DECISION-MAKER:		SCRUTINY INQUIRY PANEL		
SUBJECT:		THE FUTURE OF WORK IN SOUTHAMPTON – WHAT IS REQUIRED FOR SOUTHAMPTON TO BECOME A CENTRE FOR AI, ROBOTICS, SMART AUTOMATION AND THE DIGITAL ECONOMY?		
DATE OF DECISION:		17 JANUARY 2019		
REPORT OF:		DIRECTOR – LEGAL AND GOVERNANCE		
CONTACT DETAILS				
AUTHOR:	**Name:**	**Mark Pirnie**	**Tel:**	**023 8083 3886**
	E-mail:	**Mark.pirnie@southampton.gov.uk**		
Director	**Name:**	**Richard Ivory**	**Tel:**	**023 8083 2794**
	E-mail:	**Richard.ivory@southampton.gov.uk**		

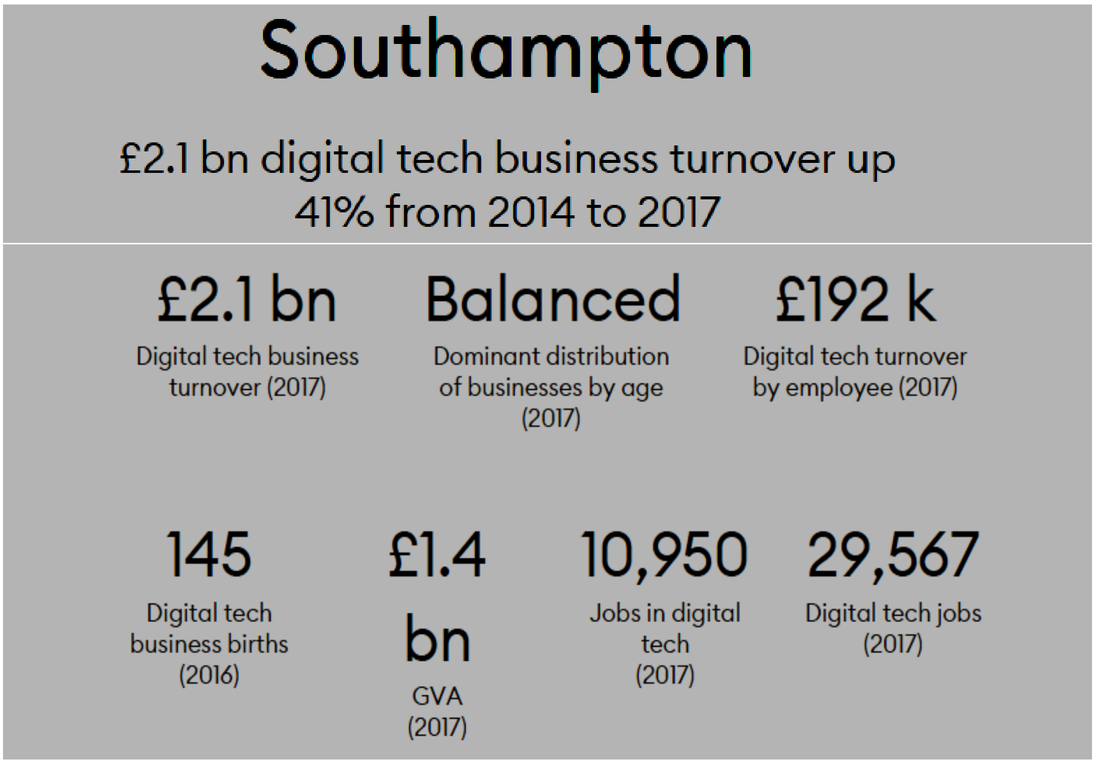
STATEMENT OF CONFIDENTIALITY
None

BRIEF SUMMARY
In accordance with the inquiry plan, for the fourth meeting of 'The Future of Work in Southampton Inquiry' the Panel will be considering how Southampton can benefit from the rapidly expanding technology sector and become a centre for AI, robotics, smart automation, and the digital economy.

RECOMMENDATIONS:		
	(i)	The Panel is recommended to consider the comments made by the invited guests and use the information provided as evidence in the review.

REASONS FOR REPORT RECOMMENDATIONS	
1.	To enable the Panel to compile a file of evidence in order to formulate findings and recommendations at the end of the review process.
ALTERNATIVE OPTIONS CONSIDERED AND REJECTED	
2.	None
DETAIL (Including consultation carried out)	
3.	The 2018 Tech Nation report identified that the UK has 2.1 million digital tech jobs, and that employment rose 13.2% between 2014 and 2017 in the digital tech sector.[1]
4.	Jobs requiring digital tech skills command higher salaries, on average, £42,578 compared to £32,477 per year and the more digitally skilled a UK job is the higher its average annual salary.[2] The Panel have also been informed that by one estimate, AI could add £232bn to the UK economy by 2030[3].

[1] Tech Nation Report 2018, Tech City UK, https://technation.io/insights/report-2018/jobs-and-skills/
[2] Tech Nation Report 2018, Tech City UK, p22
[3] PwC (2017), 'Sizing the prize, PwC's Glob-al Artificial Intelligence Study: Exploiting the AI Revolution' https://www.pwc.com/ gx/en/issues/data-and-analytics/publica-tions/artificial-intelligence-study.html

<table>
<tr><th></th><th>The Technology Sector in Southampton</th></tr>
<tr><td>5.</td><td>


Source – Tech UK 2018 report - https://technation.io/insights/report-2018/southampton/

Digital tech jobs – includes all people working in digital tech occupations, irrespective of the industry. For example, a software developer working in a retail company.

Jobs in digital tech – includes all people working in digital tech industries, including non-digital jobs. For example, an accountant working in a web development firm.
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<tr><td>6.</td><td>
Southampton was recently identified as a technology ‘Super Cluster’ in a report published by CBRE, the world’s largest commercial real estate investment firm. The report, EMEA Tech Cities: Opportunities in Technology Hotspots[4], identifies four separate categories of technology cluster based on a city’s level, concentration and growth of tech sector employment.

Between 2010-16 high-tech employee numbers grew 25%, ranking Southampton individually fifth out of the 23 cities covered in the report. A particular focus on ‘knowledge-intensive’ employment over the same period also saw a greater increase, of 50%, putting Southampton in the top 3 cities.
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</table>

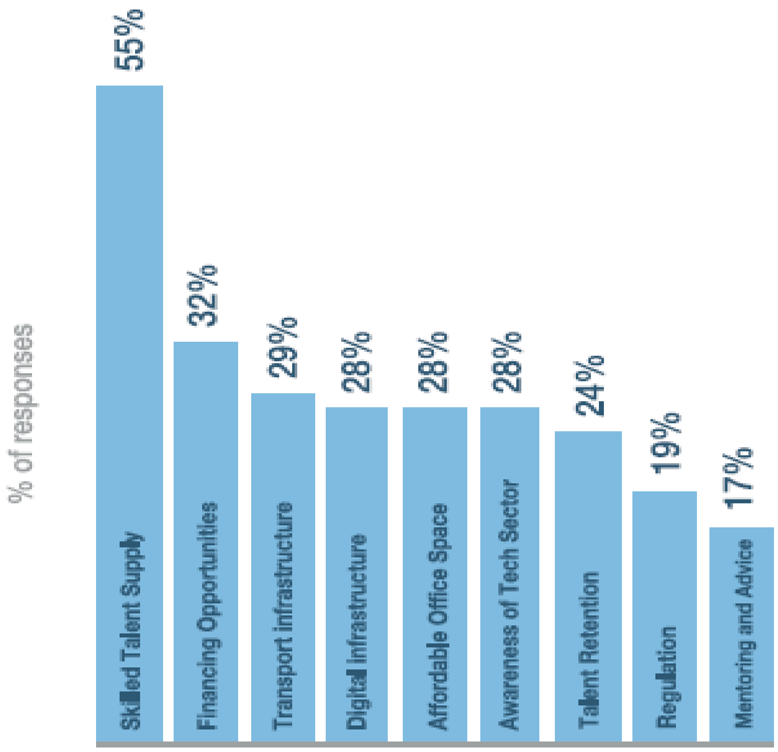
[4] EMEA Tech Cities - Opportunities In Technology Hotspots, CBRE, September 2018

	Catalysts for UK Digital Tech Growth and Innovation
7.	Whilst recognising that nurturing and growing the vitally important technology sector requires the collaboration of a great many stakeholders, including start-ups, scale-ups, universities, investors, the Government, local governments and corporates, the Tech Nation 2017 report,[5] following analysis of feedback from digital tech founders and community leaders, identified six key areas that could act as catalysts for growth in digital technology in the UK.
8.	Three out of the six catalysts relate to skills and diversity and were discussed at meeting 3 of the inquiry. These are: • Skilling up for digital business • Gender diversity • Attract the best and brightest global talent
9.	The remaining three catalysts that have been identified as important elements that can help to grow the technology sector are as follows: • Access to finance, at every stage of growth • Boost digital connectivity • Physical spaces for company formation and growth
	Access to finance, at every stage of growth
10.	In the Tech Nation 2017 report over 40% of digital tech founders or businesses reported that access to funding is a significant business challenge. The report recognises that although not every company needs venture capital or loans to fuel their growth, improving access to capital can make all the difference to international competitiveness, especially for high growth companies. The Tech UK report concludes that this could be achieved through: • Nurturing and developing local angel networks • Patient Capital (long-term capital) • Harnessing the power of universities – UK universities can provide crucial access to funding and practical business support for their students and alumni.
	Boost digital connectivity
11.	The Tech UK survey identified that almost one third (30%) of founders and CEOs said digital infrastructure continues to present a challenge. Investment is essential if businesses are to thrive and grow. In the UK, fixed internet traffic is now set to double every two years[6], whilst mobile data traffic will increase at a rate of between 25% and 42% per year[7]. In order to meet this rising demand the Tech UK report recommends continuing to increase access to Ultra-Fast Fibre to the Premises (FTTP).

[5] Tech Nation 2017 report, Tech City UK, p41-42
[6] Fixed internet traffic worldwide: Forecasts and Analysis 2012 - 2018, Analysis Mason (2015).
[7] Mobile Data Strategy, Ofcom

<table>
<tr><td></td><td>Physical spaces for company formation and growth</td></tr>
<tr><td>12.</td><td>The Tech Nation 2017 survey identified that co-working spaces play a vital role in successful digital tech ecosystems. Almost three quarters (74%) of survey respondents who had used co-working spaces rated them as useful.</td></tr>
<tr><td></td><td>

Figure 1 – Key Challenges Faced by Digital Tech Businesses



Source: Tech Nation Survey, 2017

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<tr><td>13.</td><td>

The 2017 Tech Nation survey identified the following growth challenges to the tech industry in Southampton[8]:

- 57% - Financing Opportunities
- 35% - Limited Highly Skilled Workers
- 35% - Poor Transport Infrastructure
- 29% - Limited Digital Infrastructure

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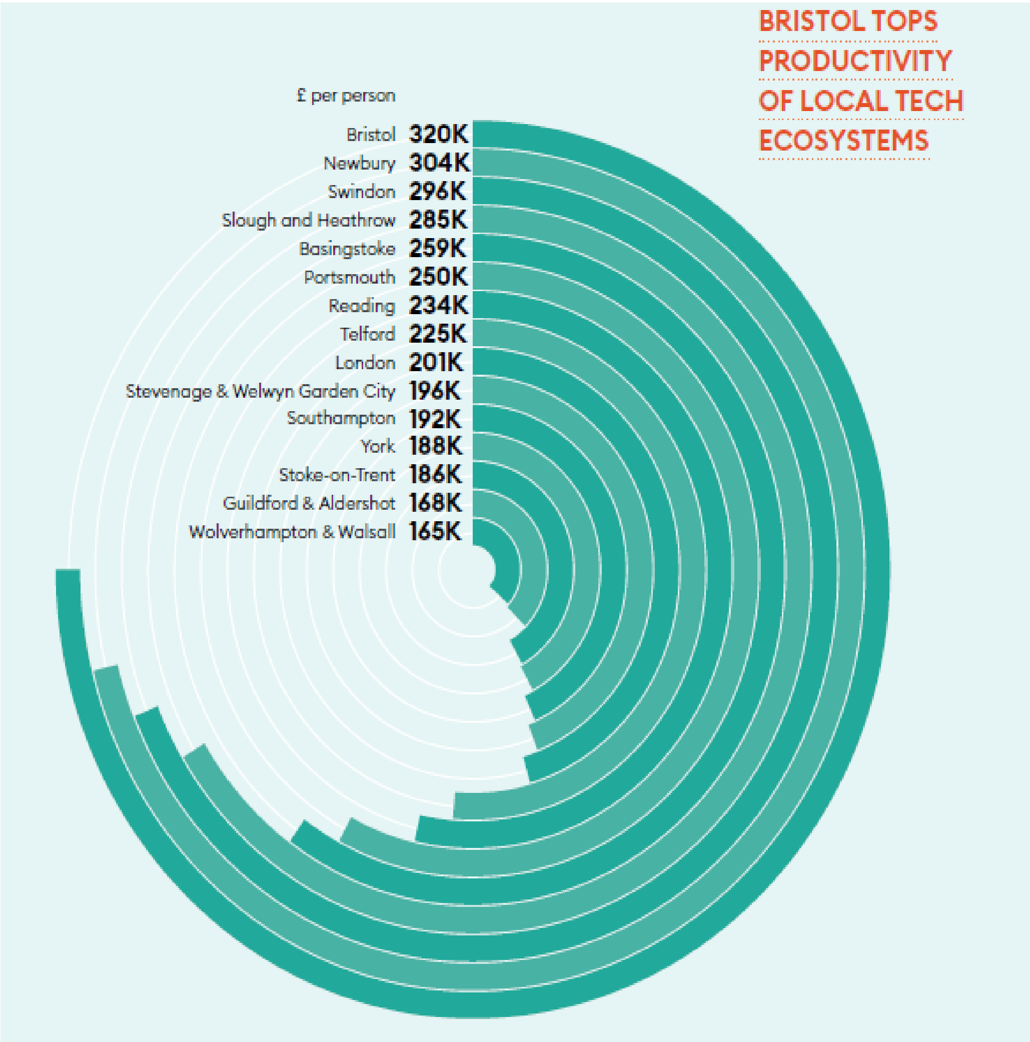
<tr><td></td><td>Examples of Good Practice</td></tr>
<tr><td>14.</td><td>Bristol is the UK’s biggest digital hub outside of London and has the most productive local tech ecosystem as shown in Figure 2.[9] Bristol also came first in the 2017 Huawei UK Smart Cities Index 2017 and was the world’s first ‘open’ city.[10]</td></tr>
</table>

[8] Tech Nation Report 2017, Tech City UK, p103
[9] ONS Business Structure Database, 2017, referenced in Tech Nation 2018 report p25
[10] Huawei UK Smart Cities Index 2017

15.	Attached as Appendix 1 is a report published by the European Commission in January 2017 that highlights the actions that have been taken in the Bristol City Region to transform the digital landscape of the area. The report identifies key roles played by local government, businesses and business incubators, universities and the Chamber of Commerce.
	Figure 2 – Productivity (£ per person), turnover by employee for the top 15 UK travel to work areas  **Source:** ONS Business Structure Database, 2017, referenced in Tech Nation 2018
16.	To consider the issues identified in the previous paragraphs, and to provide the Panel with insight on the initiatives, plans and activity that will help Southampton benefit from the rapidly expanding technology sector and become a centre for AI, robotics, smart automation, and the digital economy, a number of guests have been invited to the inquiry meeting: • Catherine Lee – Director of Research, Innovation & Enterprise, Southampton Solent University • David Bream - Director, Southampton SETsquared, University of Southampton • Denise Edghill - Interim Director for Growth, Southampton City Council. Denise has a wide portfolio of responsibilities including

	economic development, employment skills and business engagement, regeneration, infrastructure and planning and cultural services. • Jeff Walters – Economic Development Manager, Southampton City Council • Tech UK – Representatives from the trade association representing UK technology companies have been invited to attend the meeting
17.	The guests invited to present information at the meeting will take questions from the Panel relating to the evidence provided. Copies of any presentations will be made available to the Panel.
RESOURCE IMPLICATIONS	
Capital/Revenue	
18.	N/A
Property/Other	
19.	N/A
LEGAL IMPLICATIONS	
Statutory power to undertake proposals in the report:	
20.	The duty to undertake overview and scrutiny is set out in Part 1A Section 9 of the Local Government Act 2000.
Other Legal Implications:	
21.	None
RISK MANAGEMENT IMPLICATIONS	
22.	None
POLICY FRAMEWORK IMPLICATIONS	
23.	None

KEY DECISION	No
WARDS/COMMUNITIES AFFECTED:	None directly as a result of this report

SUPPORTING DOCUMENTATION	
Appendices	
1.	Bristol: The World's First Open City, January 2017
Documents In Members' Rooms	
1.	None

Equality Impact Assessment	
Do the implications/subject of the report require an Equality and Safety Impact Assessments (ESIA) to be carried out?	No
Data Protection Impact Assessment	
Do the implications/subject of the report require a Data Protection Impact Assessment (DPIA) to be carried out?	No

Other Background Documents: Equality Impact Assessment and Other Background documents available for inspection at:		
Title of Background Paper(s)		Relevant Paragraph of the Access to Information Procedure Rules / Schedule 12A allowing document to be Exempt/Confidential (if applicable)
1.	Tech Nation 2018 Report - https://technation.io/insights/report-2018/	
2.	Tech Nation 2017 Report – https://35z8e83m1ih83drye280o9d1-wpengine.netdna-ssl.com/wp-content/uploads/2018/04/Tech_City_2017_report_full_web.pdf	
3.	CBRE report: '*EMEA Tech Cities: Opportunities in Technology Hotspots'* - https://www.cbre.co.uk/research-and-reports/EMEA-Tech-Cities--Opportunities-In-Technology-Hotspots	
4.	Creative Network South: Solent Creatives Industries Declaration - http://www.creativenetworksouth.co.uk/wp-content/uploads/2018/10/HANTSCC8605-Creative-industires-Brochure_v16-SINGLES-DIGITAL.pdf	
5.	Huawei UK Smart Cities Index 2017 – https://e.huawei.com/uk/marketing-material/onLineView?MaterialID={A81CFA81-C7A8-4E8F-A088-963C7E73F3CC}	