BUSINESS SUPPORT CASE STUDY



5C CONSULTING

Oxfordshire based business, 5C Consulting, replicates the real world in 3D virtual ones!

5C Consulting deliver both pre-contract, business winning, consultancy support and post contract subject matter expertise in support of military training and experimentation programmes in the UK defence and security sector. More recently, 5C have diversified into the virtual world by providing services across the spectrum of capture and delivery activities needed to create and exploit digital twins in defence and construction sector procurement.

Founder Simon George shares his background story "I was an army officer for 20 years as a military engineer and latterly in defence equipment procurement. I left the army in 2008 and worked in a range of business development jobs in the defence industry. I always wanted to set up my own consultancy and the opportunity came at the start of 2020 when my wife and I set up 5C Consulting Ltd.

Not long after the business launched, the pandemic hit. But we were quite lucky, the defence industry wasn't hit like many others. If anything, it was an advantage. I was a one-man-band on the end of a web cam and was able to be agile and deliver quickly. The business grew and leading into 2022, I needed to grow out. It was then I decided to take a leap of faith and expand the business into service delivery, that of Digital Twinning – the ability to capture the real world in 3D and turn reality into virtual models for a number of applications and industry sectors.

Transforming 5C into 3D

Simon tells us how the new digital services arm of the business came about "One of the roles I do as a consultant is in the warfare development department of the army. This keeps me exposed to what the needs of the military are. I saw a real niche market for terrain 3D visualisation, the need to capture, with lidar scanners or photogrammetry drones and convert it quickly into useable data. For example, it is expected that future conflict will be more urban focussed than in previous decades. They will be town or city based, and military training needs to reflect the additional challenges and complexity this brings. We capture both real world towns and military urban training areas where the product is used to help in their development or the footage is imported into synthetic gaming engines a representation of a real world for them to train virtually in, with augmented goggles or in a large dome with screens all around. Digital twinning does what it says on the tin, it creates exact replica in the digital world of what exists in the real world."









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OxLEP's financial support helps make this a virtual reality

In order to get his digital services offering off the ground Simon was looking for external financial support, he tells us how he discovered OxLEP "I use a virtual office at Bloxham Mill and was chatting to other businesses about networking. I was introduced to OxLEP as a route for business support and funding. So, I applied for a grant to help us grow our digital twinning capability and thankfully, we were successful.

The grant provided us with two complete IT systems that we use for processing the huge amount of data we capture through our digital capture devices such as Lidar scanners. In addition, the funding was used for consultancy to upskill the team on the latest technologies and we now have three trained operators. Since then, we have won contracts totaling over half a million pounds for the delivery of our services – a route that would have been extremely difficult to pursue without the initial capital outlay that OxLEP were able to help with."

OxLEP were a breath of fresh air

When asked what his experience was like during the grant process, Simon answered "You can tell that OxLEP's grant application is a really tried and tested procedure. I was very impressed. I've been in defence for many years and if the process of innovation funding for the military was as slick as OxLEP's, many more contracts would get placed.

From the first webinars they give you all the information you need and are very clear on eligibility. I must admit, I was a little daunted at first, but as I stepped into the process the OxLEP team were on hand to help me and make it really straight forward. The team there were always available if I had any issues, they would help me. They were also flexible when things changed my end during the application. Compared to other organisations I have dealt with in the past they are a breath of fresh air".

5C's digital future

We are now well established as both a consultancy and a digital twinning business. So, moving forward we are looking to help solve more of the key problems of today, focusing on using our defence experience for specialist security clearance industries, like the maritime and nuclear industries. I also see the insurance industry as a key sector for us to target, as it's one that is wrestling with the key problems of lithiumion fires and the hazardous transportation of dangerous cargo. Even a simple electric vehicle represents a huge hazard on board a ship. Our digital services can help owners and insurance companies understand the scale of the problem and therefore the risk.

In other areas we are looking to expand the team further and are just about to launch our new website which should make us more accessible. Things are looking good for the future and we owe OxLEP a huge thanks for their support to this point. I'll definitely continue to work with OxLEP and spread the word about them. I'm also hoping to do more general networking in the Oxfordshire community. Many individuals and businesses have helped me in the past, so it's time to give a little something back.



If you are looking for support for your business get in touch with us to find out how our team of specialists at OxLEP Business can help you.

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