2021 Tertiary Education
Digital Transformation Index

Welcome to the first annual Digital Transformation Index for Tertiary Education.

A new initiative from TechnologyOne to assist tertiary education institutions with benchmarking comparisons and insights into digital transformation across the sector.

Contents

Foreword:
Peter Nikoletatos

technologyone
Transforming business, making life simple

COVID-19 presented a number of challenges for tertiary education institutions across Australia and New Zealand in 2020.

It not only forced the acceleration of digital transformation upon their curriculum, teaching and learning delivery, student support and research; it also impacted institutions' operating models, their technology investment priorities and fundamentally altered the sum of capabilities that reside in the organisation.

A delivery model and culture that is largely built around face-to-face teaching simply lacks the ability agility to be easily digitised or scaled up. COVID-19 forced institutions to make a rapid move to online learning with no preparation, little or no training, and insufficient bandwidth, resulting initially in a poor user experience for many students and staff.

A move to remote teaching also presented challenges for students who did not possess a reliable internet connection or modern technology. This was particularly evident for students from lower socio-economic or remote areas that struggled to participate in online learning. Many households were also unprepared to accommodate a working from home model, let alone the impact on individual wellbeing from this unprecedented event.

For some institutions the move to online learning was not as difficult. Schools that had embraced the cloud and implemented online applications were at a considerable advantage. Staff and students forced to work or learn from home experienced a seamless migration and did not have to adapt to new systems.

They were already experienced in much of the software that allowed for remote teaching and collaboration, they didn't experience data centre lock-outs, and benefited from cyber secured systems that were far more robust.

The accelerated move toward digital transformation has also highlighted some key learnings for tertiary institutions moving forward. The largest of which is, that no business can ignore customer experience, even if that customer is a student.

TechnologyOne has commissioned this report to help institutions see how far they have travelled on their journey, gain insights into barriers that others have overcome and view the hallmarks that best-in-class institutions have shared.

We trust that the findings in our inaugural Tertiary Education Digital Transformation Index will help you identify where you are on your digital transformation journey and take steps to ensure that you are on the right path.

Peter Nikoletatos
Industry General Manager – Education
TechnologyOne; and
Adjunct Professor
La Trobe University

Introduction

2020 was a challenging and unusual year for all industries. With lockdowns enforced across the ANZ region due to COVID-19, institutions quickly uncovered the need for and the benefits of smarter digital solutions to aid remote teaching and servicing the demands of students online.

The pandemic also accelerated the need for tertiary institutions to invest in alternative means for delivering coursework and supporting staff via digital solutions. This accelerated many organisation's digital transformation journeys and provided the motivation to develop a digital roadmap that will forever reshape their day-to-day operations.

This annual report is produced using data gathered from responses to an online survey shared with Australian and New Zealand senior executives and management within the tertiary education sector.

Its purpose is to outline the current state of digital transformation advances across the sector and provide an index which maps the progress of institutions towards a fully integrated digital offering for their students and employees.

Insights generated using data from 81 tertiary institutions across Australia and New Zealand

Key findings

1

A lack of cloud services risks data loss and makes remote working more difficult. **77% of respondents do not use cloud solutions for research management, 54% do not use the cloud for HR resources, 46% do not use cloud systems for student management, and 45% do not use the cloud for finance systems. Information stored on internal servers or personal computers instead of the cloud risks expensive data loss or downtime and makes accessing files and services more difficult for remote workers.**

Digital transformation is being driven by the need for an improved student experience. **87% of respondents ranked student satisfaction as the highest priority for digital transformation and 82% believe it to be a high priority for increasing enrolment.**

2

3

Managing cyber security internally strains IT resources and institutions risk a cyber attack. **74% of respondents reported that they rely on internal resources to manage cyber security. 23% reported that they have no enterprise risk management strategy that includes cyber security controls, and 10% reported that they have no dedicated resources for cyber security at all.**

Digital transformation index quadrants

Idealist

Best-in-class

Pathfinder

Trailblazer

VISION AND STRATEGY

Vision and digital strategy created and shared across the organisation.

EXECUTION ⟶

How far they are in their digital transformation implementation.

The respondents' results have been plotted against our digital transformation index quadrants to indicate where they are in their journey. Those that understand the need for digital change and have a strategy in place score higher on the y-axis, 'Vision and Strategy'. Those that have implemented digital transformation initiatives score higher on the x-axis, 'Execution'.

Digital transformation index quadrants
continued

Idealist
3% of respondents

Improvement begins with a vision of positive change. These respondents understand the impact and benefits that digital transformation will have within their institution. They have begun to define their strategy, and key decision-makers and influencers view digital transformation as a high priority.

These idealistic respondents likely lack the budget and resources required to implement their strategy and have yet to align digital transformation strategies with the rest of the institution.

Pathfinder
38% of respondents

From the bottom of the mountain, you can only go up. The respondents in this quadrant may have implemented some level of digital change within their institution but lack a clear strategy for the future. Others in this quadrant might have a vision for digital transformation but have yet to begin any planning or implementation.

These institutions may not view digital transformation as a priority or lack the resources and budget to implement change.

Best-in-class
38% of respondents

Success equals vision plus execution. These respondents have not only planned for digital transformation, but they have also implemented it and have a strategy for continual improvement. They have likely implemented SaaS and ERP solutions and have a robust approach to cyber security.

These institutions have aligned their business goals with their digital delivery goals and the institution views digital transformation as a priority.

Trailblazer
21% of respondents

Sometimes the first step of a long journey is a leap. If manual procedures have been digitised and file storage moved to the cloud, but the IT team are overburdened, this institution likely falls into the trailblazer quadrant.

These respondents understand the benefits of digital solutions but lack a clear strategy and the support of a digital transformation partner.

Best-in-class:
Vision and implementation

Just over a third (38%) of our respondents to this year's survey fall into our best-in-class quadrant.

The majority of these institutions shared one key factor: 82% reported that their executive teams are either actively involved with their digital transformation or taking part in quarterly reviews of their strategies. This clearly demonstrates the importance of aligning executive staff with transformation strategies.

Implementing these strategies requires the coordination of multiple teams internally within the institution and externally with technology partners. Which is why it is no surprise that 78% of best-in-class respondents reported that they use best practice project management methodologies such as Agile, Kanban or Lean.

These project management methods help institutions transform faster and with fewer challenges. Instead of attempting to move all the on-premise solutions online in one "big bang" launch, an agile team delivers a digital transformation in small increments. Requirements, plans, and results are evaluated continuously so employees and students have a natural mechanism to provide feedback and adapt to new systems.

Not only have these best-in-class institutions planned their digital transformation, but they are also already realising their vision. 86% of these respondents reported that they are no longer reliant on on-premise platforms, 53% are using alternative cloud solutions and 33% have moved to a SaaS platform.

1/3
of best-in-class institutions have made the move from on-premise to SaaS

Best-in-class: Institution spotlight

LA TROBE UNIVERSITY

What were the critical success factors that helped your institution achieve its digital transformation strategy?

La Trobe University

For more than 50 years, La Trobe University has been transforming people and societies. With a dual emphasis on excellence and diversity, they put students at the centre of everything they do. The 2021 Times Higher Education Impact Ranking saw La Trobe place fourth in the world, third in Australia and first in Victoria for overall work to advance the United Nations' Sustainable Development Goals (SDGs). The University also ranked first in the world for efforts to protect and restore life on land and first in Australia for gender equality.

The success of our Digital Strategy 2020-2022 is that it underpins and will enable the University transformation objectives and its strategy. It has been developed collaboratively with our senior executive and leaders at the University. We jointly created the vision of a digital ecosystem that engages participants to research, collaborate, learn, innovate, and experiment in a secure and safe environment. Data insights will drive exceptional outcomes, interactions, and efficiencies.

We have supported the strategy with companion documents that provide a roadmap for investment and include eight digital principles that will guide La Trobe's digital transformation, ensuring consistent alignment and approach across all programs and projects. The digital principles will become integral in our 'thought leadership' and second nature in their use for design of information technology initiatives that support the agenda outlined in the Digital Strategy 2020-2022.

Stuart Hildyard
Chief Information Officer
La Trobe University

Industry transformation challenges

Implementing organisation-wide change is challenging, and digital transformation is no exception.

It requires the support of key stakeholders, budget, committed resources, expertise, detailed planning and extensive change management, including training and careful execution. Plus, it calls for time to scope, test and implement.

Digital transformation also requires aligning business strategies with digital transformation strategies, which our data highlighted as a huge challenge with only 38% of overall respondents agreeing that the strategies were aligned.

It is abundantly clear that COVID-19 accelerated the need for digital transformation in 2020, and time was no longer a luxury that institutions could afford. Many were forced to either transform courses for digital delivery or drop them entirely. Staff had to be trained and supported with suitable hardware and software for remote working, offline resources had to be digitised and online solutions created for a host of processes ranging from enrolment to HR management. However, without the required planning or resources, some may have unintentionally opened themselves up to cyber security risks, overburdened their internal IT teams and been left with impractical or unsustainable stop-gap systems.

38% of institutions were classified as pathfinders in this year's index report, of which 70% reported that they were reliant on on-premise solutions for their digital transformation, increasing the costs and resources required. Furthermore, 22% reported that they have no dedicated resources for cyber security detection at all.

21% of respondents were identified trailblazers, clearly demonstrating the need institutions had to implement digital solutions this year without proper planning. None of these respondents (0%) believed that their business strategies and digital transformation strategies were aligned.

Only 3% of institutions fell within the idealist quadrant, again highlighting the need that institutions have for implementation of digital solutions. These respondents clearly understand the need for digital transformation, with 75% ranking it as a high priority, but only 25% believe they have adequate resources or the budget required for implementation.

Across all quadrants our data showed that institutions do not believe they have adequate budget (71%) or resources (54%) to implement a digital transformation and highlighted a disconnect of thinking between executive, academic and professional staff. Almost half of our respondents believe they have adequate resources (46%), but only 17% of executives agreed.

Key insight #1 –
A lack of cloud services risks data loss and makes remote working more difficult

More than three quarters (77%) of respondents reported that they did not have research management in the cloud. By not using cloud services, the results from extensive research investments are placed at risk of being lost due to a reliance on internal servers or worse — storage on personal computers. Internal servers may be backed up infrequently, placing the data at risk of being destroyed by hardware malfunctions or even physical disasters such as a building fire or flood. Storing files locally on personal computers not only risks data loss due to hardware malfunctions, but also places the data at higher risk of human error, security breach and cyber vulnerability.

Over half (54%) of respondents do not use cloud-based services for HR, 46% do not use cloud systems for student management, and 45% do not use the cloud for finance systems. Relying on physical records, internal systems and local storage not only risks data loss, but also puts remote workers at a disadvantage by having to adapt to systems that were never designed to support them working from home.

Some institutions have reported anecdotally that they have introduced stop-gap systems that allow for submission of forms via email or online. If these forms are being printed, signed, and scanned again at the other end, this will inevitably lead to longer response times and unnecessarily complex systems. This not only has an impact on employee experience for staff working from home, it also complicates processes for students and can lead to a poor user experience. There are also privacy concerns surrounding the submission of sensitive information via legacy systems, and financial risks associated with data loss of records that track expensive facility assets.

"It is clear that SaaS/cloud will provide an elevated level of service offering and all organisations recognise this benefit. The COVID-19 pandemic accelerated this strategy across institutions as business continuity was put to the test. Institutions who had progressed their cloud/online strategy were able to transition in a timelier manner."

Peter Nikoletatos
Industry General Manager – Education
TechnologyOne; and
Adjunct Professor
La Trobe University

Graph Heading – Sample

Category	Value
XXXX	0.00
XXXX	0.00
XXXX	0.00
XXXX	0.00
XXXX	0.00
XXXX	0.00
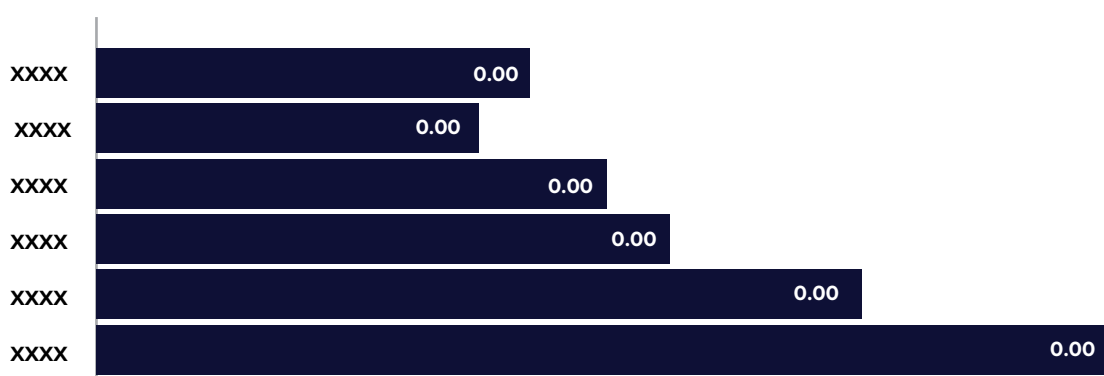
Key insight #2 –
Digital transformation is being driven by the need for an improved student experience

The majority (87%) of respondents rank student satisfaction as the highest priority for digital transformation and 82% believe it to be a high priority for increasing enrolment.

Students' expectations of digital services delivered by education providers have increased in line with their expectations as consumers in general. If a company does not have a social media presence and the ability to communicate directly with their consumer online, they are viewed as a dinosaur. If an education provider does not offer the ability to easily view timetables, access learning materials and submit assessments online, they too may be seen in this light.
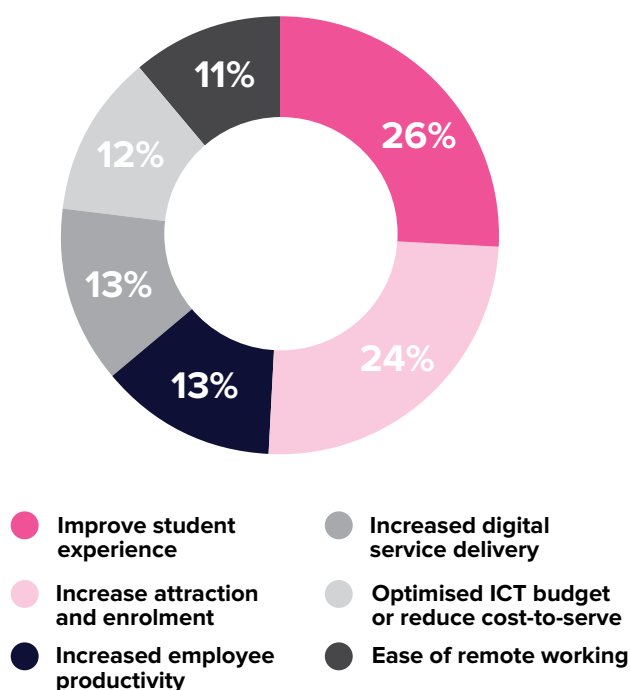
74% of our best-in-class respondents have implemented a digital student management system in the cloud that allows institutions to easily provide self-service capabilities for enrolment, class allocation, personal details and fees. It also enables students to use their smart mobile devices to connect via social media and access real-time information from anywhere, at any time.

"Students as lifelong learners have traits similar to those who are brand loyal. If the experience is great the energy is almost tangible. When an experience is perceived as poor it amplifies negatively into many other unintended areas. Dealing with a student who has endured a poor experience takes significant skill, and investment in this remains a key training priority."

Peter Nikoletatos
Industry General Manager – Education
TechnologyOne; and
Adjunct Professor
La Trobe University

What are your highest priorities for digital transformation?

- ● Improve student experience — 26%
- ● Increase attraction and enrolment — 24%
- ● Increased employee productivity — 13%
- ● Increased digital service delivery — 13%
- ● Optimised ICT budget or reduce cost-to-serve — 12%
- ● Ease of remote working — 11%

Key insight #3 –

Managing cyber security internally strains IT resources and increases cyber attack risk

Having robust cyber security strategies in place is no longer a 'nice-to-have' it is a 'must-have'. This was clearly outlined in June of 2020 when the Prime Minister of Australia, Scott Morrison, announced that our government and private sector were all at risk from "ongoing" sophisticated cyber attacks and that the scale and frequency of these attacks were growing.

Most respondents (74%) use internal resources to manage security, placing a huge strain on an internal IT department that may or may not be proficient in up-to-date cyber security measures. 23% reported that they have no enterprise risk management strategy that included cyber security controls. But the more worrying statistic is that 10% of institutions reported that they did not have the internal resources to effectively manage cyber security at all.

The good news is that, by implementing the right SaaS, you can alleviate the strain placed on your internal IT team and be confident that your software will always be kept up to date with the latest cyber security measures.

"The reality is that cyber awareness is still an issue in education. As we become accustomed to sharing more personal details online, in an effort to gain popularity, measured by likes/followers, we continue to see cyber security breaches. Institutions, as educators inter alia, can play a key role in ensuring the platforms they provide are cyber safe. The reality is that on-premise solutions are unable to match the scale and experience of SaaS providers."

Peter Nikoletatos
Industry General Manager – Education
TechnologyOne; and
Adjunct Professor
La Trobe University

10%

of institutions reported that they did not have the internal resources to effectively manage cyber security at all

Managing cyber security internally strains IT resources and increases cyber attack risk
continued

"Having robust cyber security strategies in place is no longer a 'nice-to-have' it is a 'must-have'."

— Scott Morrison, Prime Minister of Australia

Have you defined and implemented data governance policies and processes across your institution?

10%
6%
10%
74%
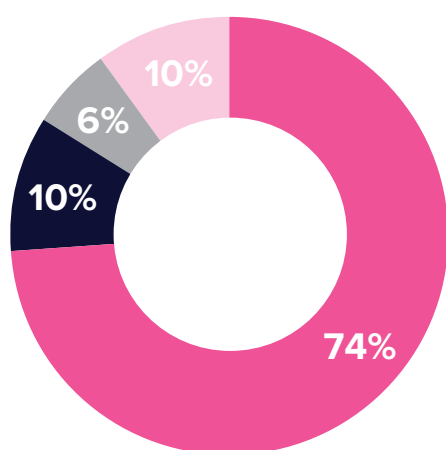
- ⬤ Yes – have internal resources
- ⬤ Yes – have outsourced this
- ⬤ Currently looking to resource
- ⬤ No

Do you have an enterprise risk management strategy that includes cyber security controls?

7%
15%
41%
37%
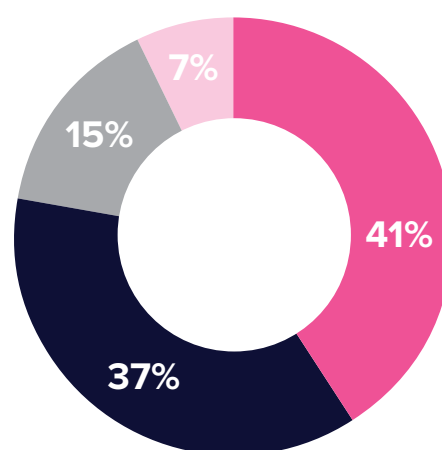
- ⬤ Yes – fully implemented
- ⬤ Yes – strategy defined but controls not fully implemented
- ⬤ We have existing controls but not a complete cyber security strategy
- ⬤ No

Discover more insights to reimagine your institution's digital transformation on the TechnologyOne education resource hub. technologyonecorp.com/one-effect/education

TechnologyOne

We are Australia's largest enterprise software company and one of Australia's top 150 ASX-listed companies, with offices across six countries. We provide a global SaaS ERP solution that transforms business and makes life simple for our customers. Our easy-to-use, deeply integrated enterprise SaaS solution is available on any device, anywhere, at any time.

Over 1,200 leading corporations, government agencies, local councils and universities are powered by our software. For more than 32 years, we have been providing these customers with enterprise software that evolves with new and emerging technologies, so they can focus on what they do best: running a successful organisation.

technologyonecorp.com

Media partner – Education Central

Education Central (published by NZME) is the independent and impartial go-to news source for all New Zealand educators, politicians, policy makers and parents.

Education Central provides the latest news, thought-provoking content, policy updates, opinion pieces from sector thought leaders, teaching and learning resources, professional development initiatives and sector success stories, conference information, plus a forum for discussion and debate.

educationcentral.co.nz/

Green Hat

We're an integrated marketing agency specialising in Business-to-Business. We assist our clients with B2B strategy and creativity to attract, engage and delight their customers and turn them into loyal advocates. We measure everything that matters and align Sales and Marketing to deliver revenue outcomes. We 'think' and we 'do'.

Our services include market research, strategy, ABM, branding, creativity, digital and social media services, content marketing, lead generation and nurturing – underpinned by analytics and automation. Industries we specialise in are professional services, ICT, financial services, industrial and any business dealing in 'complex and considered purchases'.

green-hat.com.au

Methodology and demographics

The Digital Transformation Index for Tertiary Education 2021 was developed in partnership with Green Hat. The questionnaire was delivered online and featured 22 multiple-choice questions.

The research was conducted through November and December 2020 and includes 133 responses from 81 institutions within Australia and New Zealand.

The report was completed by 106 Australian respondents and 27 New Zealand respondents.

technologyone
Transforming business, making life simple