VEC VIRTUAL ENGINEERING CENTRE







STRIVE: driving virtual engineering across the supply chain

A three year collaborative R&D project, STRIVE (Simulation Tools for Rapid Innovation in Vehicle Engineering) aimed to deliver a new digital supply chain to develop globally competitive products.

THE CHALLENGE

To address the challenges set by Bentley Motors, the Virtual Engineering Centre (VEC), in conjunction with the Northern Automotive Alliance (NAA) brought together Liverpool City Region-based technology SME's including former companies OPTIS Northern Europe and OPTIS Pristine (formerly Icona Solutions) and Valuechain. com to provide collaborative, integrated solutions.

As technical lead, the VEC provided innovative process models and cutting-edge virtual tools, with the NAA bringing project management expertise and an in-depth understanding of the automotive sector.

Access to the VEC's open innovation 'sandpit' facilities and bespoke visualisation labs, enabled the companies to co-innovate, develop and explore solutions in a virtual world and work on innovative solutions.

An essential element of the project was to gain an understanding of Bentley's existing processes to ensure smooth integration and adoption of new developments, as well as to demonstrate the benefits of virtual engineering and gain trust in the new toolsets and processes across various teams at Bentley.

THE SOLUTION: BENTLEY

"The positive impact on the business gained from the deployment of the new toolsets at the Bentley site has been a direct result of this innovative collaboration between us, the VEC and agile Northwest SMEs. Existing 'off the shelf' hardware and software solutions, including toolsets already in use, did not offer the 'step change' we have achieved through STRIVE to reach our strategic goals."- Mark Harding, Manufacturing Project Leader for Continental and Flying Spur at Bentley Motors

Through STRIVE and its development of new digital processes and procedures, Bentley was able to achieve a key strategic target, reducing its product development time, while enhancing build quality. The project contributed to the development of staff at Bentley, learning new digital processes resulting in new roles and with increased responsibility for team members.

THE SOLUTION: SME PARTNERS

As a result of STRIVE, all SME partners experienced growth within their businesses, in both revenue and new jobs created, with OPTIS seeing an increase of 11 jobs and Valuechain.com employing new staff and securing a 3.2m Euro project to innovate supply-chain collaboration and intelligence solutions.

Through the collaboration project, Valuechain.com was selected by Bentley to provide business intelligence solutions through the virtual and physical product lifecycle, something that would have been extremely difficult for an SME to achieve without such a high profile and collaboration with key partners and academic rigour.

STRIVE was part-funded by AMSCI (Advanced Manufacturing Supply Chain Initiative).



