

GREATER
LINCOLNSHIRE'S

**DIGITAL
LANDSCAPE**

SUMMARY REPORT

2017

INTRODUCTION

This report provides an analysis of the digital technology sector in Greater Lincolnshire.

The research has been commissioned by the Business Lincolnshire Growth Hub in partnership with Digital Lincoln and the Greater Lincolnshire Local Enterprise Partnership (GLLEP) Innovation Council.

The report has been prepared by Lincoln's International Business School in partnership with Rose Regeneration. It presents a series of analyses, drawing on official statistics and an online and telephone survey of businesses, in order to present a detailed picture of the Greater Lincolnshire digital landscape.

The aim of the research is to provide a better understanding of use of digital technology within businesses in Greater Lincolnshire, and enable comparison of the area's digital landscape with other areas profiled in the **Tech Nation 2016 report** <http://bit.ly/TechNationReport2016>.

KEY MESSAGES

The digital sector is modest in size but big in potential in Greater Lincolnshire.

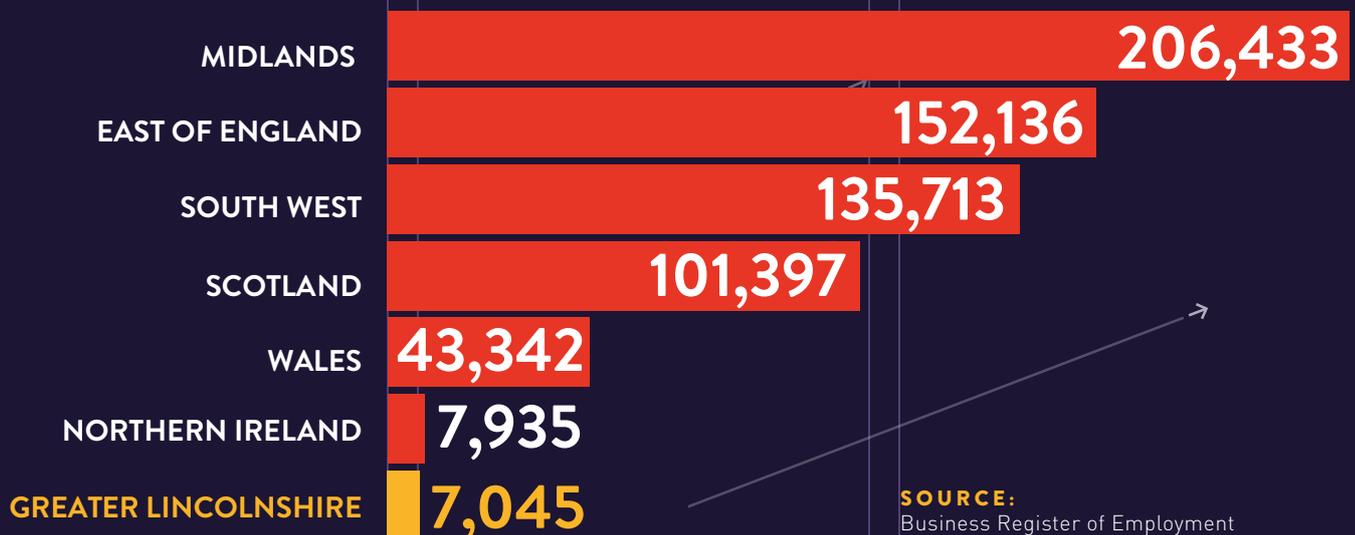
- › The digital sector is growing effectively in terms of jobs and prodigiously in terms of value. Although small compared to some other sub-regions it is growing more rapidly than many.
- › Whilst there are some niche areas of digital activity the sector is well rounded in terms of the breadth of activities it comprises.
- › There are many people working in digital roles in non digital businesses in Greater Lincolnshire. Still more Lincolnshire workers with digital skills are working outside of the area. We are a net exporter of people with digital skills.
- › Notwithstanding this "surplus" of digital workers Greater Lincolnshire businesses find it relatively difficult to recruit people with the digital skills they require. There is some significant evidence that with the right support Digital Business are happy to "grow their own" workforce.
- › Greater Lincoln is the area's digital hub with almost half the key activities and players in the sector located there. There are notable pockets of digital activity in the south of Lincolnshire on the A1 corridor north of Peterborough.
- › There are mixed views about how good a location Greater Lincolnshire is as a digital business location. It's greatest asset is seen as the affordability of its environment, whilst there are concerns around its road and broadband infrastructure.
- › Our survey and workshops with sector representatives identified considerable scope for further work around supply chain development and networking to strengthen the sector.



THE SIZE OF GREATER LINCOLNSHIRE'S DIGITAL TECH SECTOR

Across Greater Lincolnshire, there are 7,045 jobs in the digital tech sector. This represents 1.7% of all jobs compared with 4.9% across England. This concentration is highest in the administrative county of Lincolnshire (2%) and lowest in North East Lincolnshire (0.9%).

NUMBER OF DIGITAL TECH ECONOMY (2014)



SOURCE:
Business Register of Employment Survey, 2014 and Tech City, 2016)

While there are 7,045 jobs in the local digital tech sector, a far larger number (16,471 of Lincolnshire residents) are employed in digital jobs across a variety of sectors. These include digital roles in non-digital tech sectors, and also digital jobs that residents commute to beyond the Greater Lincolnshire boundary.

There are 1,967 digital tech businesses operating in Greater Lincolnshire. In the latest year for which accounts are available, the total value of turnover for businesses in this sector was £779 million, which accounts for 1.6% of sales turnover generated by all Greater Lincolnshire businesses.

The digital tech sector is relatively small in Greater Lincolnshire, but the employment and value generated by the sector are growing. Jobs in the digital tech sector increased by almost 2% between 2010 and 2014, and sales turnover generated by the sector increased by 26% between 2010 and 2015.

7,045
JOBS IN THE
DIGITAL TECH SECTOR

£779M
VALUE OF TURNOVER
IN THIS SECTOR

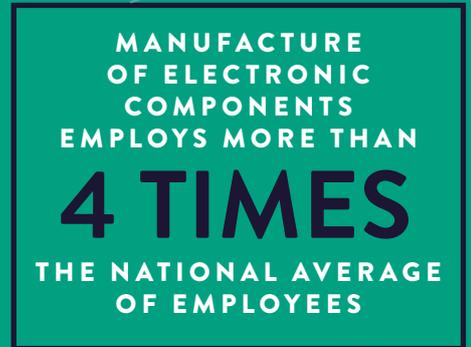
1,967
DIGITAL TECH
BUSINESSES IN
GREATER LINCOLNSHIRE

NOTABLE DIGITAL SECTOR

SPECIALISMS

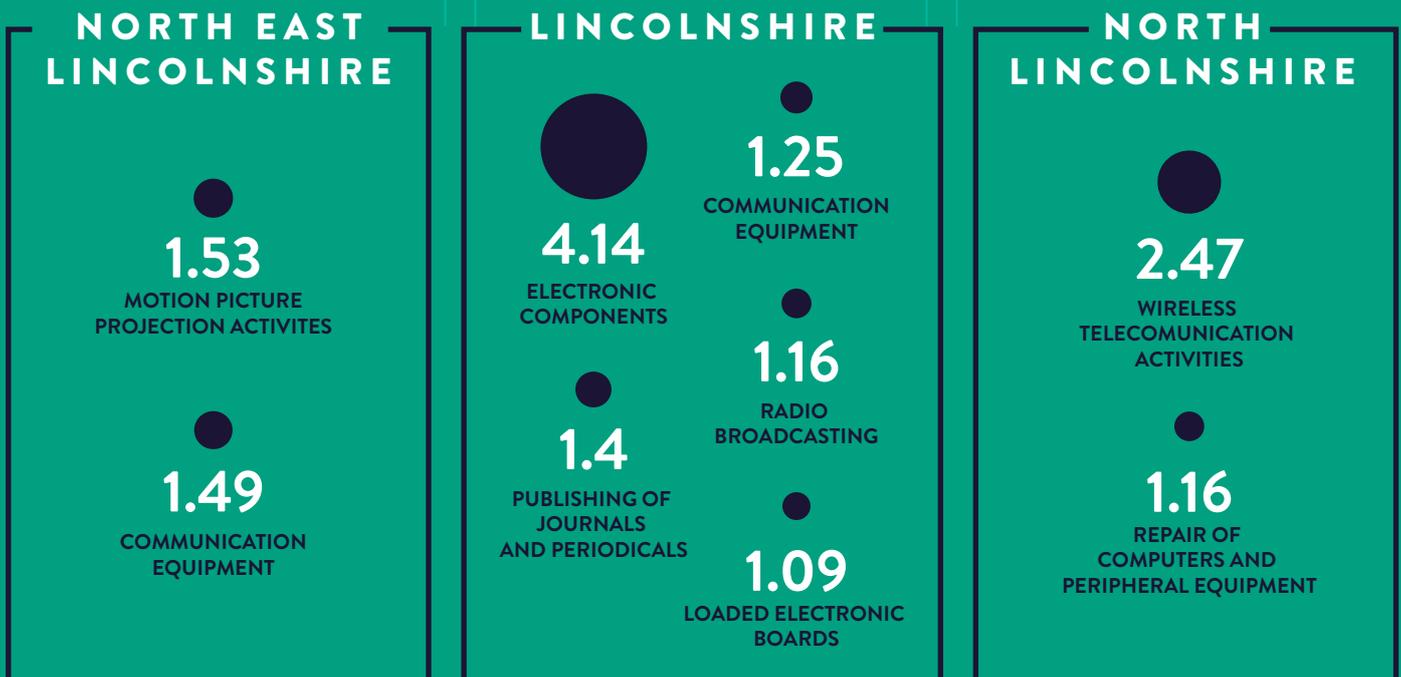
Lincolnshire has a number of digital sector specialisms. Most notable is the manufacture of electronic components, which employs more than 4 times the national average of employees. Other highly represented sectors include publishing of journals and periodicals, manufacture of communication equipment, and radio broadcasting.

Among the digital firms that responded to our survey, over a quarter of jobs were in app and software development. Digital advertising and marketing was another key area, accounting for 12% of jobs. There was a lower representation of jobs in fintech, healthtech, the Internet of Things, and gaming, although this corresponds with the national picture.



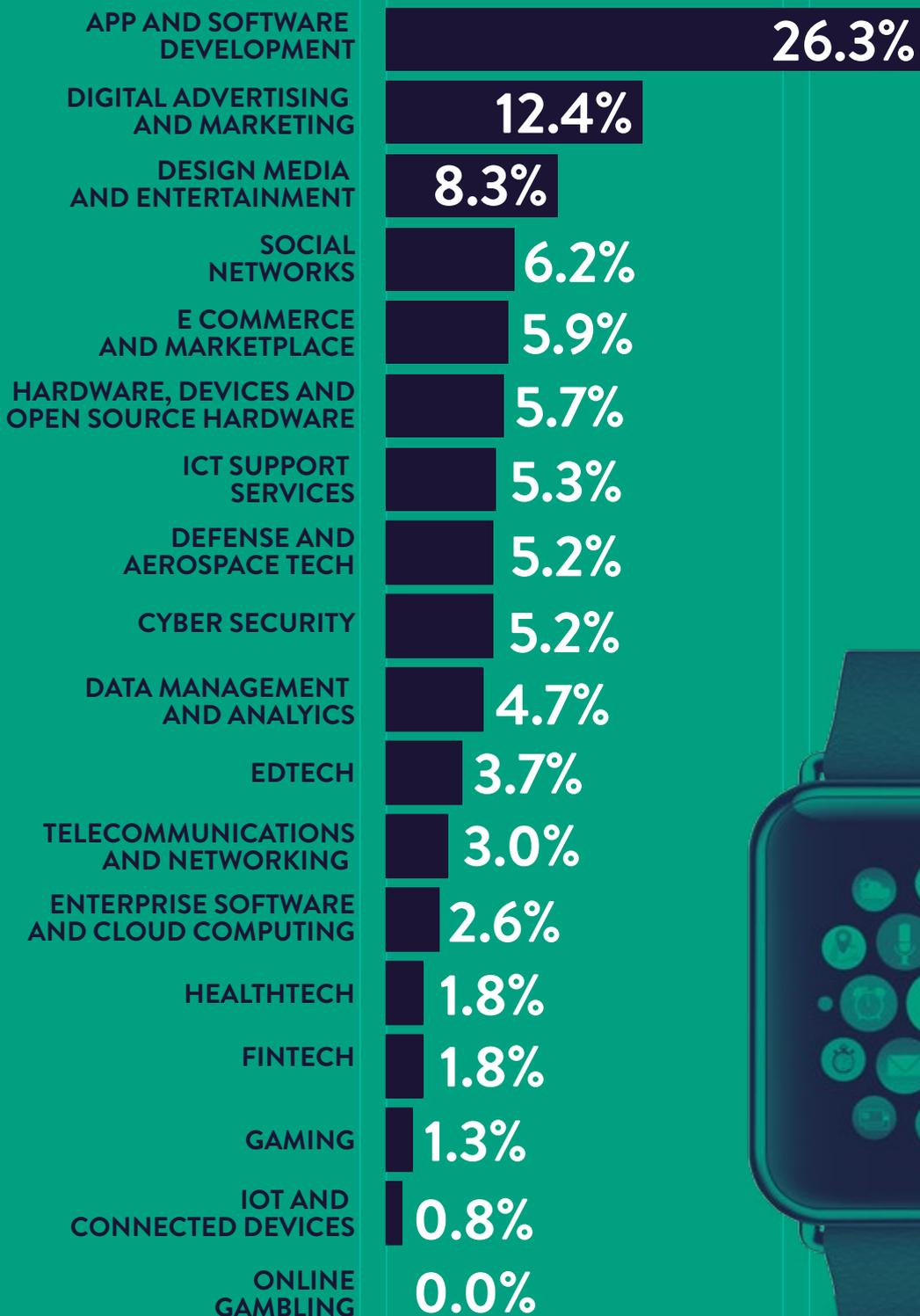
HIGHLY REPRESENTED DIGITAL SECTORS:

FIGURES REPRESENT NUMBER OF TIMES HIGHER THAN THE NATIONAL AVERAGE



SOURCE:
Business Register of Employment Survey, 2014

SECTOR SPECIALISMS OF DIGITAL BUSINESSES IN GREATER LINCOLNSHIRE (% OF JOBS)



SOURCE:
Greater Lincolnshire Digital Landscape Survey, 2016

KEY DIGITAL

CLUSTERS

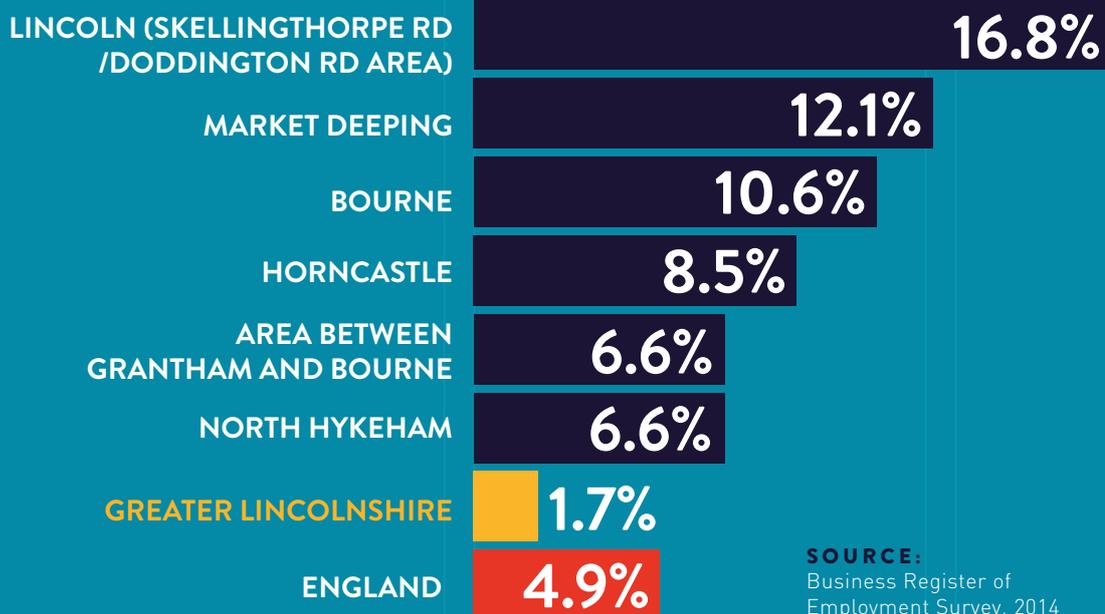
Employment in the digital tech sector is most highly concentrated in the Greater Lincoln area and along the A1 corridor in the south west of Lincolnshire.

Horncastle, in the east of Lincolnshire, is the exception (but this is principally accounted for by one large employer, Mortons of Horncastle).

The area around Doddington Road and Skellingthorpe Road in Lincoln has the highest concentration of digital tech sector employment in Lincolnshire. In this area and in neighbouring North Hykeham there are high levels of employment in manufacture of electronic components, publishing, computer programming and consultancy, IT and computer services, and telecoms.

Lincoln, Bourne, Horncastle, and Grantham all have a high concentration of employment in publishing activities, while Market Deeping has a strong concentration of employment in communication equipment.

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



SOURCE:
Business Register of
Employment Survey, 2014

NOTABLE DIGITAL TECH

BUSINESSES

The ten largest digital tech businesses registered in Greater Lincolnshire account for £597 million annual turnover and 3,616 employees.

As the table shows, these businesses include Lincoln-based Hykeham Group, GCI Telecom, AVG Technologies and Dynex Semi-Conductor. Market Deeping is the location of Landis & Gyr (smart meter manufacturers) and Park Air (air traffic control systems). The list includes two publishing businesses, Mortons of Horncastle and Warner Group Publications in Bourne.



TOP 10 DIGITAL TECH BUSINESSES IN GREATER LINCOLNSHIRE, BY ANNUAL SALES TURNOVER

	BUSINESS NAME	LOCATION	KEY ACTIVITY
1.	Danwood Group Ltd	Lincoln	Renting and leasing of other machinery, equipment and tangible goods
2.	Landis & Gyr Ltd	Market Deeping	Manufacture of electronic components
3.	GCI Telecom Group Ltd	Lincoln	Other telecommunications activities
4.	AVG Technologies UK Ltd	Lincoln	Business and domestic software development
5.	Park Air Systems Ltd	Market Deeping	Wireless telecommunications activities
6.	Mortons of Horncastle Ltd	Horncastle	Publishing of consumer, business and professional journals and periodicals
7.	Dynex Semiconductor Ltd	Lincoln	Manufacture of electronic components
8.	Qube Global Software	Sleaford	Business and domestic software development
9.	Warner Group Publications Plc	Bourne	Publishing of consumer, business and professional journals and periodicals
10.	Alan Dick Communications	Scunthorpe	Other telecommunications activities

THE TOP 10 ACCOUNT FOR

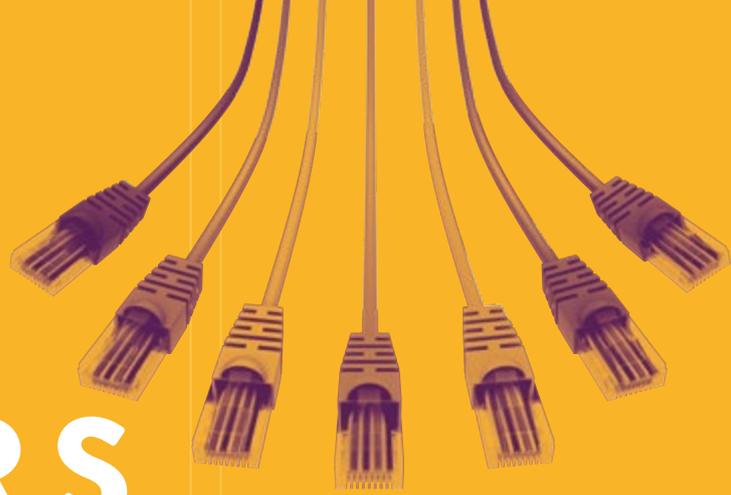
£597 MILLION

ANNUAL TURNOVER

THEY ALSO HAVE HIRED

3,616

EMPLOYEES



THE GREATER LINCOLN

DIGITAL CLUSTERS

Greater Lincoln, which includes Lincoln and North Hykeham, is the location of almost a third (32%) of Greater Lincolnshire's digital tech economy jobs, and accounts for more than half the total turnover of all digital businesses in Greater Lincolnshire.

Greater Lincoln has more than twice the proportion employed in digital tech economy jobs than Greater Lincolnshire, at 3.6%. This is highest in the Skellingthorpe Road/Doddington Road area (16.8%) and in North Hykeham (6.5%). Growth in digital jobs, is twice the Greater Lincolnshire average.

Notable sectors include manufacture of electronic components and telecommunications equipment, computer programming, IT and computer services, and computer consultancy. Key local businesses include Dynex Semi-Conductor, Hykeham (Danwood) Group, GCI Communications, Software Europe, and Rockstar Games.

The University of Lincoln and Bishop Grosseteste University are both located in Lincoln. There is a growing link between the University of Lincoln and local digital sector, based around recruitment of graduates and the emergence of new digital businesses from the University's incubation facilities.



SOURCE:

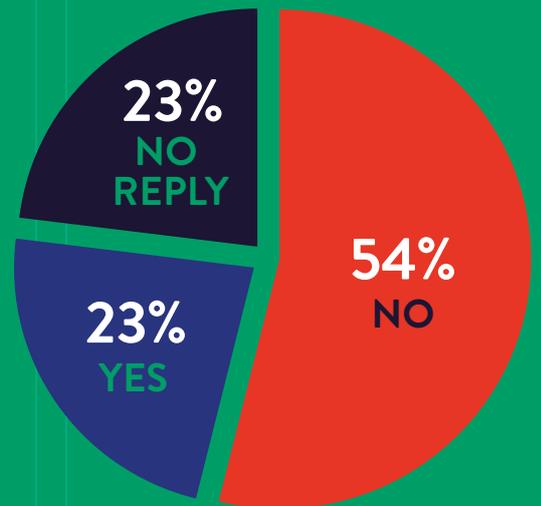
Destination of Leavers of Higher Education Survey, 2010-2015

RECRUITMENT OF SKILLED WORKERS IN THE DIGITAL TECH SECTOR

More than half of digital businesses do not consider there to be sufficient digital workers to meet demand.

Respondents identify a number of factors that affect recruitment, including a lack of workers with the right skills, and the low profile of Lincolnshire. Some employers identify that it is easy to attract graduates and entry-level employees, but more difficult to attract staff from elsewhere to fill higher level or specialist roles.

There is a growing link between the University of Lincoln's School of Computer Science and the local digital tech sector. According to a survey of university leavers, 26% of computer science graduates have found employment in the Lincolnshire digital economy. The greatest employers of graduates are local software businesses, particularly Rockstar Games and Orderwise. Non-digital businesses, such as the University of Lincoln and Anglian Water, have also recruited a number of computer science graduates into digital roles.



SOURCE:
Greater Lincolnshire Digital Landscape Survey, 2016

TOP EMPLOYERS OF UNIVERSITY OF LINCOLN COMPUTER SCIENCE GRADUATES

DIGITAL BUSINESSES

- > Rockstar Games
- > Orderwise
- > Streets Heaver
- > Scholarpack
- > Qube Global Software
- > Gemini Systems
- > Brand Four

NON-DIGITAL BUSINESSES

- > University of Lincoln
- > Anglian Water
- > Mouchel
- > NHS



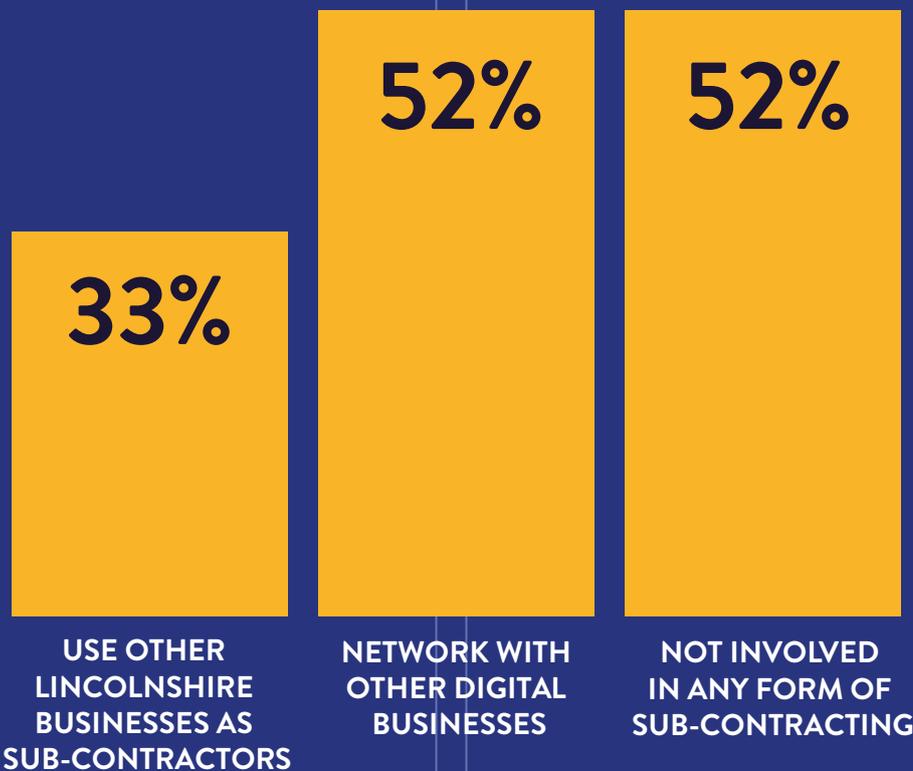
SOURCE:
Destination of Leavers of Higher Education Survey, 2010-2015

THE BUSINESS ENVIRONMENT

FOR DIGITAL TECH BUSINESSES

Around a third of digital businesses that responded to the survey are not involved in any form of sub-contracting. However, around a half sub-contract with other digital businesses in Lincolnshire, and a similar number engage in networking with other digital businesses. There may therefore be scope to enhance the operation of the local supply chain within the digital tech sector.

SUB-CONTRACTING AND NETWORK AMONG DIGITAL BUSINESSES



WIDELY CITED BENEFITS INCLUDE LOW OVERHEADS AND QUALITY OF LIFE, AS WELL AS A SUPPORTIVE LOCAL BUSINESS COMMUNITY.

SOURCE:
Greater Lincolnshire Digital Landscape Survey, 2016



Local digital tech businesses identify a number of advantages and disadvantages associated with being located in Lincolnshire. Widely cited benefits include low overheads and quality of life, as well as a supportive local business community. Disadvantages cited by respondents include the difficulty of attracting and retaining staff with the right skills, broadband connectivity and transport links.

ADVANTAGES OF BEING A DIGITAL BUSINESS IN LINCOLNSHIRE

- › Low cost of running a business
- › Quality of life
- › Within easy reach of elsewhere in UK and London
- › Close, supportive business community
- › Small digital sector, so little competition
- › Opportunity to work with MoD
- › Interesting work/variety of sectors to work with
- › Opportunity to work remotely
- › Collaboration with the University of Lincoln and Bishop Grossteste University
- › Good support for digital businesses

DISADVANTAGES OF BEING A DIGITAL BUSINESS IN LINCOLNSHIRE

- › Difficulties attracting, recruiting and retaining staff with right skills
- › Broadband connectivity
- › Transport links
- › Local clients lack of digital understanding/reluctance to innovate
- › Low profile of Lincolnshire
- › Lack of support to keep abreast of new technology
- › Mobile phone connectivity
- › Lack of financial support
- › Small client base
- › Clients in Lincolnshire want to pay less than those elsewhere

Opportunities to support the needs of digital businesses include assistance with recruitment and training of digital workers, more premises (including superfast hubs and incubator facilities), and better digital infrastructure (including availability of superfast and ultrafast broadband).

HOW CAN THE NEEDS OF DIGITAL BUSINESSES BE BEST SUPPORTED?

- › Keeping digital talent in Lincolnshire/assistance with recruitment
- › More premises, hubs and incubator facilities
- › Better digital infrastructure
- › Grant funding for digital businesses to grow/innovate
- › Funding for training of staff/new recruits
- › Subsidies to encourage remote working
- › Promoting Lincolnshire as a place to live and work

SOURCE:

Greater Lincolnshire Digital Landscape Survey, 2016

OPPORTUNITIES TO DEVELOP

THE DIGITAL TECH SECTOR

A round table session to discuss the emerging findings from the research was held in Lincoln on 7 December 2016. 15 representatives engaged in the sector and economic development attended. Key opportunities linked to the following themes emerged through the group's discussions:

THE RELEVANCE OF THE SECTOR

The Greater Lincolnshire LEP is currently reviewing the sectors it supports as part of the evolution of its Industrial Strategy and it should think carefully about the importance of this sector. The digital sector is not only important in the context of its own straightforward development. Digital workers are seen to underpin the competitiveness of many established businesses in other sectors.

RELATIONSHIP MANAGEMENT

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 in some detail the challenges to their growth and development and where appropriate looking to take bespoke action to help address them.

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 labour and access to market in terms of supply chain. There are examples of image based activities in other rural areas which have sought to address this, such as **Rock the Cotswolds** www.rockthecotswolds.com. There is real scope to consider how such an approach might be developed in Lincolnshire.

RECRUITMENT/ EDUCATION

Whilst there appears to be a good pipeline of computer science graduates into the sector from the University of Lincoln (with at least 21 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. There is 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 and should be further explored.

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.

SCALING UP

Tech Nation 2016 makes the economic benefits of an agglomeration effect around this sector clear. There is a nascent cluster of digital businesses in Greater Lincoln underpinned by 2 HE bodies and the defence sector as key clients. 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.

INFRASTRUCTURE

It is clear that, notwithstanding recent improvements, in some parts of the LEP area poor broadband functionality continues 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.

DEVELOPING A PLAN

This has been a modest but far reaching piece of research. It is clear that there are some significant opportunities to grow the local economy in terms of this sector. A detailed SMART plan based on the above themes is advisable and would form a very useful follow on to this report.

ANNEX 1:

ABOUT THE METHODOLOGY

FOR THIS REPORT

The research for this report has involved:

1

Analysis of official statistics and other sources to develop a better understanding 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), the MINT database of UK, the 2011 Census, the Destination of Leavers from Higher Education (DELHE) Survey.

2

A survey of digital and non-digital businesses to explore the nature of digital occupations, recruitment of digital workers, and opportunities to support the Greater Lincolnshire digital sector. The Greater Lincolnshire Digital Landscape survey was conducted between October and December 2016. The survey was administered by telephone, and was also available to complete online. The survey achieved 118 responses in total. Of these, 64 (or 55%) were from digital businesses and 54 (45%) were from non-digital businesses.

3

A round table workshop to discuss the emerging findings from the research and opportunities to support the sector. A workshop involving 15 participants was held on 7 December 2016 to discuss the emerging findings from the research. Participants included local authority representatives from across Greater Lincolnshire, digital business owner managers, intermediary organisations, and the University of Lincoln and Bishop Grosseteste University.



SPECIAL THANKS

AND ACKNOWLEDGEMENTS

This report was made possible thanks to the support and advice of many individuals and organisations. The Business Lincolnshire Growth Hub team would like to thank everyone who contributed to this endeavour.

Our thanks are specifically extended to Daniel Westlake, MD at Cursor, for his significant contribution into shaping this research and supporting the development of future plans.



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.

 **RoseRegeneration**

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