

Shropshire APF and AGRI

Aston University



Additive manufacturing, or 3D printing, is transforming product design and production, yet the high cost of industrial-grade technology places it beyond the reach of most SMEs. Aston University's Advanced Prototyping Facility (APF) was created to make this technology accessible, offering businesses hands-on design and manufacturing support. Building on its success in Birmingham, Aston University extended the model into Shropshire through two UKSPF-funded projects: Shropshire APF and AGRI. The Shropshire APF received £396,707 UKSPF and was open to all sectors based in Shropshire whilst AGRI received £274,972 and focused on agri-tech, food and drink businesses. The projects offered support with product design, prototyping and adopting additive manufacturing technologies. It also provided digital design support, software/tools and advice for design-for-manufacture. Both projects aimed to help SMEs innovate, adopt new technologies and strengthen in-house design and digital capability.

Drawing on previous ERDF experience, the University was able to mobilise quickly with Shropshire APF launching in July 2023 and AGRI following in November. The support provided by UKSPF funding mainly covered staffing, placement students and commercial software licences, while the University provided specialist equipment and expertise. This enabled fully funded technical support enabling businesses to work directly with engineers and designers to refine products, test materials and build innovation confidence.

The two projects achieved strong engagement. Shropshire APF supported 111 SMEs, 52 of which engaged in knowledge transfer and 12 adopted new technologies, creating 71 FTE jobs. AGRI supported 59 SMEs, engaging 34 in knowledge transfer, helping 40 adopt new technologies and developing 13 new-to-market products. A case study demonstrating support provided to a Shropshire business called Sonic Games Ltd can be found [here](#).

The project also enabled valuable opportunities for Aston University students, who gained real-world client experience through placements. One student, Kate, said: *"It's very different working with a company compared to doing coursework. I'm really grateful — I wouldn't be such a good designer now if I hadn't had this experience."* Two students went on to achieve first-class degrees, and one helped to secure a £30,000 contract for the University.

Over the course of the project, demand shifted significantly. Initially, around half of businesses sought prototyping and half digital support; by late 2024, this had increased to 80% digital support. The falling cost of 3D printers and the growing importance of branding and web presence drove this change. The introduction of a digital services strand, covering website creation, SEO and cyber audit further increased relevance and reach.

Paul Gretton, Senior project Manager, observed that while Aston University would have continued this work without UKSPF, progress would have been far slower and on a smaller scale. He said: *"UKSPF has enabled us to reach far more businesses in Shropshire and tailor our support to what they actually need. The mix of design, prototyping and digital skills has made a real difference to their ability to innovate and grow."*

Paul confirmed that Aston University intends to continue the work, albeit at a smaller scale, beyond the UKSPF period. Future delivery may adopt a low-cost, pay-to-participate model to maintain engagement with established client businesses. However, sustaining the same level of reach and impact will depend on access to external funding. Continued investment would ensure that this valuable support remains inclusive and that innovation among smaller businesses is not constrained by cost.