



## REGIONAL CASE STUDY

# Driving Innovation in U.K. Universities Through Digital Transformation

### RESEARCH BY:



**Joe Dignan**  
European Head,  
IDC Government Insights, IDC



**Matthew Leger**  
Research Manager, IDC Worldwide Education  
Digital Transformation Strategies, IDC



**Rimal Likhari**  
Research Manager,  
IDC Government Insights, Europe, IDC



# Table of Contents

*Click on titles or page numbers to navigate to each section.*

IDC Opinion .....	3
Methodology .....	4
Situation Overview .....	4
Key Challenges and Success Factors .....	7
Adapting to the Next Normal for Hybrid Learning .....	7
Business Continuity for Physical and Digital Campuses .....	8
Investment in Data Analytics and AI to Adopt New Business Models and Enhance Services .....	8
Developing Adaptable, Intelligent, and Collaborative Workplaces .....	9
<b>Case Study: London School of Economics and Political Science</b> .....	<b>10</b>
<b>Case Study: Coventry University</b> .....	<b>13</b>
Five Key Actions for Progress .....	16
About the Analysts .....	18
Message from the Sponsor .....	19

# IDC Opinion



## Digital Transformation and Resiliency Key to the Success of Higher Education Post-COVID-19

The COVID-19 pandemic served as a catalyst for digital transformation (DX) in the higher education sector of the United Kingdom. Effective adoption and use of technology will be crucial to attract and retain students, faculty, and staff while maintaining relevance in the digital-first world. Leading institutions in this new era will not just be those that are digitally transformed but also be those that are digitally resilient — in other words, institutions that build the digital infrastructure to not only adapt and respond to disruption but also capitalize on changed conditions. For instance, institutions that are equipped to enable a seamless shift between in-person and remote experiences will be able to ensure continuity of service in the face of disruption while meeting rising student demands for remote or hybrid-first education experiences.

Digital resiliency goes beyond the classroom to encompass the whole university experience. It is no longer enough to invest in technical capabilities to move classes online during bad weather events or emergencies; it is equally important to ensure that holistic student support services are digitally accessible, such as student mental health services. The next normal in higher education will be defined by the institutions that put students, faculty, and staff at the centre of their transformation.

Further, technological advancements in the workplace, including the adoption of automation, machine learning, and artificial intelligence (AI), are increasing the pace at which skills become obsolete. This has resulted in a broader societal shift toward lifelong learning, where workers will find themselves weaving in and out of education/training programs more frequently throughout their careers to remain competitive. This is forcing higher education institutions to rethink traditional business models, recruitment and enrolment strategies, student services, and long-term degree programs.

In essence, the higher education industry in the United Kingdom is undergoing a tremendous amount of change. Higher education leaders have embraced the opportunity provided by COVID-19 to develop and execute DX strategies that are not defined by budgetary or cost-cutting priorities but defined by digital resiliency, student well-being and success, hybrid-first experiences, and lifelong learning. In navigating this change, partnering with a vendor that offers software-defined management and deployment options, while respecting legacy systems requirements, can offer multiple benefits. These can include real-time awareness of student well-being, automation to ease staff workloads, and personalizing student services and experiences to improve student outcomes.

## Methodology

IDC examines the key trends, challenges, and success factors of DX in the higher education sector of the United Kingdom. This paper was developed using existing content from ongoing research in IDC's worldwide and regional Education DX Strategies practice. In addition, IDC conducted interviews with DX leaders at the London School of Economics and Political Science (LSE) and Coventry University.

## Situation Overview

During the pandemic, higher education in the United Kingdom experienced a boom in the adoption of technology. Beyond the need to mature technological capabilities, higher education leaders are challenged by the growing need to adopt new business models, enable remote and hybrid education experiences, support a shift toward lifelong learning, attract and retain students and employees, and reduce costs.

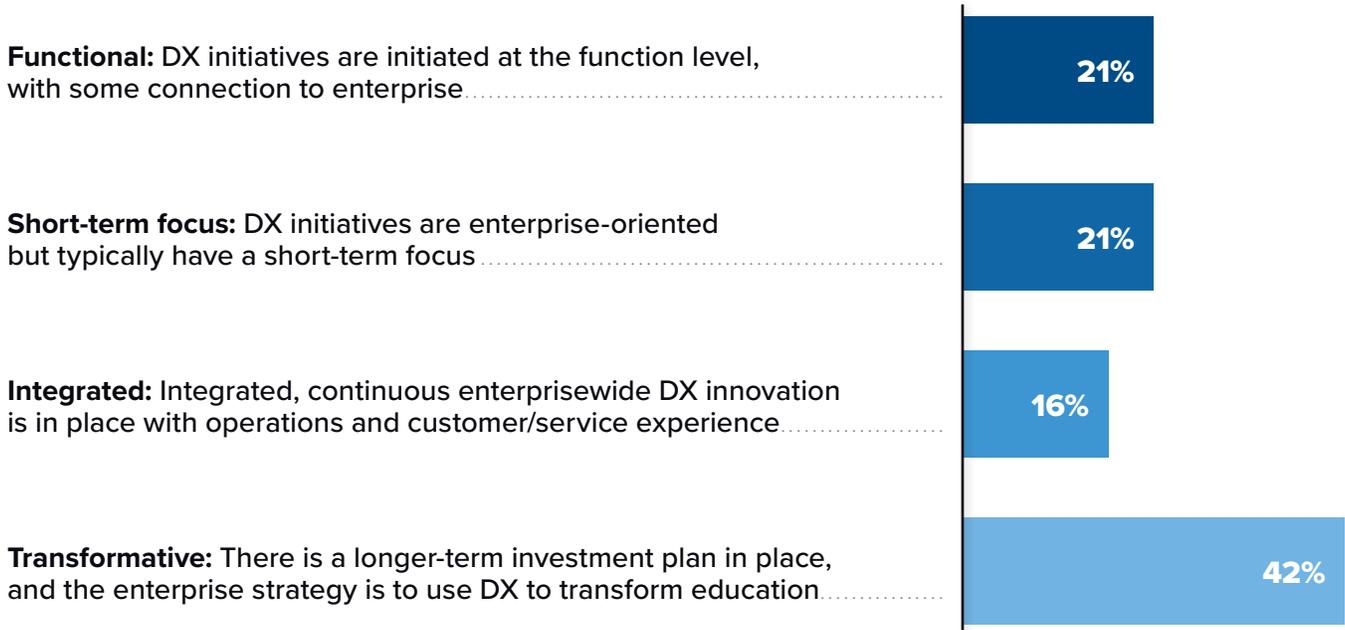
Are universities ready for this future? Almost all U.K. higher education institutions have made significant investments in technology in recent years to digitally transform how teachers teach, how students learn, and how administrators run their schools. In essence, almost all U.K. institutions have digitally transformed in some capacity. However, the progress has so far been uneven. IDC EMEA's *2021 European Industry Acceleration Survey* suggests that 42% of U.K. higher education institutions still lack enterprisewide, integrated, or longer-term investment plans (see **Figure 1**, next page).

**FIGURE 1**

**Digital Maturity Progress Is Uneven**

(% of respondents)

**Q. How would you assess digital transformation at your institution compared with your peers?**



n = 23 U.K. higher education respondents, Source: IDC EMEA's *European Industry Acceleration Survey*, April 2021

As the case studies in this paper highlight, education institutions that had adopted a more integrated and transformative approach to their DX strategy pre-pandemic continue to better manage the sudden shift en masse to remote and technology-driven operations.

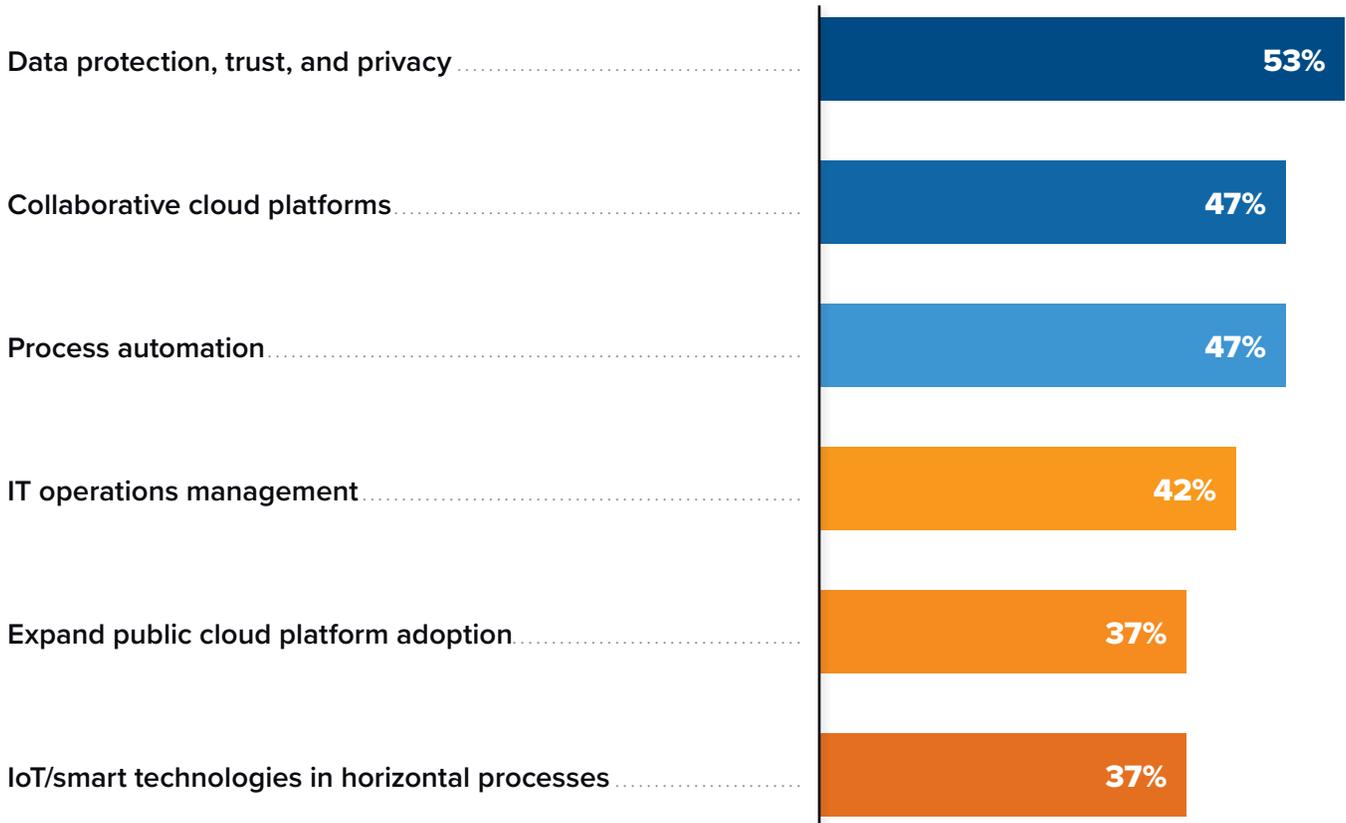
According to IDC's 2021 survey, as higher education institutions of the United Kingdom gradually adapt to the post-pandemic reality, more than half (53%) will focus on data security as their top priority. Beyond that, 47% are focused on investments in collaborative cloud platforms and process automation for enhancements such as creating a more seamless front-end learning and teaching experience or improving back-end operations (see **Figure 2**, next page).

**FIGURE 2**

**Major Areas of Technology Investment**

(% of respondents)

**Q. What are the major areas of IT technology investments for 2021 for your institution?**



n = 23 U.K. higher education respondents, Source: IDC EMEA's *European Industry Acceleration Survey*, April 2021

Furthermore, while institutions and students have realized many benefits to online learning, poor student engagement levels from prolonged remote learning have posed a challenge for many institutions. This led more than 60% of U.K. education institutions to increase or start investments in omni-learning (anytime, anywhere) in the last year according to IDC EMEA's *2021 European Industry Acceleration Survey*. The survey also showed that nearly half (48%) of institutions plan to increase or initiate investments in omni-experience student engagement tools and solutions.

Another significant outcome of the pandemic has been a renewed focus on learner well-being. According to a recent *Association of Colleges Survey*, 94% of U.K. colleges acknowledged higher demand for mental health and well-being services for students during the pandemic. As a result, a vast majority (97%) of them provided additional mental health and well-being support for their students.

# Key Challenges and Success Factors

IDC highlights some of the current challenges faced by education institutions in their DX journey and the strategies they can adopt to overcome these challenges.



## Adapting to the Next Normal for Hybrid Learning

According to IDC EMEA's *2021 European Industry Acceleration Survey*, only one third of U.K. institutions feel they are now emerging from the crisis. To ensure a more rapid recovery, adapt to this new normal, and improve resiliency to future disruptions, institutions will need to strengthen their remote or hybrid operations focusing on:

- ▶ Higher capacity and faster networks to support increased demand for digital experiences
- ▶ Immersive solutions such as mixed reality to enhance and retain student engagement
- ▶ Virtual labs with real-time research and collaboration capabilities
- ▶ Flexible, adaptative, and hybrid courses
- ▶ Online tests/exam software and services
- ▶ Affordable devices purpose-built for education



## Business Continuity for Physical and Digital Campuses

CIOs are focused on ensuring business continuity and new use cases. IDC's survey revealed that almost three quarters (74%) of the higher education institutions in the United Kingdom believe IT expenditure will increase in 2021. Therefore, the focus will be on improving efficiency and reducing cost through:

- ▶ Contingency planning
- ▶ Risk management
- ▶ Incident readiness/response
- ▶ Data availability and management
- ▶ Security awareness
- ▶ Automation and self-services
- ▶ Data analytics to gain insights at scale



## Investment in Data Analytics and AI to Adopt New Business Models and Enhance Services

According to IDC EMEA's 2020 COVID-19 Impact Survey, 75% of universities are suffering from lower revenue. Therefore, they will look at alternate business models and cost reductions as well as make efforts to improve their value offering to students by making better use of data to:

- ▶ Empower intelligent policy making and operations
- ▶ Provide real-time awareness and mitigation of threats and platform issues
- ▶ Create data exchanges that integrate and synthesize siloed information
- ▶ Develop a 360-degree view of students, campus, and assets
- ▶ Improve operational efficiency to make education affordable, equitable, and inclusive

The U.K. government has announced an investment of £213 million in U.K. universities and research institutes to equip them with state-of-the-art scientific equipment and software and hardware upgrades. Creating and scaling applications in a cloud environment to maximize accessibility, efficiency, and environmental sustainability of computing will be a key priority. This will enable the following:

- ▶ More sustainable operations through energy-efficient datacenters and green tech solutions
- ▶ Scenario planning through digital twins
- ▶ Asset monitoring
- ▶ Energy and utility usage monitoring
- ▶ Agile resource planning
- ▶ Process automation



## Developing Adaptable, Intelligent, and Collaborative Workplaces

IDC's survey reveals that 68% of U.K. higher education institutions plan to invest in smart campus administration solutions, while 47% plan to invest in agile work solutions including interconnected collaborative workspaces. To make the most of these investments, they will need to create the infrastructure to support these technologies through a “future of work” strategy that focuses on:

- ▶ Cross-team and cross-agency collaboration
- ▶ A safe and collaborative campus work environment
- ▶ Open, flexible platforms that support multiple programming languages, tools, and frameworks
- ▶ Cloud computing for research, big data analysis, simulations, and visualizations
- ▶ Learners' community for digital skills development and peer-to-peer collaboration
- ▶ Omni-channel integration and personalized services

## CASE STUDY

## London School of Economics and Political Science

## LSE Boosts Student Engagement with Salesforce.org Education Cloud

Over the past few years, LSE has taken a more strategic approach in delivering data and technology to its current and prospective students, alumni, academics, donors, and sponsors. This is in line with LSE's vision to offer its stakeholders more seamless, personalized, and accessible engagement tools. To achieve this, LSE has integrated an array of applications, data, and processes across departments.

Aligned with its DX strategy, the school has also transformed the way it makes IT investments, moving from project-by-project basis to programs of work.

Laura Dawson, CIO at LSE, says, *“There are two key priorities spread over two stages. First, build a strong operational core. This means making sure we continue doing what we do now but do it really well by improving and becoming more efficient.”* Dawson says this includes automating processes, which enables institutions to innovate more because they now have a strong operational core. Second, Dawson mentions, *“Capitalize on the strong operational core by innovating and doing things you don't do currently.”*

Salesforce.org has been instrumental in achieving these objectives. LSE's relationship with Salesforce began in 2016 through the Student Marketing and Recruitment and Admissions teams that wanted to better understand their prospective students and deliver more personalized experiences. This led to replacing legacy technologies and workflows with digital processes and technology that offered deeper insights and better targeting of its audience for marketing and engagement campaigns.

LSE also enhanced its view of students by developing several mobile apps on the Salesforce platform, including one that captured attendance data from hundreds of LSE's yearly events.

### Discovering New Functionality for Crisis Management

COVID-19 led to another unexpected but crucial use of the Salesforce platform. The platform not only ensured business continuity as operations moved online, but it also enabled the school to build a COVID-19 track-and-trace system in fewer than six weeks to contain the spread of the virus (SARS-CoV-2) on campus.

*“Having a central platform that we could use quickly has made a big difference in getting through COVID-19,”* Dawson says.



**“Having a central platform that we could use quickly has made a big difference in getting through COVID-19.”**

**LAURA DAWSON,  
CIO, LSE**

In addition, the platform reduced manual work by sending weekly automated emails collecting information from students about symptoms and providing personalized next steps based on responses. LSE continues to use the system to monitor the virus' spread and provide real-time information, such as the number of new cases, reported symptoms, and number of isolation requests. These statistics are then used for maintaining regular communication with stakeholders and to inform decision making around quarantine and health interventions.

Dawson added, *“COVID-19 has made us realize that [digital] transformation will not happen if we don't invest in it. So now that our investment has landed, we have the job of delivering the transformation.”*

## The Results and Impact

### ▶ **Real-time, unified view of student data:**

With its legacy system, LSE did not have a clear view of prospective or current student data. Now, LSE can track student data, such as new enrolments, courses under consideration, and application status, on one platform. This has streamlined data processing, aggregation, and analysis and reduced time to insight for student engagement and recruitment activities.

### ▶ **User-friendly, streamlined, and personalized communications for student events:**

Using the advanced segmentation capabilities of Salesforce.org Education Cloud, LSE migrated data, email communications, and events. As a result, the university's streamlined and personalized communications for recruiting events increased event registration rates from 61% to 75% and attendance rates from 75% to 89%. LSE's legacy system supported siloed event registration and tracking and a less streamlined and user-friendly experience. Now with Salesforce, attendees who rated the registration process “very good” rose from 61% to 75%.

### ▶ **A COVID-19-safe campus for faculty and students:**

With the implementation of its own track-and-trace system, LSE has been able to minimize the risk of COVID-19 across its community. As a result, the increased credibility in the safety measures adopted by LSE has limited the negative impact of the pandemic on the school's operations.

## Why Salesforce?

### LSE chose Salesforce for the following capabilities:

- ▶ A structured, scalable, and flexible Education Data Architecture (EDA) that can be rapidly configured for specific use cases
- ▶ Extensibility that allows rapid development of new features and functionality without impairing existing functions in the platform
- ▶ Breadth of prebuilt apps available through AppExchange, Salesforce's marketplace for enterprise cloud apps (These apps enable LSE to efficiently find and deploy app-based solutions to unique challenges.)
- ▶ A low-code/no-code development environment

- ▶ Data sharing features that allow granular options of what data is shared and what is not
- ▶ Trailhead, Salesforce’s learning platform offering training material and a peer community
- ▶ Salesforce’s international conferences that enable networking with leading universities globally and better understanding best practices and the art of what’s possible in higher education

## Next Steps

Salesforce has been instrumental in delivering LSE’s 2030 Strategy so far, increasing operational efficiencies as well as improving service delivery and stakeholder engagement. What started as a CRM solution for the student recruitment and marketing team has evolved into a business enablement and continuity platform.

*“Over time, the focus of the platform may well change, but at the moment, in order to get Salesforce to work well with student records, it is fitting that it is very driven by the Academic Registrar’s Division. The Academic Registrar looks after all of the management and administration of students, and that’s the bit that we are focusing on now,”* says Dawson.

The school is now looking to include alumni on the platform to offer a digital end-to-end journey to students, from prospective application right through to alumni relations. Alumni engagement is vital to maintaining lifelong relationships and potentially cultivating donors or volunteers. It also helps maintain a robust “campus community” where alumni can network and explore collaboration or mentorship opportunities with other alumni, current students, or even prospective students.

The school is also exploring using Salesforce for online enrolment, which has seen a steep increase since the pandemic.

## CASE STUDY

## Coventry University

## Salesforce Enables Coventry to Adopt Cutting-Edge Education Technology Solutions

With around 35,000 students in the United Kingdom, and 16,000 abroad, Coventry University is one of the largest leading public universities in the United Kingdom and among the top 600 globally. The university also draws a diverse student body from more than 150 countries. In line with its vision to attract, retain, and develop lasting relationships with students, Coventry's digital strategy focuses on a student engagement system that enables the university to support its students throughout their academic journey.

An early adopter of customer relations management (CRM), Coventry has been at the forefront of experimenting with technology to improve teaching and learning experiences and enhance operational efficiencies. As one of the fastest-growing universities in the United Kingdom, Coventry's leadership realized the need for a modern tool to integrate disparate data across departments, communicate more effectively with students, and gain deeper insights on the student life cycle. These insights would then be used to proactively support students' well-being at different stages of their journey to help them overcome barriers to success.

*"We decided that if we were going to be really engaged with our students, we needed a more modern tool," says Ian Dunn, provost at Coventry University. "My main interest now is how we use Salesforce as the spine to innovate, so that we can maximize the capability of student data and personalize their learning journeys."*

Coventry embarked on a journey with Salesforce five years ago, with the goal to transform its existing CRM to be more student-focused. The Salesforce offering included a single view of the student, self-service portals, marketing automation, contact centre, and sales functionality. Over the years, Salesforce has enabled the university to bring together a wide range of data from legacy systems and other external partners to build innovative tools and applications to support students.

An example of this is a tool that allows for certification or badging of the curricular, extracurricular, and cocurricular activities undertaken by students such as volunteering for charities or international work experience. This application can be built on top of the Salesforce platform and integrated into the student journey cycle.

This certification allows Coventry to measure and validate the skills acquired by students and map them to graduate attributes. Students are then assigned success coaches, akin to student advisors in the U.S. higher education model, who advise and mentor students throughout their journey, armed with the data



**"My main interest now is how we use Salesforce as the spine to innovate, so that we can maximize the capability of student data and personalize their learning journeys."**

**IAN DUNN,**  
Provost,  
Coventry University

aggregated on Salesforce. The ability to track both academic and extracurricular achievement will give Coventry's students an advantage in a competitive job market where employers are looking for a holistic view of an applicant.

## The Results and Impact

With a unified platform, Coventry now has faster, more automated recruitment and communication processes. Prior to implementing Salesforce's platform, Coventry had little or no capability to send automated inquiries — most inquiries took four or five days. With the unified platform, most inquiries and application processing are completed within hours, and Coventry can now send same-day personalized emails to prospective students.

*"Because we have Salesforce, we can turn around student applications quickly, even same day, and deliver customized letters directly to those students via email. The outcome is that two years ago we recruited 1,800–2,000 students, which is by far more than anyone else in the sector,"* says Ian Marshall, deputy vice chancellor and COO at Coventry University.

In the area of resource management, Coventry has become more agile with Salesforce's platform. With its legacy system, the disparate data on resource utilization meant the school was less flexible or adaptable to changing needs. Salesforce now enables flexible resource allocation so that resources can be moved from one focus area to another during the academic year based on demand. This came in handy during the peak of COVID-19, which required moving team members to offer COVID-19-specific support to students. Flexible resource allocation also facilitates making additional resources available for recruitment and enrolment operations during peak recruitment periods.

## Why Salesforce?

According to Marshall, *"We quickly selected Salesforce because it offered the out-of-the-box scope for what we wanted to do. And there was a good infrastructure of supporting applications. And we then did a very quick transformation from our old CRM to a new CRM in about six months."*

The university was also keen to find a supplier that could scale and innovate at pace, in line with its own need for change aimed at improving student experiences and engagement. Its Salesforce deployment was facilitated by a specialist implementation partner, but the university set up its own "parallel team" to work alongside them. According to Provost Dunn, doing so was fundamentally important as it kept the knowledge inside the institution.



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**IAN MARSHALL,**  
Deputy Vice  
Chancellor and COO,  
Coventry University

## Next Steps

Coventry University is currently seeking to expand the use of Salesforce to look more closely at student experience and learning journey and engagement and eventually to maintain ongoing engagement once the student becomes an alumnus. In essence, Coventry is working to connect the entire end-to-end student journey. As Coventry continues to disassemble its current student record system, the school is also working with experimental proposals around AI and data analytics to determine opportunities to not only optimize student engagement but also explore adaptive learning capabilities to support the various learning styles and needs of students.

Marshall says, *“We have been working on student engagement and look at data points such as how often they go into the library, how they use facilities, how often and for how long they log on to a virtual learning environment, and so on. After five years of capturing this data, we now have an AI specialist and a data scraper who can help us understand not only student engagement but also student learning in real time.”*

Another key focus area for the university is student well-being, particularly mental health and anxiety. Although U.K. universities have been gripped by student mental health issues and suicides in years past, the pandemic has exacerbated these issues. In fact, 74% of students reported that COVID-19 has had a negative impact on their mental health and well-being, according to a 2021 survey by Student Minds, a mental health charity for students.

Coventry is looking at ways to analyze data using AI and machine learning to identify any data patterns that can help spot students at risk or undergoing mental health issues. Lack of physical interactions in remote or hybrid learning models makes the use of data and technology crucial to this end.

# Five Key Actions for Progress

## ✓ Be Clear on the Definition of DX

Establish a definition that is most relevant for your institution and that communicates the benefits of technology to various user groups. At LSE, for instance, it meant two things: building a strong operational core and improving efficiencies and then capitalizing on the operational core to continually innovate. Invest in technology that offers meaningful, relevant, and visible benefits to win support from stakeholders and decision makers alike.

Language is also important when it comes to change management. *“It’s important that we transform the language from ‘CRM’ to something like a ‘student-relationship-management tool,’”* says Coventry’s Ian Dunn. *“This is crucial to ensure people understand what we’re trying to do.”*

## ✓ Maintain Transparency Across Your Institution

Digitally determined institutions strive to maintain transparency over all aspects of their strategy, investments, and operations. This approach helps them proactively manage any speculative scrutiny or resistance to their DX initiatives, in turn securing investment from top leadership.

## ✓ Invest in a Unified Digital Platform

A digital platform that can connect back-end and front-end processes with common applications and shared data will be key to any DX efforts. The platform can connect different applications, enable the creation of new applications (as in the cases of LSE and Coventry University), integrate data sources for analytics and decision-making support, and offer new capabilities via ecosystem partners. However, it is imperative to be highly selective when choosing a data integration platform vendor, requiring in-depth research for a full understanding of the vendor landscape.

## **Prioritise Ongoing Student and Staff Upskilling and Reskilling**

Lack of skilled staff is an ongoing challenge. While it is important to actively recruit data scientists and engineers to build digital capacity, institutions must focus their efforts on continuously upskilling and reskilling their existing faculty and staff. It's possible in some instances to look to students for skills, but it's important for the longevity and sustainability of these efforts to have internal staff with the capabilities to manage the process — whether it is working with internal teams, outside suppliers, or students.

## **Revisit KPIs to Track Value Created by Digital Investments**

Finally, measuring the performance and value of digital investments remains as crucial as ever to ensure alignment with the institution's strategy and objectives. However, Key Performance Indicators (KPIs) must be adapted to reflect hybrid operations and investments in digital solutions. An IDC survey shows almost 30% of institutions are using outdated KPIs. Customer experience and IT have been identified by the largest share of respondents as requiring new KPIs. For example, it is important to understand how a new technology or initiative will improve outcomes when teaching shifts from fully remote to in-person or hybrid settings (e.g., percentage increase in student interactions and positive learning experiences).

# About the Analysts



**Joe Dignan**  
European Head, IDC Government Insights, IDC

Joe Dignan is the European Head of Government Insights and a recognised Smart Cities subject matter expert with over 30 years international experience in the digital transformation arena. A professional hybrid, at home in both the public and private sector, he has a background in local and regional government, universities, technology vendors such as Microsoft and EDS, and technology accelerators such as the Future Cities Catapult. He has experience being on the World Bank's Smart City Expert Framework, a member of the Stakeholder Group for the European Commission's Smart Cities and Communities Group, and the EU-China smart city expert group, and is a Research Fellow at Kings College London Centre for Urban Science and Progress.

[More about Joe Dignan](#)



**Matthew Leger**  
Research Manager, IDC Worldwide Education Digital Transformation Strategies, IDC

Matthew Leger is a Research Manager on IDC's Government Insights team, responsible for the Worldwide Education Digital Transformation Strategies practice. Matthew's research focuses on key education IT and digital transformation trends, as well as emerging solutions impacting how primary, secondary, and higher education and related services are delivered. His primary focus will be on identifying best practices for implementation and use of key technologies to improve student outcomes and teacher performance, streamline operations and administration, and improve campus management. Given that his previous research has focused on the future of work and the role of education and training institutions in reskilling the modern workforce, Matthew's research includes a focus on how K-12 and higher education leaders can use technology and EdTech innovations to adapt their services to meet the rapidly changing demands of an economy that requires lifelong learning and upskilling.

[More about Matthew Leger](#)



**Rimal Likhari**  
Research Manager, IDC Government Insights, Europe, IDC

Rimal Likhari recently joined the European IDC Government Insights team at IDC. Prior to IDC, she worked at Connected Places Catapult, the U.K. government's innovation agency, where she led the delivery of strategic research and analysis projects, distilling them into business cases, opportunity assessments, market entry, and strategy recommendation reports, focusing mainly on the built environment, transport, and education sectors. In her previous role, she supported a leading private equity with wide-ranging investment and portfolio management activities through opportunity assessments, market entry strategies, regional macroeconomic analysis, industry deep dives, company valuations, and investment committee papers. Prior to that, Rimal worked for Efficio Consulting (procurement strategies) and Grail Insights, consulting for several telco and CPG companies.

[More about Rimal Likhari](#)

# Message from the Sponsor



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