

Black Country Living Museum

The company

The Black Country Living Museum (BCLM) first opened in 1978 and is an award-winning open-air museum telling the story of one of the very first industrialised landscapes in Britain. Set across 26 acres, it is home to carefully reconstructed shops, houses and industrial areas which represent the Black Country's story.

Challenge

As part of its 40th birthday celebrations, the BCLM developed a new strategic plan named 'Forging Ahead', a vision of growth for the museum over the next 40 years which included the creation of an ambitious 1940s-60s streetscape through the translocation of key heritage architecture from around the region.

However, the last major physical expansion of the museum had taken place in 2009 and with no in-house quantity surveying or construction procurement expertise, the skill set to manage the process of the deconstruction and reconstruction of historic buildings was not embedded within the existing team at the museum.

The construction sector had also changed significantly during this period and the benefits of building information modelling (BIM), 3D laser scanning and tracking technologies to support and ease the complexities of building translocations were relatively unknown to the museum. These new technologies and methods of working had the potential to provide a wide range of efficiencies to the project.



It's absolutely worth working with the University of Wolverhampton on a KTP programme, the ideas and knowledge input into the project are invaluable.

Huw Davies
Project Manager





Solutions

A new KTP programme was established between BCLM and the University of Wolverhampton to support the 'Forging Ahead' project through the application of the latest BIM technologies and processes in the translocation of heritage architecture.

The associate Khalid Mohammed, a University of Wolverhampton quantity surveying graduate, brought an excellent understanding of construction procurement to the KTP programme and was able to draw upon the knowledge and expertise of Professor David Heesom and his academic team to fully exploit the application of BIM.

Results

The KTP successfully supported the museum in the development of 'Forging Ahead', with particular focus on translocation projects. The museum has now developed a new knowledge of procurement and has implemented a framework-based procurement approach for the project.

The museum has also developed a range of cost models and protocols based on the work of the KTP which will be extremely beneficial for future construction projects. The use of BIM technology was revolutionary for the museum and demonstrated new methods for exploiting digital data throughout translocation construction projects.

Knowledge Transfer Partnerships (KTPs) aim to help businesses improve their competitiveness and productivity through the better use of knowledge, technology and skills within the UK knowledge base. This KTP project was funded by UKRI through Innovate UK.



The learning gained from the KTP programme, and its influence on 'Forging Ahead', will inform the museum's approach to future capital projects. The museum will have a better understanding of the risks, complexities and cost of such work, and this improved understanding will shape the museum's future strategy and long-term capital programme.

This KTP programme further solidified the existing strategic relationship between the museum and the University of Wolverhampton. The academic team have committed to remain engaged with the BCLM construction team to help future translocation projects and the implementation of BIM technologies.



The KTP enabled me to gain a wide range of specific knowledge around translocation costing and BIM applications. It has also supported my move towards RICS membership.

Khalid Mohammed



The KTP has been a fantastic experience for the academic team. We have been able to bring the benefits of BIM to a very specialist construction project for a world renowned museum on a major historic development.

Professor David Heesom

