

Part 1 - Conclusions and Recommendations: How can Southampton stay ahead of the robots?

Conclusions

- Global labour markets are undergoing major transformations as a result of technological developments and other relevant trends. These changes are happening at a rapid pace.
- The developments may lead to increased GDP across the UK but jobs, particularly those routine in nature, will be displaced as Artificial intelligence and smart automation makes roles obsolete. Analysis identifies that 22% of the current jobs in Southampton are in occupations very likely to decline by 2030.
- New jobs will be created to replace those that disappear. Those occupations that require interpersonal, analytical and digital skills are expected to continue to grow.
- There is a skills mismatch in Southampton between where the city is now and where the city needs to be. A significant cohort of Southampton residents, including those leaving formal education and adults of working age, need to acquire new skills to succeed in the future labour market otherwise they are at risk of being left behind, resulting in increasing inequality and possible social tension in the city.
- Getting the required skills mix in Southampton will be a key factor in determining the economic outcomes for the city, reflecting the correlation between a highly skilled population and increased productivity. It is therefore critical that the skills system in Southampton and the Solent adapts to respond to these changes.
- A number of examples of good practice exist in Southampton that are helping to address the skills challenges the city is facing. In addition a number of national, regional and Southampton initiatives have recently commenced, or have been announced, that should ensure that a number of the identified gaps are addressed. These include the Solent Apprenticeships Hub, the Solent Careers Hub, and proposals within the Industrial Strategy.
- Examples of good practice from other cities have identified that opportunities exist for the city to do more to reduce the risks outlined. These include the following:
 - Supporting the development of essential and advanced digital skills across Southampton;
 - Maximising the existing assets and resources in the city;
 - Whilst recognising the essential role that businesses need to play in re-skilling their workforce, there is an opportunity to simplify the adult learning landscape in Southampton for employers and residents;
 - Stimulating the development of a lifelong learning culture in Southampton; and

- Co-ordinating action across Southampton to promote collective responsibility for improving education, skills and training.

Recommendations

Reflecting the key findings and conclusions the following actions are recommended to address the skills challenges facing Southampton and keep the workforce ahead of the robots:

- 1. Develop a Southampton focussed contribution to the Solent Industrial Strategy** - The commitment within the national Industrial Strategy to create local industrial strategies offers a chance to set out a coordinated set of actions to deal with the challenges and opportunities the Solent areas faces, including the identified skills challenges that are an impediment to improving productivity. Local Industrial Strategies will also guide the strategic use of local funding streams and act as a gateway to any future local growth funding being deployed. To support and influence the development of the Solent Industrial Strategy, and subsequent funding opportunities, it is recommended that Southampton develops its own action plan that outlines key initiatives to support future growth of the city. This should be a Council-wide methodology to ensure a thematic, evidence-rich approach, including job design and occupational modelling, that bucks conventional approaches to transformational place-making.
- 2. Adapt and actualise the RSA Cities of Learning model for Southampton** - Cities of Learning is a new approach for activating a grassroots, city-based, mass-engagement movement around learning and skills. It seeks to close gaps in opportunity and empower places to promote lifelong learning as core to their cultural and civic identity. This would complement Council discussions on establishing an Education Quarter as part of a wider push for Southampton to be recognised as a City of Learning. This requires close collaboration with the City's core educational institutions and networks, for example, Southampton Education Forum (SEF).
- 3. Develop and implement a Skills Strategy for Southampton** – This should underpin the work underway in the Local Industrial Strategy as it is the capability of the citizens of the City – present and future – who will be at the forefront of change and thus needing to drive it. Virtual tools and platforms such as <https://idea.org.uk/> should be explored to see how they would add value to digital literacy, entrepreneurial spark and work readiness. The strategy should be a bridge between different policy themes at the Council and benchmark, for example, the 'fit' between educational provision to future skills' requirements to ensure a seamless, high-value, progressive journey for every learner. The role of SEF is critical in this regard. In parallel, the strategy should establish how human capital development and employee performance and wellbeing in the realm of work and entrepreneurship is optimised. Models developed by the likes of the 70:20:10 institute should be considered. The Skills strategy should also be fully cognisant of a desire to:
 - a) Generate strong, rewarding, sustained jobs growth
 - b) Tackle social mobility
 - c) Achieve inclusive growth

- 4. Simplify the Adult Learning Landscape** – A significant amount of money is still being spent on training in Southampton. This is being spent through various formal and informal channels and with different providers. There is an opportunity to increase the accessibility of learning opportunities by simplifying the adult learning landscape for employers and residents. One solution is to develop a virtual platform that informs employers about training courses available in the city, and the proactive support that the Council and partners can give to businesses as they look to upskill their workforce, as well as provide residents comprehensive information about training opportunities available, including the relevant MOOCs (Massive Open Online Courses) and what it will help them to achieve.
- 5. Digital Skills** – Deliver the commitments in the Digital Strategy, namely to:

 - Commission adult education to support digital inclusion and digital literacy in the city;
 - Work with universities and other partners to attract and retain digital talent;
 - Work closely with schools to maximise the digital skills of all children.

Options available include the creation of a partnership similar to the West Midlands Digital Skills Partnership to improve local digital skills and develop a pipeline of highly skilled residents that can fill the tech sector vacancies (a focus on diversity must be a key target reflecting, amongst other issues, the gender inequality employed in the digital tech sector in the UK); Working with the city's universities, utilise their excellent IT facilities during university holidays to upskill residents and pupils; support the City's Sixth Form and FE providers to enhance their digital curriculum offer to learners and employers. Continued work with the Institute of Coding and FoBM (Future of British Manufacturing) will help in this regard.
- 6. Apprenticeship Levy** – To help address specific skills gaps and build supply chain capability across key sectors and occupations, use the Levy Transfer mechanism to increase productivity levels, revenues and prospects for business growth.
- 7. Leadership and Management Training** - Improve the quality, coherence and subsequent roll-out of leadership and management training to cultivate a dynamic leadership culture that can help achieve the City's ambitions over the medium to long term.
- 8. Establish a better platform for residents, especially young people, to access accurate information on career opportunities akin to this model <http://www.theworldofwork.co.uk>** - This provides an opportunity to raise aspirations, help citizens to make better and informed decisions to achieve their career goals, and for the City to retain its talent.
- 9. Support and encourage Southampton businesses to adopt the Investors in People Tool, Jumpstart** – This tool supports organisations to grow and develop, to generate better employee engagement, improve performance and to consolidate high standards of HR practices.

Organisations such as the Hampshire Chamber of Commerce could assist. (<https://www.investorsinpeople.com/jumpstart/>)

- 10. Southampton City Council to Lead by Example** – If the City Council is to champion the up-skilling of the Southampton workforce it needs to lead by example and ensure that appropriate training is provided to City Council employees, and Councillors, to ensure that the Council's workforce has the required mix of skills to succeed and make an enhanced economic impact over the long term.

Part 2 - Conclusions and Recommendations: Growing the tech sector in Southampton

Conclusions

- Southampton is a significant player within the UK tech sector and is ahead of a lot of cities in a number of key aspects. Key ingredients exist in the city for the tech sector to grow and become more prominent, vibrant, innovative and successful.
- Solent University and the University of Southampton have track records in supporting business start-ups and spin offs and outside of the universities organisations exist to support business start-ups in Southampton.
- The opening of the Network co-working space in the city will help to encourage innovation and collaboration and the proposed Central Business District development is an exciting opportunity to create the business environment of the future in Southampton.
- The partnership between Southampton Connect and the Web Sciences Institute to seek to address societal challenges through the application of AI and innovation is welcomed. Timely progress in developing a data trust and improving the virtual infrastructure will help Southampton establish itself amongst the leading cities in the practical use of AI and data.
- The Digital Strategy rightly includes, as a key success measure, that Southampton is known for good connectivity. The digital infrastructure needs to improve in Southampton. Improving connectivity and securing 5G / full-fibre must be a priority for Southampton to avoid it threatening economic growth.
- The perception that other neighbouring cities are more vibrant and cooler than Southampton could in time restrict the growth of the sector. More needs to be done to improve the image of the city; raise the profile of the tech sector and to better promote what Southampton has to offer as a 'City of Opportunity where everyone thrives.'

Recommendations

Reflecting the key findings and conclusions the following actions are recommended to support the growth of the tech sector in Southampton:

1. **Deliver the commitment in the Digital Strategy to secure external investment in ultra-fast fibre, Wifi and 5G connectivity**
2. **Reflecting the heritage of the city create a 'Digital Shipyard' in the proposed Central Business District** – Bristol has its Engine Shed, building upon the success of the Southampton Science Park, Southampton could have a digital shipyard to showcase the strengths and innovation in Southampton. This could bring together businesses and incubators on one site acting as a hub of activity where entrepreneurs, academics, students, and corporates can collaborate, inspire, and be inspired.
3. **Actively encourage the development of 'alternative' spaces for the creative sector to work from** – Building on from the proposal to establish a creative space in shipping containers, encourage the utilisation of the interesting, quirky and amazing industrial locations that Southampton has to offer to increase the vitality of the sector.
4. **Tech in the City events** – In support of the development of a Southampton Industrial Strategy action plan, promote existing tech events and work with local tech businesses and TechUK to stage a number of events in the city showcasing the tech sector and raising the profile of the industry and the diverse range of career opportunities it supports.
5. **Embark on new, cross-sectoral partnerships to resolving societal problems using technological solutions** - There is a need to collectively support the ambition and intent behind the Connected Southampton initiative and do whatever needs to be done to make it a success. Through the Connected Southampton project there is an opportunity to bring the tech sector together, raise the profile and encourage clusters to develop by fully engaging with them to help achieve the ambition to address societal challenges through the application of AI and innovation.
6. **Seek to secure long term funding for Creative Growth Southampton**
7. **Improve the branding, promotion and packaging of Southampton** – Southampton has a lot to offer but feedback identified that it is not perceived by some members of the tech community to be a vibrant city in which talented, creative individuals want to start-up tech businesses. This perception needs to change. Southampton needs to learn lessons from cities such as Bristol and improve the narrative about what the city's tech sector has to offer, how the city is promoted and to raise the profile and status of the tech sector in Southampton.
8. **Utilise the assets and support available to grow the tech sector** – Among numerous assets Southampton has two excellent universities with extensive experience of successful business incubation; the world leading Web Science Institute; Set Squared; members of the tech community that want to help the sector flourish; as well as offers of support from the UK tech sector's representative body – TechUK. To deliver the ambitions in the Digital Strategy Southampton must utilise all its assets and offers of support to grow the tech sector and with it the economic prosperity of the city.
9. **Develop a clear offer to grow the Tech sector and a vision as to how technology can help to improve outcomes in Southampton** – The Council needs to have a clear 'offer' to develop the Tech sector and enable a

'smarter' approach, using technology, to improve wellbeing, quality of life and achieve sustained inclusive growth. The Council has a role to play here in facilitating a thematic approach to achieve its own priorities, such as its City of Culture and Cities of Learning ambitions, as well as strive for better sector convergence such as between design and manufacturing. The Council should also consider using fiscal measures to stimulate innovation and growth and the internal capacity needed to drive the Smart/Future City agenda.