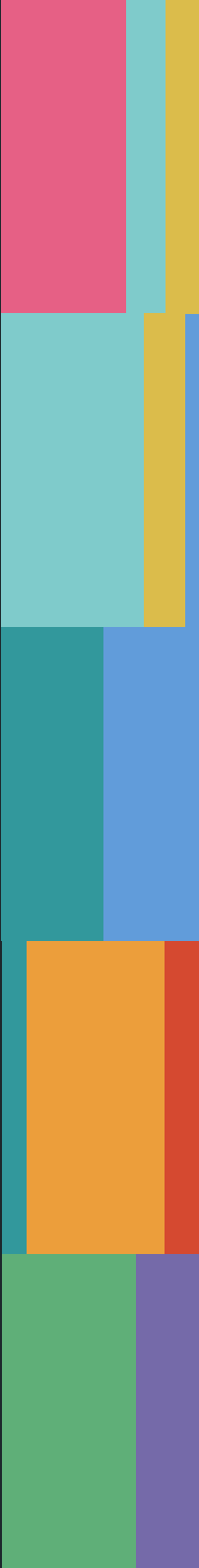# Higher Education

Digital
Experience
Report 2022

Great State

Overview.

Higher education institutions are struggling with an emerging digital experience gap between what students expect from their universities and what is being offered.

We surveyed 2000 students and higher education leaders to reveal what students expect from their university's digital experience, the benefit to universities of meeting – and even exceeding – those expectations, and the challenges universities face in attempting to close the Digital Experience Gap.

Introducing the Higher Education Digital Experience Report 2022.

Introduction

Every university has 'gone digital' to varying degrees to better support its student population.

These transformations accelerated during Covid, particularly on the academic front, but they are by no means complete, and digital experiences that support students' university lives outside learning are even further behind. The result is a Digital Experience Gap between what students expect and what universities offer.

This report looks in detail at what students expect from their university's digital experience, the benefit to universities of meeting – and even exceeding – those expectations, and the challenges universities face in attempting to close the Digital Experience Gap.

In recent years every university has digitally transformed to varying degrees to better support its student population. The result is that universities' digital experiences are failing to meet the growing expectations of students.

What's more, there are significant differences in the adoption of these experiences by key segments of the student population. At a time when universities are actively trying to tackle diversity, inclusivity and equality, it's

alarming to discover that the students they're trying hardest to attract may be those least likely to expect, engage with, or get value from digital experiences.

This is the key finding of new research carried out by Great State. The Digital Experience Gap in higher education will only widen unless universities adopt the changes outlined in this report.

The benefits to universities
The National Student Survey (NSS) is a widely recognised barometer of how students at every HEI in the UK rate their university experience. These ratings are an important factor in university rankings, and therefore the choices students (and their parents) make about where to study.

Overall, ratings are in decline – and they dropped off a cliff during the Covid pandemic – so universities are rightly devoting significant attention to improving the student experience they provide.

While HEIs made significant digital advances when it came to the student learning experience during Covid, the inadequacies of non-learning digital support were exposed at exactly the time when the need for it was increasing. Now, as we emerge from the pandemic,

there are more students studying remotely or via a hybrid approach. There is also greater adoption and expectation of digital services, while increased mental health and wellbeing needs are being voiced by the student population.

Our research found that students expect the quality of the digital experience offered by their university to be as good as that offered face-to-face. The vast majority also believe the right digital experience would help them manage their wider student life, perform better academically, feel a part of the university, and maintain mental wellbeing.

These are all factors which reduce undergraduate drop out and drive overall university performance. In addition, half the students we surveyed said the quality of a university's digital experience was the key factor in their choice of where to study. Taken all together, these findings show those universities that are quick to develop high-quality digital experiences will not only see an improvement in their NSS scores but will also benefit from increased differentiation among prospective students.

The challenges universities face

Many universities are not set up to cope with the pace of digital change.

- There is often a lack of senior level understanding and support for what they're trying to achieve with their digital experiences.

- Universities tend to address student needs with point solutions, with little thought to how these might connect to form a coherent overall experience.

- Most tend to approach their digital experiences from the point of view of the organisation, rather than the users (i.e. students).

- They lack the funding for large-scale change, while the governance structures in place do not allow the funding that does exist to be disbursed in the appropriate ways.

- It's very common to have to deal with legacy systems which have typically never integrated. Alongside this, they also suffer from technical debt and lack the knowledge and capabilities to employ the latest technologies.

Digital experiences have the potential to make university more rewarding, accessible, and inclusive for all but, without the right intervention, they could well have the opposite effect.

This report explores Higher Education's Digital Experience Gap, the threat it poses and what Higher Education Institutions (HEIs) need to do to address it and what this could mean for the future of higher education.

Our findings show that universities quick to develop high-quality digital experiences will see an improvement in their NSS scores and benefit from increased differentiation among prospective students.

Digital experience maturity

Digital experience gap

Time
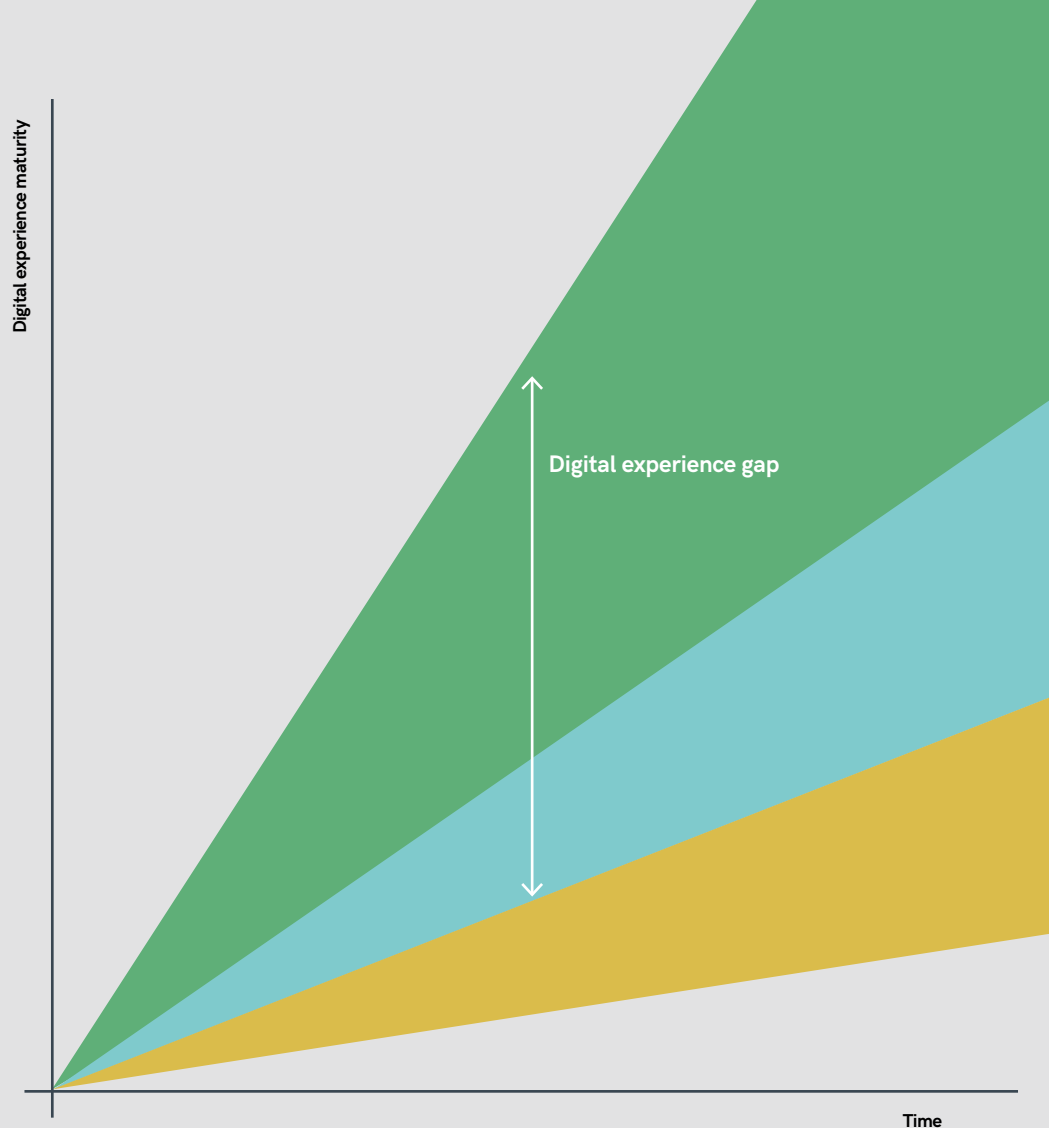
- Student expectations of digital
- What universities currently provide
- Current adoption of digital by students

Methodology

In January and February 2022, Great State conducted research about digital experiences with UK universities and students.

We ran an online survey with a representative sample of 2,222 current UK students, asking questions about the digital experiences their university provide, how they engage with them and what they expect from them. We also asked respondents about their attitudes and engagement with digital experiences as a prospective student and also what they expect after they graduate.

In addition, we carried out qualitative interviews with senior digital stakeholders at five UK universities:

1.Richard Jones
Interim Head of Shared Digital Experience
University of Exeter

2.Louise Morgan
Assistant Director IT (Digital)
University of York

3.Amanda Neylon
Director of Digital Technologies
Nottingham Trent University

4.Mike Pearson
Head of Digital
London School of Economics and Political Science (LSE)

5.Lucy Scott
Head of Business Change University of the West of England
(UWE Bristol)

6.Mark Davis
Director – IT Services
University of the West of England
(UWE Bristol)

University of Exeter

University of York

Nottingham Trent University

London School of Economics (LSE)

UWE Bristol

What we heard from students

What we heard from universities

1 Digital experiences are important to students and they expect value from them, just as they expect value from the rest of the university experience they're paying for.

2 Students expect the digital experience to support them not just in learning but in their whole student life, including in connecting with each other.

3 HEIs are in a grace period. Anecdotally, some students may be forgiving now, but that forgiveness is likely to be temporary and our research says expectations are high.

4 Overall, the quality of digital experiences raises questions about the extent to which they are accessible and inclusive for all students.

5 There's an ambition to be more digital but often not the appetite for the organisational change required to make this easy.

6 There is a drive to be more user-centred.

7 Universities are struggling to deliver digital change fast enough.

8 Everyone is struggling with technical legacy.

9 Rich data is often held but is not being used to its full potential to drive personalised student experiences and offline action.

14

What we heard from students

Digital is a key part of the student experience

It's more expensive to attend university now than ever before, and students rightly want to know they will get the most out of their time there. The experience they get through digital tools and services will undoubtedly contribute to that.

As a result of the pandemic, HEIs have focused on digital change to support learning, which has been widely embraced both by students and the institutions themselves. But how important is the digital experience to the modern-day student, what's their perception of what's currently available to them, and what are their expectations for the future?

Our research shows students expect a university's digital services to be at least as strong as its face-to-face offering (91% of respondents).

This expectation applies not just for their learning but for their wider university lives too.

With almost all students believing **that a good digital experience can help them manage their wider student life (92%), perform better academically (90%), feel a part of the university (86%), and maintain mental wellbeing (also 86%)**

So it's clear that students value the digital experience outside of 'learning', but how do they feel about the experiences they're currently being offered?

Unsurprisingly, **they rate the digital experience for their learning higher than that for their wider university life** (90% and 80% respectively say their university is at least offering the basics well). But 20% say the digital services supporting their wider student experience are way behind the curve, or non-existent.

What's more, there's an **overwhelming expectation (93%) that a university's digital experience should combine information,** services and support from the university, the local area and relevant external organisations.
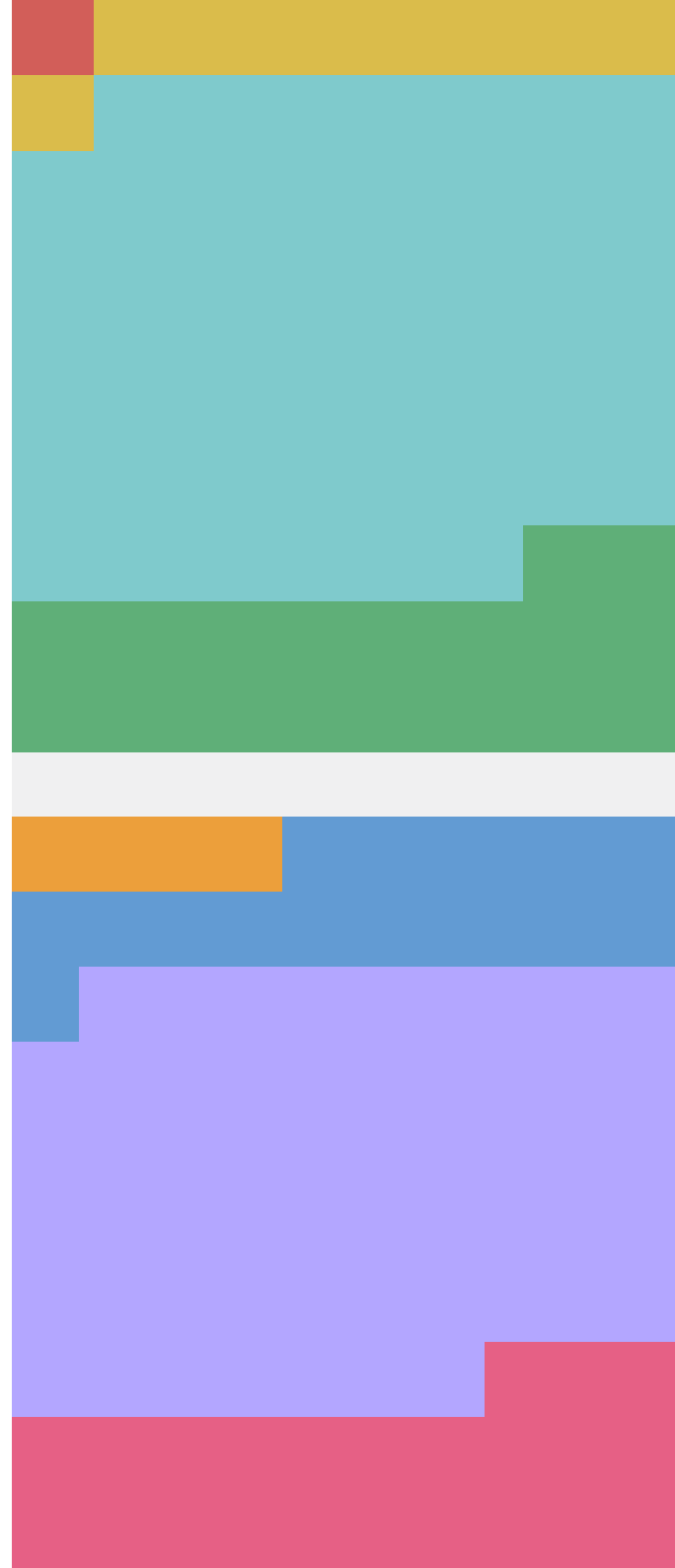
Student view on digital experiences

Learning

1%
virtually non-existent

10%
are behind the curve

67%
offer the basics well

22%
state of the art

Wider university life

4%
virtually non-existent

17%
are behind the curve

57%
offer the basics well

22%
state of the art

50%

said that the quality of their university's digital experience was a key factor involved in their choice of University

81%

said they would like their university to provide a digital experience that stays with them after they graduate

Interestingly, when we look at the 'complete student journey' starting from University selection, 50% of respondents said that the quality of their university's digital experience was a key factor in their choice. There was also a high expectation that the digital experience would extend beyond their time at university (81% of respondents).

Currently, a high proportion of digital spend and effort is directed towards undergraduate recruitment. Would Universities be better off diverting some of this to developing digital experiences aimed at students and postgrads, with the intention of differentiating themselves in the future? **Will those investing in digital experience today steal a march when it comes to recruitment? And will that 50% figure rise as students see what great experiences could be offered?**

What does this mean for HEIs?

It's clear that over the next few years, the digital services universities provide will increasingly affect whether students feel their time at university delivered value for money. The pace with which the academic side of university life had to evolve to counter the impact of the pandemic has set expectations of change across all aspects of student life.

Universities need to accept that remote or hybrid is here to stay and take the momentum created by the pandemic to continue their digital transformation.

While the NSS is admittedly more geared towards learning and support, the 2021 scores already show a significant decline. Meanwhile, complaints to the Office of the Independent Adjudicator (OIA) are at an all-time high. **Together, this indicates an increased dissatisfaction with the value and effectiveness of a university education.** This can partly be explained by the impact of Covid, but universities need to be careful not to attribute this shift in student sentiment to the pandemic alone.

Like all commercial organisations, universities need to start considering how they drive value and satisfaction for the people they increasingly should regard as 'customers' (rather than simply students). Whilst universities aren't retail brands, many are rightly adopting relevant practices from consumer brands and others outside of the sector.

Added to this, the diversity of the audience must be recognised.

A one-size-fits-all approach hasn't applied to students for a long time, and the pandemic has fragmented the student body further still.

It's important that HEIs understand the specific needs of their unique groups of customers and provide personalised services and experiences.

They need to recognise exactly where customer needs are not currently being met and, equally importantly, the areas of the experience customers most value, as these might not be the ones they expect.

In other words, they need to shift to more 'customer-centred' design and thinking, so services are designed around the best experience for students, rather than what best suits the organisation.

The students we spoke to certainly expect their university to support them in their wider experience. They feel this would help with mental wellbeing, managing their day to day lives, and ultimately academic performance – all factors which reduce drop out and drive overall university performance. So while on the surface this might not naturally be top of the priority list for most universities, it's perhaps an area that needs more focus on digital transformation agendas moving into 2023, especially with increased focus from the Office for Students on student outcomes and experience.

Many universities are adopting relevant practices from consumer brands and others outside of the sector.

HEI's are in a grace period when it comes to delivering against expectations

Gen Z are generally pretty demanding when it comes to digital experiences. Expectations around digital service design, interface experiences and personalisation have been normalised by the well-known digitally native and tech brands who manage to get this so right.

This is reflected in the fact that 67% of all students questioned said that they expect their university's digital experiences to be as good as services like Facebook, Amazon or Netflix.

Although this is the majority view, the fact that this figure isn't higher demonstrates an acknowledgement and allowance from some that universities aren't currently able to deliver against the experience bar set by digitally native platforms. How long that allowance will last is unknown, especially as we get further away from the pandemic and as the sector leaders raise the bar for digital experience.

> "It (the digital experience) doesn't need to work flawlessly, it needs to provide the basics well"
> **Russell Group university student**

No room for complacency
Interestingly, our research did highlight differences in student expectations based on the type of university they were attending.

Those attending post-1992 universities were more likely to think that experiences should be as good as Facebook, Amazon or Netflix than those from Russell Group universities (70% vs 64%).

With student intake caps removed in 2015, 'challenger' universities have had to work hard to attract students. There's now the possibility that getting their digital student experience right could provide the USP they've been searching for. At the very least they could improve their NSS scores by providing better digital experiences than their more established counterparts.

67%

of all students questioned said that they expect their university's digital experiences to be as good as services like Facebook, Amazon or Netflix.

64% PRE

i1992 POST

70%

Those attending universities post-1992 were more likely to think that experiences should be as good as Facebook, Amazon or Netflix than those from Russell Group universities (70% vs 64%).

These findings should present a warning to some Russell Group universities which have had the luxury of oversubscribed courses in the past. User expectations around digital are changing, and while historically a strong brand has guaranteed student numbers and to a degree NSS scores, ignoring the need to develop a digital student experience could be detrimental in the long run.

"Our brand is so strong that students tolerate an average experience to get the outcome"
Anonymous

> **What is clear however, is leaving it until the NSS scores dip dramatically will be too far too late**

In addition, a recent report by the Institute for Fiscal Studies suggests that future earning potential for students may be driven more by the class of degree they achieve than the university they attend. Therefore whether brand alone is strong enough to continue to differentiate Russell Group institutions across the next 10 years remains to be seen. Some such as Exeter University are on the front foot with this already, appointing a senior digital leader from a consumer brand and investing into digital experience.

What is clear, is leaving digital change until it's reflected in the NSS will be far too late. We've seen across countless sectors that complacency can be catastrophic; proactive investment in digital experiences and underlying technology is going to be important for HEIs to avoid being the Blockbuster Video of 2030.

What does this mean for HEIs?

While HEIs are undoubtedly experiencing a period of grace from students, expectations (and maybe frustrations) are going to grow with time.

Universities need to drive forward digital change at pace, focusing on the areas that add most value to their students and demonstrating ongoing change, especially before NSS score dip still further and students start voting with their feet.

Students want to connect with each other

Current use of digital for communication

Students expect the digital experience to support them not just in learning but in their whole student life, including connecting with each other.

There have been endless predictions of what the world will look like as we emerge from the pandemic. Now the reality is playing out and, unsurprisingly, the ability to connect and be part of a community continues to be important to students, even those who are studying remotely.
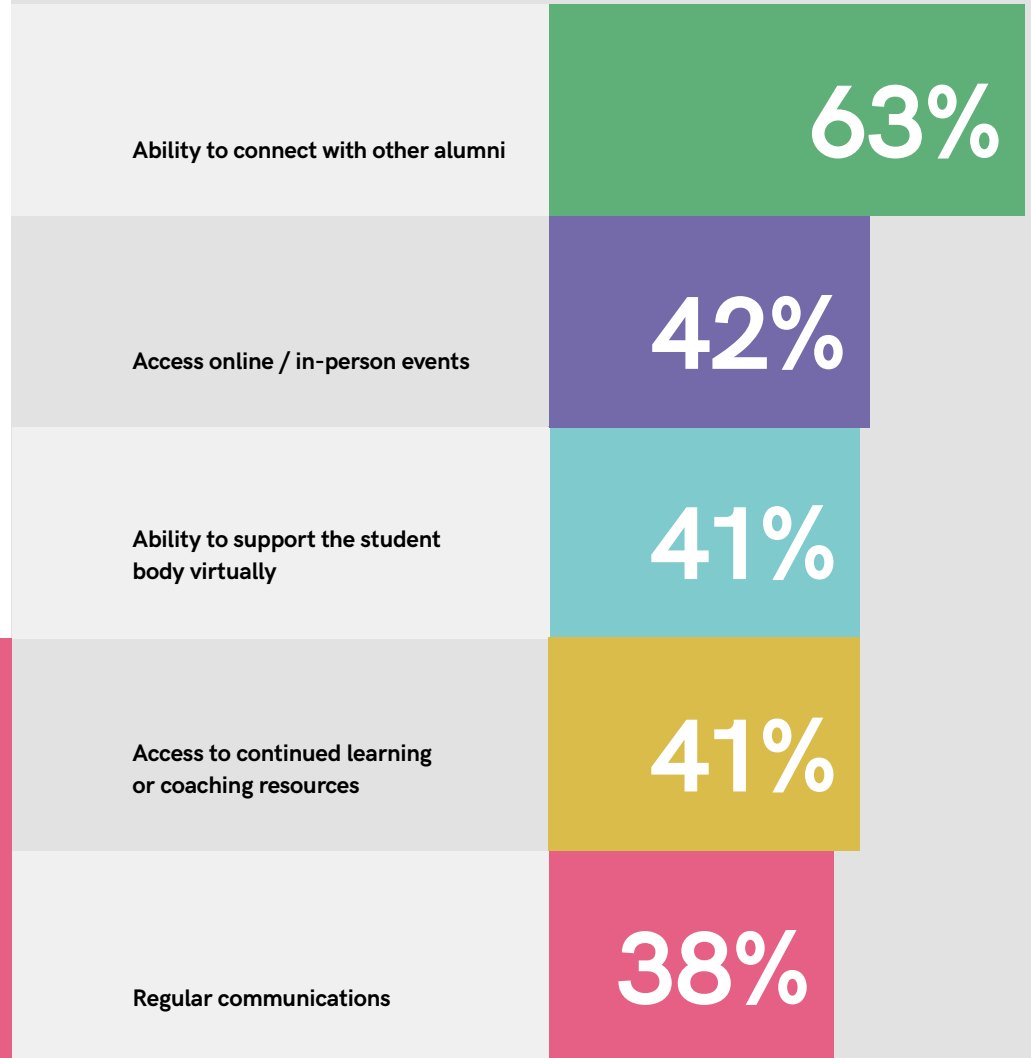
In our research, 86% of students agreed that good digital experiences are a great way to build a strong student community. In addition, chat/messaging with other students is the most frequently used digital university service (used by 37% of respondents at least daily), with the exception of accessing learning resources.

Looking beyond graduation, connecting with other alumni was the digital service students would most like after they graduate (63%). Almost half (44%) of students also said they would like access to events offering the opportunity to connect with other alumni.

86%

of students agree that good digital experiences are a great way to build a strong student community.

Ability to connect with other alumni	**63%**
Access online / in-person events	**42%**
Ability to support the student body virtually	**41%**
Access to continued learning or coaching resources	**41%**
Regular communications	**38%**

What does this mean for HEIs?

Much has been said about the need to offer digital learning, however HEIs need to ensure they don't under-estimate the wider importance of social connection, both as part of the learning process but also the wider student experience. Remote doesn't and shouldn't mean isolated.

There are plenty of anecdotal examples of this happening organically, organised by the students themselves through a channel of their choice either digitally or in person. However, as highlighted in the previous section, there is an increased expectation among students that HEIs will provide digital experiences to facilitate all aspects of student life.

Some HEIs might view this as a low priority in the grand scheme of things, but there are significant benefits for the HEI itself in encouraging connection and community in all its forms (knowledge sharing, emotional support, social connections etc), including:

- Supporting a more effective transition and onboarding experience into university, critical when the number of Year 1 dropouts has increased;

- Transitioning students to highly profitable postgrad and lifelong learning, which can be delivered remotely or in a hybrid manner at potentially lower cost and with less constraints on numbers;

- Greater advocacy – supporting students more fully will improve their overall experience, and as a result their recommendations and university NSS scores.

Fundamentally, universities need to support student connections through digital means, to enhance the physical experience or replicate it for those not attending in person.

Remote doesn't and shouldn't mean isolated

The accessibility and inclusivity of digital experiences is a concern

The last two years have done much to accelerate the adoption of digital as a part of the core student experience, but they have also raised a number of far wider issues around inclusivity.

The research we've undertaken shows that some of the digital experiences universities have developed may unwittingly be widening the very gap in diversity, equality and inclusion they're aiming to close, with worrying disparities emerging in digital usage across different student segments.
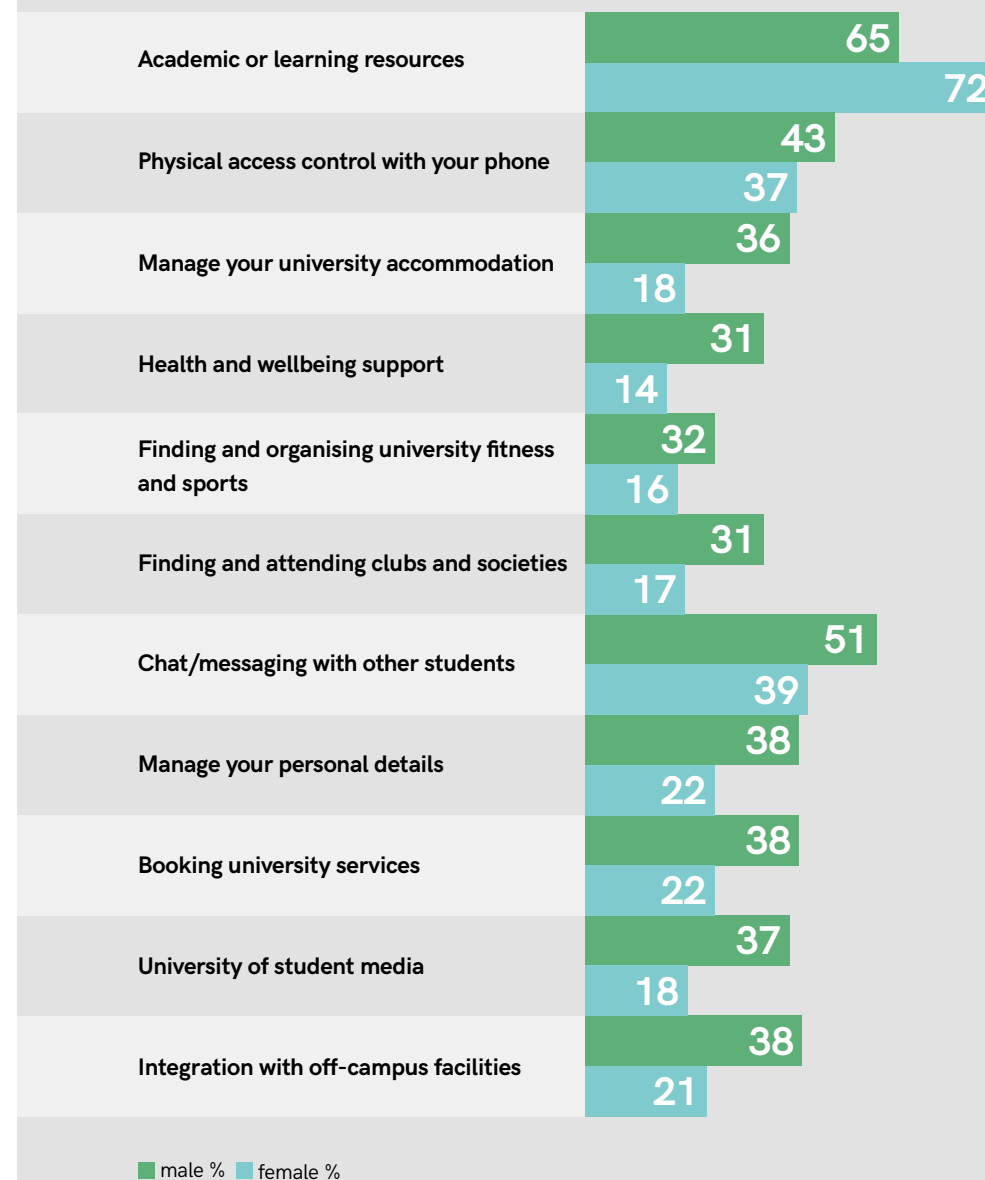
Experience gaps across, gender, social background and ethnicity
A slightly higher proportion of female students say they use learning resources more than male students. However, non-learning digital services such as managing accommodation and health and wellbeing support are used at least daily by more than twice as many male students as female.

Why is this? Do female students primarily view digital as there to support their academic development and not for wider support? Do female students prefer to use different channels to access wider services such as email, phone or face to face?

Students with a fee-paying school background and those from higher socio-economic groups are also more likely to use non-learning digital experiences frequently, despite a marginal difference in the use of learning resources among these groups.

Digital service use by gender

Service	male %	female %
Academic or learning resources	65	72
Physical access control with your phone	43	37
Manage your university accommodation	36	18
Health and wellbeing support	31	14
Finding and organising university fitness and sports	32	16
Finding and attending clubs and societies	31	17
Chat/messaging with other students	51	39
Manage your personal details	38	22
Booking university services	38	22
University of student media	37	18
Integration with off-campus facilities	38	21

■ male %　■ female %

Why might this be the case? Are students with a fee-paying school background and those from higher socio-economic groups more likely to seek out and use digital services in their lives in general?

Ethnicity also plays a role. Black students are less likely to say a good digital experience helps them to perform better academically (83% vs 91% for white students). Do black students have lower expectations of what digital can do, or do they not expect these types of services to be helpful or relevant to their lives?

Our research highlighted yet more differences based on student demographics. Male students and students from fee-paying school backgrounds were more likely to say

that the digital experience was a factor in choosing their university. Were these students more likely to use digital experiences already, and therefore to expect them from their university, than were other groups? Is this an exposure of the digital divide that exists in society?

Female students and those with a fee-paying school background were more likely to want digital services from their university after they graduate. Why? Do male and state school background students feel they don't need that connection with their university as much once they graduate? Are the reasons different for each of these groups?

83%
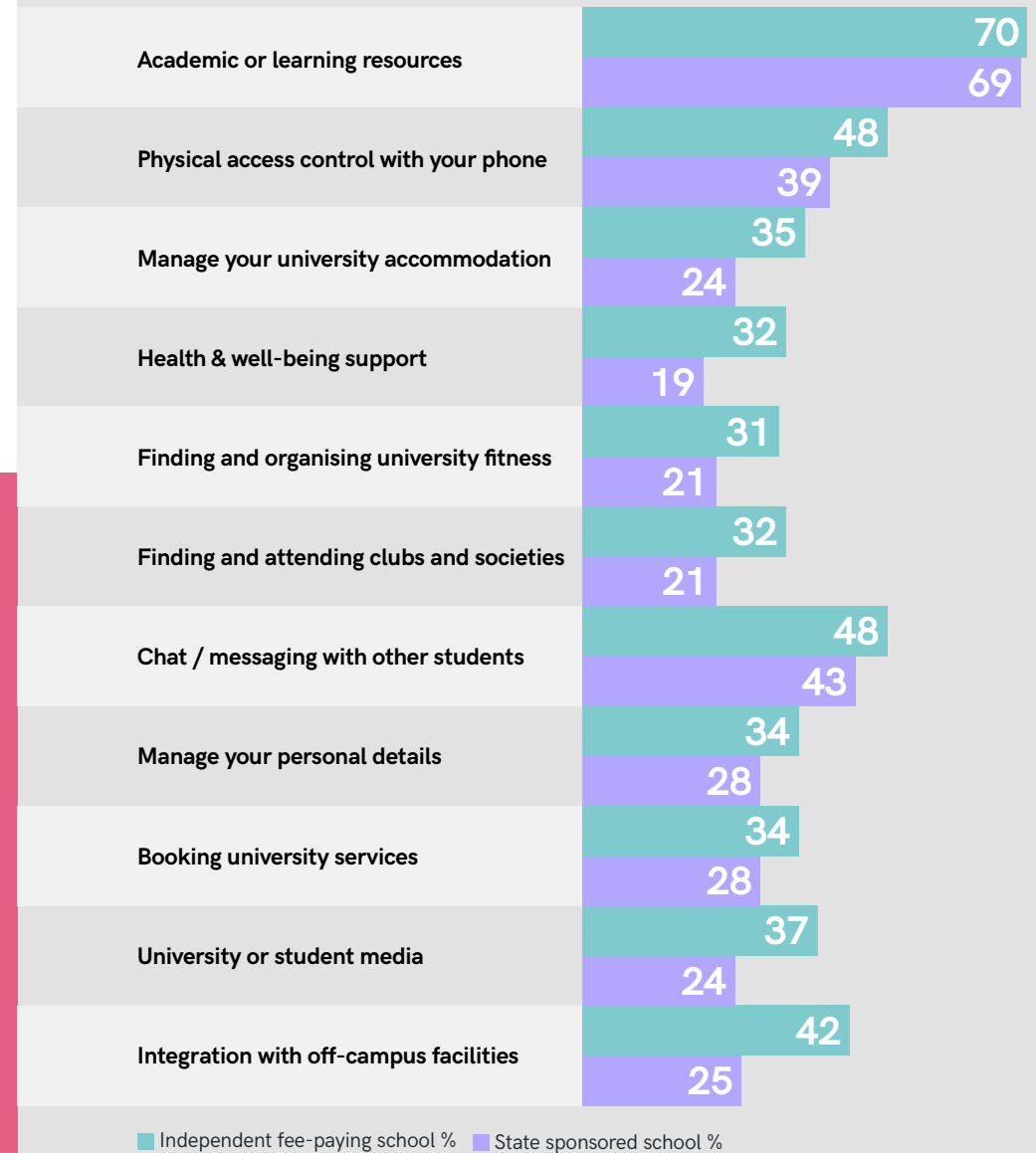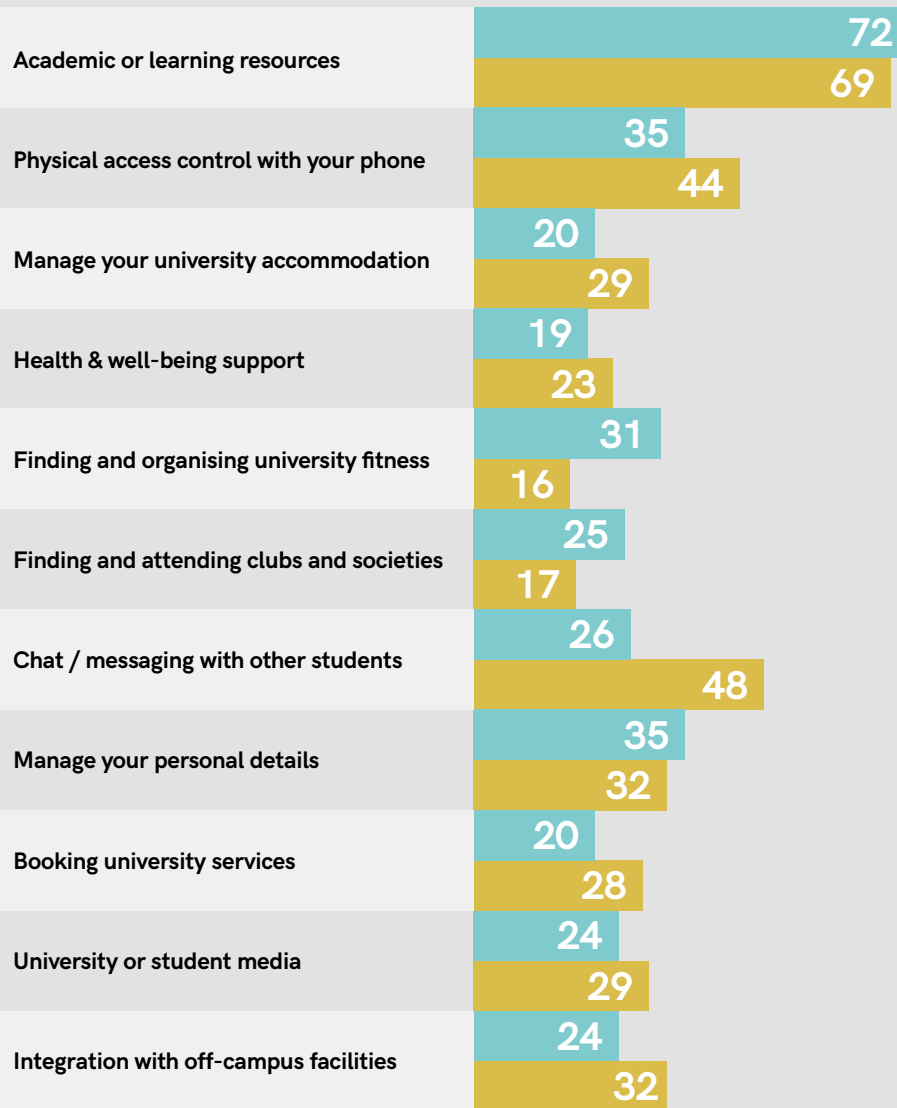Identified as black

91%
Identified as white

The proportion of students who say that a good digital experience helps them to perform better academically

Digital service use by school background

Academic or learning resources
70
69

Physical access control with your phone
48
39

Manage your university accommodation
35
24

Health & well-being support
32
19

Finding and organising university fitness
31
21

Finding and attending clubs and societies
32
21

Chat / messaging with other students
48
43

Manage your personal details
34
28

Booking university services
34
28

University or student media
37
24

Integration with off-campus facilities
42
25

■ Independent fee-paying school %   ■ State sponsored school %

Digital service use by parental social grade

Service	A-C1 %	C2-E %
Academic or learning resources	72	69
Physical access control with your phone	35	44
Manage your university accommodation	20	29
Health & well-being support	19	23
Finding and organising university fitness	31	16
Finding and attending clubs and societies	25	17
Chat / messaging with other students	26	48
Manage your personal details	35	32
Booking university services	20	28
University or student media	24	29
Integration with off-campus facilities	24	32

■ A-C1 % ■ C2-E %

Are students with a fee paying school background and those from higher socio-economic groups more likely to use digital services in their lives in general?

Were these students more likely to use digital experiences already, and therefore to expect them from their university? Is this an exposure of the digital divide that exists in society?

What does this mean for HEIs?

There are many possible factors that play into these differences, so universities need to dig further to understand exactly how their digital experiences are being used by different student demographics. They need to question the nature of the digital experience they provide and how they're enabling adoption, to ensure the necessary support for all students.

User research is critical to understanding the specific needs of student segments in order to design the right experience for them. This doesn't always have to be digital, but a consideration of how digital and offline channels can work together to provide the support that's right for the user is important.

Equally so is ensuring there are robust processes to remove any bias in the design of products. This means testing any new digital developments across all segments of the student population, not just those that are easy to access.

Pleasingly, some of the Universities we spoke to already acknowledge this and are on the case...

"Lots of our tools have been designed for 18 year olds living away from home for the first time, but we've got a very diverse student population, lots of people live at home, or have carer responsibilities, or are parents or are older – not everyone is the 18 year old undergrad, so we're doing lots of research around that"
Amanda Neylon, Nottingham Trent

What we heard from universities

There's an ambition to be more digital

There's an ambition to be more digital but often not the appetite for the organisational change required to make this easy.

Nearly all of the universities we spoke to had ambitions to develop their digital offering to students.

> "We have an ambition to be one of the most 'Digitally sophisticated universities' in the UK "
> **Amanda Neylon - Nottingham Trent**

Interestingly, most of the institutions we spoke to didn't have a specific digital strategy, instead many of them consider digital a way of enabling the wider university 2030 visions already in place.

> "We consciously don't have a separate digital strategy... Digital should be embedded in everything we do"
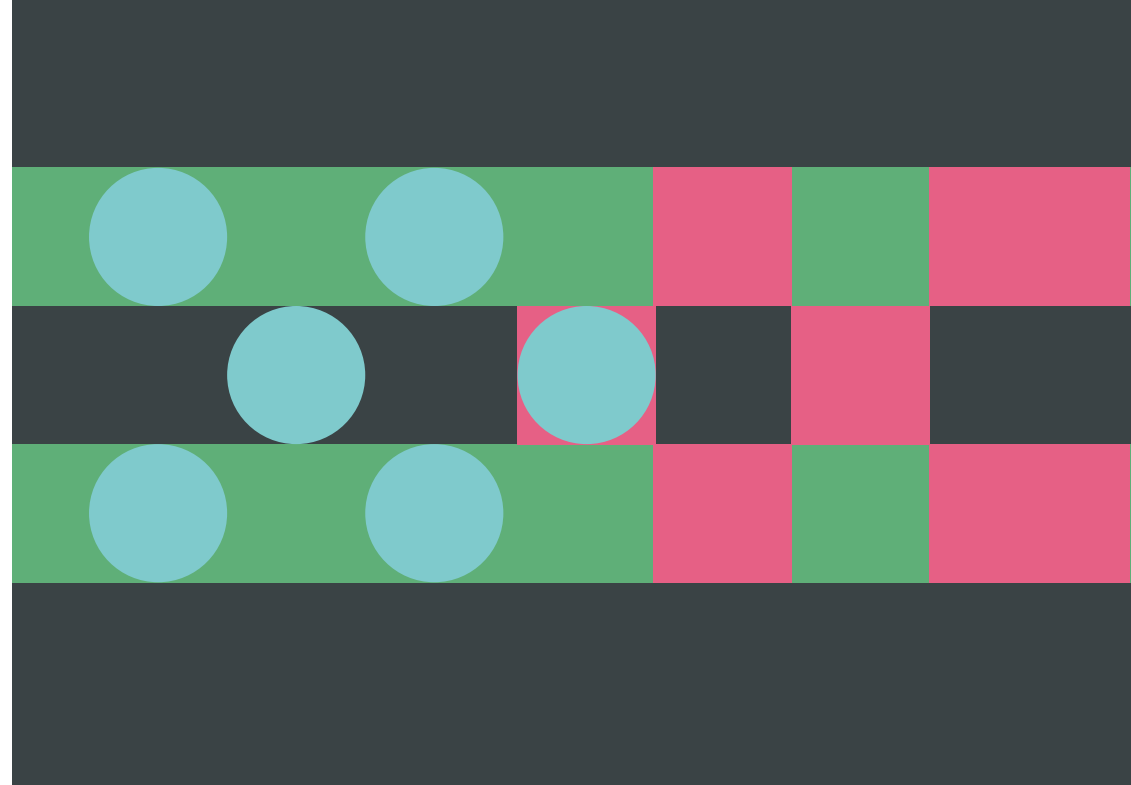> **Anonymous**

Strategically this is probably the right approach, but historically it has resulted in digital advancement being fragmented and led by individual technical solutions rather than the student experience. It also means that driving forward the overarching digital and technological change in some HEIs to support this can also be overlooked.

However, it feels like there is change in the air. Many of the institutions we spoke to are trying to approach things differently, and there are examples of successful digital developments. There are still many institutional blockers in place that make it hard (and sometimes impossible) to deliver the type of digital student experience HEIs aspire to.

A desire to change
While no-one we spoke to talked about active opposition to digital change, there was lots of discussion about organisational inertia and a lack of desire to do things differently.

Insufficient digital literacy among staff (academic and professional services) and a lack of understanding why different approaches are needed to develop and manage digital products, were cited by many as significant blockers. Significant changes needed to remove some of the other blockers are detailed overleaf.

"Great leadership, but lacking digital leadership skills – they need to know enough to question and challenge."

Anonymous

The pandemic forced change when it came to providing digital teaching and services and, for many other organisations across multiple sectors, provided much needed momentum for digital transformation. For HEIs however there is the risk that this important momentum is grinding to a halt now that face-to-face teaching has returned for many.

Silos and ownership of the student experience
All the universities we spoke to talked about their organisational structure and how that hindered the delivery of great student digital experiences.

Typically, ownership (and funding) of the student experience is dispersed across the organisation, resulting in specific digital solutions being developed to solve a specific challenge in the silo, with very little consideration given to the overarching student experience.

> "The student experience is fractured, they're asked to hop between different services and systems, to repeatedly enter their identity into various systems. That's less than ideal for them."
> **Digital Leader at Russell Group University**

In addition, without a central area championing a shared student experience, or indeed digital itself, there can often be huge friction between teams with shared ownership of products and channels, but with different agendas (often notably between technical and marketing teams). Reframing the challenge can help to break down those organisational divisions.

> "The approach we're looking to take is not trying to do everything at once but instead focus on building organisational capabilities. If you chunk the problem into capabilities...it allows focus and keeps us moving, cutting across silos and politics"
> **Louise Morgan, University of York**

Dedicated digital resource and skills
The scarcity of digital resource is not 'new' news and is not confined to the higher education sector. Almost everyone we spoke to talked about a lack of resource, with the lack of the right skills a particular barrier to delivering effective digital experiences.

The specific areas where there were noticeable absences in both numbers and skills were in the definition of user-centred products. Digital Product Managers, UX, UI and User Researchers were those whose absence was most often cited as holding back the delivery of great experiences.

> "People driving change are not HE people – we come from where people think users are paramount."
> **Digital Leader at Russell Group University**

Funding
Funding remains a challenge for most, with the structures and timescales often not suited to the funding pace required for digital product development and iteration.

Some universities are trying different tactics within this space. They're opting to fund multiple small, fast-paced discovery projects in order to identify and demonstrate value quickly and get projects off the ground, rather than progressing larger, weightier business cases that offer the financial scope to complete the entire job, but take significant time and justification to gain approval.

Some universities are trying different tactics within this space. They're opting to fund multiple small, fast-paced discovery projects in order to identify and demonstrate value quickly and get projects off the ground, rather than progressing larger, weightier business cases that offer the financial scope to complete the entire job, but take significant time and justification to gain approval.

What does this mean for HEIs?

Culture change of any description is arguably the hardest challenge for any organisation, however HEIs must harness digital mindsets and capabilities, with buy-in at the top, to enable the digital experience gap to be closed.

Those that we see getting it right are:
Considering the wider digital experience – acknowledging the need for a single student experience and providing the central thinking around what that could look like, while still allowing change aligned to this to move forward rapidly across the organisation. UWE for example has a central digital experience programme.

- Bringing in senior agents of change – we're seeing more Chief Digital Officers (or similar roles) who are there to drive forward the digital agenda independent of technical or marketing teams.

- Blending teams - bringing in external suppliers to fill specialist roles (UCD and technical) to ensure change at pace and the development of internal capability.

- Driving bottom-up transformation and demonstrating the value of digital change quickly through measuring and publicising its impact

6 There is a drive to be more user centred

Earlier in the report we highlighted the need for universities to better understand their customers in order to design inclusive digital experiences that truly meet their needs.

Historically there has been little evidence of this happening within the sector, but with a new breed of digital leader entering HEIs, there seems to be the drive to be far more user-centred.

> We've not always been great at UCD and understanding our audiences – we do ask lots of questions of our students but they tend to be quite specific... we're genuinely trying to be more user centred.
> **Amanda Neylon – Nottingham Trent**

> We are putting students at the heart – which we haven't always focussed on historically.
> **Louise Morgan – York**

Whether this becomes a reality will largely be down to the ability to crack the finance, resource and cultural challenges already highlighted. Focusing on the important rather than the shiny.

There's also an acknowledgment (at least among those we spoke to) that the areas that add most value to students aren't always the ones that get senior internal stakeholders excited, or provide the innovative focus of a conference talk.

While the temptation is undoubtedly there to adopt new platforms or focus on the 'shiny' from a marketing perspective, the universities getting it right are the ones identifying and addressing core student needs using digital.

> Digital experience should be a mix of shiny baubles and core functionality
> **Louise Morgan – York**
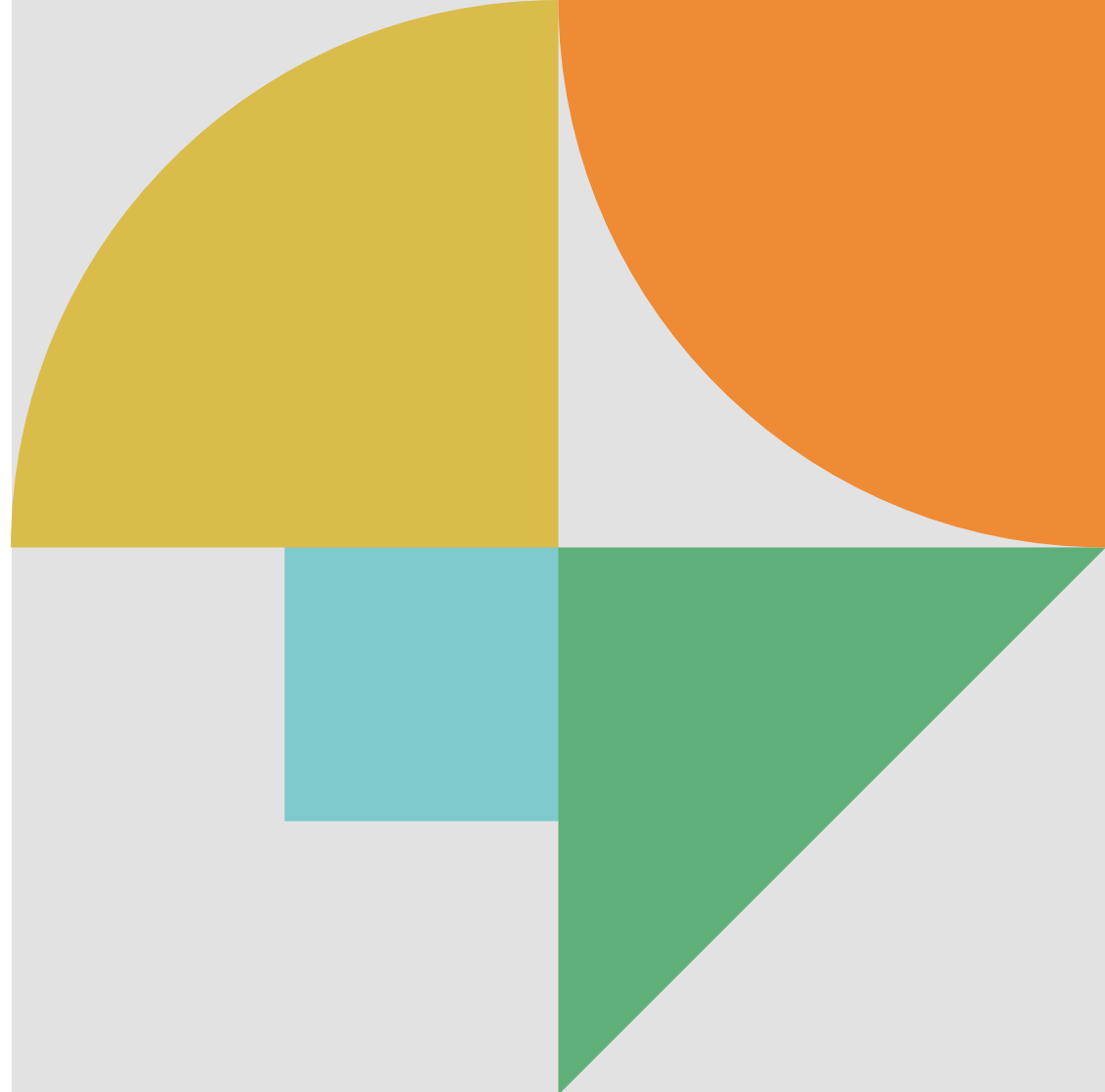
The unis getting it right are the ones identifying and addressing core student needs

There was also recognition that digital isn't always the right answer, and that HEIs must focus on adding value where the user needs it rather than where the organisation feels it should be. This is particularly important when it comes to wellbeing and mental health. Digital shouldn't be a barrier to the provision of human services, but rather should allow HEIs to take a more proactive stance in supporting students.

What does this mean for HEIs?

Universities have to focus on the needs of their users. There is limited time to act, so focusing on the areas that are most valuable is critical. The focus should be on creating an ongoing programme of insight, both qualitative and quantitative, to allow the most pressing opportunities to be acted on and existing elements refined.

Broad research is needed in order to focus on understanding all aspects of students' needs. If delivered correctly, the outputs of this type of research can be used across all areas of the university to ground areas of development.

All research needs to be representative of all students – ensuring all segments are covered rather than just the easily accessible or most vocal.

"We should be trying to deliver the best quality student experience not chasing after cool tech"

Mike Pearson, LSE

Universities are struggling to deliver digital change fast enough

Universities face two separate but interwoven challenges. They need to deliver digital products at pace, but they also require the infrastructure, funding and resources to continue to iterate those products beyond the initial delivery.

Delivering at pace
As covered earlier, student expectations are growing and universities need to be able to respond by delivering new digital experiences at pace.

This presents some very real challenges. Aside from the blockers previously covered around funding, and skills, most of the universities we spoke to talked about the challenge of delivering quickly for their students, whilst not perpetuating a fragmented, or substandard student experience.

> We have lots of vertical solutions that do one job very well in isolation"
> **Anonymous**

Off the shelf SaaS options are a quick and easy way to deliver change, but there's often little integration with existing systems, or consideration of the impact on the overall student experience which may already be fragmented.

> We have a tension internally between how much to we build ourselves to differentiate the UWE experience, which comes with a burden of cost to support and iterate, versus looking at off the shelf products that might be 'good enough', but can deliver at pace and are supported by the supplier"
> **Lucy Scott, UWE**

For the more astute universities, off the shelf also introduces a new problem - the need to balance uniqueness with pace, at a time where differentiation is critical for the challenger institutions.

"We have lots of vertical solutions that do one job very well in isolation"

Projects vs products

Most universities now acknowledge the need to deliver high-quality digital products, however they are not typically set up to maintain and evolve them post-launch.

Products are different to projects. They don't have a fixed scope and timeline, and it can be hard to get budget approval through the traditional way universities work. Universities we spoke to had issues on both sides of the equation.

When discussing cultural and organisational challenges, the acceptance of product over project – and the resulting implications – was one that most universities were still struggling with.

What does this mean for HEIs?

Universities need to embrace modern working practices to drive change at the pace required to satisfy student expectations. Again, those we see making real progress focus on:

- Using SaaS intelligently – using best of breed solutions to solve a problem, leveraging single sign on for a seamless user experience. Utilising middleware to enable data to flow between these systems, whilst keeping them loosely coupled for future flexibility.

- Emphasising automation and pace – using automation tools to build applications and cloud services, driving cost efficiency and increasing productivity. Productive teams deliver value more quickly and more often.

- Cross functional product teams made up of multiple disciplines – not limited to development resource only.
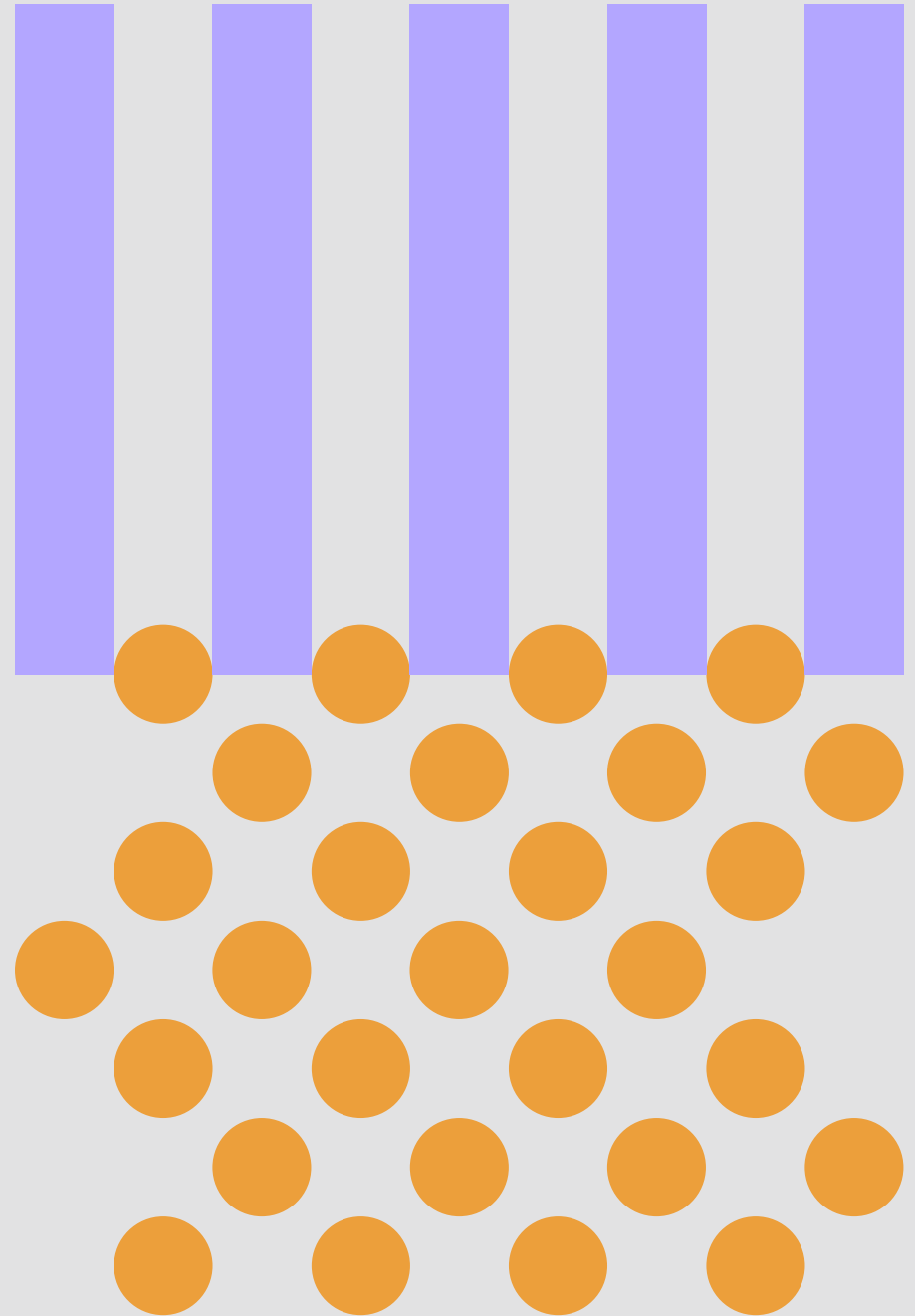
Everyone is battling with technical legacy

What does this mean for HEIs?

Everyone we spoke to talked of their frustration with the 'graveyard' of old systems within their institutions and its inevitable impact on delivering digital experiences.

> We have a legacy of old technology - which has been slowly accreted over time and has never really been architected. As a result, the ability to innovate in a way that doesn't add to that tangle is hard. We need to, and are, going through a process of simplification which is slow but necessary.
> **Digital Leader at Russel Group University**

This is a particular problem for higher education (more so than many other sectors) because systems are often procured in isolation to solve a specific need or challenge, often without the involvement of central technical teams.

For many there has been insufficient consideration given to enterprise architecture, resulting in a fragmented digital ecosystem that's very hard to bring together to support a single student digital experience, or expand easily into unmet areas.

The fragmented technical landscape presents a significant problem for those driving forward digital experiences. It's never going to be quick or simple to resolve, but we recommend working within the current technical landscape in order to move forward quickly by:

- Adopting a decoupled, composable architecture – to avoid falling into the trap of attempting to find one system that does everything, instead focusing on a more modular approach, identifying the right systems for specific roles and enabling data to flow between them through an intermediary layer. This also has the advantage of making it easier to swap out individual systems as needed.

- Developing a technical strategy for the enterprise – to steer future technology procurement, help prioritise the remediation of technical debt, and drive efficiency within the enterprise by ensuring technical solutions are aligned as much as possible.

- Ensuring that technical debt is identified, tracked, and remediated as part of normal business operations – by implementing modern abstraction layers between legacy systems and newer ones to buy the time to replace or rebuild the legacy systems. Every sprint should include time to focus on technical debt, even for greenfield projects.

Historically, there has been no consideration given to enterprise architecture, resulting in a fragmented digital ecosystem

Data is not being used to its full potential to drive the student experience

Digital experiences are a powerful tool. HEIs can use them not only to learn more about students' mindsets and behaviour, but also to provide them with personalised support.

An increased focus across all areas from academic performance to mental health and wellbeing means there is undoubtedly a huge opportunity for the smarter collection and use of data. Opportunities which can range from providing more personalised digital content and services to students, or enhancing the insight used to design new services, through to more direct uses such as providing timely intervention for students who need it.

Some of the universities are further down this data journey than others, but none are yet doing this to its full extent.

> "Because of complicated, complex digitally fragmented state - we're less able to harness data and insight to our advantage to better serve our users. We're on a journey to improving our data architecture so that this can unlock potential for our decision making and how we support and personalise the experience for our students and customers"
> **Lucy Scott - UWE**

So why are universities not doing more with data?
Unsurprisingly the fragmented architecture within HEIs makes it difficult to collect data and then use it intelligently to influence the student experience.

> Because of our complicated, complex and digitally fragmented state - we've been less able to harness data and insight to our advantage and to better serve our users. We're on a journey to improving our data architecture so that this can unlock potential for our decision making and how we support and personalise the experience for our students and customers
> **Lucy Scott - UWE**

For the universities slightly further down that journey, such as Nottingham Trent, it's the capabilities of people to interpret and act on the data that are holding back its effective use for interventions, even on a manual level. For others there is the issues of students themselves, and a level of scepticism around how data is being used.

> "Digital literacy prevents colleagues using the data and systems available for knowledge, interventions etc"
> **Lucy Scott, UWE**

Ultimately many senior stakeholders don't recognise the potential of data, so they're unlikely to set it as a priority across the organisation, or to drive the cross-departmental working to exploit its benefits. Some forward leaning institutions recognised this challenge and have brought in senior people from the commercial sector and consumer brands, where data-led and customer-centred thinking are second nature.

What does this mean for HEIs?

Even if exploiting data in the ways we've suggested seems like a goal for the far future, it's important that HEIs consider building the foundations now to allow future exploitation, both in terms of technology and internal understanding and buy-in.

Organisations should aim to build an appreciation of data and its importance at the most senior levels. They should look to move the conversation beyond IT, into experience and organisational benefits, communicating in ways that are engaging and relevant to those stakeholders, such as demonstrating an achievable future vision of student and staff experiences. This can provide a 'North Star' for the organisation.

In addition, as with many aspects of digital transformation, the answer doesn't need to be large, intimidating, organisation-wide change. Instead, HEIs can start the journey by delivering pockets of personalised content or communications, centralising some data and making small steps towards a single customer/student view. Achievable changes such as these can often demonstrate visible success quickly, helping to gain wider buy-in and understanding.

That said we would recommend the creation of a data strategy and realistic roadmap for the enterprise. Steps that can be taken immediately include setting data standards and ensuring new applications are able to share data to support future ambitions.

Next
steps

Closing the experience gap

The Digital Experience Gap highlights how, without change, student expectations will outstrip universities' ability to keep up. Those students with the greatest need, and who would benefit the most from high-quality digital experiences, will pay the price.

Universities need to acknowledge and act upon the themes highlighted in this report. Taking on board the insights and acting on them can reduce the Digital Experience Gap and enable universities to lead rather than follow even the highest student expectations.

Once the foundations of digital experiences are in place, the real opportunities are centred around making smarter use of data – enabling real-time, automated, personalised and intelligent communications.

Some universities are striving to lead the way in digital, taking the whole sector forward with them. Most are struggling with same issues – how they choose to sidestep them and move forward will separate those who prosper from the rest.

We must continue to look outside the sector for inspiration.

Meanwhile, higher education generally is playing catch up with other sectors, so we must continue to look outside the sector for inspiration.

With so much opportunity to use digital for transformative change in higher education there's certainly an exciting future ahead.

To discuss how we can close the experience gap for your students and drive digital transformation at your university, contact:

education@greatstate.co