driving up enrollments, and could indicate a drive to internationalise their institutions using digital platforms as learning channels.

In this regard, the adoption of technologies such as the metaverse within the education sector requires closer scrutiny. There is much to be learnt about the effective use of the metaverse for education. However, if successful in its adoption, the metaverse presents an opportunity to offer a digital learning experience that positively impacts on education access and learning outcomes while reducing the cost of learning per student over time. Early adopters internationally have introduced versions of the metaverse for student orientation, lab work and virtual learning.

Figure 7. Technology adoption in student learning and experience

Q. Please indicate the extent to which the following technologies are being deployed or considered at your institution, at student support or within curriculum, i.e. deployed, in proof of concept, being considered, not yet considered



Source: PwC analysis

During COVID-19, many universities were forced to accelerate their digital learning deployments faster than expected. Many learners had challenges with accessibility, inclusion, and engagement. We were reminded that the digital equity gap in Africa unfortunately persists. Moreover, the initial reaction to virtual learning has left students divided on whether they prefer physical classes to online learning. According to the inaugural PwC Voice of the Student Survey 2022, 49% of students prefer virtual learning, 38% prefer hybrid learning formats, and 13% prefer in-person classes.

We expect these sentiments to evolve over time as virtual learning experiences improve, advances in digitising curricula are achieved and the access to technology broadens at a lower cost point. Already, students are indicating a low preference for traditional in-person learning. This means that current government policies, such as the distinction between distance and contact institutions, needs to be revisited along with associated funding policies.

The digitisation of higher education complements PwC's New Equation which embraces a world that is human led and tech powered. The New Equation is PwC's global strategy, focused on clients and other stakeholders, helping them build trust and deliver sustained outcomes for their businesses. It is imperative that students in South Africa, and Africa as a whole, have the relevant digital skills to remain competitive in the current and future global economy; as well as to aid in leapfrogging the education system in Africa.

Innovation

The term 'innovation' has different connotations to different audiences. For the purposes of this survey, we explored innovation separately to technology related advancements purposefully to explore innovation in its broader context.

Survey respondents placed a high emphasis on innovation with 50% indicating an increased budget towards innovation than previous years. It is also clear that respondents have set goals beyond traditional university operations as 39% indicated "delivering solutions to complex societal problems or increasing societal impact" as the number one driver behind innovation and a further 33% placed it second. Innovation for improving student success, experience or well-being ranked second overall.

Many respondents (39%) viewed themselves as average in comparison to their peers when it came to their innovation positioning, while 22% of respondents viewed themselves as 'on the leading edge' and a further 22% as a 'fast follower'. Only three institutions (or 17%) saw themselves as lagging behind their peers.

22% of respondents described their universities as being on the leading edge of innovation.

22% the significant role respondents said their students play in innovation at the surveyed universities.

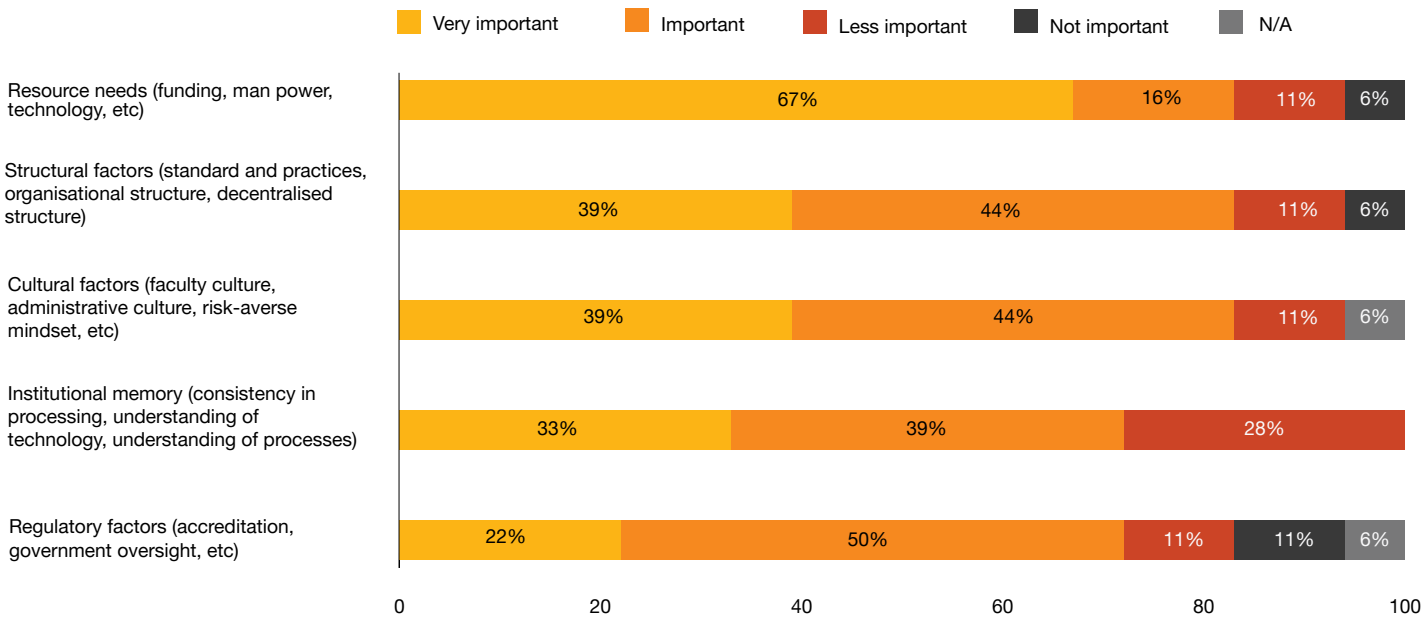
50% of VCs described their budget for innovation being higher than previous years.

These results compare directly to the results of a US based survey conducted in 2017 as a joint project between the Learning House Inc and the Online Consortium in their survey on the 'State of Innovation in Higher Education: A Survey of Academic Administrators' wherein respondents viewed themselves similarly. This survey also explored barriers to innovation, and once again, the results mirror those of local universities - in both surveys, resources constraints, structural and cultural factors are cited as the top three barriers to innovation.



Figure 8. Barriers to innovation

Q. Please rank the following factors in terms of the barrier they pose to innovation



Source: PwC analysis

The need for higher education institutions to innovate on multiple dimensions continues to be an imperative and the survey respondents clearly acknowledge this. Structural and cultural barriers are clearly areas of focus, indicating a need for alignment between strategic intent and internal positioning and readiness. Future surveys would need to explore how innovation is measured, if at all, or whether key institutional measures continue to be responsive to policy requirements rather than promoting innovation success.



Learnings from the private sector

To get to the heart of how established companies successfully compete as they innovate beyond digital, we conducted a three-year study (2018–2021) of businesses that had undergone significant transformative changes and succeeded.

We started with a broad survey of industry peers and experts to identify established companies in their industry sectors who were most respected for their ability to set a new strategic direction and execute on it. From the companies suggested to us by these industry experts, we used several criteria to select the twelve companies that we studied in-depth.

Our objective was to learn not just about what these companies did, but about how they did it: how they made choices about the future, how they came to the insights that informed their choices, how their leadership teams worked, how they got people on board, and how they overcame the inevitable obstacles in their journeys.

We found that despite the differences in industry, geography, and size, the transformation journeys these 12 companies undertook and the way their leadership teams navigated the changes had key elements in common:

- They each started their journey by looking externally and reinventing their value proposition and their relationship with customers and partners.
- Then they undertook significant internal transformations to align how they operate and how they lead with their imagined future.
- And finally, the leaders of these companies challenged themselves—their own beliefs, strengths, and weaknesses—so that they could be fit to shape their companies' future.

We summarise key insights from their journeys as seven leadership imperatives that together provide a powerful playbook for how to structure and execute the transformations that are required and considered how these may be true for universities:

The research revealed 7 leadership imperatives to create value in the new way and secure your place in the future



Student wellbeing and employability

According to the World Health Organisation, more than 30% of university students have experienced a common mental disorder in the past year. South African data shows that 20.8% of first-year students had experienced anxiety and 13.6% had experienced depression. While 30.6% of students had thoughts of suicide in the past 12 months, 16.6% had made a suicide plan and 2.4% had attempted suicide. Less than a third of students who need psychological support receive the care they need.

The South African Depression and Anxiety Group reports that there are 23 known cases of suicide in South Africa every day, and for every person that commits suicide, ten others have attempted it. Before COVID-19, the organisation fielded 600 calls a day. As of September 2021, that number had risen to 2 200 calls a day — an increase of nearly 40%.

Students are facing a myriad of pressures – both in their personal and academic lives. Universities thus have an interest in ensuring that they play an active role in identifying and addressing these challenges as these pressures easily come to intersect and negatively impact their student's lives and academic success.

Universities have responded to this need, with nearly all respondents deploying multiple interventions to address student wellbeing.

100% Of respondents said they provide some form of support to measure the effectiveness of the methods they use to assess their students' health and wellbeing

Only 8 respondents have a specific focus on suicide prevention

Source: PwC analysis

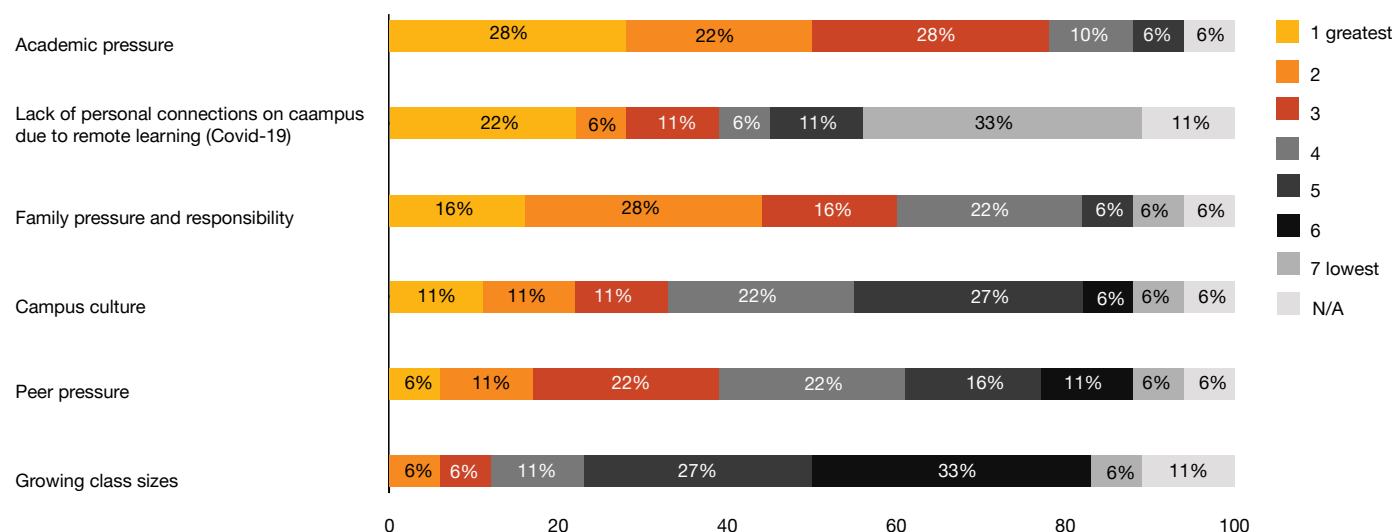
Universities are approaching student wellness using a holistic approach to ensure early identification of stressors up to and including the intervention phase. By offering services that approach student wellness from an emotional, financial, academic, psychological and physical wellness perspective, universities will enable students to be better equipped to handle the pressures that impact them.

Of concern though is that only eight respondents indicated specific focus on interventions for suicide prevention.



Figure 9. Factors impacting student wellbeing

Q. What do you think are the main factors which impact student wellbeing? Please select all that apply. (Click and drag to rank your selection from greatest to lowest focus.)



Source: PwC analysis

Academic pressures, lack of personal connections and family pressures were cited as the top three factors impacting student wellbeing. In our interviews with some of the VCs, student finances were also a key contributing factor, with many VCs indicating a surge in the demand for additional student support on a more ongoing basis. This is further supported by the PwC Voice of the Student Survey 2022 - while students acknowledged the support from universities, they indicated a need for more.

Universities do measure the use and effectiveness of their wellbeing services, but few (less than 35%) do more comprehensive impact assessments. Measuring the extent to which interventions are effective is an important step as the demand for services grows, requiring institutions to adopt different approaches to scale student wellbeing services effectively.

Across the sector, key areas of focus for institutions should include:

- The adoption of an approach that addresses the whole institution as a strategic priority, supporting students and staff struggling with wellbeing issues.
- The development and/ or strengthening of links between support teams and student facing staff in faculties and departments, supplemented by training and resources for staff to better enable them to refer students.

- Regular assessment of existing wellbeing support provision, including student and staff expectations, feedback and accessibility.
- Using more intelligent data modelling to identify those in need of support based on internal and publicly available data.

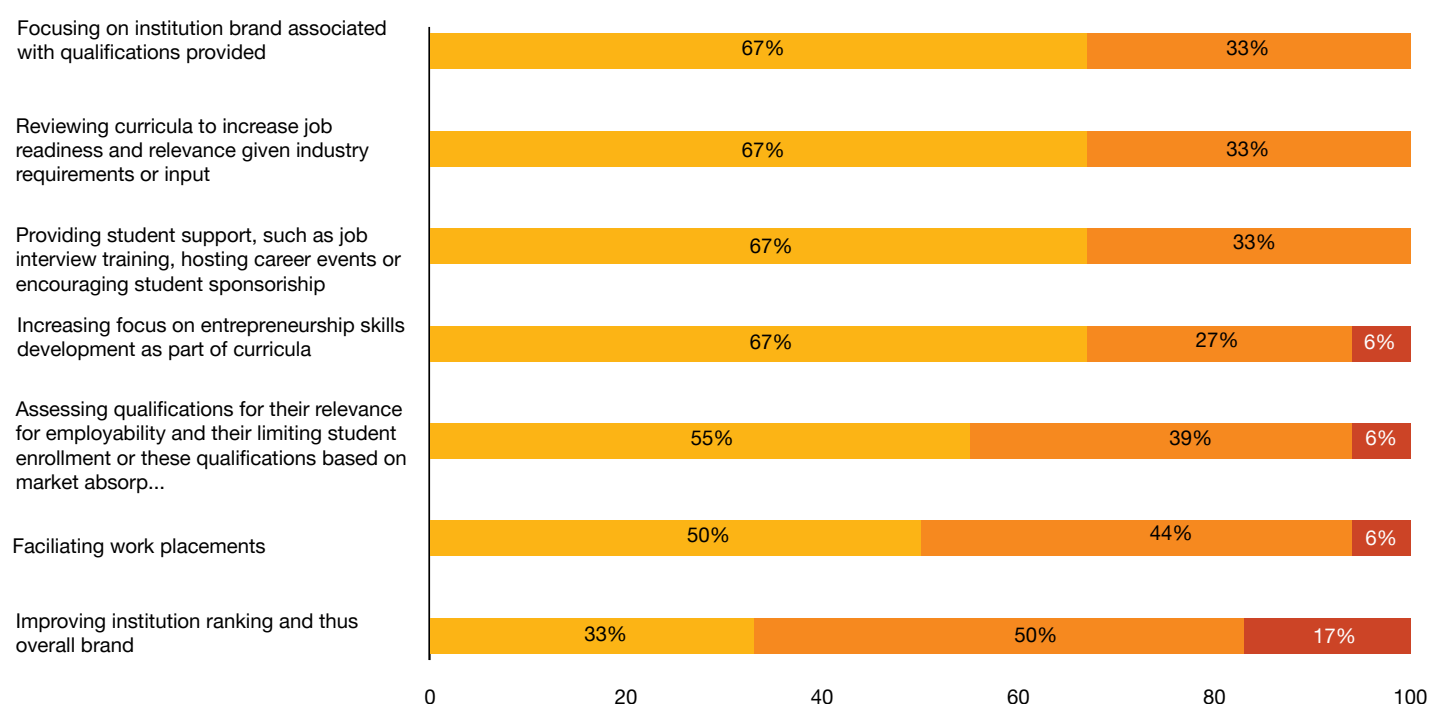


Addressing graduate employability

Institutions are also responding to the issue of increasing graduate unemployment and the call for more relevant skills, with nearly all respondents adopting multiple approaches to improving student employability. The PwC Voice of the Student Survey 2022 confirms this with most students believing themselves ready for the work environment, although they do indicate a need for curriculum management to incorporate more practical exposure.

Figure 10. Initiatives to increase employability

Q. What initiatives does your institution have in place to increase the likelihood of student employability? Please rate your selection according to the following topics, i.e. very important, important, less important, not important, not applicable. - Improving institution rankings and thus overall brand



While universities have many initiatives to improve student employability, the impact of these initiatives, however, is yet to affect the current trajectory of graduate unemployment, which has steadily increased over the last decade.

Risks and priorities

Vice-chancellors have identified financial sustainability as the number one risk facing their institutions. As such is top priority for their institutions. In addition the following risks and priorities were also identified:

Key risks

- Ability to attract and retain the right academic staff is also high on their agenda together with transformation
- Student protests and campus instability that results in disruption which hinder academic progress
- Decrease in student enrollment

Strategic priorities

- Development/review of strategic plans and the implementation thereof
- Drive to market and attract students to enrol at the universities
- Improving student experience, academic programmes and support services.

Closing Remarks

The pandemic accelerated many global mega trends that have been observed for years, even decades. As noted in a recent PwC article, *Adapting to a New World*, five global forces, which together have been termed ADAPT (Asymmetry, Disruption, Age, Polarisation, Trust) have been changing the way millions of people live and work: Asymmetry of wealth and opportunity, disruption wrought mainly by technology and climate, age disparity and the stress caused by the very young and very old populations, polarisation leading to the breakdown in global and national consensus, and the loss of trust in the institutions that underpin and stabilise society.

These trends have given rise to global challenges that call for a new kind of leadership, one in which leaders embody and negotiate a set of apparent contradictions in order to thrive in a rapidly changing world: the six paradoxes of leadership. For instance, it used to be accepted that leaders could be either great visionaries or great operators. Today's leaders, however, should embody both qualities.

They should also be at once tech-savvy and deeply human; good at forming coalitions and making compromises, all while being guided by their integrity; deeply humble and aware of their limitations while at the same time showing the way and making big decisions; globally minded as well as deeply rooted in their local communities; and constantly pushing for innovation while being grounded in their organisation's core identity. As the world seeks to repair and reconfigure in response to the aftermath of the COVID-19 pandemic — and to prepare itself to be resilient in future crises — there is an urgent need for leaders to understand, accept and embrace these paradoxes.

Higher education plays a key role in preparing the leaders of tomorrow for tackling the challenges the world faces. In fact, leaders have dual responsibilities: they themselves should navigate the paradoxes of leadership and also prepare the next generation of leaders to do the same.



Six paradoxes of leadership defined



Globally minded localist

How do you navigate a world that is increasingly both global and local?



High-integrity politician

How do you navigate the politics of getting things to happen and remain true to who you are?



Humble hero

How do you act confidently in an uncertain world and recognize humbly when you're wrong?



Strategic executor

How do you execute effectively while also being highly strategic?



Tech-savvy humanist

How do you drive technology enhancement that generates future success while deeply understanding human needs?



Traditioned innovator

How do you drive innovation while staying true to your purpose?

Preparing the leaders and universities of tomorrow

The paradoxes of leadership provide a helpful framework for universities to think through how to address the future.

Globally minded localist

Students will need exposure to both global and local influences. Universities should consider adding global forces and geopolitics to the curriculum and teaching students how to understand the world 'on the world's terms, rather than through the lens of local politics, economics and values. Partnering with universities in other regions of the world could be one way to achieve this exposure, but more scalable solutions may be needed as well. Universities and students should also engage more actively with their local communities, for example by working over extended periods on community projects.

High-integrity politician

In an ecosystem where the private sector, institutions and individuals must collaborate to create value, leaders should be able to accrue support, negotiate, form coalitions and partnerships, and overcome resistance. Universities can help prepare tomorrow's leaders

to succeed in this world by orchestrating ways to get diverse groups of students to work together while teaching them the power of purpose and trust to align teams around a common goal. In addition to the well-established team exercises, projects should focus on complex outcomes and therefore require input from diverse students, often even students working toward different degrees. Self-awareness and character are important ingredients of integrity. Institutions can help students discover what drives and motivates them, what they naturally excel at, and what they struggle with.

Humble hero

Universities have traditionally been good at conveying a strong fact basis, aiming for students to 'know it all.' With change in the world happening so quickly, it is also important for students to learn how to 'learn it all.' Seeking out, hearing and understanding others' voices is important for students to become humble heroes. Universities can help them by teaching civility and creating a culture that is about respectful discovery of other perspectives. This might manifest itself in the materials that are discussed in class, the seminar speakers who are invited to campus, and project driven curricula.

Strategic executor

Universities typically excel at teaching the latest developments in any given field. For future leaders to become strategic executors, however, two more aspects will be helpful. The first is a more integrated view of the world. If tomorrow's leaders are to shape the future, they should understand risk and regulations, competition of various political systems, dependency of economies, past crises and how they have changed people's perceptions, ethical and social considerations, and many more. The world's massive problems, such as climate change, mobility, and healthcare, can't be solved by experts in single disciplines. They require an integrated view, and universities can help lay the groundwork for it. The second aspect is the ability to affect organisational change, not just in theory but also in practice. To help future leaders learn how to drive change, universities should consider embedding students into change projects for extended periods, having them work with organisations in their local communities so they learn how to make things happen in the real world.

Tech-savvy humanist

For leaders to become tech-savvy humanists, traditional pure engineering or humanity programmes should be expanded. Future leaders will need engineering and computer science programmes with some social science and humanities overlay, and vice versa. Universities should therefore add to their tech curriculums elements of psychology, sociology and political science, just as philosophy, international relations, education and business curricula should include elements of machine learning and artificial intelligence. Transdisciplinary and interdisciplinary learning and research should be at the core of every institution's academic framework.

Traditioned innovator

Vice-chancellors agree that innovation is non-negotiable in order to succeed in today's world. What everyone may not fully appreciate, though, is the perseverance it takes to make innovation work and the need to have purpose drive the focus of everyone's energy in the institution as

well as students. Exposing students to design thinking, linking them up with local entrepreneurs who work on scaling up innovation, inviting innovators to hold seminars and tell their personal stories of failures and successes, and organising 'innovation challenges' in which students can develop ideas could be helpful for promoting innovation.

Navigating the 6 paradoxes of leadership for those at the top of higher education institutions

In addition to preparing the next generation, those in leadership can use the six paradoxes when reflecting on the skills of their own executive teams and when moving their institutions forward.

By thinking and engaging globally and working with people from diverse backgrounds and cultures, leaders can gain access to insights and talent in the global marketplace. At the same time, being aware of and responsive to the needs of the local communities and ecosystems in which they operate is becoming increasingly important for executive leaders. By orchestrating dialogue and exposing people to new ideas, all while being clear about what is fact versus fiction, leaders can make sure important dialogue is maintained in an often-polarised environment. The current environment also calls for humble hero leaders, people who are willing to make bold decisions, for example by reimagining the value their universities are going to create in the world, and who have the humility to acknowledge what they do not know.

Additionally, by understanding how their organisations need to change in a world shaped by global forces and being able to make the change happen on the ground, leaders emphasise their roles as strategic executors. Embracing a tech-savvy attitude allows leaders to investigate how their organisations could use digital technologies to make higher education accessible to more students.

Finally, by focusing on what is unique to their institutions and how they can use that uniqueness to create value, leaders become traditioned innovators for their organisations.

Higher education plays a key role in helping society tackle the crises the world faces and has the opportunity to help produce a highly positive outcome. The six paradoxes of leadership, when applied to future leaders and universities' own leaders, can provide a useful framework for thinking about what might be involved.

To cite an inspiring quote from Indian author Arundhati Roy – “Historically, pandemics have forced humans to break with the past and imagine their world anew. This one is no different. It is a portal, a gateway between one world and the next. We can choose to walk through it, dragging the carcasses of our prejudice and hatred, our avarice, our data banks and dead ideas, our dead rivers and smoky skies behind us. Or we can walk through lightly, with little luggage, ready to imagine another world. And ready to fight for it.” The future indeed represents a portal for transformative and accelerated outcomes that have not been achieved before. While financial limitations will continue to place strain on the ability of universities to invest widely, it will be critical for investment areas to be prioritised in the short to medium term. Universities have certainly demonstrated their resilience, but must now prove their relevance in a new age.



References

Chronicle of Higher Education (CHE) Digital Transformation on Campus Assessing College Leaders' Attitudes on Strategic Technology Changes 2022

Global Market Insights (GMI) E-Learning Market Trends 2021

Global Market Insights (GMI) Global Forecast Report 2027

Higher Education Strategy Associates (HESA) World Higher Education: Institutions, Students and Funding Report 2022

PricewaterhouseCoopers (PwC) Adapting to a New World 2020

PricewaterhouseCoopers (PwC) Perspectives in Higher Education 2022

PricewaterhouseCoopers (PwC) Voice of the Student Survey 2022

The Learning House Inc. and Online Learning Consortium (OLC) State of Innovation in Higher Education: A Survey of Academic Administrators 2018

World Economic Forum (WEF) Global Competitiveness Report 2019

World Economic Forum (WEF) Global Social Mobility Report 2020



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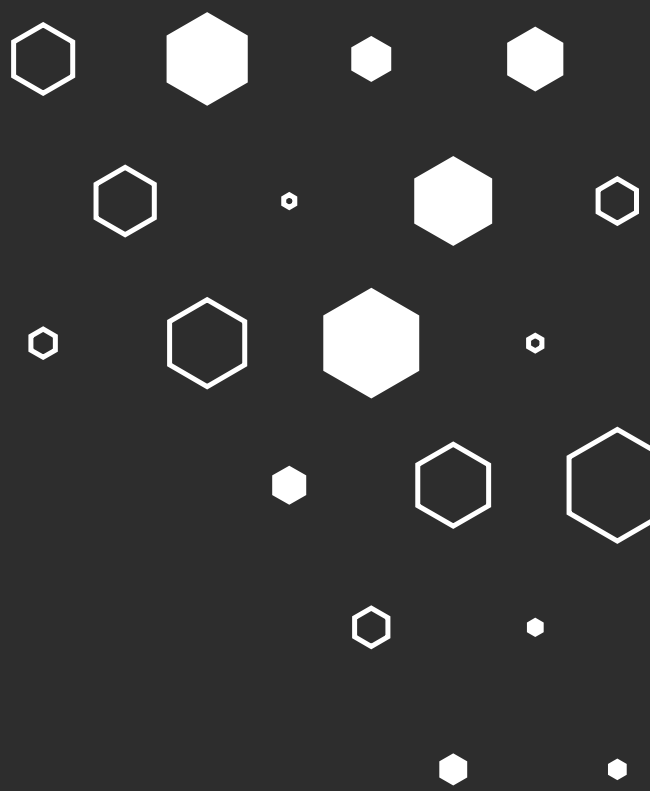
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