BLACK COUNTRY FE INNOVATION SERVICE















Introduction

The Black Country Innovation Service project is a £795,029 pilot initiative funded by Innovate UK through the Further Education Innovation Fund (FEIF). It was initially a twelve-month pilot project from 1 April 2024 to 31 March 2025 and was subsequently extended by another twelve months to 31 March 2026.

It is delivered by five further education colleges, namely:

- Walsall College (Lead Partner)
- Dudley College/ Black Country and Marches Institute of Technology

- City of Wolverhampton College
- Halesowen College
- South Staffordshire College

The project has helped to create Innovation Centres for local businesses seeking technical and innovation support. The pilot aimed to drive innovation adoption among local SMEs, encourage businesses to embrace advanced technologies to optimise their operations, and enhance efficiency, enabling them to be competitive. The project also created opportunities for industry placements, T-Levels and apprenticeships, supporting upskilling and career development. The project focuses on key growth sectors aligned with the makeup of the industry in the Black Country: advanced manufacturing, engineering, ICT/Digital, Retrofit/ green technologies.

Each Innovation Hub specialises in a specific area expertise.

Walsall College Hub Digital Innovation Hub

Launched in November 2024, the Hub provides services in various technological domains, including:

3D Scanning & 3D Printing 3D CAD Modelling 360-Degree photography and video services 360-Degree imaging and video capture Software training across multiple platforms Podcasting Al Marketing

Electric Vehicle (EV) Safety training for non-technical staff



Dudey College Manufacturing Hub

Launched in June 2024 and based at the Black Country and Marches Institute of Technology. The Hub provides various technological domains, including:

High-end CNC production Automation and Robotics Computer Aided Design Rapid Prototyping Additive Manufacturing/ 3D Printing 3D scanning Materials and product testing



City of Wolverhampton College Digital Innovation Hub

Launched in April 2024, the Hub provides services in various technological domains, including:

Artificial Intelligence (Al) Cyber Security Green Technologies



Halesowen College Digital Hub

Launched in November 2024, the Hub provides services in various technological domains, including:

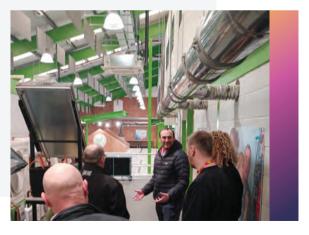
Artificial Intelligence (AI) Cyber Security Web technology



Staffordshire College Green Technologies Hub

The Hub is based within the new NET Zero centre and was launched in January 2025. The hub provides services in various technological domains, including:

Net Zero Green Technologies Engineering Construction LEAN



External Evaluation of the Black Country Innovation Service pilot project

In September 2024, the delivery partners procured EPM Consultancy to undertake an ongoing evaluation of the then 12-month pilot project.

EPM carried out an interim evaluation in Quarter 4, 2024. This was to provide insights into progress made and offer recommendations for the remainder of the implementation period. The interim evaluation report was produced in January 2025.

A final evaluation was carried out in February/March 2025, quantifying the economic impact and providing recommendations for the legacy and the approved 12-month continuation of the project which would now end on 31 March 2026. This booklet summarises the 80-page evaluation report into a succinct document. In addition, there is some information that the partners submitted post evaluation.

Student Engagement & Work Experience

Staff Upskilling & Training

Strengthened Partnerships

Highlights

At 61.9%, most companies that benefited from the project are Micro Businesses, with fewer than 9 FTE. 21.4% are Small Businesses who employ between 10 to 49 FTE and 16.7% are Medium Businesses who employ 50 to 249 FTE

The most frequently accessed services are AI and Digital solutions use by **22.2%**, Website update by **13.6%** and 3D Printing services by **8.6%** of beneficiaries. **15.8%** of beneficiaries reported securing at least one new commercial contract, while **5.3%** successfully obtained at least one grant.

33.33% of beneficiaries have adopted environmentally sustainable practices.

36.8% have reported experiencing social benefits as a result of their participation in the project.

Highlights

52.6% of companies reported initiating new R&D collaborations, while 6.7% noted the creation of new patents, designs, trademarks or copyrights.

89.5% of beneficiaries indicated that their expectations were met or exceeded with the services that they received.

47.4% of companies reported making progress towards new-to-firm product or service with an increase in TRL of +1.77.

The services found most useful are product design & development support, access to facilities, access to Al, cyber security, green technologies and manufacturing support each reporting at 26.32%.

Concrete impacts reported by the beneficiaries include: 47.37% improvement in employee upskilling, 26.32% improved efficiency, 10.53% increase in productivity, 5.26% enhanced profitability, 36.84% increase in revenue.

Highlights

3 out of 4 targets met and exceeded with one at **96%.**

1 FTE job has been created and 6 FTE jobs safeguarded across 5 companies at the time of the evaluation.

Additionally, **25%** of companies plan to offer a position to their intern(s) appointed through the project.

The net economic impact for the project is for every £1 invested in delivering the project, £14.15 was generated in the economy.

The main channels of referrals are: Innovate UK Midlands (29.4%), via colleges themselves 35.3% and Business Growth West Midlands 17.6%.

The main themes mentioned by beneficiaries for future activities are: Technical expertise on 3D rendering, Al and digitisation, green tech, marketing, sales and e-commerce, prototyping, contacts/networking and grants.

Impact on Colleges

Student Engagement & Work Experience

10 T-Level placements secured, 2 work experience days with Engineering T-Level students, 2 real-world robotics projects for Design and Computing T-Level students with businesses.

Staff Upskilling and Training

Total of 15 staff upskilled as follows: 4 staff receiving Training in Additive Manufacturing/ 3D Printing, 2 Engineering staff completed industry standard CAD/ CAM training, 2 Digital Innovation Hub staff received Cyber Security training, 3 Care staff upskilled on managing and delivery of the EMIS platform, 6 staff upskilled in Al and Cyber Security.

Strengthened partnerships with

- Warwick Manufacturing Group, Made Smarter, Regional Organised Crime Unit.
- Siemens, Kuka, Nordlock, Cisco, IBM, ThirdwavelCT.

Oxford Innovation (Dudley) and Business Growth West Midlands (Dudley and

• Wolverhampton).

West Midlands Innovation Alliance. The project is now part of the West Midlands

 Innovation ecosystem and also part of the Innovation Alliance Delivery Forum Network.

Progress achieved against

Indicator	Target	Performance at 31/03/25	% of Target
Total Expenditure	£795,029 Revenue	£765,610 Revenue	96.00%
Innovation Organisational Needs Analysis (ONAs)	100 (20 per partner)	101	101.00%
SMEs accessing Innovation Services	40 (8 per partner)	61	152%
SMEs accessing Innovation Workshops	80 (16 per partner)	210	262%
SMEs embedding ONAs over the lifetime of the project	25 (5 per partner)	24	96%

Overall 3 out of 4 outputs targets have been met and exceeded. The one remaining at 96% will be met in the second quarter of 2025. The 4% underspend is due to most staff being recruited into post 2 (or more) months afer the funding agreement was signed on 11 April, 2024.

Project Net Economic Impact = £11.246m

(this is made up of the 3-year net GVA Impact and 3-year Economic Employment Impact).

Value for Money

The Innovate UK funding to deliver the project was £795,029. Balancing this total delivery cost against the 3-year net economic impact, the value for money is:

Output/input unit cost: £14.15

This means that for every £1 spent in delivering the project, £14.15 was created.

The table on page 14 compares value for money of the project against comparable projects. The comparator projects were chosen either because they also had an innovation support element or business support available to companies and therefore offering a similar combination of services (innovation and business support).

The Black Country Innovation Service when benchmarked against other funded initiatives in the UK is delivering a good return on investment of £14.14 per £1 invested.

Given that this is a pilot in its initial phase with a short delivery timeline, this is a significant achievement.

Project Name	Lead Partner	Funders	Focus / sector	Total Project Value	Expected beneficiaries	Value for Money
BCIS	Walsall College	Innovate UK FEIF	Innovation Hubs	£795k	100 businesses	£14.15
Low Carbon Solent (LCS)	University of Portsmouth	ERDF	Low Carbon	£1.8m	200 businesses	£11.94
ISfB	OXlep	ERDF	Engineering	£7.9m	155 businesses	£11.72
ARLI	University of Birmingham	ERDF	Low carbon, Innovation	£3.4M	125 businesses	£5.49
Smart Factory Hub (AMTECAA)	University of Birmingham	ERDF	Advanced Manufacturing	£11.1m	265 businesses	£4.87
CIAMM	University of Birmingham	ERDF	Quantum Innovation	£1.2m	40 businesses	£3.40
STAR	University of Leicester	ERDF	Advanced Manufacturing	£4.6m	77 businesses	£0.24

The Project Logic Model

The diagram below identifies the key project details as set out in the grant application form

Figure 1: Logic Model of the Black Country Innovation Service Project



Beneficiary profile

Baseline data from 82 businesses who benefited from the Black Country Innovation Service project between June 2024 and January 2025.

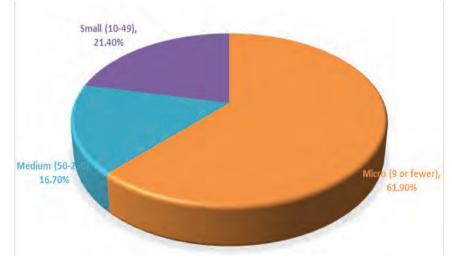


Figure 2: Breakdown of all beneficiary companies by size

The majority of companies supported are micro businesses with fewer than 10 employees.

The vast majority (79.25%) of the companies are male-led. 20.75% are female-led businesses. This is in line with the Black Country business profile which indicates that 20.3% of businesses are female-led (Black Country State of the Sub Region Report 2023).

The position is slightly better when compared to the national average as according to the Small Business Survey, only 15% of UK businesses were led by women in 2023.

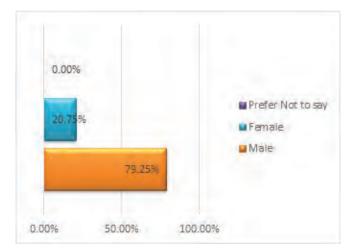


Figure 3: Breakdown of all companies by gender of business director(s)

51% of companies are led by those who described their ethnic origin as white. 22.9% described themselves as from an ethnic minority group, with 2.1% as other. However nearly a quarter 24% indicated (prefer not to say).

The Black Country State of the Sub Region Report 2023 estimates 12%.-13.5% of businesses are owned by people from an ethnic minority background. Therefore, ethnic minority owned businesses are well represented amongst the beneficiaries of the Black Country Innovation Service Project.

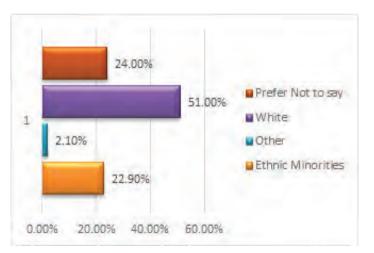


Figure 4: Breakdown of all companies by ethnicity of business director(s)

SIC Code of beneficiaries 25 29 47 45 66 18 52 70 14 28 56 73 81 86 95

Figure 5: Beneficiaries' sector of industry by SIC code

The main sector of industry represented were:

- 19.49% Manufacture of metals, electrical products and machinery
- Computer programming, consultancy and related activities

- Education
- 5.80% Manufacture of motor vehicles, trailers and semi-trailers
- 5.80% Other Manufacturing

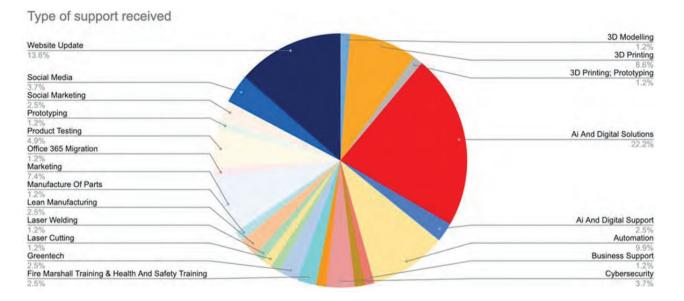
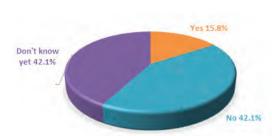


Figure 6: Breakdown of all companies by type of support they received

The most popular services accessed are: Al and digital solutions at 22.2%, website update at 13.6%, automation at 9.9%, 3D Printing services at 8.6%, Al Marketing 7.4%, Cyber Security 3.7%.

Feedback from beneficiaries who completed the survey



19 beneficiaries representing 23.17% of beneficiaries responded.

Figure 7: Beneficiaries securing new contracts

15.8% of beneficiaries have indicated securing at least one new contract thanks to the support of the Black Country Innovation Service project.

42.1% are unsure if the project has helped to secure new commercial contracts yet.

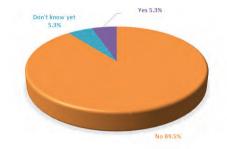
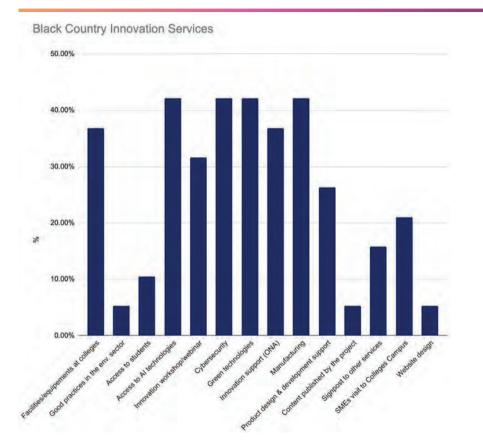


Figure 8: Beneficiaries securing grant funding (non-commercial contract)

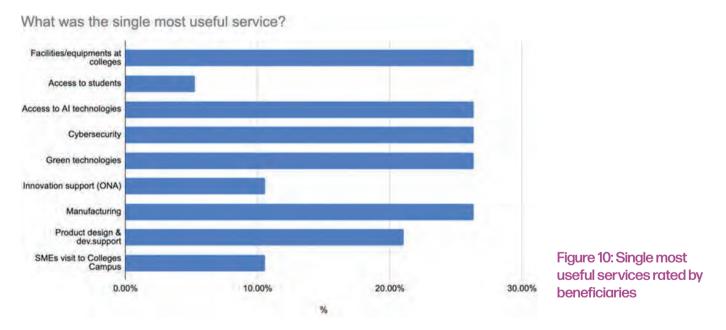
5.3% of beneficiaries reported securing at least one grant with the support of the Black Country Innovation Services pilot project.

An additional 5.3% remain uncertain whether the project has contributed to securing new grant funding at this stage.



The most frequently accessed types of support include access to facilities and equipment at the Colleges' Hubs, AI Technologies, green technologies, innovation support, and manufacturing resources, each reported 42.1%.

Figure 9: Range of support received by beneficiaries



When survey respondents were prompted to select the one single most useful support to them, the product design & development support scored the highest with 26.32% together with the access to facilities/equipment at colleges, Cybersecurity and AI technologies, green technologies and manufacturing.

Product and Service market readiness

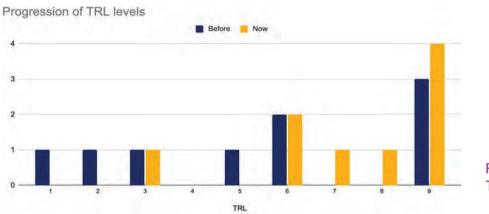


Figure 11: Progression of TRL Levels

47.4% of survey respondents have tried to make progress towards new-to-firm products or services. The respondents reported that, on a scale of 1 to 10, their product/service was on average at 5.55 ± 3.08 close to market when they first engaged with the project. These same products/services are now 7.33 \pm 2.06 closer to market. The average increase of TRL across the survey respondents is +1.77 (and 84% due to the Black Country Innovation Service project).

This is a commendable jump in TRL. In addition, some respondents have now reached TRL 9.

Organisational Needs Analysis

The number of businesses who have implemented the innovative measures following the ONA have now increased as evidenced by the 24 businesses that have now embedded their ONAs.

When prompted to explain their most useful piece of advice/learning/knowledge that they gained through the process, notable answers were:

"It has raised our all-round awareness of this sector"

⁶⁶Our prototype was brought to life through our collaboration with the BCIS, powered by cutting-edge 3D printing technology and the brilliant minds of students and academic experts⁷⁷

"The student support has helped us to increase our reach to potential new customers"

⁴⁴We can access equipment we can't afford⁷⁷

Jobs created and safeguarded

Across all beneficiaries respondents, 1 FTE jobs have been created and 6 FTE jobs safeguarded across 5 companies.

In addition, 5 paid students/interns were hired across 3 companies.

50% of companies made an attempt to hire students from under-represented groups (e.g. women in STEM, racial/ethnic minorities, individuals with disabilities).

25% of companies plan to offer to their intern(s) a position upon completion of the internship.

Productivity

Employees upskilled				
Improved efficiency				
Improved productivity				
Improved stainability/environmental impact				
Increased profitability				
Introducing/adopting new technologies				
Jobs created				
Jobs safeguarded	-			
New business opportunity/Increase revenue				
New collaboration with FE colleges				
0.00%	10.00%	20.00%	30.00%	40.00%
			%	

Impact of the Black Country Innovation Services on productivity

Figure 12: Impact of the Black Country Innovation Service on productivity

- 47.37% of survey respondents reported an improvement in employee upskilling.
- 26.32% reported improved efficiency.
- 10.53% reported increased productivity.
- 5.26% reported enhanced profitability.
- 36.84% noted support for introducing or adopting new technologies.
- 10.53% reported job creation.

50.00%

- 15.79% reported safeguarding jobs.
- 36.84% highlighted new business opportunities and increased revenue.
- 42.11% reported forming new collaborations with FE colleges.

The pilot is in its early stages, and its impact is expected to increase over time.

Environmental impact and sustainable practices

As a result of participating on the project, 33.3% of survey respondents have adopted environmentally sustainable practices.

Reported areas of green improvement include material recycling and installation of solar PV arrays.

66.7% of those who adopted environmentally sustainable practices reported an improvement in their reputation with customers or stakeholders.

Social benefits

36.8% of survey respondents reported experiencing social benefits as a result of their participation in the project.

R&D Collaborations

Across all beneficiaries respondents, 1 FTE jobs

52.6% of companies reported initiating new R&D collaborations, leading to a total

increase of **£8,010.10** in R&D and innovation expenditure and cost savings of

£50,772.11 because of participating on the Black Country Innovation Service project.

Creation of new patent and new designs

Additionally, 6.7% of respondents reported creating new patents, designs, trademarks, or copyrights as a result of their participation in the project

Barriers to innovation

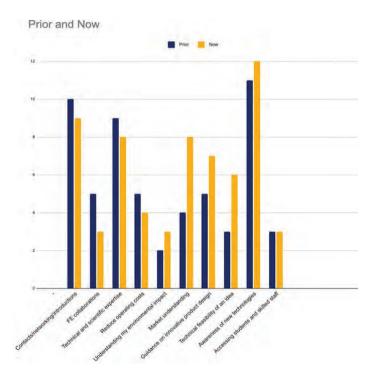


Figure 14: Comparison of beneficiary barriers to innovation prior to engaging with the project and now

The top 3 most popular company needs prior to joining the programme were: 1) Awareness of new technologies, 2) Contacts/networking/ introductions, 3) Accessing technical and scientific expertise.

A decline has been observed in the demand for contacts, networking, introductions, FE collaborations, access to technical and scientific expertise, reducing operating costs which is a positive development.

Meanwhile new needs have emerged as companies now focus on progressing from concept to market and selling their innovative products and services.

Notably, the need for access to students has remained consistent.

Satisfaction and expectations

89.5% of survey respondents stated that their expectations were met or exceeded by the service provided through the project. This represents a remarkably high satisfaction rate for a programme of this nature.

When prompted to explain their level of satisfaction in the programme, notable answers were:

"Very thorough in their approach and very supportive team"

"The student and professional support has been comprehensive and useful"

"It has taken me in a different but relevant direction to what I expected"

"We learnt about ChatGPT and Gemmini as well as workshops on automation. We are still implementing. All in all very useful"

Satisfaction with different aspects of the Black Country Innovation Service project

The aspects of the Black Country Innovation Services that survey respondents most frequently rated highly were: the expertise of the Advisors, the prompt handling of inquiries, the thorough analysis of requirements, the quality of advice provided, and the overall professionalism of the project staff.

Assessors note that the overall satisfaction rate is excellent.

Future Direction Themes

Beneficiary survey respondents requested support along the 5 following themes, which are aligned with their future business ambitions.

These themes are listed below from most frequently mentioned to least frequently mentioned:

Technical expertise on 3D rendering, Al and digitisation, green tech	Contacts and networking		
Marketing, sales & e-commerce	Grants		
Prototyping	New Technologies		

Lessons Learnt

1	Engaging SMEs at an early stage ensures better uptake of innovation services and smoother integration of support mechanisms.
2	A one-size-fits-all approach does not work. SMEs benefit most from customised innovation support.
3	Transparent and consistent messaging from all delivery partners helps in managing expectations and maximising project impact.
4	SMEs require time and sustained guidance to fully integrate ONAs into their operations.
5	The ability to adapt the services to evolving SME needs and external factors improves project delivery.
6	Working with Higher Education bodies and industry groups expanded the project's reach and impact, strengthening inter-agency connectivity achieving cross-sector engagement.
7	Engaging with multiple agencies fostered greater inter-agency collaboration, improving coordination and enhancing the project's overall impact.
8	Continued engagement beyond the formal end of the project for Cohort 1 helps sustain momentum and long-term benefits.

Case Study - PHARMBOT AI

PharmBot AI[™] is an intelligent virtual pharmacist and chatbot system designed to assist pharmacies in delivering exceptional healthcare services. By leveraging advanced AI algorithms, machine learning models, and natural language processing techniques, PharmBot AI[™] provides accurate drug information, personalised health advice, and teleconsultation capabilities to patients worldwide.

Challenge addressed

To design and 3D print a real life size prototype of the robot with electrical vocal components.

"

This prototype was brought to life through an amazing collaboration with the Digital Innovation Hub, powered by cutting-edge 3D printing technology and the brilliant minds of students and academic experts. A huge thank you to Black Country Innovation Services and the Further Education Innovation Fund for supporting local start-ups like ours. A special thanks to Georgia Tsinopoulou, whose leadership and dedication have been instrumental in bringing this project to life. Your passion for innovation and talent for bringing ideas into reality has made this milestone possible⁷⁷



Case Study - Lynsey Luu

Lynsey Luu jewellery is a unique company that designs and develops quirky jewellery pieces and specialised gifts and sell a majority of their products online.



Challenge addressed

Lynsey Luu was looking to have access to a laser cutter in order to produce some of their unique and intricate jewellery designs themselves rather than outsourcing them.

"

Being able to use the laser cutter through the project has meant that I have been able to have a play around with different settings to achieve different outcomes depending on the materials. I have also had the chance to make test pieces which has saved me time and money.⁷⁷

Case Study - Gray Training Ltd

Gray Training Ltd, based in Dudley, West Midlands provides specialist training and skills courses for the construction sector. The Training programmes they offer include construction industry training board courses, energy utility skills training as well as Health and Safety. The company also offer National Vocational Qualifications (NVQ) assessments.

Challenge addressed

The organisation was looking to advance and improve on their IT security and were put in touch with the Dudley College Hub to access support from the Black Country Innovation Services project.



"

Through Richard's support we have been able to develop our IT security system and website. The organisation support has been instrumental to ensure that our business is secure and it has helped us immensely to know that our systems are safe.⁷⁷

Case Study - Staht

Staht is a manufacturing company that designs and builds digital pull test equipment. They are based in Stourbridge in the West Midlands. The business was created in 2020 and has grown and developed successfully since then. They have become an established SME and are now looking to scale up further, they already export on a worldwide basis.

Challenge addressed

In order to develop their company, Staht were seeking some support to explore Rapid Prototyping in order to speed up their design iteration on new measurement products that they had in the pipeline.

Ståht Ståht

"

Through taking part in the project we were able to access Rapid Prototyping equipment and experts. This has now become a key part of our developmental process, offering speed and increased flexibility for our projects. The access to Rapid Prototyping has become an essential service for our work line and has meant that we can better build confidence and alignment with their customers. Now we have started our prototyping journey, there is no going back.

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