



Enabling Innovation at
Nottingham Trent University



Foreword by Jeremy Hague

The Nottingham Government School of Design was established in 1843 to support the development of skills and innovations within the textiles industry in Nottingham. Over 175 years later this focus on enhancing skills and innovations with local businesses still characterises NTU today and has formed a key part in the delivery of our Enabling Innovation Programme. We see our role, creating opportunity and helping to enrich society, as a key civic function for the University. In our future business support programmes we will continue to build on this work.

Funded by the European Regional Development Fund (ERDF), Enabling Innovation has been a three-year collaborative programme involving the University of Nottingham and the University of Derby. Starting in April 2016, a primary objective for this programme of work was to stimulate interest and investment in research and innovation within the small and medium-sized (SME) business community. A lack of investment in R&D by companies is often cited by policymakers as a major barrier to increases in productivity. Through this programme SMEs have been encouraged to invest time and resources in new products and services, with NTU helping to implement their ideas.

We are delighted we've been able to help satisfy that interest in innovation. Over the last three years, NTU has helped over 700 local SMEs to innovate, bring forward new products and services, thrive and grow. Our support has helped boost both their productivity and that of the region as a whole - a key national and local priority.

We are incredibly proud of the work we've done with businesses and the examples we've provided in this document are testament to the talent and ambition that exists in the local business community. We've provided access to graduate talent, collaborated on research and development activities, and opened doors to the management and leadership expertise available at our award-winning and internationally renowned Nottingham Business School.

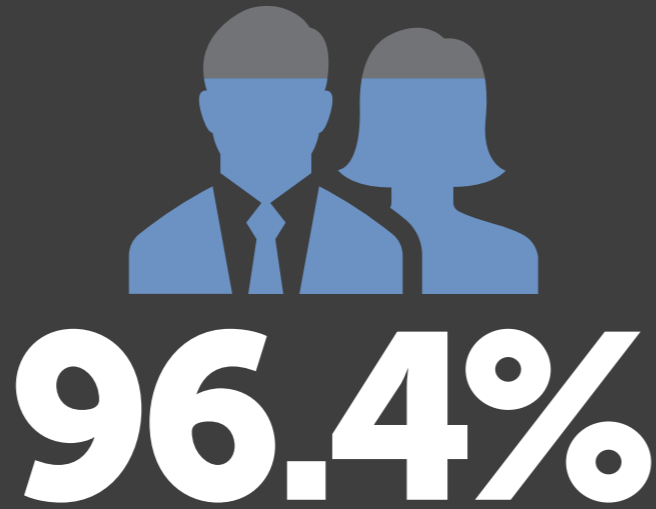
NTU looks forward to watching these businesses grow and become more productive over the coming years. We will be happy to assist them - and many others - as part of our future business support programmes.

Dr Jeremy Hague
Director of Partnerships, Local Economic Engagement and Commercial Services





SMEs supported to create new products and services



Employee retention from funded graduate roles

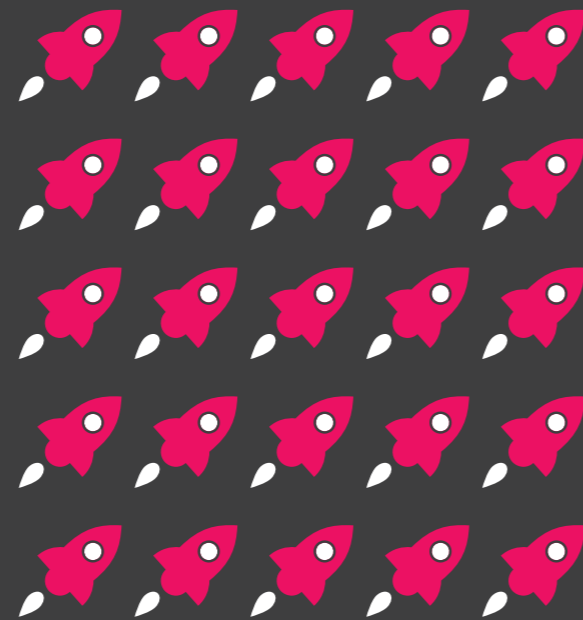
197

Graduate placements (all new roles)



100

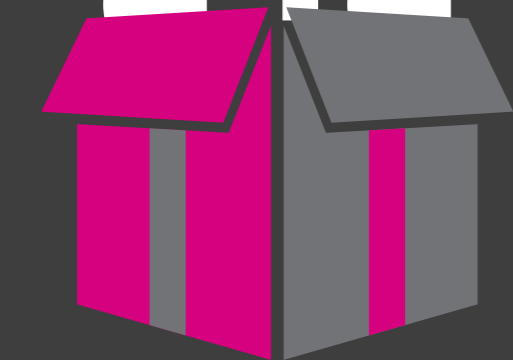
New SMEs started



40

Internships (all new roles)

242



New products and services developed by SMEs

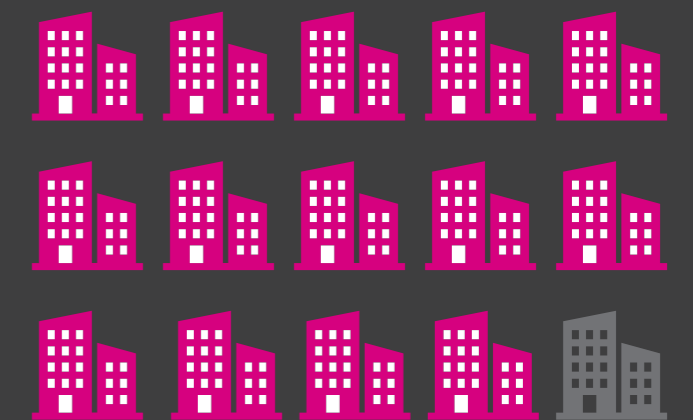


Positive feedback from participants and line managers



94

SMEs engaged with the ICL Programme



117

SMEs completed the ICL Programme

Legal Advice for Innovation

The hub has delivered services for assisted SMEs on a variety of commercial law issues. Areas of expertise range from intellectual property, employment and contractual terms and conditions, to commercial dispute resolution and commercial property law.

The hub's services were provided through Nottingham Law School's Legal Advice Centre (LAC). The staff within the Centre are supported by student volunteers and practitioner academics from the Nottingham Law School. All work by the student volunteers is supervised by qualified solicitors. The Centre also provides seminars on a variety of legal topics to those looking to set up and develop their own businesses.

The LAC ran 22 events throughout the programme. The most popular topics have been Intellectual Property, Data Protection and GDPR, Employment Law and Contract Law.

More than 120 businesses attended these seminars covering a wide range of issues, including:

- Contractual Terms and Conditions
- Intellectual Property
- Web Policies
- Commercial Property
- Company set-up and governance
- Data Protection - GDPR
- Employment Law
 - Reasonable adjustments in the workplace
 - HR policies and procedures.

The Legal Innovation hub have:

- drafted and tailored a set of HR policies and procedures for 14 businesses.
- provided advice on IP to more than 40 businesses.



Enabling Innovation Delivery of Innovation Support

The Enabling Innovation programme was a three year, £20m collaborative programme involving the University of Derby and the University of Nottingham funded through the European Regional Development Fund (ERDF).

NTU was granted £3.8m between 1 April 2016 and 31 March 2019 to offer innovation support to small and medium businesses in Derbyshire and Nottinghamshire.

Within NTU we established eight innovation hubs across our colleges. The hub teams had specialist staff and carried out a diagnostic with each SME to understand the specific innovation support they were seeking. Each of the hubs offered a range of support services including access to:

- expert workshops and seminars
- business networking opportunities
- one-to-one bespoke support
- graduate talent
- academic expertise
- world-class facilities and equipment.

Innovation Management and Leadership

This Nottingham Business School programme provided SMEs with a tailored approach towards implementing innovation through improved management and leadership capability. Businesses could access a range of expert-led workshops, as well as academic staff and student-led projects, all designed to fit around their needs. The hub also provided SMEs with coaching and mentoring, providing access to a range of academic expertise and externally appointed industry mentors.

SME specific business events

The hub delivered a programme of **58 workshops** and seminars, attracting **736 attendees** at various venues across Nottingham city and beyond, by working with other industry partners such as Vision West Nottinghamshire College in Mansfield. Subjects covered include:

- small business strategy
- digital and international marketing
- pitching and selling
- financial management and access to investment
- managing and leading a team
- employee engagement
- alternative business models and routes to markets.

Bespoke one-to-one projects and mentoring support

The hub have assisted businesses to access subject-specific, expert-led support tailored to their specific needs. This has included staff and student-led projects, and one-to-one mentoring in subjects such as:

- employee engagement and motivation
- customer and market research
- operations and systems analysis
- social & digital marketing
- routes to market
- financial management, costing and forecasting
- selling and pitching skills



“We are a fast growing company in a fast moving industry, and the Enabling Innovation experts helped us to uncover insights into our own team dynamics and ways of working. They gave us practical ways we could change our business that would give us a real competitive advantage in terms of employee engagement and innovation.”

Susan Hallam MBE
Managing Director of Hallam Internet



Case Study

Supporting Fitted Home to innovate through marketing and process development.

Fitted Home is an award-winning Mansfield based kitchen and bathroom company.

As a small family business in the early stages of growth, the company felt they lacked both the experience and resources to establish a strong brand and attract sales from new customers.

The Nottingham Business School provided expert mentoring and worked with Fitted Home to identify areas where the business could benefit from innovation support.

The mentoring sessions were able to identify various ways Fitted Home could introduce new marketing techniques and innovative practices that were key to their business growth and the attraction of new customers. This enabled the company to introduce new methods to increase their marketing activity consistently across all communication channels. They also benefited from a personalised workshop on the importance of marketing and healthy brand development.

Because of the support received from Enabling Innovation, the business was able to identify inconsistencies in their marketing and develop the value of their brand. Fitted Home now have the same look and feel for their social media and website presence as well as their vehicles, premises, workwear, business cards and other promotional material.

The business has noted an increased engagement with existing and potential new clients and now aims to use the knowledge gained to further increase customer acquisitions and become less reliant on referrals.



The support gave us focus, tools and techniques, for now and the future, effectively supporting our growth plans that now include an effective PR and marketing strategy. We are on target to double our revenue this year and already have projects booked for the next three months. Our Engagement levels are increasing, and customers are happy to wait for us to do their projects.

Lorraine Garvey
Director at Fitted Home

Food and Drink Innovation

The Food and Drink Innovation hub utilised facilities and expertise based at NTU's Brackenhurst Campus. The team offered SMEs a range of services that included nutritional analysis and shelf life testing, new product development, allergen advice, labelling and packaging guidance.

Nutritional analysis

Businesses were able to submit recipes for detailed analysis. The hub was able to offer guidance on product development, including ways to reduce salt, fat, and sugar content if required. Businesses received a detailed declaration containing a breakdown of their recipes as well as bespoke traffic light symbols to download and use for their food product labelling.

Food and drink masterclasses

The hub was able to support local food and drink businesses through the delivery of intensive two-day innovation masterclasses. These offered dedicated support across the topics of:

- building a brand and taking it to market
- negotiation, selling skills and exporting
- product development and outsourcing
- routes to marketing and pitching to buyers.

The masterclasses gave 86 attendees free access to industry experts and academic support.



“The Rock Fall marketing team attended a two-day Enabling Innovation workshop at NTU that focused on brand marketing and category planning. Since then, the company has added several new styles to their range, including a lightweight, retail focused electrical hazard range. That has been recognised in the industry for the quality of its innovation. They have also planned a comprehensive rebrand to simplify and modernise the communication of their different ranges. Because of the lessons learned in the workshop, the company believes they will be able to make significant steps in the coming years.”

Paul Wilson
Rockfall UK Ltd



Case Study The Sauce Mansion

The Sauce Mansion is a Derby based business created by Kevin Spencer who started by cooking sauces at home for his friends and family as a hobby. From there he turned his hobby into a business that specialises in the manufacture of hot chilli sauces and condiments. To make these he uses fruits, vegetables and herbs. His plan now is to take these products to market to launch these sauces to market.

Due to a lack of experience of the food industry. The Sauce Mansion required technical support for product development and assistance in refining their specifications. At this early stage, the business could not afford commercial consultancy and needed mentoring and business support.

Nottingham Trent University provided multiple levels of support, including 23 hours of labelling consultancy and packaging design advice. Enabling Innovation has gone on to provide much needed technical support, offering 48 hours of guidance including shelf life testing and product reformulation.

Sauce Mansion has since attended 12 hours of workshops provided by the University. As a result, they were able to attend an innovation and outsourcing masterclass and have gained invaluable business legal knowledge.

Thanks to the support received, the SME was able to conduct shelf-life analysis that included micro testing. This revealed an issue with bacteria growth and talks are underway on how to eliminate the risk and prolong shelf life. Finally, the team at NTU also offered the business nutritional labelling guidance as well as advice on retail packaging.

Computer Science Innovation

Based at NTU's Clifton Campus, The Computer Science Innovation hub has delivered support through expert workshops and in-depth collaborations. Its aim was to introduce local business to the cutting edge of computer science, understanding of Big Data and data security. The programme educated SMEs by making them aware of the potential benefits innovation in computing and data could provide for their business.

Throughout the programme, the hub has offered specialist guidance and workshops aimed at making SMEs more digital, and automated. Subjects include:

- Virtual, Augmented and Mixed Reality
- Robotics and Artificial Intelligence
- Big Data and Analysis
- Digital Security and GDPR
- Cloud Computing
- Internet of Things
- Software Development
- Prototyping for a range of platforms

Supporting digital innovation

Through the programme, the hub ran multiple series of website development workshops. These workshops enabled over 100 SMEs to develop and enhance their online and also work with University academics and local advisors to consider the impact of app technology to their business.

Cyber Security and GDPR

Through Enabling Innovation, the hub worked with industry experts and law enforcement advisors to provide SMEs with innovate ways to safeguard their business online. Through a series of academic workshops and a showcase event in 2018, SMEs were able to positively influence how they protected their customer data from hacking or theft in an increasingly unpredictable online environment.



Case Study

River Dove Weir Restoration Project Site
NTU and Bakers Consultants Ltd

Based in Matlock, Baker Consultants are an ecological consultancy service backed by thorough scientific knowledge that frequently use innovative techniques to capture environmental survey and assessment data.

The company approached NTU to explore more effective ways to carry out habitat assessments. These are important but challenging tasks that require a considerable investment in expertise, time, and resources.

The Enabling Innovation programme provided the business access to academic expertise, drone technology and unmanned aerial vehicles (UAV).

Using UAV technology is a much quicker, easier, more flexible, cost-effective and frequent approach, that can also access habitats that are challenging to access from ground-level. This methodology offers research and commercial ecological scientists the potential to inform new approaches to routine physical habitat monitoring and management and will contribute to new understandings of the natural landscape.

The result of this developments within the company has meant Baker Consultants have been in discussion with the National Trust to use the technology across their sites. It can reduce the manpower cost dramatically but increase the care provided to local ecosystems.

Materials and Engineering

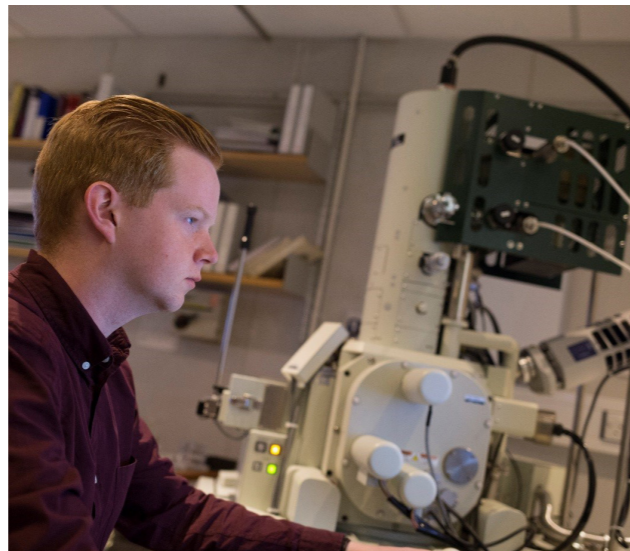
Through Enabling Innovation, SMEs have been able to access a broad base of knowledge, facilities and equipment, giving them access to industrial imaging, materials analysis and process automation. It has provided businesses with expertise across multiple disciplines, including passive monitoring, healthcare, agricultural and materials testing.

A major challenge for the hub was to break down the belief that all research was high level and inaccessible to businesses. We were able to show how specialist and expensive equipment could assist in the manufacture of simple rubber products, and develop better manufacturing techniques that could be implemented in a small environment. This also helped to create a strong working relationship with the local scientific and engineering community.

SMEs often need to carry out rudimentary and simple testing on products and services. However, to purchase the necessary equipment or outsource such testing to another private company can be extremely cost prohibitive. Our team were able to offer access to equipment such as chromatography, electron microscopy, atomic force microscopy, and magnetic resonance imaging. Whilst our academics and students consider these standard testing methods, they are extremely beneficial to a small firm and can potentially alter the course of their business.

Examples of the guided support the hub has been able to offer include:

- infrastructure security
- structural analysis
- method development
- standard testing.



Case Study Innately Cool

Innately Cool

Innately Cool is a locally based start-up looking to develop innovative solutions for the drinks market, particularly keeping them cool whilst outside. By working with NTU's Chemistry department, they were able to develop a solid chemical mechanism that incorporated the required temperature controls, as well as remaining environmentally friendly and safe for human use. The testing of various methods provided a strong scientifically based footing for the SME to build on and let talented students bring fresh ideas to the business. The company is developing the product internally and this wouldn't have been possible without the initial assistance and impetus given to them by the Enabling Innovation team.



Accessing funding and support from Enabling Innovation has been vital for my small start up business. It allowed an idea on paper to become something tangible, tested, developed and evolved, leaving Innately Cool in a position to move confidently towards prototyping our product. The quantity and quality of expertise and specialism we were able to access allowed us to make the most of the funding, including a six-week internship working specifically on our project. This piece of work is central to its next steps. As well as the scientific support, I personally found the supportive environment of NTU very constructive, with many opportunities to discuss and develop ideas with a wide range of people. The contacts gathered through this process has been invaluable and I hope to work with NTU again soon.

Cat Park
Innately Cool

Product Design and Process Innovation

The Design Innovation hub focused on enabling technologies with SMEs around product design, architecture and the built environment, art, fashion, and textiles. The hub also offered access to emerging 3D technologies and has assisted companies seeking to explore virtual and augmented reality and the integration into their business practices.

The hub has been able to support SME innovation by facilitating academically guided projects, has led one-to-one collaborations with design advisors and used student talent to offer consultancy to project development.

Supporting artists to thrive

The hub worked closely with 18 local artists to deliver an eight-week programme of business mentoring and masterclasses to support their innovative work through design. This culminated in a public exhibition of the artists' work. This mini programme was a huge success in developing their creative talents but also in demonstrating how to take this talent and translate it into viable and sustainable businesses.

The Creative and virtual residencies

The Enabling Innovation programme invited proposals from artists and designers to take up residency in NTU's Creative and Virtual Technologies Research (CVTR) Lab. This initiative provided seven local creatives access to expert research facilities, 3D technologies and with academic research support for up to eight-weeks to develop their work.

As a result of the access to facilities and academic research, creatives were able to create new work that utilised innovative processes that would be later displayed at professional galleries and allow the residences to expand their creative portfolio.



From prototype to production

Working with regional designers and practitioners, the Design innovation hub was able to provide practical demonstrations and 'design thinking' to help develop businesses ideas from the concept stage through to a finished design.

The hands-on guidance allowed SMEs to further develop their design into a cost-effective prototype. The hub was able to utilise 3D technology to demonstrate a ways in which local businesses could create their own they could take away to develop their business.



Case Study

ASAP Water Crafts

Based in West Bridgford, ASAP Water Crafts approached us for support to produce a display stand for its innovative watercraft product.

The company required a design that could be flat-packed, easily transported and hold the watercraft product securely at exhibitions. It was important that they were provided with a design that considered their organisations branding requirements and allowed for interreacting technology such as iPads to help capture client information at events.

The product was designed using 3D design technology to consist of multiple transportable parts that could be fitted together. The process utilised laser cutting facilities out of 12mm ply-wood to provide strength.

The stand was designed to be mainly hidden once the craft was in place, providing a focus for the product on display and key marketing messages to be presented each side.



Right from the start the advisors really understood what was required to help our product development and design a prototype that worked first time. The support from NTU has been incredible and provided my company with a product I couldn't have developed myself.

Ross Kemp
ASAP Water Crafts

Support for Enterprise and Innovation (The Hive)

The Hive is Nottingham Trent University's centre for entrepreneurship and enterprise, providing budding entrepreneurs with an inspiring environment and all the support they need to turn their innovative ideas into successful, financially viable business ventures.

Through a structured package of support including workshops, mentoring and events, The Hive has helped 97 entrepreneurs to start a business. Its team of enterprise advisors and experts helped these new enterprises through the crucial early stages of developing their business ideas, alongside a peer group of fellow entrepreneurs.

Events and Mentoring

A successful programme of workshops and events took place at Hive hub, taking a fresh look at business skills and approaches, to enable SMEs to develop and enliven their business practice and to provide an environment for connection and networking. The events covered topics such as:

- HeadStart programme - providing entrepreneurs with the essential tools for starting a business
- Working for Yourself workshop - a crash course towards self-employment
- Draw a Better Business: essential guide to visual thinking to help small businesses
- Crowdfunding for Innovation
- Innovative networking
- Mindfulness in business
- Strategy Behind Social Media Success
- How to develop a Purposeful Mindset in business.



Case Study WAC

Work & Communications (WAC) is an app-based business founded by NTU law student Georgina Fairhall in 2018. The app combines a simple and easy to use design with features to track hours and budget an individuals hard-earned cash from payday to payday. The work management platform offers gig economy, zero hour and hourly paid workers a tool to manage their work life in this currently unsupported workforce. WAC is also being developed into a business version providing a digital clocking system and benefits for both employer and employee. The app allows all users to take control of their work life, time and finances.

WAC was supported by the Enabling Innovation programme at The Hive, attending the HeadStart programme and receiving a start-up grant. Georgina also had mentoring from one of The Hive's team of experts.

Thanks to The Hive's support, Georgina was successful in getting to the final of the Santander Universities Entrepreneurship Awards in 2018. Following this, she has been able to secure investment for the business and is now part of NTU's Big House Accelerator programme. After success of the Santander competition, Georgina is supported by Warwick Hill, Senior MD of Microsoft Europe and leader of the Microsoft UK Start-up Accelerator programme, whom she met while taking part in the Santander Entrepreneurship programme.



Not only did The Hive provide support to build my tiny idea into a growing company, they also helped me... a clueless entrepreneur... grow into a full blown company owner. The business advisors were extremely helpful and enrolled me on the Enabling Innovation project shortly after my first meeting. It taught me all the steps I needed to take so I could develop my idea and get a company off the ground. The advisors have always been by my side and keen to help me make further connections, get involved with different opportunities and access grants. I can't thank you enough The Hive, I will always value our relationship and will forever stay closely connected.

Georgina Fairhall
WAC

Talent for Innovation

NTU's Employability team offered graduate recruitment support to hiring managers in SMEs, working with them to identify skills gaps and innovation needs. The hub offered a bespoke and comprehensive package of support for the attraction, selection and retention of graduates.

In the last three years NTU has provided a portfolio of support services for SMEs including employment grants, expert workshops and recruitment toolkits, and a Learning and Development programme designed for graduates to drive innovation in their organisations.

The Talent for Innovation portfolio of services included:

Job design advice and guidance on graduate recruitment

Running diagnostics and consulting with SMEs about their recruitment needs, the hub was able to create a comprehensive series of employer tool kits for SMEs to download and apply to their recruitment processes. These templates offered businesses an innovative way to capture and retain new talent to their workforce.

Finders Keepers workshops

The hub has run multiple cohorts of their dedicated workshops series that focus on attracting, selecting and retaining talent within SMEs. Offer guidance of how to best advertise new roles and retain valued members of staff whilst offering growth and development opportunities.

Access to funding graduate talent

The team has part-funded 12-month placements of graduates into SMEs to implement an agreed innovation project within a business.

Innovation Community Lab

A six-month development programmes that offers graduates or new starters in an SME an opportunity to explore and implement ways to introduce innovation within the business they work for.

Talent Management Consultancy

An in-depth consultancy service that has helped to improve current recruitment practice SMEs use in the local region.



Case Study

Diversity Marketing

As one of Nottinghamshire's leading CRM and creative agencies, Diversity Marketing were looking to recruit new talent into their business and develop a new service and software solution for their customers.

Simon Elliott, Managing Director at the Arnold-based company, said they would traditionally look to recruit people who have three to five years' worth of experience working in the creative industry.

"We began working with the University and through the Enabling Innovation programme, we were able to employ a talented graduate in Nottingham who had the right skills and who was perfect for our company."

The Enabling Innovation programme offered a 20% contribution towards the cost of a graduate's salary for the first year.

"Having these talented graduates in the company helps the agency stay competitive in an ever-evolving market," said Simon.

This was a new position for Diversity that allowed the company to implement a new service leading to the development of a new relationship with a major corporate customer.

Innovation through Graduate Talent

As an anchor institution located in a core city, Nottingham Trent University is committed to playing a leading role in the social, cultural, economic and environmental development of the city and the wider economic area.

Over the last three years we have unleashed a graduate taskforce of 237 innovators into local businesses, helping them to innovate, grow and increase their competitiveness. Through the Enabling Innovation programme we have developed a holistic package of support to complement the graduate placement programme. Recognising a broader requirement for supporting the strategic direction of the business this has evolved into a pioneering model for SME assistance and knowledge exchange, utilising and aligning the skills of our graduates to the specific innovation gaps and challenges of local SMEs.

Innovation Community Lab

The Innovation Community Lab (ICL) programme is a pioneering six-month initiative delivered to graduate "intrapreneurs". Attendees benefit from a thirty-hour programme of interactive and engaging workshops designed to share knowledge and skills around identifying and introducing business innovation. We also support the management and leadership teams in the businesses so that the new knowledge and expertise becomes more widely embedded in their company.

Over two years, 94 companies have engaged with the programme with 117 early career innovators 'graduating'. The direct feedback from participants and line managers had been universally positive with more than 90% saying that the ICL had a positive impact on the culture of the business in respect of creating, presenting and implementing ideas.

"We gained an expert and professional in supply chain, contributing at a level we could not normally access. The placement enabled a step change."

Managing Director, Mondottica – A Nottingham-based eyewear manufacturer and distributor who recruited a Supply Chain Coordinator. This employee then completed the ICL programme, subsequently helping the business expand into the USA.

The impact of ICL was measured through surveys completed by both the participant and line managers. An impressive 86% of managers saw increased participant confidence to innovate, with 77% saying the programme had a direct impact on their capability to innovate as a business. Businesses also reported that ICL helped to change managers' mindsets and attitudes towards learning and development. SME leadership teams have a stronger appetite for growth, confirming the programme has contributed to a desire to be more competitive. Participants said it also helped them to enhance productivity, supporting them with effective pitching, co-creation and embracing new ways of working.

Talent Management Consultancy

A bespoke intervention was created specifically for high growth SMES. The programme was designed initially using a detailed diagnostic tool that was used to identify key areas for improvement in the business' approach to the attraction, selection and retention of new graduate talent. We wanted to fully explore the business needs, understanding the challenges they were facing and identifying for the future and their aims for early-careers recruitment.

The identified and agreed solutions were based on either attracting, selecting or keeping graduate talent. As part of the Enabling Innovation programme we engaged with 33 SMEs, pinpointing key issues and working with them on a wide range of codesigned solutions to the problems they identified.

"The support that we have had from the Talent Management Consultancy Project will allow a much easier and more professional approach for Bloc Digital's recruiting process with universities. The project supplied us with great material so send off to the uni's in advance to allow them to fully understand Bloc Digital as a company and what services we supply. This then helps them to pass this understanding on to the students and hopefully get a better selection of applicants to our job offers".

Keith Cox, Bloc Digital - a Derby based SME specialising in the creation and re-use of digital information

Innovation through Design

Using student and academic research to influence design

NTU's design legacy of working with SME stretches back over many years, but was most recently achieved through the successful Future Factory programme. In the Enabling Innovation programme our Design Innovation Hub built on the work of this previous initiative, and the well-established reputation NTU has in the field of product design.

We have achieved this through different means, depending on the specific needs of the company seeking support. SMEs have used NTU's ground-breaking academic and research base, accessed our world class facilities and equipment and identified and recruited graduate talent into their businesses.

Using NTU research to influence eco-friendly product design

Product design company Tochi Tech approached NTU as a result of a live brief to work with researchers and students at the University to find innovative and sustainable solutions to appliance manufacturing. Professor Amin Al-Habaibeh, a professor in intelligent engineering systems, and undergraduate Dylan Knight, who studies BSc (Hons) Product Design, developed a hollow plastic counterweight that is filled with water to stop washing machines from vibrating during spin cycles.

The new design cuts the weight of the home appliance by 30%, which in turn lowers the cost of fuel through appliance transportation, also reducing the risk of physical injury when lifting and installing the product in the home. Research suggests that reducing the weight of a truck carrying washing machines by 100kg could save approximately 8.5g of CO2 and 0.35 litres of fuel per 100km in transportation distance. This environmental advance will also bring production and cost saving benefits.

Professor Al-Habaibeh said: "This sustainable solution not only reduces cost and energy needed for transportation, but also provides ergonomic and health and safety benefits to those physically handling washing machines. This is a great example of how we integrate our teaching and learning processes and research with industry, to solve real problems and support job creation."

Using 3D Technology to adapt product design

Enabling Innovation's work with SMEs has greatly helped local business OFFUNDO Limited. They approached NTU looking for help to develop their innovative butter spreading product for the commercial market. NTU helped the company transform their product from stainless steel to plastic.

Having remodelled the two-part stainless steel product to suit plastic production, a 3D printed prototype was made. The plastic parts are lighter in weight, dishwasher-proof and food-safe whilst retaining the strength seen in the metal unit. With the functional and aesthetic improvements made, the cost of commercial producing the 3D design prototype would be slashed by 88% when compared to its metal predecessors.

By offering a range of benefits to small and medium-sized organisations, Enabling Innovation hopes it can support further businesses with 3D technology and product design innovation.

"The Enabling Innovation programme has provided us with a vast talent pool, access to specialist facilities and technologies that would have been beyond our reach as a small entrepreneurial business. The experience and knowledge that we have been able to tap into across the programme is enabling us to move the business forward with more confidence in our abilities."

Julie Whitehead
OFFUNDO Limited

Harnessing student talent in design

ABurnet are based in Ilkeston, Derbyshire, and manufacture headwear products for industrial and leisure use. NTU students were invited to create innovative and exciting design templates for new types of headwear, to expand ABurnet's current product range.

Richard Burnet, Managing Director at ABurnet, and Wendy Smith, Financial Director, praised the work done by all the students who entered the competition. Richard said, "We were both energised to see the breadth of talent and design inspiration offered by the students' interpretation of our design brief. We now have a wealth of designs to inspire customers for Tek-Chef's new web-based design platform."

Supporting design from concept to prototype

Sheltered Spaces are a design and build company that first approached Enabling Innovation regarding an idea to develop cladding materials for use in building projects. Their initial concepts and designs required the expertise and facilities to convert their designs into a workable template for cutting and production. Enabling Innovation also offered the company advice and guidance on costings of the product, so it could be applied to their build projects.

"Without Enabling Innovation's help, I wouldn't have been able to get to this stage of the product development where I am now considering how to develop the design into a tiled product for builds."

Marcus Rolands
Sheltered Spaces

NOTTINGHAM^{NTU}
TRENT UNIVERSITY



Enabling Innovation was a three-year collaboration between Nottingham Trent University, the University of Nottingham, and the University of Derby to support SMEs in Derbyshire and Nottinghamshire to innovate. It was part-funded by the European Regional Development Fund (ERDF)