TURNING DURHAM INTO THE NEXT SILICON VALLEY

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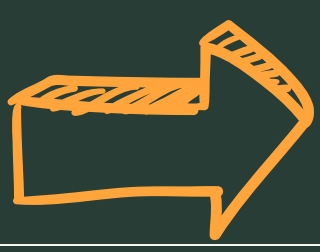
Introduction

County Durham is making active efforts to enhance its innovation landscape by focusing on four pillars: **people, productivity, places, and promotion.** However, the region has historically exhibited limited innovation activity and startup rates compared to other regions in the UK. our research team conducted a comprehensive investigation using authoritative databases and policy documents to address these issues. Our findings and recommendations aim to align the innovation delivery framework with the region's circumstances and requirements, providing a path forward for innovation development in County Durham.

KEY CHALLENGES



IThe region has historically exhibited **limited innovation activity** and startup rates compared to other regions in the UK.

IThe region has **lower employment rates, economic activity, and Gross Value Added (GVA)** compared to the national average.

IThe region suffer from **Implicit resource barriers,** such as funding limitations and knowledge gaps, have contributed to underutilization of regional support and a decline in employment and economic activity rates.

IThe region has **inconsistent performance across different** industrial sectors

Based on the previous discovery from the research we have proposed a Q&A format document to be utilize by county Durham

The questions include:

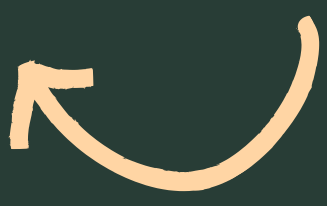
1.What are we good at and where are the opportunities to grow?
2.What the region may face with the trend of automatization?
3.What is the current situation regarding research and development as well as high-tech business activities within the region? How can it be improved?
4.What can be concluded from innovate UK and UKRI data?
5.How can the county encourage investment in the region?
6. How to improve the innovation delivery model

Summary of response

- The current county delivery plan raises concerns about its effectiveness in a changing market. The county should provide **comprehensive** and industrially tailored business support to new and emerging ventures to enhance innovation. The structure of these programmes must transcend merely **beyond funding efforts,** by addressing the need for an enhanced understanding of strategic, technological, and operational hurdles faced by growing firms.

- The Northeast region excels in industries such as automotive, advanced manufacturing, life sciences, universities, and research centres, with emerging sectoral clusters. The UK's commitment to achieving **net-zero emissions**, requiring substantial annual capital investment, allows the Northeast to leverage its manufacturing and engineering heritage, potentially creating around **27,000 direct job opportunities** by 2050, positioning the region for significant employment growth.

- The Northeast region, known for its strong manufacturing base, is facing a **technological transformation** due to the UK's net-zero goal by 2050, which could lead to job losses through automation. Jobs at higher risk of automation involve low skills and machine interactions, with the Northeast and other regions particularly **vulnerable.** To ensure long-term sustainability, the region should prioritize skill enhancement and foster development in less vulnerable high-tech sectors.



- Research investment in the UK's Northeast region is low, leading to **lower wages** in high-tech sectors and a **struggle to retain talent** despite the presence of universities and research institutions. A shortage of skilled occupations is also evident, with many businesses having limited workforces. To address these issues, the county needs to **foster skill-intensive** occupations through targeted initiatives, offering incentives and supportive frameworks, increasing research funding, and raising researcher wages. These steps aim to enhance high-tech positions, ultimately improving talent retention and attraction.

- An analysis of the historical Innovate UK data indicates a notable **disparity** in application counts between the Northeast region and Durham, reflecting uneven resource distribution. Funding applications mainly focus on Manufacturing and Responsive sectors, with limited attention to industries like AI and Data Science, aligning with concerns about potential automation risks. Factors such as low retention rates and complex application processes hinder SME engagement. For effective policy development, the county should prioritize **equitable resource distribution** within Durham and encourage the growth of technology zones, supported by clear frameworks and digital platforms to enhance SME access to funding opportunities.

- Data highlights a trend of **investor-investee pairings** primarily within the Northeast region, which could deepen reliance on manufacturing. To counter this, strategic efforts are needed to **expand beyond the region**, including collaborations with neighbouring areas through support projects, exhibitions, and social events. These initiatives aim to diversify investments and promote innovation-driven progress in the Northeast.

CAPABILITIES FRAMEWORK/ECOSYSTEM

- Following discussions with team members, it is clear that the current county delivery plan is **simplified**, raising concerns about its effectiveness in dynamic market conditions. To enhance innovation delivery, the county should provide support to small and medium-sized enterprises (SMEs), with a focus on both financial and non-monetary assistance.

- **A comprehensive and mutually reinforcing structure**, as shown in Figure can be established to cultivate a resilient regional ecosystem. Additionally, addressing educational attainment and fostering a qualified workforce in high-tech and research roles are crucial for driving innovation. By implementing these strategic interventions, sustainable and progressive innovation can be achieved in the Northeast region