

Digitally enabling people: Skanska UK e-learning with Pinnacle Series and Excitech



“E-learning with Pinnacle Series is a part of our digital transformation programme, and our commitment to ensuring BIM Level 2 is business-as-usual by 2020.

Excitech are part of our team and we trust them to do what’s best for our business.

On this project they are instrumental in making effective e-learning and job specific learning pathways work for us; driving our long-term strategy as well as day-to-day productivity improvements”.

David Throssell, BIM & Digital Engineering Operations Manager, at Skanska UK

Meet Skanska UK

Skanska, established in 1887, is one of the world’s leading project development and construction groups. The UK operation is one of the country’s top contractors. An inclusive and responsible business that is helping to build for a better society, Skanska is known for major projects, such as the Gherkin and Crossrail. Drawing on its Scandinavian heritage, it is green, innovative and progressive – with some 40,000 employees globally; 6,000 in the UK.

Operating around the world in selected home markets in Europe and the US, Skanska is listed on the Stockholm stock exchange and headquartered in Sweden’s capital city. Recent project highlights include:

- With a value of more than £400 million, seven Crossrail contracts have been secured by a Costain Skanska joint venture since 2010, including Bond Street and Paddington stations.
- Water – Skanska is delivering long-term value for Thames Water, Welsh Water and Anglian Water, using collaborative working to create broad-based, innovative solutions that benefit consumers.
- In the last 10 years, Skanska has built, refurbished and extended over 40 schools in Bristol to deliver over 7,500 new primary places, and improved the learning environment for more than 13,600 secondary pupils.
- New Papworth Hospital – part of a new biomedical campus in Cambridge, this cardiothoracic centre of excellence will provide 310 beds, seven operating theatres and five catheterisation labs, funded through a private-finance initiative.
- In joint venture, Skanska delivered the £1 billion widening of the M25, one of the world’s busiest motorways, ahead of schedule in 2012. A £320 million design and construction contract to upgrade further sections was again completed early in 2014. Skanska is also part of the team managing and maintaining the 440km of motorway until 2039.
- The Monument Building in London and 66 Queen Square in Bristol are Skanska’s first UK developments under its Workplaces by Skanska banner, bringing distinctive, high-quality and sustainable office and retail space to a competitive market.

The Challenge – delivering the right support for every job

Skanska is committed to a digital transformation strategy to deliver better outcomes, faster, for its customers. Part of this strategy is around creating great places to work. By making sure people have the right tools for the job, this can develop their careers and skills within a supportive environment, and can gain the satisfaction of making increasingly valued contributions to what Skanska does.

Excitech has been supporting Skanska, as its Autodesk partner, with consultancy training and support for their digital transformation for the past 15 years. Having taken on Pinnacle Series initially as a way of providing e-learning on-the-job support, Skanska wanted to move to the next level and use Pinnacle Series to deliver learning paths for individual job roles. This ensures that people can hit the ground running when they take on new projects or job roles.

Keeping Productivity Moving

“Our BIM community started using Pinnacle Series straight ‘out-of-the-box’ which enabled us to get people up to speed quickly with BIM working practices,” explains David Throssell, BIM & Digital Engineering Operations Manager, at Skanska UK.

“This soft roll-out covered 250 Autodesk users; people who use Autodesk products every day and need quick answers to questions on the go, without having to go searching on the Internet or seeking the input of colleagues simply to perform an Autodesk function they’re not personally familiar with.”

The ‘out-of-the-box’ platform provides access to key learning materials, as well as online live technical support provided by Excitech. The next phase for Skanska is to customise the software to build in their own protocols and methodologies supported by the development of role specific learning paths.

The company identified specific milestones for realising this strategy: creating the digital project site and workplace, enabling it to deliver new services and products. “Within this strategy, digitally enabling our people and processes, particularly through digital collaboration and a BIM way of working are key drivers of change within the organisation,” says Throssell.

The Solution – Bespoke project onboarding and job family training

Excitech worked alongside the Skanska team to arrive at a definitive set of job descriptions that would require specific learning pathways. This phase of the development involved identifying what an individual would need to learn, and what the timeframe would be for acquiring the identified skill. Excitech compared Skanska’s requirements against existing Pinnacle Series content to home in on where the gaps were.

For each learning path, the Excitech consultancy and training team created the paths as well as any content not available, including specific course and training videos wherever applicable. This development exercise involved liaising with third parties for specific vendor generated input where the software concerned is not in the Excitech solutions portfolio. The pathways for the first phase included:

- Administration/reception
- Asset and facilities management
- All staff (cross-company procedures such as Health & Safety and HR)
- BIM management and coordination, design management
- BIM management for commercial, environmental, procurement, estimating, and quantity surveying
- Construction manager, supervisor, and engineer
- General management
- Handover and completion, insulation and commissioning, quality management
- Planning

Speaking about the development process with Excitech, David Throssell says “I know that some organisations choose to develop their own customised modules. We decided not to go down this route for two reasons.

Firstly, we prefer to allocate all our resources to customer-facing projects; focussing on what we do best: contributing to building, upgrading and maintaining the country’s infrastructure.

Secondly, also part of the same thought process, we know that Excitech have the resources and talent to develop such content faster and smarter than we ever could. Our view is that if you want an expert job done then you have to call on the experts to do it.”



The Result – Consistency, continuity, and confidence

A year into the exercise, the initial deployment of Pinnacle Series used by 250 Autodesk users has now grown to 700 users, with a full roll-out across the company expected within the next 12 months.

“Pinnacle Series is not just an engineering tool,” says David. “It has far broader use and relevance across the business. It gives us consistency in internal processes and professional skills. It also supports continuity since it makes the company less dependent on the knowledge that people hold in their heads; this is important for organisational development.”

Robust framework for the future

Skanska have now started to evaluate how they might extend Pinnacle Series across their supply chain, with their top 250 suppliers, to elevate skills and consistency across the chain. “Pinnacle Series improves the confidence for the individual and the team but also has a broader

impact; inspiring confidence among customers that we provide consistency in skills levels. When we present bids now, we highlight our use of Pinnacle Series. Some of these bids are on major infrastructure projects that will last 20 years or more.

Demonstrating that you have a robust framework for embracing new technologies and rapidly disseminating the skills necessary to optimise their use across the project team is invaluable. Our customers understand that Pinnacle Series enables Skanska to do that,” says Throssell.

Services provided:

- Pinnacle Series consultancy, which included advice and support in the development of learning paths
- Software and customisation of learning pathways
- User training
- Technical support