







The Barnsley TechTown 5 year Action Plan aims to create 'More and Better Jobs and Businesses' through powering the uptake of digital skills, digital entrepreneurship and digital transformation of existing businesses.

It has been co-created through a series of interactive workshops by Barnsley College, Barnsley Council, Barnsley Library, creative and digital businesses, people and educators from across the Borough and a host of partner organisations which all comprise the TechTown Local Group.

The Action Plan sets out our goal to create a Digital Campus which will be an ecosystem accelerator for Barnsley, enabling a scale up to a higher-tech, more knowledge-based econom. It has 4 main themes:

Digital Place: Create a physical digital campus on the town centre Courthouse site

**Digital Businesses:** Support and grow digital businesses and unlock growth potential within our indigenous business community through digital

**Digital People:** Address digital exclusion, raise aspiration/employment opportunities and skills levels to develop our digital talent pipeline and make Barnsley a place digital people can be successful

**Digital Partnerships:** Establish relationships and work in partnership with the private and public sector to help realise our digital ambitions

This plan outlines the current picture, the rationale, who's involved, existing activities and the detailed actions we will take.

Our vision is to establish an inclusive and welcoming Digital Campus that supports the growth of digital jobs and businesses.

# Introduction



Tech Nation, which produces the leading UK report on the digital sector, uses these categories to define 'digital tech', which reflects our use locally:

app & software development data management & analytics digital advertising & marketing digital entertainment enterprise software & cloud Computing internet of things cyber security
e-commerce
educational tech,
financial tech
games
hardware & devices/open source
hardware

healthtech online gambling social networks telecommunications & networking

What do we mean by 'digital'?



## Place

Create a smart digital campus

## Business

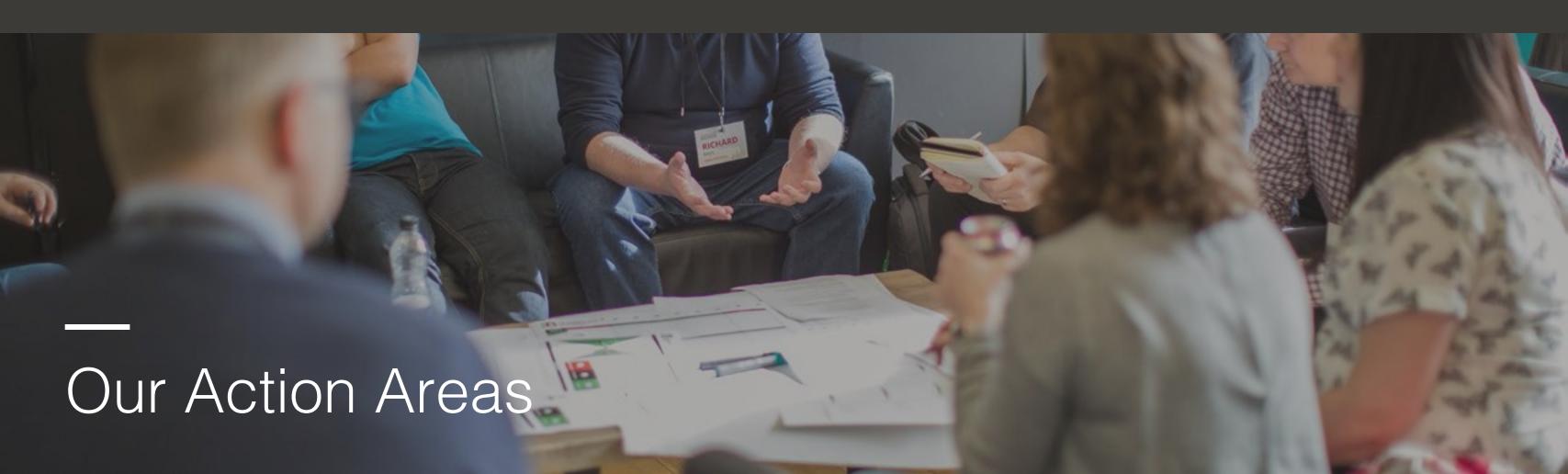
To create more high skilled digital jobs and businesses

## People

Develop a supply of talent to fill digital roles

## Partnerships

Work in collaboration to add value and impact



Bringing together digital people, learning and business across a connected campus of places and spaces both online and offline to deliver more and better jobs and businesses.

Learn Start up Incubate & Grow & Collaborate Live

Our Digital Campus – An Ecosystem Accelerator

### **Our Objectives**

To create more high-skilled digital jobs and businesses.

To develop a supply of talented people to fill digital jobs.

The results we want to see are More and Better Jobs and Businesses in Barnsley through a focus on digital. This is in alignment with the Council's jobs and business planning and employment and skills strategies.

## Why, what is the main problem?

In Barnsley economic performance tends to be weak with a gap between where we are currently, and where we need to be.

The jobs that are available tend to be lowskilled and low paid and increasing workplace automation is a threat to the workforce.

There is a lack of people with the right experience to fill higher-skilled roles. This is especially the case with digital talent.

# Objectives

## For People

More and better job opportunities

Greater prosperity

Better quality of life

Improved lifestyle leading to better health and wellbeing

Higher aspirations

Digital will impact all jobs so we need to try to future proof our workforce

## For Businesses

Increased innovation and productivity

Improved quality products and services

Attraction and retention of talented people

Greater turnover/profitability

Stronger supply chain and opportunities for collaboration

# For the Economy

More local spend from the public and businesses

More money for local government to spend on town services and development

More attractive place to live and work

Stronger brand and reputation to attract inward investment

Opportunity to involve digital community in solving civic challenges

# Why is digital important to Barnsley?

#### **Strengths**

Barnsley is positioned between two growing digital hubs in Leeds and Sheffield and close to Manchester

The Digital Media Centre (DMC), IoT Tribe and TechTown have helped strengthen the town's reputation

Enterprising Barnsley and the DMC are award-winning for job creation and business transformation, recognised at EU level

Forward thinking and enabling Council, with some channel shift successes in digital and an ambitious Digital First agenda

Strong partnerships/networks with corporate, business, education and voluntary sectors Growing awareness of, and ambition to embrace, digital across the Borough

Town's underlying digital infrastructure

A track record in agile approaches to scalable project development (Connected Healthcare, Connected Manufacturing)

An active, if small, digital community

#### **Opportunities**

Clarify digital vision and strategy for Council and Town

Make more use of digital skills and collaboration in and with the community

Leverage the shared commitment from business and education sectors to develop digital skills

Appetite from private sector for the right kind of places and spaces for digital business and 'maker' activities

Continue to build on strong cross-sectoral partnerships in the town, regionally and beyond

Drive demand for greater use of technology to bring efficiencies and improve services in incumbent sectors e.g. Industry 4.0

A transition to a more knowledge-based economy

Lead by example – the Council can adopt an approach to innovate and better use digital services and take an open data approach

Engagement with town centre development and smart city opportunities

#### Weaknesses

Lack of digital skills and talent

High levels of digital exclusion

Job opportunities largely low paid and low skilled

Lack of critical mass of digital tech businesses

Low business start-up rate, especially in digital tech

Reliance on public sector for jobs

Low awareness of digital jobs, so limited aspiration to digital careers

Poor data – availability, quality and usage of quality

Perception of Barnsley outside the town

Reduction in public funding due to austerity cuts

Brain drain - people may live in Barnsley but work elsewhere

#### **Threats**

Increasing digital job opportunities in cities

Speed of change (and speed of response)

Lack of digital knowledge within Council and businesses

Reducing budgets and increasing lack of resource at Council

Businesses leaving Barnsley due to difficulty in attracting skilled workers

Lack of investment in IT in Council and businesses

Cyber-security risks

Digital by default approach in Council can exclude people most needing service

Other towns have a head-start and are moving fast

Workplace automation

Exit from EU and loss of access to EU structural funds

# Current Situation: SWOT Analysis

#### **Connected Healthcare**

Innovation programme in digital healthcare, with local businesses tackling NHS challenges via a 'hack' format. (Jan-Jun 2016).

#### Connected Manufacturing

Digitalisation of manufacturing programme to connect digital + manufacturing sectors. Supported by Digital Catapult (Jan-Jul 2017). With learning from TechTown Partner GAVLE

#### Mashup tech meetings

Organised in conjunction with Sheffield Digital on Virtual Reality, the Internet of Things and Robotics (Jan to Jun 2017).

#### TechTown Lab

Successful pilot event to introduce design thinking related to tech careers to secondary school students (July 2017)

With learning from TechTown partner **CESIS** 

#### **Council Strategy**

Supporting the formation and focus of the Digital Leadership team at Barnsley Council (Aug 2017)

What have we done already?

#### Building business-education links with Barnsley College

Developing links between businesses and Barnsley College, and regional universities. Business input on FE courses and curriculum Making the Digital Media Centre a destination

Creating a community at the DMC and extending this to the region through having an open door culture and a wide variety of events. Hosting IoT Tribe North accelerator

loT accelerator based at the DMC. Global cohort of 10 start-ups developing their loT prototypes (Jan-June 2018) and plans for second cohort

Synergy with LIMERICK

Mashup tech meetings

Second series with Sheffield Digital, due to success of first series - on Augmented reality and other tech topics (Jan-June 2018) Open Data

Supporting open data plans and engagement with local business. IoT gateways installed on DMC (ongoing).

Synergies with BASINGSTOKE & DUBROVNIK

What is ongoing?



#### Digital Place

To develop a physical Digital Campus on the town centre Courthouse site which will include:

Digital skills provision at all levels

Business incubation and growth support

Supportive open data policies/ digital infrastructure

Access to digital facilities and expertise

Town centre living with strong cultural component

High quality public realm

Fun, engaging and accessible places and spaces for digital people and businesses



#### Digital Businesses

To support and grow digital businesses and unlock growth potential within our indigenous business community through digital:

Strengthening talent pipeline

Co-working and incubation facilities

IoT Tribe Accelerator

Connected Manufacturing and Healthcare
Access to finance and support

Connecting digital solutions, and problem solvers with civic challenges



#### Digital People

To address digital exclusion, raise aspiration/employment opportunities and skills levels to develop our digital talent pipeline (Figure 2).

Digital skills training opportunities

Makerspace at Barnsley Library

Collaborative Connected

IoT/data Lab within the Campus

TechTown Lab for schools

Barnsley Future Festival



#### Digital Partnerships

To establish relationships and work in partnership with the corporate, private, public and education sectors as well as citizens to help realise our digital ambitions.

Build on/ establish relationships with key partners

Encourage and facilitate collaborative working

Leadership of URBACT Transfer Network TechRevolution

Participation in International Urban Cooperation partnership with Liuzhou, China

TechPlace online community of interest Strategic Partnership with Digital Catapult

# Our Actions (see Action Table Appendix)

Where we need to move citizens from, and to – understanding the pipeline and accepting that we need Citizens, Workers and Makers for a healthy ecosystem!

**Digital Beginner:** 

Novice or digitally excluded

Digital Citizen:
Carrying out
digital
transactions

Digital Worker: Using digital applications

Digital Maker: Coding and managing big data

Digital Talent Pipeline (fig 2)

The plans for Digital Campus have buy-in from the Local TechTown Group, senior management across the Council and partners and from elected councilors. They are integrated with wider plans for development of Barnsley town centre (Figure 4 – next page).

The Action Plan will be adopted as part of the Council's strategic growth plans. The IT, economic development, community and jobs and skills teams will be involved in ensuring it interfaces with the Council's corporate plan and other digital initiatives.

The Local Group will continue to meet from Summer 2018 maintain the momentum gathered during the project. It is a cohesive and integrated group that has co-produced the plan and understands what we need to achieve. The ongoing structure and meeting regularity will be discussed with the group.

Group membership includes:

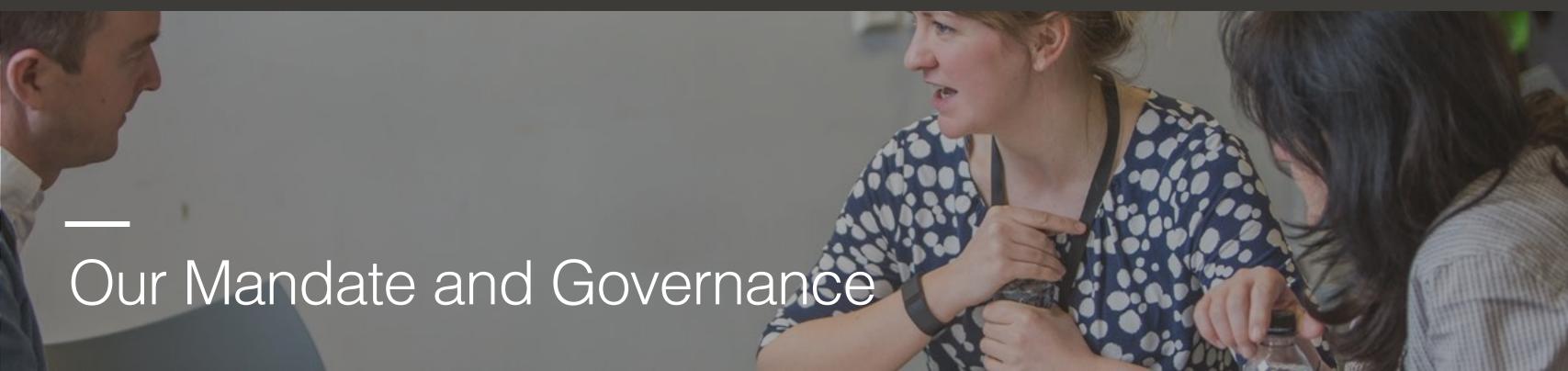
Businesses Local Authority

Regional Authority

Education providers at all levels

Citizens

Membership is not fixed and works best when it is agile and responsive.



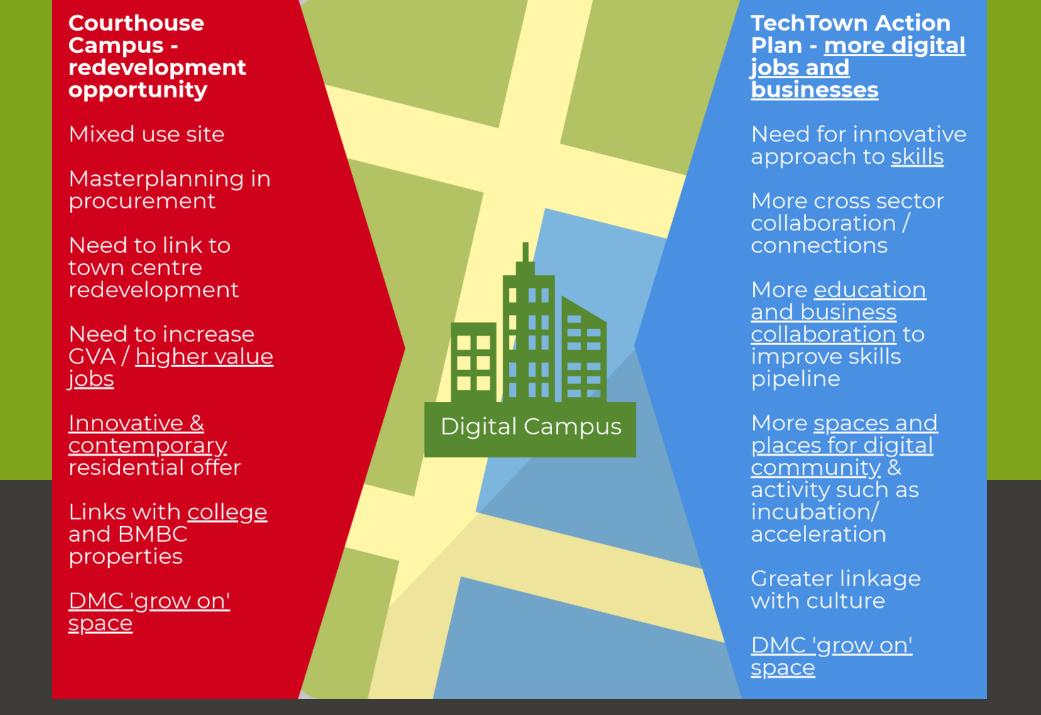
There is a need to consider the societal and environmental impact of our proposals for Digital Campus.

Barnsley has a high number of people that are digital excluded. Through the involvement of Berneslai Homes (social housing) in TechTown and the Makerspace initiative, we intend to support the wider community to develop digital skills.

Through the Things Network gateways and release of open data from the Council, the aim is to enable individuals and businesses to address local challenges, such as health & well-being and pollution through IoT-based innovations.

Making a better Barnsley for our citizens is at the heart of our Action Plan





# The TechTown Plan is integrated with the Council's plans

#### Current

An application has been successful for Barnsley to lead an URBACT Transfer Network, 'TechRevolution', to exchange good practice from Barnsley and continue the collaborative working across Europe to augment urban policies.

Through partnering with IoT Tribe, a London/Madrid-based organisation with an extensive track record in IoT start-up acceleration, the Council won the opportunity to host IoT Tribe North. As 'the Tribe' of start-ups is located at the DMC, it gives the local community an unprecedented opportunity to interact with a tech accelerator, which are normally only associated with large cities.

A Council-Library-MakerEd UK submitted to the Royal Academy of Engineering's Ingenious public engagement awards has been successful - to equip and run a Library Makerspace to develop creative skills for the digital age.

By identifying and embracing this type of opportunity, the Digital Campus agenda is already being progressed.

International Urban Cooperation successful bid to partner with a non EU city to develop links and projects (Barnsley is one of five pilot cities – others are Rome, Granada, Reggio Emilia and Nice)

Via TechTown, two Barnsley digital businesses have supported the recent successful Institute of Coding bid made by the University of Sheffield.

#### **Stakeholders**

BMBC, IoT Tribe, Barnsley business community, Capital Enterprise, Innovate UK, Rolls-Royce

#### **Submitted**

A submission has been made to the Innovate UK Business Basics programme - to advance the Connected Manufacturing project supporting digitalisation of traditional industries in partnership with Digital Catapult.

A European Structural and Investment Funds (ESIF) bid to support a Digital Innovation Hub building to refurbish the Core, adjacent to the DMC. We may need to look at political sensitivies around the Core

#### **Stakeholders**

BMBC, Barnsley Libraries, Barnsley business community, Sheffield City Region, Digital Catapult, regional industry

# TechTown Action Plan Funding & Resources

# What happens next?

The Barnsley TechTown group has come together with the shared goal of raising aspirations and improving the prospects of people and businesses in Barnsley. Through use of URBACT methodologies to support co-creation, they have collaboratively produced this Action Plan for Digital Campus.

The plan sets out a series of carefully considered actions that will power Barnsley's people and economy to the next level. What TechTown has achieved is already making waves around the region and beyond. Through full implementation of the plan, we will achieve the transition of 'From Coal to Code' to a higher tech, knowledge-based economy and with it a stronger brand and a brighter future.

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