

CASE STUDY



Teesside University

Paving the way to Excellence with Digital Campus Workstream

ABOUT TEESSIDE UNIVERSITY

Teesside University opened as a public university with its main campus in Middlesbrough in the UK and providing education to 22,500 students. It was officially opened as Constantine Technical College in 1930, before becoming a polytechnic in 1969, and finally granted university status in 1992. The University supports a wide range of activities including research-based teaching and learning, research, enterprise and knowledge exchange.

In 2022 Teesside University had revealed new plans to establish a London based campus to support global opportunities for students. Teesside University London went from concept to campus in less than 12 months, an ambitious achievement that saw the opening of a brand-new state-of-the-art campus in the former Olympic Park, Stratford. With an initial focus on digital technologies and enterprise, Teesside University London capitalises on the University's strengths in animation and games design and directly links the thriving digital cluster of Middlesbrough, with existing partners based in London.

THE CHALLENGE

Building a brand-new campus brought brand new thinking and the University wanted an innovative academic delivery model with the aim of reducing travel and enabling students to balance study around other commitments.

Prior to the project commencing, the Team at Teesside University sought the views of a number of key stakeholders including staff and students in order to get an idea of what good looked like and support the development of the overall TU London Digital Campus Experience in parallel with building the business capabilities. The University wanted to:

- Explore how they could provide students with specialist computing resources in a sustainable, scalable and more effective way.
- Enable blended and flexible delivery of generic and specialist technology needs within a digital hybrid workplace that enabled flexible workspaces and collaboration within a modern working environment.
- Provide students in their new London campus user device flexibility whilst also providing student labs and virtual desktop delivery alongside delivery of specialist computing software in both shared and remote use cases.
- Enable core campus technology and connectivity that was secure and stable with scalable technology foundations including secure access to corporate systems and data, unified communications and connectivity to internet and cloud services.

CIRRUSHQ AT A GLANCE



+93 Outstanding Customer Satisfaction NPS score



50+ Staff Certifications



Operate in 21 AWS regions providing client support



16 years' experience of taking organisations to the cloud



100% AWS experts - exclusively AWS



16 AWS Partner Accreditations



"The facilities are amazing, I enjoy how I can access the virtual system from anywhere on any device and I don't need to rely on physical hardware at home or on campus, I'm able to access a workspace that has all the software and all the files I will need to get my work done."

Games Art Student

Teesside University, London

THE SOLUTION

CirrusHQ were approached as the preferred partner to help Teesside University to meet these complex challenges and provide insight into new, emerging and creative use of technologies in support of the University goals. Multiple solutions were considered and a model based on application streaming technology was preferred, one that enables access to specialist computing hardware and software, including demanding 3D work such as Games Design and Animation on demand from a student's own device in any location was finalised.

As part of a competitive engagement, Teesside engaged with the CirrusHQ team to first design, and then build a Proof of Concept to prove the solution worked, allow University staff and students to test against standard University applications which were typically only available via on-campus physical machines, and ensure the solution was able to be deployed within budget.

The proof of concept was deemed successful and CirrusHQ provided additional services to design and build the new "Cloud Labs" solution for production use for the University and its students at the London campus.

CirrusHQ provided high value Professional Services to design and build:

- An AWS Landing Zone to allow the University to easily govern, manage and secure a complex multi-account AWS architecture to reference standards.
- Virtual Private Cloud within AWS along with a secure connection between Teesside's existing data centre and the new Cloud Labs.
- Single sign on using existing credentials and an Active Directory resilient architecture in which access to the solution can be maintained if connectivity to on-premise environment becomes unavailable.
- Extended storage for application installations and Student file storage with restricted access to dedicated student folders, secured to within the Campus network only.
- Multiple streaming environment fleets for the University uses cases in Animation, Games, Computing and Cyber with scheduled policies to match the timetable of learning blocks to provision demand before students accessed the environment.
- Reporting from usage statistics and metadata including which users accessed which fleets, which applications they accessed and the duration of their session.

Teaming this innovative technology solution alongside BYOD, loan locker initiatives and digital lab spaces have helped to improve digital confidence amongst students and staff. Additionally, this new consumption-based computing solution directly links demand with cost and carbon impact, reducing the resource, space and energy intensive overheads at the London campus.

THE BENEFITS

- Staff and students can work flexibly and access support and resources in a simple, responsive and convenient way.
- Staff are able to deliver engaging experiences through access to industry leading software tools in an innovative reliable and cost-effective way.
- Students can maximise learning outcomes with access to industry leading software from their own device, at home or on campus.
- Specialist computing resources can be scaled and delivered in a cost-effective manner, minimising the dependency on long term planning and capital investment.
- The consumption model supports the University goals to reduce carbon impact.