The 2018 digital university

Staying relevant in the digital age

Talking Points

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Introduction

The very nature of Higher Education, how it is delivered and the role of universities in society and the economy is changing, and will continue to change significantly in the next decade. Universities are competing globally for students, academics and funding, and only those that stay relevant and leverage new digital capabilities will benefit in this digital age.

Our recent Talking Points, 'The 2018 university – making the right choices, making it happen'[1] considered how, in an increasingly competitive Higher Education sector, universities need to differentiate themselves through new and emerging business models – one of which was to become a Digital Leader.

Many universities are developing specific digital strategies in reaction to the massive shift towards using new technology, yet lack the vision, capability or commitment to implement them effectively. As a result

many institutions then invest heavily in IT systems that don't deliver the anticipated benefits and outcomes. These universities fail to appreciate that they don't need a digital strategy – just a business strategy that is fit for the digital age.

Staying relevant in the digital age requires a strategic vision for the whole institution, a vision that is led by senior management with support from many departments, not just IT. A lack of digital literacy amongst academics, students and staff means that early engagement and interaction to build the right support networks is essential to achieving sustainable change across the entire institution.

Universities that are not equipping themselves to adapt to this new digital era will be left behind. Whether you want to be a digital leader or simply stay relevant in the digital age, the time to act is now.

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1   PwC, 2015, The 2018 university – making the right choices, making it happen www.pwc.co.uk/2018university

The game has changed. Permanently

Digital is here and it's here to stay. For example: always connected mobile devices are ubiquitous; social media is the primary communication channel for many; new cloud computing capabilities allows the creation of new tools and products at a rate not previously seen; geolocation sensors create new tracking and targeting opportunities; digital is now the first choice for media consumption – the list goes on. This disruption is impacting and changing Higher Education and academia and the change is set to continue.

Students have become customers who bring their own digital world expectations to university. These customers are more savvy, better connected and more vocal than ever. Many have preconceived ideas of how universities will engage directly with them and what outcomes they can expect in return for their investment. Students increasingly see universities as the main means of securing their future employment rather than simply learning and self-development. The value proposition for universities is therefore changing and this means that employability and the student experience is more critical than it has ever been.

Although MOOCs (Massive Open Online Courses) have yet to gain the traction that many anticipated, a new wave of innovative teaching techniques has arrived and academics are exploring new methods of teaching that are underpinned by digital technologies. MOOCs are far from being the end of the line for digital disruption in teaching methods. As a generation that is more digitally sophisticated than any previously, students expect to be taught and to learn using methods that suit their personal preferences and at a pace that they have chosen, not one that is mandated to them.

This rapidly evolving young audience takes on new tools and apps at a pace that even the most agile university struggles to keep up with. And as competition from credible substitutes to Higher Education, such as Higher Apprenticeships, continues to grow, as does the fierce competition to attract the best students in both the UK and internationally, universities need to demonstrate that they are able to provide the digital experience that students now take for granted. In today's digital age where the voice of the customer is more prevalent than ever, turning your customers into advocates for your university is one of the most powerful marketing tools available.

The power of emerging technologies

New and emerging technologies such as smart mobile/wearable devices and sensors, cloud-based IT and advanced analytics are changing business and operating models across all sectors including Higher Education. These technologies present new opportunities to improve or redefine the university experience and campus through activities including teaching and learning, research and working on complex projects with other universities and partner organisations.

For instance, imagine a 'Digital Campus' that senses when students, tutors, professors and other university staff are on campus and then provides them with relevant interactive information on their devices to help them do their jobs better. Or, imagine a scenario where virtual and augmented reality is used to give prospective students a richer digital experience before and during an open day or to make different campus environments digitally explorable for students in their everyday lives. Alternatively, consider a university in which telepresence solutions are routinely used to support better remote working or where artificial intelligence is used to intelligently, accurately and rapidly respond to queries coming via the web or by phone.

Advanced analytics is also transforming what universities can do for students, professors and tutors. A wealth of data is now being collected from a range of internal systems and external sources such as mobile and wearable devices that can be analysed and presented back to the user in an interactive and highly visual fashion. Universities that are able to harness the potential of data by analysing it intelligently and using it to deliver outcomes, such as improved academic performance, employability rates or student retention, will give themselves a considerable advantage.

Finally, cloud-based IT is transforming the art of the possible and is delivering a step change in terms of agility for those organisations that are able to adopt the modular and scalable approach to IT that it offers. New ideas can now be tried out with a minimum of upfront investment, and this reduction in the 'cost of curiosity' means that trying to predict the future is becoming almost impossible. It is far more important to invest in gaining the true agility that comes as a result of being able to rapidly respond to changing market conditions and take advantage of the new opportunities presented in the digital age.

All of this can be the difference between a 20th century university and a 21st century one. We expect that over time, the most desirable students will be attracted to those universities that embrace the digital age on their terms rather than being overwhelmed by it. This means that being aware of new trends in emerging technologies and having the ability to rapidly harness their potential to drive improved outcomes will become a key differentiator within Higher Education.

What are the barriers to going digital?

Many universities lack a clarity of vision on the disruptive impact of digital on Higher Education or are unable to respond effectively. Common reasons can be:

- Understanding that universities have a new breed of customers that they need to engage with, and competitors that they need to compete with, in new and different ways

- An inability to simultaneously evolve existing ways of working whilst adding new techniques, tools and capabilities

- A culture that inhibits the rapid development and release of new technology

- A lack of trust in digital services and cloud technologies, or concerns about their reliability, security and resilience

Another major inhibitor to digital uptake in universities is digital literacy. By this we mean the knowledge, skills and confidence to use the available technology and devices to deliver the outcomes you want. Academics and staff can be fearful of using tools in which they lack confidence and are nervous about engaging in digital spaces where they can feel at a disadvantage to students (or 'digital natives', who have grown up around technology). Despite these digital natives being always-connected, with mobile devices to hand, they seldom possess the skills to use this technology effectively in a learning context. So universities have a real responsibility to embrace digital, particularly when teaching, to ensure students are getting the most from new technology.

Digital technology has enabled many innovative teaching techniques such as flipped classrooms, richer distance learning experiences and hybrid (a combination of online and face-to-face) teaching models. However, even though they don't always like to admit it, many universities and academics view teaching as being secondary to research.

Getting the most out of learning platforms such as Blackboard, Canvas or Moodle requires a significant investment of a university's time – an investment that is only made when teaching is recognised as a valued activity. As a result, many learning platforms have simply become repositories where lecture notes are stored for download, delivering little benefit for the student or the provision of data for use in analytics. With the government announcing the imminent introduction of the Teaching Excellence Framework (TEF) the need to improve is now even more heightened.

In addition, university IT departments who need to support digital initiatives are not always well equipped to do so. Inflexible policies, aging infrastructure and inexperience working with digital agencies can delay or prevent new digital initiatives from taking shape. Academics, staff and students that try and use digital technology in new and innovative ways can often be 'shut down' by IT departments fearing a loss of control or with concerns about risk and compliance.

It's not just all about barriers to embedding and using new technology though. Having the right voice on existing social media platforms and being able to respond quickly, consistently and in the right tone can be a significant differentiator in this space. Many universities though are unsure of how to leverage these communication channels effectively and what the appropriate controls should be. Often this results in an over-complicated approval process for social media postings, deterring academics and staff who have interesting or unique points of view. The social media postings that do make it through the bureaucracy can often be stale or overly corporate, creating a jarring social media experience for many.

How to successfully harness digital

1 *Understand that digital transformation affects every part of the university, not just IT*

The idea that digital is all about technology is a common misconception. Of course, technology plays an important role, but it is simply the canvas upon which the digital experience is created.

Many universities looking for a digital quick fix, procure new technology platforms via their IT departments without first understanding the wider role of digital across the institution. IT-led programmes seldom deliver the anticipated benefits and can disadvantage universities while they wait for outcomes that never materialise.

IT departments need to be involved, but involved in the right way. Cross-department transformation programmes that are driven primarily by those who will receive the benefit, with support from IT and the right enabling technology, are necessary to achieve sustainable outcomes.

2 *Link all digital activity to the university's overall vision and strategy*

All successful change programmes need to be underpinned by a clear vision and strategy defined by senior management. Digital is no different and clarity on the anticipated benefits and how these tie back to the overall strategy is necessary for success.

A lack of overall vision can lead to disjointed programmes and this siloed thinking leads to siloed IT systems creating an infrastructure that is complex, inflexible and unable to react quickly in a changing marketplace. Before staff and academics can buy into new strategic programmes to improve digital capabilities, they need to understand why the programme exists and what their role is in achieving the strategic outcomes.

Open and transparent communication is essential to building trust, as is the need for those involved to feel part of the change – not that the change is being 'done to them'.

3 *Invest in communities built around willing and capable digital innovators*

To make digital a success, universities need to invest in giving staff, academics and students the right training in digital technologies and combine this with effective support networks. This is an ongoing commitment, and those institutions that, for example, simply provide students with an introduction to a series of software applications during Fresher's Week with no follow up, should not expect to achieve a significant uptake in digital technologies from those students.

Staff and academics need to be given the freedom and flexibility to try innovative new ways of working, using digital technology without fear of criticism or retribution. Peer groups that provide support on digital technologies and techniques are necessary to embed digital literacy for academics, staff and students. Innovative thinkers who are pushing the boundaries of what can be achieved through digital technology should be encouraged to act as ambassadors for these support groups so they can act as a catalyst for change and feel that their actions are appreciated and encouraged.

4 Adopt a design approach that focuses on customer needs, not the university's internal structure

Delivering a great customer experience means listening and being agile enough to react to criticism and feedback. Designing the digital experience around the way the university is currently structured and behaves rather than focusing on the needs of the end user can lead to out-dated behaviours, such as issuing email addresses to students who don't use email regularly and already have an email address anyway. Seeking honest opinions through surveys, forums and opinion polls brings valuable insight as does information obtained from official and unofficial social media groups. Monitoring what people are saying about your competition can also be highly revealing and can identify new opportunities for differentiation.

Capturing and analysing this information and using it to challenge the status quo can identify areas where customer service could be improved and how a unique position within the market can be developed even if this requires innovation and the creation of new team structures.

The power of social media – are you managing it effectively?

Academics and staff don't automatically know how to use social media for the benefit of the university without the appropriate guidance and support. Academics can be wary of entering 'personal' social spaces, such as groups set up by students on Facebook, and university representatives who appear defensive when negative comments are made on social media platforms, can give the wrong outward impression.

Unintentional side effects of well-intentioned actions can have a similarly negative impact. For instance, an academic or tutor entering a lively and interactive social media community of students discussing course content, can bring the debate to a premature end as they can be seen as a subject matter expert rendering further debate unnecessary.

Senior management and marketing departments fearful of the lack of control resulting from allowing academics and staff to post in social channels or blogs can impose rigid regulations, or review processes that inhibits and stifles creativity.

Universities that have embraced the four principles we have outlined are aware of the power of social media and the positive impact that it can have on potential students, current students and alumni. A university with a rich social media presence can keep followers up-to-date with relevant information, and provide an alternative means of interacting with the institution.

A strategic approach to embedding social media will look different for each individual institution. Removing barriers and empowering individual university departments to create their own voices on social media can help bring those departments to life digitally within the context of the university's overall vision. This acts as a catalyst for the further uptake of new digital tools and techniques.

A community is needed to support and maintain this transition and those universities that are leading on this digital initiative have created Digital Hubs or Social Media Command Centres at the heart of the campus to act as a central point for the digital community. In turn this provides the support and advice necessary for academics and staff that are less comfortable with the use of social media in an academic context. This approach embeds best practice policies and behaviours without the need for an overly bureaucratic process or for individuals to feel that they are being watched and monitored.

The digital blueprint

A digital blueprint for the future

The modern university has to play many different roles but must also have a well-defined focus that sets it apart from the competition. Finding the right balance is the key to survival and success.

For example, students have changed dramatically. They are now paying customers and bring with them a set of demands and expectations that modern Higher Education providers must meet and exceed. For staff working in Higher Education, the digital age has created huge new challenges and opportunities. Teaching and learning, research, working conditions and reward are all changing fast.

Our digital blueprint considers how being digital in everything you do will connect a university directly to its customers and staff.

There are many aspects to becoming a successful digital university, and there is not a single 'one size fits all' answer. There are however, a number of key themes that we see over and over again in those institutions that are leading the way on the digital agenda.

Students

What to study?
Prospective students can easily find information about courses and drill down into richer course content and communities

Where to go?
Students have a range of options about where to learn and how to consume learning materials

Simplify enrolment
The enrolment process is clear, and progress can be easily tracked. There is not a 'communications gap' between offer acceptance and the course commencing

Maximum impact in the first 100 days
Makes queries easy and reduces uncertainty for new students

Academic student support
Supports students with academic attainment and achievement using digital channels

Insight & analytics student support
Students understand their performance and potential from collated data

Postgraduate research support
PGR students track their progress and collaborate with other PGR students

Student life platform
Highlights student communities, extra-curricular activities and discounts in the local area

Employability and further academic options
Students are prepared for life after their undergraduate degree

Staff and academics

Professor/tutor support
Supports the professor/tutor with teaching activities

Insight & analytics professor/tutor support
Professor/tutor understands their students' performance and potential from collated data

Professor support
Supports professors with publications and research activities

Funding & collaboration support
Encourages collaboration across disciplines for research opportunities and publication production

Professional services support
Enables staff to manage the 'business' of the university effectively

'My portal' self service
Provides all staff with a digital way of managing their key tasks

University

Branding
The university brand is used effectively in digital channels to give the institution a 'personality'

Attracting students
The best students are attracted by understanding how the university can help them achieve their goals

Attracting professors
The university attracts the best academic talent by being seen as a leader

Attracting professional staff
Enables the university to attract the best professional services talent

Attracting partners & funding
Builds and manages partnerships with other institutions

Co-creation with business
Establishes mutually beneficial partnerships with business

Alumni support & community
Alumni maintain a connection and sense of community with the university

Content management
All content is digitised and stored securely

Digital in 'everything we do' – embedding digital across all university departments

As well as embracing a digital blueprint for customers and staff, thinking digitally also means taking a whole departmental approach across an institution – this is the only way that the levels of innovation and cultural change required to become a digital university can be achieved.

The digital agenda needs to be driven by senior management who in turn need the support of individual departments to take ownership for their own contribution towards achieving the necessary outcomes and tying individual activities back to the overall strategy and vision.

Estates & Facilities:

- Create flexible digital collaboration spaces with access to video screens and power and provide good wireless connectivity on campus and in halls of residence

Procurement:

- Support a range of contracting models and frameworks that give media agencies scope to work using new flexible delivery and implementation techniques

IT:

- Become a forward-looking department that tracks new technology trends and advises on how these can be used to deliver new capabilities and outcomes for the university

- Revise policies and procedures so that the innovative use of digital technology by staff, students and academics can be encouraged

- Make access to information and systems as open and accessible as possible so that data can be consumed in new and innovative ways

- Leverage cloud technologies to drive innovation and the fast turnaround of new digital capabilities, products and systems

HR:

- Develop employment contracts and Continuing Professional Development (CPD) programmes to support the ongoing development of digital literacy skills

- Support teaching as a valuable role on a par with research to help drive innovation in new teaching methods and techniques that leverage digital capabilities

Faculties & Schools:

- Develop optional or mandatory modules within courses that promote digital literacy to students

- Support those academics that are leading the way in the development of digital skills and developing new innovative teaching techniques, to become advocates that support the promotion of digital literacy within the wider academic community

- Encourage the advanced use of learning platforms by academics to deliver better outcomes for students and the university and to capture valuable learning data for use in analytics

- Help to build support networks for academics who are less confident with digital technologies

Marketing:

- Engage with staff, academics, students, potential students and alumni across a range of social channels, web sites and apps to deliver a personalised service that represents the university's culture

- Determine how the university's brand is perceived in its target markets through surveys and monitoring social channels and react accordingly to reflect the preferred perception of the institution

- Relinquish some control on social media channels to encourage innovation and the creation of digital communities. Support the creation of digital communities between individuals at different stages of their academic journey (such as applicants and alumni) to help provide insight of life at the university or on specific courses

- Use captured data and analytics to identify target customer segments and develop personalised marketing messages for each

Library:

- Help the creation of digital literacy support networks for students by providing input and a space for students to collaborate

International Office:

- Use digital channels to help overseas students build a better sense of the university environment

- Engage with overseas students and international agents through social media and other digital channels such as dedicated apps

Admissions:

- Use digital to engage with and inform applicants on progress of applications and maintain contact with applicants after they accept and before they enrol, to give them a sense of what to expect at the university and how they should prepare

- Use insight and analytics to identify and increase conversion rates of the most desirable applicants, particularly when it is anticipated that they will accept an offer
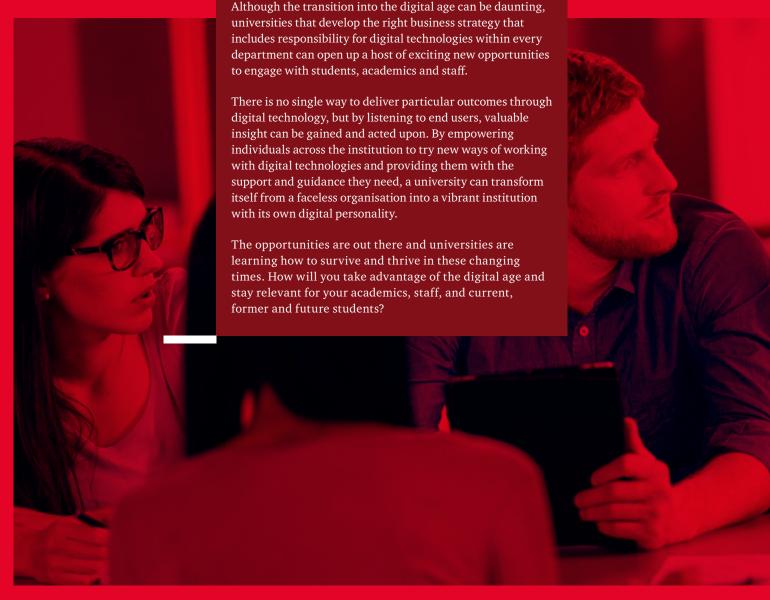
Finance:

- Help to develop budgets that support an Operational Expenditure budget model that is required to strategically leverage cloud technologies

Student Services:

- Develop insight and analytics that can help to identify struggling or disengaged students so that targeted interventions can be made and in turn improve retention rates

Conclusion

Although the transition into the digital age can be daunting, universities that develop the right business strategy that includes responsibility for digital technologies within every department can open up a host of exciting new opportunities to engage with students, academics and staff.

There is no single way to deliver particular outcomes through digital technology, but by listening to end users, valuable insight can be gained and acted upon. By empowering individuals across the institution to try new ways of working with digital technologies and providing them with the support and guidance they need, a university can transform itself from a faceless organisation into a vibrant institution with its own digital personality.

The opportunities are out there and universities are learning how to survive and thrive in these changing times. How will you take advantage of the digital age and stay relevant for your academics, staff, and current, former and future students?

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As well as bringing our insight and expertise to this sector, we contribute our thinking and experience to the public policy debate through our Public Sector Research Centre. To join this free online community, go to **www.psrc.pwc.com** and register today for regular updates on our research and analysis.

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