



Ravensbourne: Designs on the future



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Designs on the future: How Cisco is helping Ravensbourne scale for success



When David Cameron unveiled plans to transform London's East End into one of the "world's great technology centres" in November 2010, he spoke of the potential that could be reaped by harnessing the "energy and creativity of Shoreditch" – potential that could be used to power and revitalise everything from industry to society.

Just a few miles south of Shoreditch however, this transformation has already begun. To truly make that dream of creating a technological hub in the East End a reality, talented, creative and entrepreneurial people will be needed to fuel and drive the businesses that will sit behind it. Enter Ravensbourne. The university sector college, recently relocated from an existing campus in Kent to a

regenerated location on the Greenwich Peninsula – one of the London 2012 Host Boroughs – is one of the UK's leading design and digital media higher education institutions.

In its new location in one of the Host Boroughs, Ravensbourne offers a vocationally focused portfolio of courses that span fashion and television to music and graphic design. The college provides students an innovative catalogue of creative and technological learning options. An industry accredited centre of excellence, Ravensbourne is also a Skillset Media Academy, a national network of learning organisations that are leading the way in developing a new generation of media talent.



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Vitality, Ravensbourne is also focused heavily on industry and providing a successful outcome for its learners. Thanks to a strong industry network and a dedicated research and enterprise centre, Ravensbourne champions the role of the knowledge economy in creative businesses and ensures that its young professionals emerge equipped with the skills and commercial acumen to launch successful careers and businesses of their own.

That philosophy comes to life in college’s creative business incubation programme, which brings together research and enterprise with converging technologies to support developing design and media companies. As a design ‘laboratory’, Ravensbourne provides a space for industrial future planning and prototyping, and plays a key role in the innovation of London’s digital technology industries.

A DIGITAL HUB

It was in the relocation from Kent to Greenwich that Cisco first became involved with Ravensbourne. When the opportunity to relocate to the heart of East London’s regeneration arose, it was one that the college was determined to capitalise on to the fullest extent. Not only would Ravensbourne embrace the move to one of the Host Boroughs and a custom built campus aimed at recreating a professional creative working environment, it would do so with the support of a cutting edge Cisco network.

As a college focused heavily on the digital arts, Ravensbourne had been making regular updates and expansions to its network over the years prior to the relocation. However, increasingly data hungry digital content was placing a growing strain on the Ravensbourne network, and it became clear early on that a next generation network would be essential to supporting the Ravensbourne vision at the new site.

For Ravensbourne, that vision extends beyond just providing the education that will enable a future workforce. Chris Thompson is Ravensbourne’s Director of enterprise and innovation. “One of the major ambitions behind the institutions relocation was to fundamentally revamp the way we operate as a learning environment,” he says. “We wanted the new Ravensbourne to look, feel and act like a professional creative agency does. The network had a critical role to play in providing our students and lecturers with the tools that they needed to scale for success.”

As well as providing Ravensbourne with the capacity to handle the digital content that sits at the core of the college’s syllabus, there was also a more direct technological requirement behind the new network. The frequent, but ultimately ad-hoc nature of upgrades and additions to the core network at Ravensbourne’s Kent campus meant that it had begun to fragment. Disparate systems with no common connectivity were slowing the campus down and limiting the institution’s ability to support its students.





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As the Official Network Infrastructure Supporter for the Olympic and Paralympic Games, Cisco works with a number of organisations that are contributing to regeneration and economic growth. Cisco's relationship with London 2012 is a partnership in which Cisco, along with other technology partners, is supplying critical network infrastructure over which all voice, video and data will be transmitted.

With the specific challenges of Ravensbourne in mind, Cisco outlined an approach based on its Connected Learning blueprint. Connected Learning is a philosophy aimed at improving learning, accelerating economic growth and strengthening social wellbeing. This philosophy is achieved through the delivery of cutting edge technology at the heart of organisations like Ravensbourne to provide content rich education to its students, helping to transform performance with everything from virtual classrooms to lifelong learning programmes.

CONNECTED LEARNING IN PRACTICE

At Ravensbourne, that Connected Learning philosophy is delivered with the help of Cisco's Borderless Networks platform. Borderless Networks is a technology approach that has been built with one vision in mind – to connect anyone, anywhere and on any device, securely, reliably and seamlessly. By reducing operational complexity and providing the highest quality network and user services, the borderless experience is one that is

founded on the principle of enabling users to do more, faster, wherever they are.

This principle is highly visible at Ravensbourne. With an impressive array of technology across the institution that includes a six-channel HDTV studio, a separate four-channel studio, two linked four-channel atria, an HD virtual studio and a Dolby Surround Sound studio, data traffic across the new campus is understandably heavy. With the help of Cisco, and supported by a 'work anywhere' approach that was key to the Ravensbourne creative vision, the college has become a true borderless environment in which students and academics are able to collaborate and communicate across a range of disciplines and locations.

"In action, it's a sight to behold," continues Chris. "In the first few weeks of term alone, we registered 1,700 students, had 1,000 businesses through the door for events at the campus, and began to incubate more than 40 start-up companies, some founded by our undergrads. What Cisco technology has enabled us to do is ensure that every one of these people is able to work seamlessly wherever they are in the college and no matter what they do.

"Just walking around the campus, you'll see meetings going on left, right and centre, students working together wirelessly whether they're in classrooms or in recreational areas, and our incubation businesses developing their projects," he says. "The network has transformed how we teach and how our students learn and work, and in a very short time indeed, that vision of establishing a professional creative environment has become a reality".



Since January 2011, Ravensbourne has been delivering a series of events that look at everything from the future of HD content to 3D storytelling, attracting business and partners from across the region. The capability provided by the network to deliver compelling audio/visual and interactive content around those events has been a key part of their success.

That's not to say it has been without challenges for Ravensbourne – though not on the implementation side. "Around three weeks before the new campus opened, we were burgled," explains Chris. "It says a lot that the thieves in question went straight for the Cisco technology. Unfortunately, they knew how valuable it was, and they knew exactly what they were looking for! It put us back a little in terms of the overall deployment, but I'm pleased to say that we've still been able to deliver for our students."

IMPACT, NOW AND FOR THE FUTURE

Chris cites some of the comments from students and incubating businesses at Ravensbourne as the best evidence of the impact that the network revolution is having on the institution. "We're going from strength to strength, and each day the technology does more for us. It's satisfying to hear comments from students, staff and business that the technology is changing the way that they work and learn, and it has been absolutely vital in supporting the long-term success of some of our incubation businesses. It's a real platform for innovation."

He shares some of the feedback he has received for the purposes of illustration: "Due to the network, Wireless is vastly improved, and support for any mobile devices, tablets and laptops means we can work throughout the building and have both organised and impromptu meetings," wrote one member of staff. "The Cisco infrastructure gives us the foundations to build an environment that supports user-owned technology that benefits students, business users, visitors and staff," said another. "Using Network Access Control we are able to now build an environment that allows creativity to develop in a controlled, risk free manner".

Importantly, the consensus is that the college is well prepared for the future too. "Having high-bandwidth, 10gig ethernet at our disposal future-proofs our infrastructure," commented another beneficiary. "The ability to access and review content from anywhere in the building enables us to become a true 'one stop shop'. Productivity has increased no end."

"In a very short space of time, we've redefined what it means to study, work and develop a business at Ravensbourne," concludes Chris. "The technology we have now matches our ambition, and we're ready for the ongoing regeneration of East London and all the incredible opportunities that it's bringing our way."



PRODUCT LIST

The following Cisco products were used to create the Borderless Networks deployment at Ravensbourne:

- Cisco Catalyst 6500 Series Switches with Virtual Switching System (Core)
- Cisco Catalyst 4506 Series Switches (Access Layer)
- Cisco Application Control Engine for load balancing
- Cisco N Series Wireless Routers
- Cisco ASA 5550 Firewalls
- Cisco ACS Access Control Server
- Cisco Network Access Control





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