

Networking

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The University of Nottingham

Today's universities operate in highly competitive environments, and for the University of Nottingham, seamless connectivity was key to its status as a modern University, business and centre of excellence.

Thanks to BT, the University now has a complete wireless learning environment, where students use their own devices to help them study, and connectivity adds real value to learning.



What was needed

With award-winning campuses in the UK, China and Malaysia, the University of Nottingham, part of the Russell Group, ranks in the UK's top ten and top one per cent of universities worldwide. It's also an elite research centre with strong links to business and the public sector.

With universities operating like modern businesses, they must compete to attract the best students and teaching staff. Excellent WiFi connectivity was a huge factor in the University's mission to offer a consistent and secure experience for students. Students expect to bring their own devices to campus and use online learning tools and channels, as well as share information via You Tube, Twitter, LinkedIn and other social media.

The old WiFi was slow and patchy - it certainly couldn't claim to be a bring your own device-friendly campus. When the wireless failed, students had to plug into ethernet ports. The various atria across the campus, designed as a shared space for collaborative learning, were deserted.



How BT helped

At pitch stage, BT gave a snapshot of the possibilities of unlimited wireless. Tony Wheatman, project manager, Corporate Systems Development, says: "They gave us a really good demonstration of the solution – the only ones that did that, and it absolutely blew us away."

BT installed WiFi that allows users to connect securely using their own devices, at every part of the university. This includes halls of residence, cafés and lecture halls, boosting access points from 800 to 2,600 with capacity for more.

The system seeks out hotspots and manages traffic through nearby access points to prevent overload. It also identifies which devices are connecting so they can help support those devices. And it uses Cisco's[®] Clean Air technology, which combats interference that can affect performance. Additionally the network was designed not to interfere with the nearby commercial airport.

Connecting devices are checked to ensure they have the required security credentials and that they are not carrying any malware or viruses before they are given access to the network.

Students now upload notes, share resources, record lectures, timetables and links to their online learning tool and upload online evaluations of lectures.

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Tony Wheatman, Project manager, Corporate Systems Development

IT Services

Key to the system's success is its agility within a fast-changing environment. The WiFi solution can follow a device around the campus, like a spotlight on a stage, to make sure the connection is as strong as it can be. "It allows students and staff to roam the campus and keep the connection and service as high as possible," says Tony Wheatman.

For me, it's a no brainer. WiFi is something that we need. It's so important to 21st century learning to have everything you need at your fingertips, whenever you need it, whenever you want.

Student, The University of Nottingham



The results

BT's solution has been a complete game-changer for Nottingham: the magic is its simplicity. The University wanted an integrated service where everything works together, and that's what it got.

WiFi has transformed the public space – the dead-space atria are now buzzing. "Within days, students started to congregate, doing individual work on laptops but also a lot of collaborative packages and sharing information," says Christopher Barnett, associate professor of Computing and Future Studies.

For one student, the WiFi enhances her learning in lectures. "I can get answers from my iPad so it expands on what I'm learning... by being able to pull up ebooks and e-journals to look at while I'm in lectures."

Visiting corporations have been impressed, asking how a project earmarked for a five year turnaround happened in such tight timescales. "We condensed it to a year with BT's expertise and we're getting calls to find out how we did it," says Tony Wheatman.

Alison Clarke, deputy CIO and director of IT Services says the University can now major on the experience it provides for everyone. "We want students to study wherever they are, academics and visitors on campus to work in the cafés, not just in offices." The possibilities for the future are immense, according to Alison, with the university looking at the prospects for extending the WiFi so it can even be used while travelling to and from other campuses, possible on buses. "We want to build on the foundation we've got now. We don't want to stay where we are - we can move forward and do some really exciting things... building on the partnership that we've created with BT."

Find out more:

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