

The Path Towards Digital Universities

By Prof. Kai Peters, Pro-Vice-Chancellor, Coventry University

emStream Insights Series



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As Pro-Vice-Chancellor of Business & Law at the Coventry University Group, Kai is responsible for the strategy and alignment of the portfolio of business and law activities across the group. Additionally, Kai does his best to chip in with bright ideas on overall university success.

While universities are going through considerable changes, the current COVID-19 pandemic has established the critical role of technology in course delivery. The impact is much more profound than visible at first glance. To reimagine a digital university, it is best to visualise the student journey as a mental map from initial exploration to joining the university, studying successfully, graduating and following a career path. It is also increasingly common for students to return to university for further studies. The relationship between institutions and students is complex. While “co-makership” is critical to success, a student is also increasingly a lifetime customer who needs to be treated as such.

Technology is transforming all areas of a university life

The most important success factor for universities is the recruitment of local and international students. Technology has provided student acquisition with a lot more opportunities. Customer relationship management (CRM) products such as Salesforce enhanced with increasingly sophisticated AI allow us to target and communicate with audiences in an

exceptionally personalised way.

Under the Covid-19 pandemic, the delivery of high-quality education to students confined in their homes has become the most pressing challenge. While using tools such as Zoom or Microsoft Teams ensured business continuity by enabling classes to resume, they are only a stop-gap solution. To provide a full learning experience, we have begun to use a platform called Aula. Its central concept is to create learning communities for students, enabling peer-to-peer interactions that are such a core element of the learning process. This has resulted in an extraordinary increase in technology adoption by students.

Additionally, universities are aspiring to provide the best possible selection of electronic books, library resources as well as compelling simulations and participatory applications such as Padlet. We are in the process of adapting our course material to become fully online “Future Learn” enabled so that it can be delivered as a blended course delivery program, either as MOOCs or full modules. From a content perspective, technology has made it possible to provide much better access to library and learning resources.

“Research and teaching” is another area that benefits greatly from a more intensive use of technology. The ease of application highly depends on subject areas. Delivering business education through online tools is considerably easier than doing so in areas such as healthcare where learning relies heavily on lab work and hospital internships. Similarly, from a research perspective, the humanities primarily use library-based tools whereas science is heavily reliant on experiments in labs.

In terms of digitalisation, the greatest scope for transformation may actually be within the area of administration. This function and underlying systems allow the university to be managed effectively. Areas such as HR, finance, core registry, student assessment and record keeping can actually become completely paperless. Traditionally, investment in these systems has been somewhat neglected but the tools available today could truly revolutionise the customer experience for students and faculty alike.

Transformation requires a roadmap and good implementation capabilities

Managing a broad-based, multi-location university group is only possible through significant investments in IT. Most universities are going through a period of technological overhaul that requires a strategic approach in order to deliver the benefits sought. We have just approved an application architecture roadmap which takes us through to 2023 and touches a broad range of areas from student assessments to corporate functions. A key goal is to implement SaaS products that allow global access across our group wherever possible.

We also want to rationalise the technology portfolio and halt the invariable proliferation of disjointed applications performing similar tasks. Realistically, universities are probably behind the curve as most global organisations have already addressed these challenges effectively. The multi-location, multi-activity nature of universities is a more recent phenomenon that has made the need for a portfolio approach more pressing.

The COVID-19 pandemic has also increased overall cohesion and our comfort levels with managing distributed teams. Blogs such as [distributed.blog](#) from Automatic – the company that created WordPress – are truly a source of invaluable information. We are actively working with our students to increase their comfort levels with technology and distributed learning. These skills will become increasingly important due to globalisation and factors such as climate change that are likely to reduce mobility across the globe.

In terms of implementing digital transformation projects, “timing” presents an enormous challenge for a university. In our case, the complexity of change covers over 40,000 students, the entire portfolio for higher education and course start dates that spread out across the year. There is really no specific period during which systems can be replaced without impacting users. Project management is therefore a critical competency to build. Once a pilot has cleared its initial assessment phase, our environment forces project completion within a short timeframe. As an example, we will have converted all course modules to the new Aula environment in just over three months this summer.

What does the university of the future look like?

The best way to answer this question is to think about the range of activities a university performs. Teaching is clearly being changed forever as the era of large lecture theatres and a faculty member as the source of all knowledge is ending. Content chunks will be delivered online. Working with students in smaller discussion-based groups, whether face-to-face or online adds immense value. While a faculty member may still design the course and film the lectures, the need for learning facilitators and community managers is clearly increasing. This may lead to dividing faculty into groups focused either on active research or on teaching and facilitation.

From the perspective of the student journey, the pandemic has regrettably reduced the quality of social life on the campuses. However, from a teaching and learning perspective, the upsides are location independence, the ability to study at one's own pace and review material at leisure. Access to speakers from around the world and collaboration with students at a click of a button has never been easier.

The availability of technology tools and the COVID-19 pandemic have accelerated trends that were already well established for years. In higher education or other organisations, most of us would rather dispense with commuting, participating endless face to face meetings, or spending most of our time dealing with office politics. A blended model is coming our way.

In this world, people are freer to choose where to live and work and organisations can recruit staff from an unlimited choice of locations. Technology advances will certainly continue to accelerate this trend.



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