COMPLEMENTING
ADVOCATING
LEADING

DIGITAL STRATEGY//JANUARY 2018

Armagh City Banbridge & Craigavon
Borough Council

> The world is going through a kind of digital transformation as everything - customers and equipment alike - becomes connected. The connected world creates a digital imperative for companies. They must succeed in creating transformation through technology, or they'll face destruction at the hands of their competitors that do

Embracing Digital Technology: A New Strategic Imperative,
MIT Sloan Management Review and Capgemini Consulting, 2013

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SETTING
THE CONTEXT

The Digital Economy is, in simple terms, an economy that is driven by digital technologies. It is arguably set to have the most important transformative influence on our global society going forward and to provide a powerful new way of building a competitive and inclusive world. Even now we have seen its impact in how we interact with each other socially, do business, move around and even look after our health.

Digital technology is increasingly permeating every aspect of society. It means that even the smallest companies can become global exporters with just a click of a mouse. Communities can access jobs, training and opportunities wherever they are. Schools can have access to the very latest information to drive a powerful new learning environment. Digitisation can reduce the costs of public services and make community engagement more inclusive. The digital economy can ensure that a region like Armagh City, Banbridge and Craigavon can provide the connectivity and access to services previously only enjoyed by its much larger neighbours and urbanisations.

It is hard to predict the speed of change that is going to take place but we do know that even a decade from now the world will function quite differently because of digital technology. At Armagh City, Banbridge & Craigavon Borough Council we want to make sure that we are giving all stakeholders in our community the best chance to harness the opportunities that the digital transformation will bring.

This is why we have taken the bold step of publishing a series of commitments developed through this Digital Strategy which:

• Advance a local response to digital transformation
• complement central government initiatives,
• play an advocacy role for the Borough in developing its digital development needs, and
• provide leadership and focus in growing the digital sector and its role within the wider Armagh City, Banbridge and Craigavon economy.

WHAT DOES THE DIGITAL TECH SECTOR LOOK LIKE IN ARMAGH CITY, BANBRIDGE AND CRAIGAVON?

The Armagh City, Banbridge and Craigavon Borough Council's 'Regeneration & Development Strategy 2015-2020' identified the importance of the digital tech sector as one of the key growth sectors that will contribute to its priority of growing the local economy. The sector was reviewed in a detailed scoping study[1] in 2016 which defined and profiled the role of the sector in the Borough identifying its importance not just in terms of its contribution as a sector but also in its wider role in supporting the growth and development of the wider economy.

Key parts of the Digital Tech sector include IT Services, Computing and Advanced Electronics, Software and Communications. In broad terms, a Digital Tech business is one which provides *'a digital technical service/product/platform/hardware, or heavily relies on it, as its primary revenue source'* [2].

NISRA statistics suggest that there are upwards of 135 Digital Tech businesses located in the Armagh City, Banbridge & Craigavon Borough Council area making it one of the largest Digital Tech business bases outside Northern Ireland's two main cities, Belfast and Derry/Londonderry. It employs around 800 people or on average 5 people per business, similar to the Northern Ireland average (outside Belfast and Derry City & Strabane Councils).

The sector is associated with more highly skilled individuals, higher productivity and higher wages. Matrix, the Northern Ireland Science/Industry Panel, [3]identifies the sector with a productivity premium of +28% and a wages premium of +44% above the Northern Ireland average.

+28%
above NI average

Digital GVA per head

+44%
above NI average

Digital ICT wages

Digital Tech has the potential to contribute in excess of £25m+ wages to the local economy

The Digital Tech Scoping Study forecast that the Digital Tech sector in the Borough has the potential to contribute in excess of £25m+ wages to the local economy by 2020[4]. Jobs growth in the sector has been very strong in recent years. In fact, the sector has grown fastest across all 11 Councils between 2013 and 2015 in terms of job creation by a considerable margin (up +73% vs. NI 13%).

Armagh City, Banbridge and Craigavon also has an important base of Knowledge Economy businesses which takes in most of the Digital Tech sector but also Medical Devices, Pharma/Biotechnology and other technical services. Craigavon particularly stands out in terms of its focus on Knowledge Economy businesses. Many of the creative industries located in the Borough are also often strongly digital in nature.

The Digital Tech sector's reach is much wider than just the sector itself. One source estimates that 41% of Digital Tech economy jobs in the UK exist in what are thought of as 'non-digital' industries such as financial services, health services and the public sector. Almost half of businesses operating in marketing, PR and design are now primarily digital technology businesses, one-third of film and broadcast media and increasingly more traditional services businesses including retail and sports and leisure. This is also the case in Armagh City, Banbridge and Craigavon which has a strong digital focus in some of its leading industries including Pharma and Agri-Food as well as some of its smaller and more innovative businesses in sectors including retail, marketing and tourism.

[1] 'Consultation And Scoping Study Into The Digital Tech Sector In The Armagh City, Banbridge & Craigavon Borough Council', Maureen O'Reilly, July 2016
[2] Tech Nation 2016, Transforming UK Industry', Tech City & Nesta
[3] Matriix Digital ICT Report 2016
[4] Scoping Study

WHAT ISSUES INFLUENCE THE DIGITAL ECONOMY'S DEVELOPMENT AND GROWTH?

An extensive consultation process has guided the development of this Digital Strategy. This has included engagement with organisations at the heart of the development of Northern Ireland's most innovative sectors and businesses including Catalyst Inc., Matrix and Digital Catapult. Those responsible for educating and upskilling people with digital skills (SRC, QUB, UU, AMMA) as well as InvestNI, the Local Enterprise Agencies and all those focused on the development of the local economy have been included. Of particular importance has been the voice of business in the region who attended an event hosted by Armagh Planetarium with guest speaker John Healy from All State Northern Ireland to put forward their views on how to take forward a Digital Strategy for the Borough.

There was strong endorsement of the importance of the sector to the Digital Economy in Armagh City, Banbridge and Craigavon and a welcome acknowledgement of the Council's pivotal role and innovative approach to driving forward its development with initiatives such as the Digi-Transform programme, the Digital Hub and Digital strategies. A willingness to engage with and support the Council was evident from all key stakeholders including Catalyst Inc, Digital Catapult, University of Ulster, SRC, business support providers and the business community.

The main issues of importance in this consultation process focused on:

CONNECTIVITY – OPTIMISING THE DIGITAL INFRASTRUCTURE

The volume of Internet traffic is set to increase at a phenomenal rate year on year putting increasing strain on a digital infrastructure, which is not fully developed, in all areas of the Borough. The need to have the best infrastructure in place was raised persistently as an issue during the consultation process. Parts of the Borough's fixed broadband speeds were perceived as slow and mobile coverage poor. The infrastructure was not considered adequate to allow the Digital Tech sector to fulfil its potential and support the broader development of the Borough. A number of businesses raised poor infrastructure as an issue negatively impacting on their business daily, particularly those based in more rural areas.

The Armagh City, Banbridge and Craigavon Council area is perceived as being at high risk of digital exclusion. The two key indicators measuring infrastructure show that the percentage of the population without 10MBPS Internet access is 9.1% in Armagh City, Banbridge and Craigavon compared to just 1% in Belfast. The percentage of the population without 4G mobile data is 6.4% (Belfast 0.6%).

Population without 10MBPS Internet access

9.1%	Armagh City, Banbridge and Craigavon
1%	Belfast

Population without 4G mobile data

6.4%	Armagh City, Banbridge and Craigavon
0.6%	Belfast

2017 MAP SHOWING OVERALL LIKELIHOOD OF POSSIBLE DIGITAL EXCLUSION

Armagh City, Banbridge and Craigavon
Likelihood of overall digital exclusion is **High**

Armagh Banbridge and Craigavon
Likelihood of overall digital exclusion is **High**
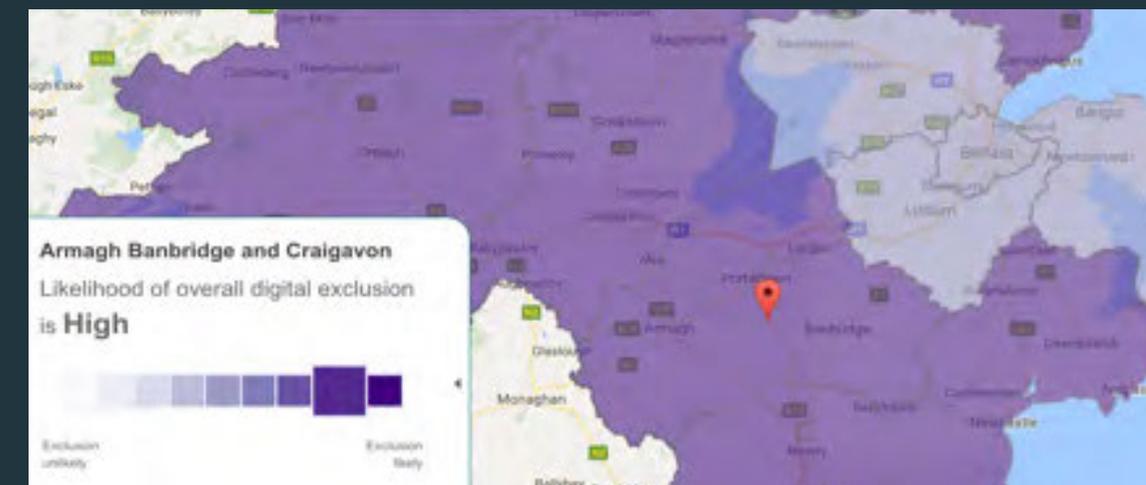
Issues around infrastructure and connectivity are largely the responsibility of national and regional governments and lie outside the control of local councils. For example, the Digital Economy Bill (2017) is a UK commitment to enable access to fast digital services. This will include a new legal right for everyone to request an affordable connection to broadband of a minimum specified speed (at least 10Mbps). The Draft Programme for Government makes a commitment to improve Internet connectivity through greater access to broadband services.

Armagh City, Banbridge and Craigavon Borough Council is playing its part through initiatives such as the Full Fibre Networks Programme and Borough Voucher Scheme (with Belfast City Council). However, there was general agreement that the Borough's infrastructure must be capable of providing coverage across all parts of the region at the volume, speed and reliability needed to live, work and do business in this rapidly changing environment.

AN INCLUSIVE SOCIETY –
MAXIMISING DIGITAL SKILLS AND CAPABILITY

As digital technology increasingly pervades every aspect of how we live our lives, the need to have even the most basic digital skills becomes paramount. More of our public and private services are moving online and as citizens we all should all have the ability to access them. Yet a significant proportion of the Borough's population remains digitally excluded or in simple terms does not have even the most basic digital skills to go on-line or pay a bill. The demand for digital skills and increasingly specialist digital skills will continue to grow. Even now many jobs have a digital element, and it is predicted that within 20 years 90% of all jobs will require some element of digital skills .

1 IN 6   16%

of the population have not been on-line in the last 3 months
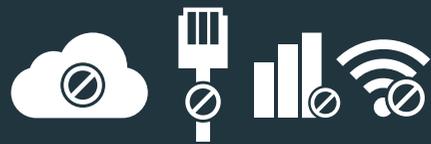
1 IN 4 | 25%

do not have the 5 basic digital skills needed to manage information, communicate, transact, create and problem solve in a digital age

The consultation emphasised a widely held view that there remains a lack of awareness in some parts of the ecosystem (education and wider) about the critical need to develop the digital skills and capabilities of all citizens in the Borough, both young and old. Businesses viewed digital education as inadequate and out of date. There was a particular concern that not enough practical support and experience was being offered and that more innovative, flexible and practical solutions were required which were driven primarily by business need. Those working in schools and colleges stated that major changes had recently been undertaken and were in the process of being completed in recognition of the need to improve education in digital skills across the education platform. It was recognised that some positive inroads are being made with initiatives like Go On NI which reaches out to Internet beginners across Northern Ireland. The Digital Skills Framework and innovative national and international initiatives such as CoderDojo, Raspberry Jam and Bring IT On focus on developing young people's skills.

Digital and STEM (Science, Technology, Engineering and Maths) go hand in hand and both schools and colleges have focused STEM strategies in place. The evolving work of the Further Education Colleges in terms of skills development and business engagement is key. The Southern Regional College is working to enhance how it supports the sector and to deliver a new approach through its campuses across the Borough. The Council has also been forward thinking in the development of its Digital Youth programme with Young Enterprise aimed at improving students' digital skills by engaging with local businesses. The Council area is unique outside Belfast and Derry/Londonderry in having the AMMA Centre – a Creative Learning Centre – located in Armagh City. However, the consultation process highlighted a strongly held view that much greater investment is needed to ensure that digital skills development is embedded in every aspect of society within the Borough. The investment needs to be more co-ordinated and strategic with a particular focus on practical learning supports and greater engagement between students/schools/colleges and business. There is a need to 'educate the educators' on the importance of digital skills.

SUPPORTING/SHOWCASING DIGITAL AND DIGITALLY ENABLED BUSINESS

We know that it is imperative to support digital businesses in the Borough. They are among our most productive, innovative, skilled and outward looking businesses.   They are not however a homogenous group and can be difficult to identify and reach. Many digital tech businesses, for example, tend to be sole owner and managers typically working from home. The consultation process confirmed how 'hard to reach' the digital tech sector was in the Borough and the challenge of finding ways of bringing them together to network, something that has successfully been achieved in other regions such as Derry and Newry. It was considered crucial to develop some form of 'hub(s)', real or virtual, to provide a platform to allow these businesses/peers to network and find ways to interact and share ideas/develop opportunities.

The consultation process also highlighted that many businesses, particularly micro and small, are being left behind by the digital revolution, an issue that is evidenced by research . The need for all businesses to have basic digital skills in how they manage information, communicate, transact and problem solve is key. Yet statistics show that 2 in 5 small businesses lack even basic digital skills. There are some powerful demonstration effects from businesses/entrepreneurs living and working in the Borough who have used their digital skills and technologies as part of a successful business growth strategy.

TOTAL HOCKEY: A LOCAL DIGITAL BUSINESS SERVING NATIONAL AND INTERNATIONAL CUSTOMERS

It is very important to harness that success and use it to showcase to all businesses what can be achieved. The consultation also highlighted the importance of working closely with strategic support providers including Catalyst Inc., Digital Catapult and InvestNI in all aspects of the Council's support to the Digital Economy in Armagh City, Banbridge and Craigavon.

The Digi-Transform Programme is noted an important step in this process aiming to support 100 digital and non-digital businesses in the Armagh City, Banbridge and Craigavon Borough Council to scale up and grow over the next 3 years. The innovative nature of this programme was noted by a number of stakeholders during the consultation process.

DIGITAL ABC – LEADING BY EXAMPLE

Armagh City, Banbridge and Craigavon Borough Council has its role to play in the digital transformation of the Borough. The Council is committed to building digital into what we do and particularly through the services we offer. We want to make out services more accessible, efficient and secure and to be a leader in the implementation of digital transformation projects both within and outside the Council.

The Digital Economy Bill (2017) makes a number of commitments around the provision of government digital services including enabling government to deliver better public services and protecting citizens in the digital economy. The Council is committed to fulfilling its obligations under the Digital Economy Bill.

> ## a leader in the implementation of digital transformation projects both within and outside the Council
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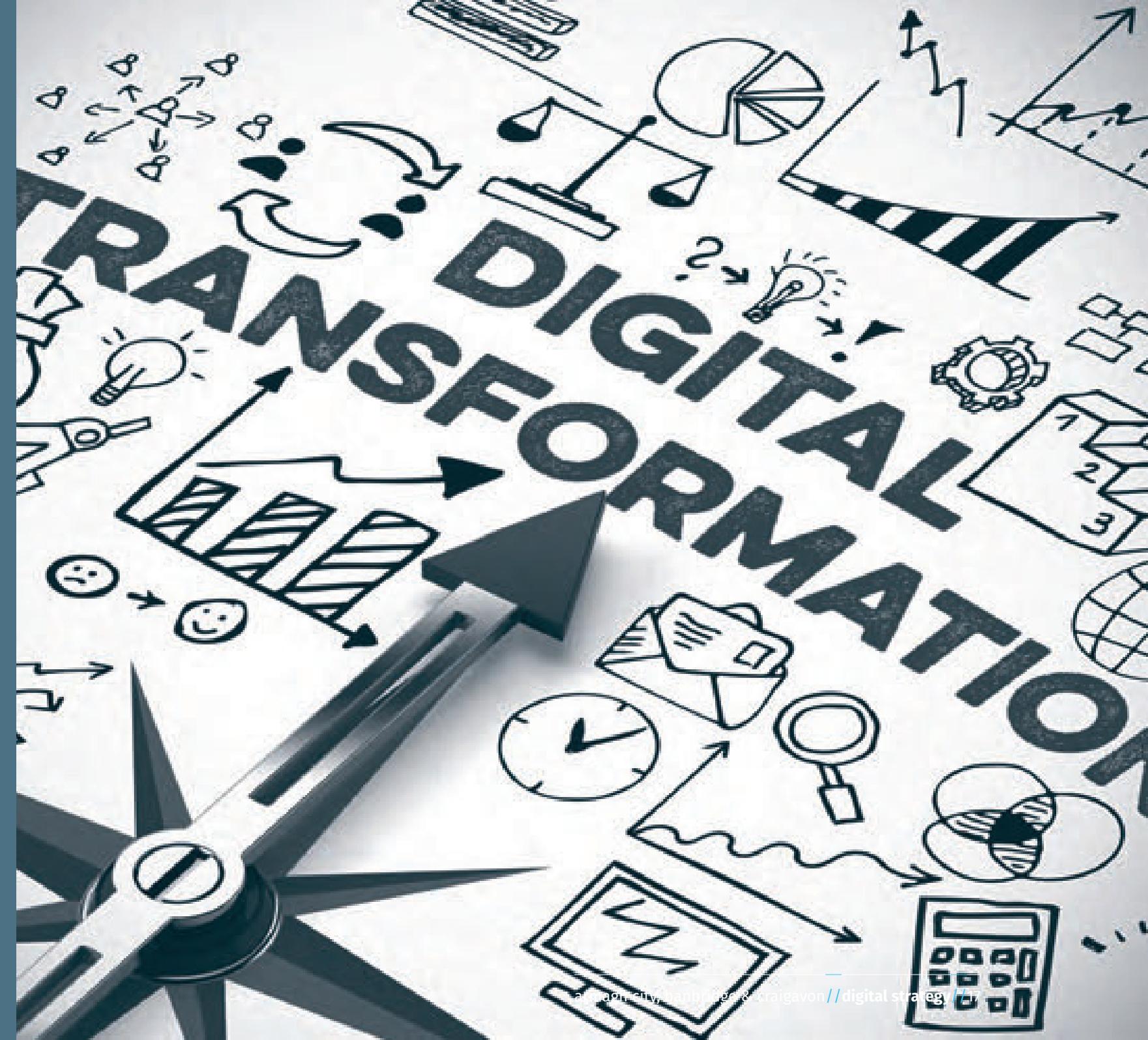
WHY TAKE LOCAL ACTION? –
THE RATIONALE FOR INTERVENTION

While global changes dominate the sector, there is a need for local action to tackle digital exclusion and realise the investment potential of the sector for the Council area.

The Armagh City, Banbridge and Craigavon Borough Council area is assessed as being at high risk of digital exclusion. Increasingly, digital exclusion equates to economic and social exclusion. The Council is taking action at the local level to tackle digital exclusion both through its Digital Strategy (this strategy) and through its other policies and programmes such as its community development, cultural, urban regeneration and rural development programmes.

A further reason for taking action at the local level to develop the sector lies in the potential investment which the sector can deliver as one of the fastest growing sectors in the UK and Northern Ireland economies. Other Council areas in Northern Ireland with a population smaller than that of Armagh City, Banbridge and Craigavon have effectively promoted their areas as a focus for inward investment and indigenous investment in the digital technology sector.

The Council area has a considerable pool of talent on which to build local and international investment. It has a small but strong core of digital tech businesses already located in the area.

It also has a number of large, sophisticated internationally competitive businesses which are digitally enabled but not part of the digital technology sector itself. These businesses – such as Moypark, Almac, Ulster Carpets and others – rely on digital technology for their success and have a large pool of digitally sophisticated employees. In addition, the Council area has a large number of residents who work in the digital technology sector but commute to Belfast for their employment. This combination of digital and large digitally enabled businesses along with a pool of residents employed in digital technology outside the Borough creates real potential for growth in the sector within the Council area. But there is currently no support network for the sector's development and no focus for realising that potential. Without Council action to create and sustain business networks for the sector and a focus for its development that potential is unlikely to be fully realised.

> there is a need for local action to tackle digital exclusion and realise the investment potential of the sector for the Council area
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WHAT SHOULD THE COUNCIL DO TO SUPPORT DIGITAL GROWTH?

Our research for this study and the consultations undertaken in its support suggests that action by the Council to develop digital technology in its area should be based on 3 inter-related elements of
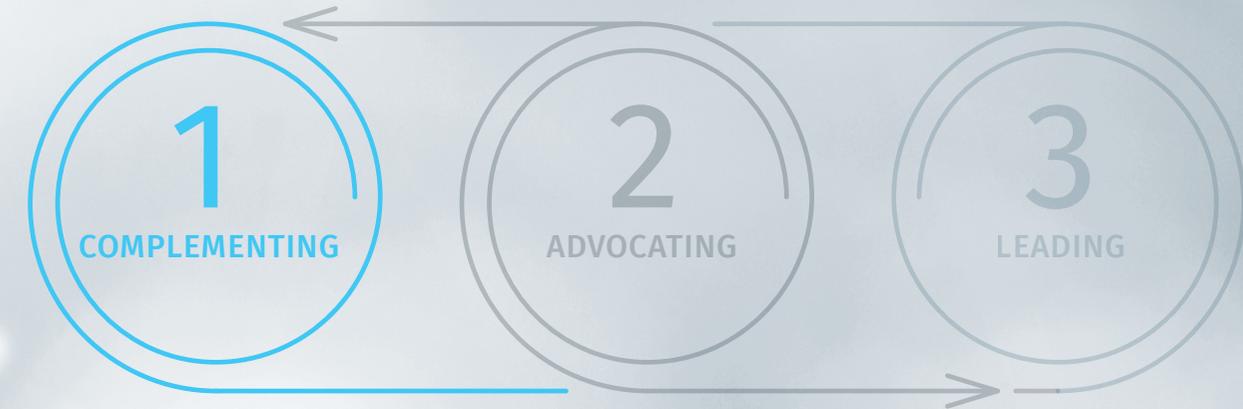
1. **Complementing** UK and Northern Ireland Government initiatives
2. **Advocating** the needs of the Council area, and
3. Providing local **leadership** and focus.

These elements and their interaction are shown below.

THE 3 ELEMENTS OF A STRATEGIC APPROACH

1 COMPLEMENTING

2 ADVOCATING

3 LEADING

86%

62%

COMPLEMENTING

1 COMPLEMENTING   2 ADVOCATING   3 LEADING

Action under the 'Complementing' heading would include bringing a local bottom up element to the UK Digital Strategy and to any relevant policy documents published by the Northern Ireland Executive. It would also involve tackling digital exclusion by working to address infrastructure deficiencies and addressing educational, skills and aptitude gaps at local level. The Council is itself a provider of digital government services and will consider its own role in making the Borough digitally aware and skilled. Also the Council would wish to work with the Department of the Economy, InvestNI and other government agencies both to ensure that national and regional policies have the greatest possible impact in the Council area and to contribute to the formulation and development of those policies in a way which reflects the needs of the Council area.

The following Exhibit illustrates the actions which might be taken under the Complementing heading.

Illustrative Actions Under Complementing

- Council needs a authoritative voice with Northern Ireland and UK policy makers and agenda setters
- Also requires a strategic understanding of the digital needs of local businesses, both large and small
- The Council's own policies and practices will be important
- Tackling Digital Exclusion requires local action and inclusion in community development, regeneration and rural development action plans
- New Employability and Skills Strategy has a major focus on influencing career choice including towards the digital skills
- Working with educating and training providers to ensure provision meets needs of digital businesses

ADVOCATING

In advocating the needs of the Borough in relation to digital development, the Council will continue to speak out clearly across a range of issues including:

- Improving the fixed line and mobile digital infrastructure of the Council area, particularly in rural areas
- Ensuring that the Council area's needs in relation to digital development are met. This might include, for example, engaging with the Southern Regional College to ensure that its course and consultancy provision meets the express needs of business in the Council area or encouraging bodies such as Catalyst Inc. (formerly the Northern Ireland Science Park) to be active in providing services in the Borough
- Promoting the Council area as a location for inward investment in the digital technology sector.

Illustrative Actions Under Advocating

- Need for new approaches to mobile and fixed line infrastructure deficiencies
- Ensuring UK and Northern Ireland initiatives benefit to Council area
- Close relationship with Catalyst Inc., Digital Catapult etc.
- 3rd level provision at local level
- Agenda setting for the Council area
- Promoting Council area as location for inward investment
- Trade and investment

1 COMPLEMENTING

2 ADVOCATING

3 LEADING

LEADING
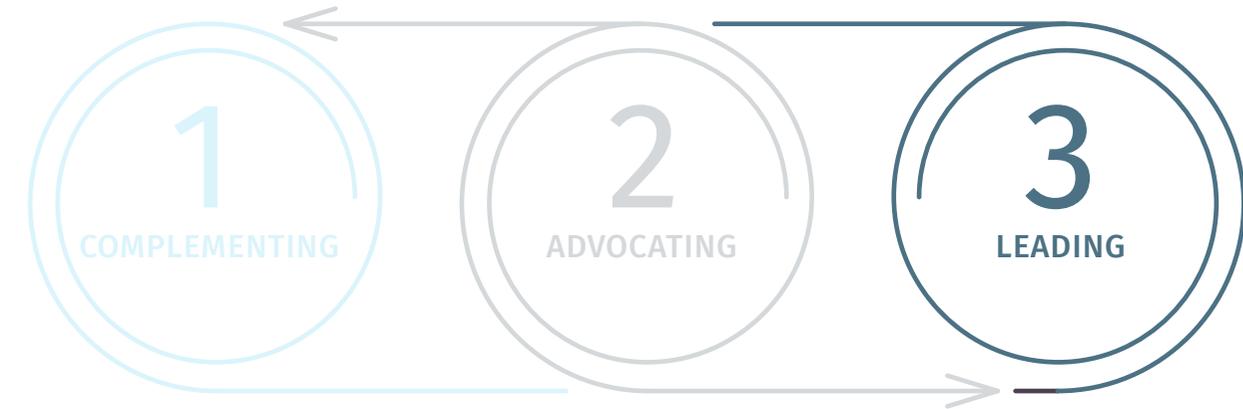
The foundation of a successful strategic approach to developing the digital technology sector in the Borough necessitates the Council developing the leadership of the process and to use that leadership role to provide a focus for the development of the sector.

The consultations undertaken to support this strategy development showed a lack of identity and focus to the digital sector in the Borough, that digital businesses were very fragmented with many feeling removed from appropriate support structures.

The parallel study, currently being undertaken by Oxford Innovation, of the potential for digital hubs in the Council area could have an important contribution to make by providing visible physical foci for the development of the digital sector in the Borough and a structure for sectoral focus, leadership and networking. However, whether or not digital hubs are developed, networks need to be developed to provide focus and leadership for the sector's development.

of a partnership with organisations such as Catalyst Inc., Matrix, Digital Catapult, the Southern Regional College and Ulster University.

The Exhibit illustrates some of the actions which the Council could take under the leadership heading.

Illustrative Actions Under Leading

- Creating a focus for the sector in the Council area
- Creating and animating sectoral networks
- Possibly based on digital hubs
- Being a strong and dynamic partner
- Catalyst Inc., Matrix, Digital Catapult, SRC, UU, International counterparts
- Overall, thought leadership

IMPLEMENTING THE
3 - PART STRATEGY
—

Implementing the 3 – part strategy proposed will require the Council to gain new resources and expertise and to develop its relationships with digital businesses in the Borough, with policy makers and decision makers at the Northern Ireland level and with its partner organisations such as Catalyst Inc. and SRC.

THERE ARE **5** KEY COMPONENTS TO THIS PROCESS:

1 The Council needs to recruit a Digital Champion or Digital Ambassador for the Armagh City, Banbridge and Craigavon Council area. The Digital Ambassador is probably a part time role for an experienced senior person from the digital sector who can interact authoritatively with policy makers in central government, with digital businesses of all sizes across the Borough and with other Council officers.

2 Once the Digital Ambassador is in place, the Council should then consult on a 3 Year Strategy Delivery Plan for the Digital Sector in the Borough which will include issues such as:

- Putting together a private sector led Digital Leadership Team made up of key figures from digital tech and large digitally enabled businesses located in the Borough along with digitally skilled talent living in the Borough
- Working with Council to progress plans for the provision of digital hubs, depending on the results of the current study
- Making the case for excellent digital infrastructure across the Council area
- Helping to ensure that the Council's own digital services are cutting edge and high quality
- Much more consistent delivery of educational initiatives – such as Coderdojo – across the Borough
- Working with Catalyst Inc, and learning and development and business support partners to maximise educational support for the digital sector in the area and to promote digital business start-up and development

3 Using the Digital Ambassador and the Digital Leadership Team to promote the Council area strongly in key markets for inward investment and promoting the existing digital offerings of existing businesses in the Council area

4 Developing partnerships with key Northern Ireland and UK partner organisations and with appropriate international organisations to promote a confident and authoritative agenda for digital development of the Council area – working with the Council's digital partners, and

5 Creating a Digital Development Officer role within the Council to support the Digital Ambassador and to work within the Council structures to implement the 3 year Digital Strategy Delivery Plan.

The Digital Strategy Action Plan sets out the Council's commitments to the Digital Strategy for the Borough

APPENDIX

ARMAGH CITY, BANBRIDGE & CRAIGAVON BOROUGH COUNCIL **DIGITAL STRATEGY**   ACTION PLAN

CATEGORY	ACTIONS & ACTIVITIES	TIMESCALE
Complementing UK and Northern Ireland Government initiatives	The Council will work to tackle digital exclusion both through this strategy and through its community development, urban regeneration and rural development action plans	Continuing
	The Council will work with schools and colleges to ensure that education and training provision equips young people for a digital future and meets the need of digitally driven businesses. This will be an important part of the Council's Employability and Skills Strategy as well as this Strategy.	Continuing
	The Council will develop key strategic partnerships to support the development and growth of the digital sector in the Borough. Key partners will include the Department for the Economy, InvestNI, Catalyst Inc., Digital Catapult and the Southern Regional College	Continuing
	The Council will review its own digital policies and practices to ensure that they demonstrate best practice in digital enablement and inclusion	Continuing
Advocating the needs of the Council area	The Council will work with the Northern Ireland Executive and with service providers to ensure that the Borough has excellent fixed-line and mobile digital infrastructure well in excess of the minimum standards (10mbps) set by the UK Digital Economy Bill	Continuing
	The Council will work with Catalyst Inc., Digital Catapult, SRC and UU to ensure that the Borough has excellent services to digital businesses and participates fully in all appropriate Northern Ireland and UK initiatives	Continuing
	The Council will promote the Borough as an excellent location for investment in digital businesses, both externally and locally owned	Continuing
Providing **Leadership** and Focus	The Council will create networks of support for digital businesses throughout the Borough. As appropriate these will be based in digital hubs in the Borough and will provide support to all the main digital sub-sectors	Continuing
	The Council will deliver the Digi-Transform programme which will work with 100 local businesses, both Digital and Non-Digital, to provide a package of mentoring and workshop programme support to drive the digital transformation of local businesses and create new job opportunities in the Borough	Networks to be in place in 2018. Timescale for digital hubs is subject of a separate study Digi-Transform Programme delivery to commence November 2017 and run for 3 years
Resourcing the Strategy	The Council will employ a Digital Ambassador for the Borough	Digital Ambassador in post by mid 2018
	Once the Digital Ambassador is in post, the Council will develop a 3-year Digital Strategy Delivery Plan for the Borough	Digital Strategy Delivery Plan prepared in Q3 and Q4 2018 and applying to financial years 2018/19 - 2020/21
	The Council will develop a private sector led Digital Leadership Team to ensure that the needs of digital businesses are well articulated to service providers. The members of the Digital Leadership Team will be drawn from digital businesses in the Borough, larger businesses which employ staff with a high level of digital skills to support their business growth and digitally skilled talent living in the Borough	In first 6 months of Digital Strategy Delivery Plan
	The Council will employ a suitably skilled Digital Development Officer to support the Digital Ambassador and to work within Council to implement the Digital Strategy Delivery Plan	Digital Development Officer in post by mid 2018

INTERESTED IN ECONOMIC DEVELOPMENT

in the Armagh City, Banbridge and Craigavon Borough Council area?

We want to talk to you

Please contact the Economic Development Department at Armagh City, Banbridge and Craigavon Borough Council

📞 **0300 0300 900**

✉ **info@armaghbanbridgecraigavon.gov.uk**

🌐 **armaghbanbridgecraigavon.gov.uk**

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