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To: Growth, Economic Development and Communities Cabinet Committee - 15 April 2014

Subject: Digitising Kent: Realising the potential of new digital technologies

Classification: Unrestricted

Past Pathway of Paper None

Future Pathway of Paper None

Electoral Divisions All

Summary

Digital technologies are transforming the way we work and live at an unprecedented rate. This paper sets out how Kent could become a 'digital leader', unlocking not just significant benefits for Kent's economy, but also in improving the quality of life for the County's residents.

Recommendation

Members of the Growth, Economic Development and Communities Cabinet Committee are asked to NOTE and ENDORSE the report.

1.0 Introduction

"No matter what business or service you deliver today, digitalization is changing it. The changes we see in media and digital marketing are just the beginning. If you work in agriculture, mining or manufacturing, digitalization means a new opportunity for you as well. "

(Peter Sondergaard, Senior Vice President in Gartner Research)¹

"The UK is not maximising the potential offered by digital technologies, because too many individuals and organisations are not using them to their fullest or not using them at all. We estimate that the UK could have increased its annual 2011 GDP by up to £63 billion if it had achieved global leadership in digitisation."

Booz&Co. "This is for Everyone" Report, November 2012 (Commissioned by GO ON UK")

1.1 The UK Charity GO ON UK has set out a compelling case for universal digitisation across the UK – that is, getting everyone online and encouraging

¹ <http://blogs.gartner.com/peter-sondergaard/the-digital-industrial-economy/>

both individuals and organisations to maximise the use of digital technologies within their lives and businesses.

1.2 They argue that the socio-economic benefits of developing greater digital capability across organisations, businesses and individuals has the potential to:

- Create a £63 billion uplift in UK GDP if the UK could become a global leader in digital adoption.
- Boost SME annual turnover by £18.8 billion if SMEs marketed and sold online.
- Save £5.1 billion by developing and promoting digital public services.

1.3 In Kent alone, on this basis, higher levels of digital usage, capability and leveraging of emerging transformative technologies could translate into:

- an estimated £1.5 billion increase in Kent's GDP
- enhanced SME turnover
- significant savings for the public sector

1.4 In addition, there are also considerable social benefits in promoting greater adoption of certain new technologies. In particular, there is growing realisation that collaborative technologies such as Skype and Facetime, can play a significant role in overcoming social isolation – whilst next generation 'telecare' technologies could enable older people to live independently for longer within their own homes, whilst offering greater peace of mind for families and carers.

1.5 As a result, this paper outlines the key activities currently underway to optimise the adoption of new technologies by Kent's residents and businesses, and foster the development of new digital sectors.

2.0 Improving connectivity to create a strong digital foundation

2.1 Substantial investment is being made in improving Kent's connectivity. Superfast broadband is already available in over 500,000 premises across the County as a result of commercial investment programmes and the BDUK programme is working to bring superfast broadband to areas that that would otherwise not benefit. Combined, this means that by the end of 2015, 91% of premises across Kent will have superfast broadband, with all properties having access to a basic broadband service.

2.2 KCC remains committed to extending the reach of superfast broadband and is currently working with the government regarding the new Superfast Extension Programme – which will seek to increase superfast broadband coverage to 95% of properties. Match funding will be required for the programme and we are currently scoping options with the Corporate Finance team. We have also registered an interest in Kent becoming a pilot location for testing new technologies in 'hard to reach areas' as part of the Government's new Innovation Fund programme – which is aimed at the hardest to reach areas.

2.3 Given that the Kent and Medway BDUK project is funding open access infrastructure (i.e. a broadband service can be purchased from a range of different communication providers), we are discussing with a number of ISPs opportunities for joint campaign work to promote the availability of new services as they come on line.

3.0 Fostering Kent's digital economy.

3.1 KCC is working with Microsoft to develop an innovative programme to accelerate the development of Kent's digital economy. This work includes:

- a) Establishing an inspirational business seminar programme to improve SME knowledge re new technologies – and to provide an insight into emerging trends. This programme will be launched at the 'Kent Reimagined' event on the 24th April, which will feature a key note from Microsoft's Chief Envisioning Officer, Dave Coplin. The event will then be followed by a series of business to business 'show and tell' seminars highlighting a range of themes e.g. effective digital marketing, new digital payments, cloud-based working etc.
- b) Exploring how we can support the development of new 'digital sectors' such as 'big data', the 'internet of things', next generation telehealth and telecare to establish Kent as a 'digital leader'. Analysts predict that these high value sectors will be critical drivers of future economic growth, for example:
 - Big data represents the monetisation of information and is often described as the 'oil of the digital economy'. Essentially it about utilising advances in computing power to develop new techniques for collecting and analysing huge bodies of data to produce useful insights or services – such as real time customer feedback, real-time data on the spread of disease etc. Research undertaken by CEBR has indicated that the UK's big data' sector will be worth £41 billion per annum by 2017 and will have already generated 58,000 jobs.
 - The Internet of Things - In 2009, there were 2.5 billion connected devices with unique IP addresses to the Internet. The majority of these were devices people carry such as cell phones and PCs. Gartner (a US based firm of analysts) has predicted that by 2020, there will be up to 30 billion devices connected with unique IP addresses, most of which will be products (e.g. household appliances, sensors in roads, wearable items). They have predicted that this will create a 'new economy' and that the total economic value add for the Internet of Things will be \$1.9 trillion dollars in 2020, benefiting a wide range of industries, such as healthcare, retail, and transportation.

We are currently working on an Interreg project which will seek to map specific opportunities within these new emerging sectors for Kent.

- c) Examining how the development of a 'digital or virtual layer' can create new economic growth opportunities – either in leveraging Kent's proximity to London (and especially Tech City) or creating new ways to drive high street sales.

With respect to the latter, Kent has worked with Microsoft to submit a bid to the Technology Strategy Board in their recent 'High Street Reimagined' call for projects. This seeks to develop a cutting-edge proof of concept using digital and augmented reality technologies to enhance high street navigation, local business 'discoverability' and local retail spend.

4.0 Promoting the social benefits

- 4.1 The growth of smart phones, tablet devices such as ipads and smart televisions has created new, more accessible ways for consumers to access the internet. Nevertheless, the Office of National Statistics has reported that almost 20% of the UK population does not use the internet, many of whom are older demographic groups.
- 4.2 There are particular opportunities in promoting the benefits of technologies such as Skype and Facetime to older groups. KCC is, therefore, producing a 'how-to' video highlighting how easy these technologies are to use and the difference they can make in feeling connected with friends and families.
- 4.3 In addition, the advent of the 'Internet of Things' will mean that more and more household appliances will have the ability to be connected to the internet in the 'smart home'– which will have many applications to support assisted living. For example, devices such as Smartkettles are already being widely used in countries such as Japan, for example, to send text or email alerts to family members when they have not been boiled by elderly relatives within a set timeframe. Similarly, next generation 'telecare' technologies used by healthcare and social care professionals will also enable people to live longer independently within their own homes.

5.0 Conclusion

There are considerable economic and social benefits to be realised in Kent by optimising the take-up and adoption of new technologies – as well as by fostering the development of new digital sectors. The work streams currently underway will ensure that the County is well placed to realise the opportunities of the new emerging digital economy.

6.0 Recommendation

Members of the Growth, Economic Development and Communities Cabinet Committee are asked to NOTE and ENDORSE the report.

Background Documents

None

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