

Since 2011, DoES Liverpool has been the heart of the city's maker community, offering low cost access to equipment and expertise that had, for years, been beyond the reach of the vast majority of people. While owning a 3d printer, laser cutter or CNC router might have seem a good idea, few hobbyists – or for that matter, small companies – could afford the initial outlay, let alone the space required to house what could be quite sizeable machines.

'We started small,' says one of DoES Liverpool's founders, Adrian McEwen, 'But had big ideas. We opened in the Gostins Building in the city centre, with six people, a fridge, a coffee machine and a 3d printer. To get to where we are now is fantastic.'

Where DoES Liverpool are now is the newly renovated Tapestry building in what has been coined 'The Fabric District.' Close to Lime Street Station, The Fabric District is a project by business owners and landlords to regenerate an area which had often been overlooked by the development which has transformed the region. The name recalls the various haberdashers, milliners and cobblers that once inhabited the buildings, and a reminder that working together can help us be more than the sum of our parts – something which underpins the ethos of DoES.

'We aim to encourage interaction between everyone that comes through our doors, whether they're artists, coders, makers or something else entirely,' says the company's only paid staff member, Sean Gleeson. 'One of the best things about DoES Liverpool is that everyone comes from different backgrounds, with different experiences skills and ideas Some of the best collaborations have come from some of the most unlikely sources.'

Over the years, the workshop in DoES has expanded from a 3d printer in a shared office to a separate room, to now occupy two rooms and part of the large open plan main space in The Tapestry.

'People keep donating machinery!' says Adrian, 'It's hard to turn down something which is cool, and which our community will get good use of.'

Bringing some of the equipment into the main work space was something that DoES Liverpool were keen to do when they moved.

'There was always a split between the co-working side of things, and the workshop,' Sean says. 'We wanted to get rid of that divide and encourage closer working between the two strands of DoES Liverpool. Now, the first thing you see when you enter is our 3d printers, while there is regularly something being built, someone working at the electronics bench. We hope it makes it clear that DoES isn't just co-working, and isn't just making – it's the combination of the two, and the awesome things that can come out of that collaboration.'

In creating the new space, DoES Liverpool's organisers thought long and hard about the various benefits and drawbacks to each plan.

'It was a completely blank canvas. We had to try and create the best possible configuration to ensure that the workshop didn't cause too much disruption, in terms of noise or mess, whilst still keeping the amalgamation of the two elements.'

This was achieved by creating two workshop spaces, one for metalworking which houses a CNC Router and a unique, locally designed and built CNC Mill, and one for woodworking

and laser cutting, which contains standard woodworking tools and DoES Liverpool's two laser cutters – Gerald (the Gigantic) and Sophia (the Smaller). A third, even bigger cutter, Maurice (the Monster) is currently awaiting deployment – so long as members of the DoES community are able to build the software to run it. 'As I said,' Adrian laughs, 'It's difficult to turn down cool machinery. Even when the reason it's being donated is that the software has been lost and the previous owners don't have £1500 to buy it.'

'DoES Liverpool is run by the community, for the community,' says Sean. 'Anything that people want, we'll try and get, but we often rely on the help of our members to make that happen. For example, when we last overhauled the lasers, we gave our members the chance to chip in if they wanted to. They ended up donating more than we needed. Similarly, the mug press we have was bought with community money after people enjoyed using one at an open day. And that's before I even think about how much was donated to help us move.'

One of DoES' main aims is to keep prices as low as possible for that community. Daily access to the workshop starts as low as £10, with monthly access from £35. As well as this, every Thursday evening and the second Saturday of each month are Maker Night and Maker Day, where access to the workshop is completely free. No-one, the thinking goes, should be prevented from learning new skills and experiencing the freedom and pleasure that making can bring.

'Most spaces in Liverpool chase funding. But funding brings limitations, paperwork and require outputs,' Adrian says, 'And we never want to put limits on what people do here.'

And what people do is pretty fantastic. Past projects include working with a charity to help children and young people 3d print prosthetic hands, decorating the Christmas tree in one of the city's main squares with giant, LED baubles that you could play games on, and creating a robot that writes poetry. More recently, the community helped a local samba drum group create parade costumes that lit up in time with the rhythm of the drums, and brought to life a young inventor's design for the Defence Dress – a garment for women and girls which uses blinding lights to protect them from attackers.

These kind of projects have kept DoES Liverpool at the forefront of the global maker scene, and these are the kind of projects that DoES will look to continue with in the future – projects that meld not only different styles of making, but ideas from outside the maker sphere, from artists, coders and something else entirely, and bring them together into something, like DoES Liverpool itself, that is greater than the sum of its parts.