

Southend-on-Sea Borough Council

Agenda
Item No.

Report of Chief Executive

to

Cabinet

on

18th September 2018

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Maximising the Use of Technology through the Smart City and Digital Futures Agenda

Place Scrutiny Committee
Cabinet Member: Councillor Moring
Part 1 (Public Agenda Item)

1. Purpose of Report

- 1.1 To present the draft report on the findings of the scrutiny project entitled "Maximising the Use of Technology through the Smart City and Digital Futures Agenda".

2. Recommendations

- 2.1 That the report and conclusions from the in depth scrutiny project, detailed at Section 4 be agreed.
- 2.2 That the SMART City agenda and its associated programme 2017/20 through the 'People Management, Accommodation and Digital Strategy Working Party' to be chaired by the Cabinet Member for Digital Futures.
- 2.3 That the Council takes steps to make more effective use of data it has or generates as a tool for intelligent decision making, policy making and commissioning. Steps to include the development of a corporate data warehouse and the inclusion of Business Intelligence and Analytics as a core component of the functionality of the proposed Intelligence Hub. This recommendation is likely to see the formal involvement of academia, the University of Essex for example.
- 2.4 That the Digital Futures Service continues to progress the proof of concept data driven automation of strategies in response to real time events e.g. traffic congestion or poor air quality or through the CISCO KINETIC platform.

3. Background

- 3.1 The Council's 'Digital Strategy 2017/20' including the foundation for its SMART Cities journey was approved by Cabinet in 2017. The document itself contained both routine business as usual tasks as well as longer term strategic actions but,

crucially, laid down the intention to create the foundations for the development of Southend as a SMART City.

Essentially, a Smart City is a place that uses data and information communications technology strategically to:

- provide more efficient, new or enhanced services
- monitor, manage and optimise infrastructure systems
- enable new level of cross sector or cross department collaboration
- use real time data flows to make responses dynamic

- 3.2 At its meeting on 10th July 2017, the Place Scrutiny Committee agreed that its in-depth study for the year should be “Maximising the use of technology through the Smart Cities and Digital Futures agendas” (Minute 151 refers).
- 3.3 The project plan was approved by the Place Scrutiny Committee at its meeting on 9th October 2017 (Minute 361 refers).
- 3.4 The Member Project Team appointed to undertake the study on behalf of the Committee comprised Councillors Kevin Robinson (Chair), Alex Bright, Tino Callaghan, Jonathan Garston, Nigel Folkard, Derek Kenyon, James Moyies, Helen McDonald and David McGlone.
- 3.5 The project team considered a variety of documents and written submissions, heard evidence from a variety of witnesses, organisations and providers through presentations and undertook a site visit to inform their approach.

These included both the Council’s and Government’s Digital Strategies, UK Smart City Index – An assessment of strategy and execution of the UKs leading Smart Cities (published by Navigant Consulting Inc. commissioned by Huawei), the House of Lords Library Briefing ‘Digital Skills in the United Kingdom’ dated 10th August 2017, Smart Places & Connected Communities (published by Microsoft UK & UKAuthority),.

It was noted that the Council’s Digital Strategy had been discussed and noted by the Scrutiny Committee at its meeting on 10th July 2017 (Minute 146 refers). This included the development of an Intelligence Hub and Smart “proof of concept” pilot projects that were being progressed during 2017/20 namely:

SMART Community Safety
SMART Traffic Flow and Parking Management
SMART Health & Well Being (Assistive Living)
SMART Environment Monitoring and Management
SMART Energy

To progress these proof of concept pilots across the 5 service areas, the Council has had significant dialogue with major international technology companies which wish to assist and work with the Borough on its SMART journey. Representatives of these companies were asked to give evidence through presentations and/or written submissions.

3.6 Witness/Evidence Gathering Sessions

3.6.1 Digital Strategy Working Group

Members of the project team were invited to attend a meeting of the Southend Business Partnership's Digital Southend Working Group (DSWG). This took place on 21st November at The Hive, Southend on Sea. The purpose of the Working Group was to bring together interested stakeholders within the Borough of Southend from Education, Local Government, the Private sector and the Community to develop and implement a co-ordinated and jointly owned Action Plan that will support the development of the digital economy and infrastructure as well as promoting Southend as a digital tech destination.

The project team heard of the progress made by the DSWG in understanding what the opportunities are for Southend in relation to the Digital Tech sectors and how all key players can work together.

They also discussed the concept of Smart Cities, thinking in particular about how Southend could host innovative events sometimes known as 'hackathons', to gain some insight into what these are and how they could be an interesting vehicle for exploring some of Southend's 'civic challenges'. A Hackathon is a design sprint-like event in which computer programmers and others involved in software development, including graphic designers, interface designers, project managers, and others, often including subject-matter-experts, collaborate intensively on software projects.¹

The goal of a hackathon is to create usable software. Hackathons tend to have a specific focus, which can include the programming language used, the operating system, an application, an API, or the subject and the demographic group of the programmers. In other cases, there is no restriction on the type of software being created.

As well as running through the relevant issues in the draft 'Ambition Southend' strategy, the DSWG also briefly looked at the other end of the Smart Cities scale – basic digital skills and digital inclusivity – considering what could be done to improve support for those without the skills to take a full advantage of digital services and employment opportunities. This was particularly important to ensure that Southend had the digital skills across all sectors to support economic growth.

3.6.2 Presentations to the Project Team

At its meeting on 28th November 2017, the project team received two presentations. The first was from some very senior level/high ranking officers at Cisco where the project team took the opportunity to discuss the global Smart City vision, trends and case examples, as well as where Southend-on-Sea is in the digital transformation journey, both in terms of potential gaps and potential the next steps for Southend.

Cisco welcomed this opportunity to meet with the project team and confirmed that it had been a great experience partnering with Southend. They explained that we had established high standards in setting up the goals, planning the city digital

¹ The Hackathon Is On: Pitching and Programming the Next Killer App, Steven Leckart, Wired, March 2012

transformation roadmap, and implementing the first phases. They looked forward to working with us to accelerate building the city digital layer, expanding the intelligent network, implementing the digital platform, and achieving the “city lighthouse” global best practice in Southend delivering tangible outcomes for citizens, business community, and the Council.

The second presentation was provided by City Fibre. They gave an overview of their company, the work they do and services they provide, their involvement with other Council’s and what this has enabled. They explained the work currently being undertaken within the Borough in partnership with the Council, which included the provision of 95km of full fibre network in the Borough, the launch of services to businesses via their partner, Onecom (there now over 70 businesses which have ordered services), 31 UTC cameras contracted for connecting to the network, 16 new CCTV cameras in the Borough committed to be on fibre.

The project team was afforded the opportunity to visit “The Crystal” a sustainable cities initiative by Siemens, the world's most sustainable events venue and the largest exhibition on the future of cities. As part of the visit and tour of the building, the project team met representatives of Siemens to discuss Southend’s Smart City programme and Siemens involvement in delivering Smart Cities.

The project team also met with representatives from Vodafone who also commended the Council on its progress to date and ambitions for the future. They also indicated that they could offer significant support in helping in the delivery of our objectives, particularly in the areas of 4G and 5G Wireless coverage and their SMART Cities platform and (Internet of Things) solution.

The project team heard about Vodafone’s plans for the future in this area, more particularly the mobile coverage Essex including the change from 3G to 4G as well as an overview of the development of 5G. They also heard about the projects Vodafone were working on with other cities worldwide as well as in Europe and the UK through the use of public sector IoT (Internet of Things)² The project team took opportunity to highlight the pockets of the town, especially along the seafront or town centre, where there was poor or no signal for mobile users. However, the project was disappointed that there seemed to be no intention by Vodafone to address the ‘not spots’ which were quite significant and that Vodafone intended to boost signal in locations in which it already have a presence but not to fill in the gaps.

4. Next Steps

- 4.1 The SMART City agenda is constantly developing but Southend is currently in a very good advanced position, progressing the pilot schemes and developing its proposal for the creation of an ‘Intelligence Hub’ to serve the Borough.

Opportunities for the further enhancement of the Borough-wide infrastructure continue to arise and these will be capitalised upon wherever possible.

² The Internet of Things (IoT) is the network of physical devices, vehicles, home appliances and other items embedded with electronics, software, sensors, actuators, and connectivity which enables these things to connect and exchange data, creating opportunities for more direct integration of the physical world into computer-based systems, resulting in efficiency improvements, economic benefits and reduced human exertions - Wikipedia

Consideration is now being given to how the Southend approach could be adapted and extended to serve the South Essex Corridor.

4.2 The Council, in partnership with CISCO, is making steady progress in the establishment of its Borough-wide Smart City platform. This platform gathers and cross references data turning it into insight and actionable automated strategies.

4.3 Progress is being made across each of the 5 SMART pilot areas:

SMART Community Safety
SMART Traffic Flow and Parking Management
SMART Health & Well Being (Assistive Living)
SMART Environment Monitoring and Management
SMART Energy

The business case for and evaluation of the optimal location to locate the proposed Intelligence Hub is currently being made.

4.4 The input and assistance from academics who can draw on, interpret and utilise data produced by the Borough forms a key part of our SMART City Journey. This was particularly evident from the representation from the local academic institutions in attendance at the Digital Southend Working Group meeting attended by the project team.

The creation of a data warehouse for the Borough to enable predictive analytics and the publication of open data is a crucial step and is being progressed in 2018.

Many local authorities already publish a raft of data sets for public consumption and Milton Keynes, Bristol and Leeds are famed for it. There is little evidence to suggest that any Local Authority has derived much income from the selling of its data but much to suggest its publication stimulates interest and sometimes innovation from the local population commonly through the production of Apps to meet local needs.

Examples of how some Councils are using Open Data are provided in the links below.

<http://www.mksmart.org/data/>

<https://opendata.bristol.gov.uk/pages/home/>

<http://www.leeds.gov.uk/opendata/Pages/Further%20information%20open%20data.aspx>

The effective use of data will necessitate the establishment of a sound and on-going working relationship with an academic body. This has yet to be established and options are being considered.

- 4.5 Crucially, a SMART agenda for any location must be resident and business led; it needs to be informed from the bottom up and include the aims and aspiration of multiple stakeholders of which statutory bodies are but some.

More needs to be done in this regard and the vision for a SMART Southend must be integral to the wide vision for Southend and South Essex 2050.

5. Reasons for Recommendations

- 5.1 Southend like many other locations across the UK has no option but to progress a SMART agenda for the place. There is no doubt that technology will continue to play an ever increasing role in public service delivery and permeate many aspects of everyday life. Failure to progress this agenda would be remiss on the Council's part and, ultimately, disadvantage the borough in a number of ways.

6. Corporate Implications

6.1 Contribution to Council's Vision & Corporate Priorities

The SMART Programme 2017/20 is geared to meeting the multiple stakeholder needs of the borough and not just the Council. Actions and projects within the programme fundamentally underpin all the Council aims and priorities.

Ambitions are geared to addressing the social, economic and environmental challenges faced by the Council.

6.2 Financial Implications

There are revenue consequences associated with the 'SMART City' agenda as currently envisaged, the most significant of which perhaps relate to the running costs of the proposed Intelligence Hub. These are costs which are already budgeted for within the respective teams and do not present the need for any additional financial resource at this time.

In respect of projects aligned to the SMART CITY programmes

These sums will be considered as one as the SMART agenda progresses to ensure that the overall value derived from procurement is greater than the sum of the parts.

6.3 Legal Implications

As the programme is progressively delivered there is the need to comply with the General Data Protection Regulation 2018.

6.4 People Implications

There will without doubt be people implications associated with this agenda. For example, should the Intelligence Hub go ahead and see the co-location of staff engaged in three 24/7 services then this will impact both roles and responsibilities of staff. Moreover, the increasing application of SMART solutions to services over time could impact the daily routines of some staff.

However, none of this above is with precedent and each and every project irrespective of size will address staffing implications in keeping with Council policy.

6.5 Property Implications

The most significant property related aspect of the program as currently envisaged is the creation of an Intelligence Hub for the borough.

This has been estimated to cost in the region of £5m and, at time of writing, both the business case and an options appraisal for the optimal location are being worked on. It should be noted however, that the Hub is also likely to be a significant income generator.

The Operations Centre has yet to be built and the best location for it to be built determined. £500k has been identified in the capital programme to kick start this process and the specification for the Bristol Operations Centre to inform Southend thinking has been sought.

6.6 Consultation

Plans are now in place to include consultation on the role of Digital and the SMART City agenda within the wider consultation on Southend and South Essex 2050.

Consultation on the potential uses of the proposed Intelligence Hub will be extended to colleagues in the NHS, the Community and Voluntary Sector and neighbouring authorities.

Any staff impacted by and project proposal will be consulted in keeping with Council policy.

6.7 Equalities and Diversity Implications

Each element of the programme will need to be subjected to an equalities analysis where appropriate.

6.8 Risk Assessment

There are two sorts of risks associated with this programme. The first is financial and the second in relation to data protect and information governance. Each pilot or sphere of activity should meet two criteria; that it improves outcomes and deliver savings. Pilots will be need to be subjected to a business case and properly evaluated before they are considered suitable for scale up. All pilot project will need to be subjected to the rigours of a Privacy Impact Assessment in keeping with the Council's approach to GDPR 2018.

6.9 Value for Money

All projects including the creation of an Intelligence Hub will be subject to a cost benefit analysis to justify financially or otherwise its progression

6.10 Community Safety Implications

Several aspects of the programme support the Community Safety agenda.

6.11 Environmental Impact

Several aspects of the programme are geared to monitoring, managing and improving the environment.

7. Background Papers

The UK Governments Digital Strategy March 2017

<https://www.gov.uk/government/publications/uk-digital-strategy>

The Council's Digital Strategy 2017/10

8. Appendices

8.1 Southend's SMART Programme 2017/20