

GREATER LINCOLNSHIRE'S

DIGITAL LANDSCAPE

In 2016, the first Greater Lincolnshire's **Digital Landscape report was produced** to provide a better understanding of the digital technology sector in Greater Lincolnshire and enable comparison of the area's digital landscape with other areas profiled in the Tech Nation report.

The report was commissioned by the Business Lincolnshire Growth Hub with Digital Lincoln and the Greater Lincolnshire Local Enterprise Partnership.

The report told of a digital sector that was "modest in size but big in potential". Three years on, our latest report draws on the latest official statistics and an online survey of businesses to present an up-to-date picture of Greater Lincolnshire's digital landscape.

KEY MESSAGES

The digital tech sector continues to grow strongly in terms of the number of businesses, jobs and the value that it generates for the Greater Lincolnshire economy.

The sector encompasses a wide breadth of activities, with electronic components, communications equipment, and data processing standing out as key strengths.

The expansion of the sector has affected the availability of skilled workers, which continues to be a major concern for digital businesses. Accessing the right training is a related concern, although the development of the Institute of Technology provides scope to build the digital skills capacity of the region.

The Greater Lincoln digital cluster is the area's largest concentration of digital employment, which is growing at twice the regional average. North Hykeham, in particular, has seen strong employment 🖌 growth. Market Deeping is another key centre of digital employment that has also seen significant jobs growth since 2014.

Greater Lincolnshire is valued as a location which offers a good quality of life, and where the costs of running a business are low. However, broadband connectivity and transport infrastructure are viewed as two of the main disadvantages of being located in Greater Lincolnshire.

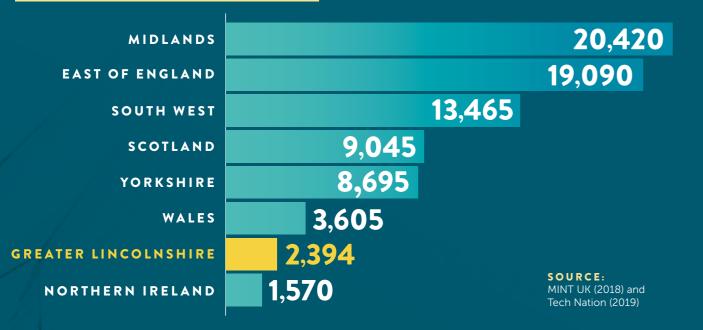
Our survey suggests that there has been a growth in inter-trading between digital businesses in Greater Lincolnshire. Businesses express a growing demand for further collaboration within the sector, and for support to help the sector to grow. The development of Mosaic, Lincoln's new digital hub, is a demonstration of this and illustrates the growing sense of momentum within the digital tech sector.



THE SIZE OF GREATER LINCOLNSHIRE'S DIGITAL TECH SECTOR

Across Greater Lincolnshire, there are 2,394 businesses operating in the digital tech sector, representing 4% of all businesses in the region. While the digital sector is relatively small, it continues to grow rapidly. The number of businesses increased by 19% between 2014 and 2017, while the sales turnover generated by the sector grew by 27%.

NUMBER OF DIGITAL TECH BUSINESSES



There are 8,250 jobs in Greater Lincolnshire's digital tech sector. This represents 1.8% of jobs compared with 4.6% across England. This concentration is highest in the county of Lincolnshire (2.3%) and lowest in North East Lincolnshire (0.9%).

In the latest year for which accounts are available, the total value of turnover for businesses in the digital tech sector was £992 million, an increase from £779 million in 2014.

Since the previous report was published in 2016, the number of digital jobs in Greater Lincolnshire has increased by around 17%. This growth has been driven by an increase

in computer programming, computer consultancy, data processing, and telecommunications activities across Greater Lincolnshire.



NOTABLE DIGITAL

Lincolnshire has a number of digital sector specialisms. The manufacture of electronic components continues to be a key activity for Lincolnshire, employing more than three times the national average.

Other highly represented sectors include the manufacture of communications equipment, which is an important and growing sub-sector across Greater Lincolnshire.

HIGHLY REPRESENTED DIGITAL SECTORS

Figures represent number of times higher than the national average



SOURCE: Business Register of Employment Survey, 2017

Business Register of Employment Survey and MINT Database, 2017



KEY DIGITAL **CLUSTERS**

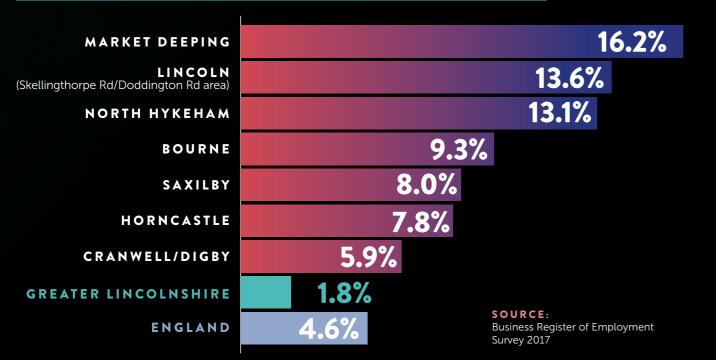
Market Deeping and Greater Lincoln continue to be the areas with the highest concentrations of digital tech sector employment in Greater Lincolnshire.

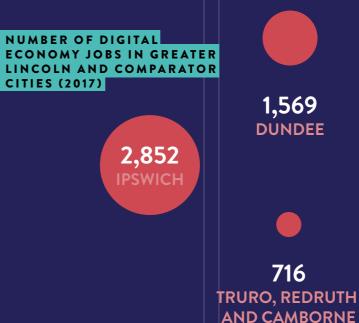
In Market Deeping digital tech sector jobs now account for 16% of all employment compared with 12% in 2014, an increase of nearly 200 jobs. The town is the location of the Eventus business centre, which is home to a number of digital businesses. These include Cognition Intelligence, a Cyber Security business, Pixel Click which creates digital content for websites and publications, and Zazzle Media Ltd., a digital marketing company that has recently experienced rapid growth. Market Deeping continues to be an important centre for the manufacture of communications equipment, and computer consultancy and data processing are increasingly important activities.

Digital tech sector employment in North Hykeham has increased significantly, growing from 8% to 13% of all jobs between 2014 and 2017. This has been driven by growth in telecommunications, computer programming, and computer consultancy activities. North Hykeham is a key growth area within the Greater Lincoln cluster, accounting for more than half of the area's digital sector employment growth.

Bourne and Horncastle continue to have a high concentration of employment in publishing activities, while Saxilby emerges a new hot spot for digital tech sector employment, driven by an increase in computer programming jobs, primarily at Orderwise.

AREAS WHERE DIGITAL FIRMS ACCOUNT FOR MORE THAN 5% OF JOBS





THE GREATER LINCOLN DIGITAL CLUSTER

Greater Lincoln, which includes Lincoln and North Hykeham, continues to be the largest digital tech sector cluster in Greater Lincolnshire and is the location of more than a third (36%) of digital jobs in Greater Lincolnshire.

Digital tech sector employment in Greater Lincoln now accounts for 4.5% all jobs, which is two and half times greater than the average for Greater Lincolnshire.

The Greater Lincoln digital cluster continues to grow; the number jobs increased from 2,253 to 2,990 between 2014 and 2017, representing an increase of around a third.

North Hykeham and the Skellingthorpe Road/Doddington Road areas continue to be important locations for the digital tech sector, with North Hykeham seeing significant digital sector growth. Central Lincoln and, in particular, the area around the University of Lincoln is home to more than 400 digital tech jobs.

Notable sectors include telecommunications activities, which has emerged as the most important digital sub-sector in Greater Lincoln, followed by computer programming, manufacture of electronic components, and computer consultancy.

Key local businesses include GCI Communications, Dynex Semi-Conductor, Integrity Software, ScholarPack, and Rockstar Games.

A new digital hub, Mosaic, has opened in the centre of Lincoln to provide co-working space for digital businesses. The aim of Mosaic, which is private-sector led, is to facilitate the growth and development of the digital sector by providing dedicated space for digital businesses to network and collaborate. It also aims to improve the visibility of the digital sector and promote the businesses in the sector both within and outside of Greater Lincolnshire.

SOURCE: Business Register of Employment Survey, 2017 and Tech Nation 2018



2,990 GREATER LINCOLN

3,027 NORWICH

CASE STUDIES C4DI

C4DI (The Centre for Digital Innovation) is a privately-run digital hub and technology incubator located in Hull.

The hub was founded by property development company The Wykeland Group, Kingston Communications, University of Hull, and Hull Digital. The hub initially developed as a co-working space, C4DI Beta, in an old warehouse, with around 40 tenants paying a monthly membership. In 2015, C4DI opened a purpose-built building on the bank of the Humber in Hull and now has around 1,000 members, both virtual and tenants.

C4Di provides workspace for digital and technology companies and individuals which includes access to a 3GB symmetric connection, meeting rooms, events spaces and workshops as well as support for business start-ups.

WWW.C4DI.CO.UK

C4DI

A key focus of C4Di is the facilitation of collaborative relationships both within the digital sector and between the digital sector and Hull's long established sectors, such as engineering and manufacturing. Digital businesses are able to learn from each other and work together, and there are opportunities for them to create value in other sectors.

The team behind C4Di believes that it is now recognised as the heart of the digital community in Hull. C4Di continues to grow and, in 2020, C4Di will open its Tech campus, funded using a combination of £11 million European Regional Development Funding and private sector investment.

> "Facilitation is probably the most important role of the hub. We like to say we 'engineer serendipity'. There are some businesses that are good at networking but others that work quietly on their own, and we need to be aware of what everyone is working on so that we can bring them together."

JOHN CONNOLLY, MANAGING DIRECTOR, C4DI

mosaic Lincoln's digital hub

Mosaic is a new digital hub that opened in Lincoln city centre in 2019.

The development of the hub has been led by the digital community in Lincoln, working collaboratively with Lincolnshire Coop and Lincolnshire County Council. The aim of Mosaic is to provide a focal point for the digital sector in Greater Lincoln, to foster networking and growth.

The hub provides a co-working space which gives digital businesses a place to develop, collaborate and innovate. The new £1.8 million space is based in Thomas Parker House in the city. ScholarPack, a Lincoln-based tech company which provides management information systems for primary schools, have moved in as its flagship tenant.

Facilities include high-speed internet, hot desks, meeting rooms, breakout areas, booths for phone calls and private offices for hire. Mosaic provides different membership options and flexible terms for digital businesses. It also features a lounge offering coffee for tenants, a programme of regular events and the support of building hosts to keep the facility running smoothly.

WWW.MOSAICLINCOLN.CO.UK

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O DIGITAL

Digital Lincoln is a community of people and businesses interested in digital technology.

Based in Greater Lincoln, the aim of Digital Lincoln is to build the local digital tech community, by providing the opportunity to share ideas and knowledge through a series of informal events and socials.

The Digital Lincoln Meet Up has a growing network of more than 800 members from Greater Lincolnshire and beyond (see https://www.meetup.com/digitallincoln/). It hosts regular events in and around Lincoln which include both technical and non-technical topics, to ensure it is accessible to everybody. Many events take place at the Boole Technology Centre in Lincoln, with the support of the Science and Innovation Park. The new Mosaic Digital Hub will also be a location for Digital Lincoln events, including the annual Lincoln Hack. Digital Lincoln is also sponsored by the Business Lincolnshire Growth Hub, in recognition of the importance of the digital tech sector to the Greater Lincolnshire economy.

WWW.DIGITALLINCOLN.CO.UK

rockthecotswolds

Rock the Cotswolds was formed in 2010 by Oli Christie, owner of digital games based business Neon Play.

The initiative is about creating a highly positive image of the Cotswolds, with a rough geographical designation of Gloucestershire and West Oxfordshire. The initiative has an informal structure and is led by individuals operating as volunteers.

To date over 400 businesses and business-related activities, all with a connection to digital and economic growth, have been identified and are profiled on the website which sits at the heart of the initiative.

Rock the Cotswolds advertises vacancies, runs events which promote the area as place to do business, and has reached out to engage a team of ambassadors who support the development of the area as a digital hub.

The initiative has developed a positive and pro-active marketing campaign and has been able to secure a range of marketing support including billboards on the M4. Overall the initiative which is business led has engaged over 40 sponsors in addition to the time put in by its organisers to support its promotional work.

WWW.ROCKTHECOTSWOLDS.COM

The team behind Rock the Cotswolds are not paid and all have day jobs. We're doing this because we're passionate about the area and its potential over anywhere else in the world.

RECRUITMENT OF SKILLED WORKERS IN THE DIGITAL TECH SECTOR

60% of digital businesses who responded to our survey did not consider there to be sufficient digital workers to meet demand.

This represents a decline in the reported availability of skilled digital workers reported at the time of the previous report. This reflects the picture of expanding activity within the sector, in terms of growth in businesses and jobs but also the level of inter-trading reported by digital tech businesses.

A guarter of computer science graduates from the University of Lincoln find employment in the local digital sector, which is consistent with the previous report. These include graduates who find digital jobs roles with digital or non-digital employers, or who become self-employed or start their own business.

The greatest employers of IT graduates are local software businesses, particularly Rockstar Games, Streets Heaver and Continuum 247. The University of Lincoln continues to be a major employer of its own computer science graduates. Graduates also find employment with (non-digital) public sector employers such as the NHS, civil service and armed forces, and a diverse range of private sector employers including those involved in engineering, food manufacturing, retail, construction, packaging, financial services and healthcare. The diversity of employment destinations for IT graduates emphasises the enabling role of the digital tech sector and the increasing importance of digital technology for business productivity and growth in Greater Lincolnshire.

TOP EMPLOYERS OF UNIVERSITY OF LINCOLN COMPUTER SCIENCE GRADUATES, 2015-2017

DIGITAL NON DIGITAL > Rockstar > University of Lincoln > Streets Heaver > Anglian Water > Continuum 247 > NHS > Tended Ltd

> Scholarpack



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THE BUSINESS ENVIRONMENT

Responses to our survey indicate that the level of sub-contracting to digital businesses in Lincolnshire has increased, with 56% of businesses reporting that they sub-contracted to local digital businesses (compared with 33% in 2016).

However, the level of networking between businesses in the digital sector activity remains consistent with the picture in 2016, and the proportion of businesses stating that they are sub-contractors to other businesses has declined slightly.

A number of businesses that were involved in networking mentioned their involvement in the new Mosaic Digital Hub in Lincoln (see page 9).

> 56% 53% 41% SUBCONTRACTOR TO OTHER GREATER LINCOLNSHIRE BUSINESSES USE OTHER LINCOLNSHIRE BUSINESSES AS SUB-CONTRACTORS NETWORK WITH OTHER DIGITAL BUSINESSES

As in the 2016 report, digital businesses were asked to identify what they considered to be the main advantages and disadvantages associated with being located in Lincolnshire.

The low costs of running a business and the quality of life offered by the area continue to be perceived as the main benefits of being located in Lincolnshire. Some businesses consider Lincolnshire's location to be an asset, with easy access to other areas of the UK.

Difficulties in attracting and recruiting skilled digital workers remain a key concern for digital businesses. Businesses also continue to cite broadband speeds and transport infrastructure as key barriers.

ADVANTAGES OF BEING A DIGITAL **BUSINESS IN LINCOLNSHIRE**

Low costs of running a business Quality of life/rural location Within easy reach of elsewhere in the UK

Friendly tech scene

Good support for the digital sector

Good broadband

Small digital sector, so little competition

DISADVANTAGES OF BEING A DIGITAL **BUSINESS IN LINCOLNSHIRE**

Difficulties attracting and recruiting digitally skilled works

Slow broadband speeds

Remote/poor transport infrastructure

County lags behind rest of UK/reluctance to change

Lack of local leadership

Lack of dedicated office space

Poor local wages

Greater investment in supporting the digital sector to growth... including infrastructure, collaboration, direct funding... set up of digital challenges with the investment to fund businesses to solve real time issues.

When asked how the sector could be better supported, the responses suggest a growing emphasis among digital businesses on the need for more networking and collaboration within the sector. Related to this, a number of businesses mention the need for a tech or digital hub, or office space that is dedicated to the digital sector. Better broadband connectivity, and access to training and skilled workers, remain key priority issues for the sector.

HOW CAN THE NEEDS OF DIGITAL BUSINESS BEST BE SUPPORTED?

MORE (BUSINESS-LED) NETWORKING WITHIN THE SECTOR

NEW HUB/DEDICATED OFFICE SPACE FOR DIGITAL BUSINESSES

> BETTER BROADBAND CONNECTIVITY/5G

GREATER ACCESS TO TRAINING AND SKILLED DIGITAL WORKERS

HELP TP BUILD THE TECH COMMUNITY AND FOSTER COLLABORATION

IMPROVED TRANSPORT INFRASTRUCTURE

FUNDING TO ENABLE DIGITAL BUSINESSES TO GROW

PROMOTING OF LINCOLNSHIRE AS PLACE TO LIVE AND WORK

> Help us to grow the sector, more businesses means more jobs and more talent which helps us all.

Better networking and events that are driven by business, not Government or universities.

MOVING FORWARD

The 2016 version of this report identified a number of key opportunities. We have updated these to take account of findings linked to the current report.

THE RELEVANCE OF THE SECTOR

The Greater Lincolnshire LEP has now recognised digital as an important cross-cutting and enabling sector in the Greater Lincolnshire economy. The latest data suggests that there has been significant growth within the sector in Greater Lincolnshire, and the feedback to the survey shows a continuing and growing demand for networking and collaboration between digital businesses. Since the previous report, ongoing discussions within the digital sector in Greater Lincoln have led to the creation of Mosaic, a private-sector led coworking space for digital businesses. It is important to maintain vthe recognition of the importance of the sector and to ensure it is acknowledged as a key enabling sector in the redrafting of the current Local Industrial Strategy.

RELATIONSHIP MANAGEMENT

In the previous report the research identified that the relatively modest size of the sector and its clear geographical clustering provide real opportunities for the development of an aftercare approach by the local authority/LEP network in Greater Lincolnshire. This would involve getting alongside the most important players in the sector, understanding the challenges to their growth and development and, where appropriate, looking to take bespoke action to help address them. We have significant evidence to suggest that the sector is growing, which emphasises the continued importance of this relationship management process. Activities to ensure ongoing work to increase the broadband connectivity of Greater Lincolnshire and an adequate supply of suitable business premises are important themes in this context. The recent development of Mosaic is a powerful example of what can be achieved.

IMAGE

It is clear that there are positives and negatives in terms of the image of Lincolnshire. Its modest cost base and relatively remote nature make it attractive as a place to nurture a business. The more challenging issues relate to a lack of skilled digital workers and relatively low profile when compared with other areas of the UK. There are examples of image-based activities in other rural areas which have sought to address this. A number of these approaches have been tried elsewhere, such as "Rock the Cotswolds", and there is scope to consider how such an approach might be developed in Greater Lincolnshire.

RECRUITMENT/EDUCATION

While there appears to be a good pipeline of computer science graduates into the sector from the University of Lincoln (with more than 20 IT graduates placed within one business alone over the last 5 years) more widely the recruitment picture is challenging for businesses. There is significant evidence of in-house and informal training within the sector. The scope, particularly in the context of work with FE and school providers, to enhance the opportunities for people to work in the sector and meet the demands of its employers is significant. The agreement of a landmark Institute of Technology (IoT) in Lincolnshire (one of only 12 in the UK) provides a superb opportunity to build the digital skills capacity of the area. The current proposed curriculum for the IoT in Greater Lincolnshire includes over 300 proposed new places per year linked to the extension of digital skills. This provides a valuable opportunity to engage businesses in need of skilled workers with sector development groups as part of the development of the IoT

NETWORKS

There is some scope, from the evidence provided, to enhance the inter-trading and wider growth of the sector through networking. There are a number of local and informal networks, which have already been established which could be strengthened and enhanced through direct support in terms of promotion and resources. Digital Lincoln (www.digitallincoln.co.uk) is an example of a growing digital community in the region, and now receives the support of the Business Lincolnshire Growth Hub in recognition of the enabling role of digital technology in the region. With Industry 4.0 and the increasing role of digital technology across all sectors, and there is an imperative to foster collaboration between digital and non-digital businesses to maximise opportunities for innovation across all sectors in the Greater Lincolnshire economy.

INFRASTRUCTURE

It is clear that, notwithstanding recent improvements, in some parts of the Greater Lincolnshire LEP area, poor broadband infrastructure and speeds continue to impede the development and growth of digital businesses. In addition to this a number of survey respondents identified the availability of premises, particularly "growing space" for established businesses as an issue. These issues have been reinforced through the responses to the 2019 survey and should remain a priority for the Greater Lincolnshire LEP.

SCALING UP

The economic benefits of an agglomeration effect around digital sector, as set out in reports such as Tech Nation, are clear. There is a nascent and growing cluster of digital businesses in Greater Lincoln underpinned by the presence of two Higher Education institutes and the defence sector. More work needs to be done in the context of all the activities above, which if progressed systematically and in concert, provide clear scope to strengthen not just the sector but the capacity of Greater Lincolnshire more widely. The development of Mosaic and the establishment of the Lincolnshire Institute of Technology provide real opportunities to support the scaling up of businesses in key cluster areas across the county. Joint working between the Business Growth Hub and local economic development officers at district council level provide a possible way to move these opportunities forward at the sub-county level.

ABOUT THE METHODOLOGY

FOR THIS REPORT

THE RESEARCH FOR THIS REPORT HAS INVOLVED:

Analysis of statistics and other sources to provide an up-to-date picture of the size, distribution and growth of the local digital sector. This has involved use of a common list of Standard Industrial Classification (SIC) codes to define the digital sector, which has been devised by the Department of Culture, Media and Sport (DCMS). The analysis has drawn on a number of sources, including the Business Register of Employment Survey (BRES), Tech Nation Reports 2018 and 2019, the MINT database of UK companies, and the Destination of Leavers from Higher Education (DELHE) Survey.

The latest data for the Business Register of Employment Survey (BRES) now includes businesses registered for VAT and/or PAYE. The latest employment figures for the digital sector are therefore more representative, as they include a greater number of small and sole-trader businesses. However, for this reason, caution should be used when comparing employment figures for 2014 and 2017.

A new online survey of digital and nondigital businesses has been undertaken to explore current views on opportunities to support the Greater Lincolnshire digital sector. This latest Greater Lincolnshire Digital Landscape survey was conducted between May and August 2019. The survey achieved 110 responses in total. Of these, 44 were from digital businesses and 66 were from non-digital businesses.



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WWW.BUSINESSLINCOLNSHIRE.COM

UNIVERSITY OF LINCOLN

We would like to thank the University of Lincoln for sharing their internal research and studies to help provide up-to-date and accurate reports, without their help this wouldn't have been possible.



We would like thank Rose Regeneration for leading on the development of this research and preparation of this report.