

7. Digital Programme 2018/19 Progress - including overview of GDPR preparations

REPORT OF: HEAD OF DIGITAL, CUSTOMER SERVICES & HR
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Wards Affected: All
Key Decision: No
Report to: Scrutiny Committee for Customer Services and Service Delivery
Date: 19 September 2018

Purpose of Report

1. This report provides Members with a progress report on the service design and digital programme endorsed by the Scrutiny Committee for Customer Services and Service Delivery on the 13th February 2018. It includes more detail on the delivery of the priorities and service improvements and efficiencies. It also highlights some of the challenges in delivering the programme including supplier and market development.

Summary

2. Digital in its widest sense refers to an approach to change which is often, but not always, enabled by digital and networked technologies. This change is both social (culture and behaviours) for example the increasing use of mobile devices, as well as technical (process design and infrastructure) for example software that is internet based not needing such complex hardware on site (Software as a Service).
3. Digital is not the point of the change, but it can drive changes and support changes within services. Digital approaches and technology support the Council to use technology in innovation and improvement of service delivery. The focus of the Council's digital work is in improving the experience of our customers and creating efficiencies. For example, information on bin missed bins can be transferred from the contact centre to SERCO in real time so that they can be picked up more quickly therefore improving customer services. This reduces staff time spent on processing information and more time on delivering the service. Customers experience faster response times and staff activity can be redirected to focus on other priority areas, for example recycling.
4. While there have service improvements for customers the programme has also identified efficiency gains and areas where future costs have been avoided. These efficiency gains fall into two areas:
 - cost reduction and
 - cost avoidance.
5. Many of the changes to date have been used to increased capacity within services and updated hardware and software to support changes in how services can be provided to meet changing business needs.

6. Using digital technologies linked to service redesign has enabled the Council to increase both its effectiveness and efficiency. Succinctly, effectiveness is getting things done; efficiency is doing things right. For example, the development of the Waste System operated by the Council's Waste Team and SERCO that is now linked to the Customer Relationship Management System used by the Customer Services team, has allowed workflows to change. This has meant more customer service requests now go directly to SERCO and the Council's Waste Team can monitor progress and performance instead of processing service requests.

Recommendations

7. The Committee is recommended to:
 - a) Note the progress of the service design and digital programme in the past year;
 - b) Consider the work for the service design and digital programme for 2018/19 into 2019/20; and
 - c) Consider any particular priorities that they would wish to see given within the service design and digital programme.

Background

Digital and technology trends in the last year

8. The past year has seen a continuation of the move of technology towards internet based, mobile accessible tools and systems. Microsoft continues to take a cloud services approach, wanting customers to use its applications on a whole range of devices, including those based on Google and Apple technology. It has also developed the flexibility of its applications enabling them to be 'connected' more easily to other systems. This trend of developing Application Programming Interfaces (APIs) that work like locks and keys to enable different types of software to more easily communicate with each other is also an increasing trend.
9. The software supplier market to government continues to change. Expectations of both staff and citizens using online Council services and digital tools matches those they have of using consumer services. Our customers demand an experience similar to that which they get using consumer services such as Facebook, Amazon, Google and so on. Increasing pressure is being put on suppliers to deliver software that is easy to use, straightforward to maintain and enables simple customer self-service. Increased pressure from across the sector will hopefully deliver results from software vendors however the challenge remains in key line of business systems where the market share of the incumbents is considerable. For example, in Revenues and Benefits and Planning. The Council is making use of new suppliers in the market where it is appropriate to do so.
10. The Government Digital Service has developed services such as Payments and Verify (for identifying customers online). GDS has been most successful in promoting approaches such as user centred service design and agile project delivery, resulting in quicker, better outcomes for citizens. MSDC is increasingly employing these techniques in our operations and this is most evident in the redesign of the Council's website.
11. Currency changes are resulting in increased licencing costs as software and hardware is typically priced in dollars. Therefore, the focus is to ensure we exploit functionality of the technology and digital tools the Council has in place.

The Council's digital and IT approaches

12. Our approach to IT and digital continues to be to enable the Council's services to be redesigned to better meet our customers' needs, as efficiently as possible. This requires systems and hardware that are flexible, mobile, deliver on customer self-service, and manage data securely. Clearly this approach requires an understanding of how and why customers seek services. Simply, customers either contact the Council because of service failure, for example a missed bin, or to request a service, for example to seek planning permission., Effective service redesign requires the Council to understand not only online customer behaviour, but also how and why customers contact us, so we can reduce or eliminate contacts that are as a result of service failure.
13. We believe that cloud-based technology is the best way to deliver this future of flexible, mobile, customer-friendly and interoperable systems. We want to invest in and exploit a small suite of cloud platforms to deliver all the capabilities we need to help colleagues redesign their services.

14. We are already a fair way down this road. Salesforce is being used as a Customer Relationship Management System (CRM) and is used by the Waste team and SERCO. Salesforce is also used as the underlying Payroll and HR system and it also supports our Freedom of Information activity.
15. Supporting this approach has also involved replacement of network infrastructure at the Council. Much of this has involved replacing end of life hardware to ensure service can be maintained as well as installing new equipment that can help underpin new ways of working and faster more data intensive applications. For example, we are currently increasing the number of Wi-Fi points to cross the whole campus. This will support the roll out of mobile devices, including laptops, so that people can work more flexibly across campus. In turn this will reduce the number of workstations we deploy and support.
16. When assessing a requirement from a service area, our first approach is to consider whether existing capabilities can be used to meet that need. Where they can't, we look to buy a Software as a Service (SaaS) solution. SaaS has a much lower maintenance overhead than traditional, on premise systems, and should also deliver on mobility, self-service and data interoperability. Some of our requirements however cannot be met in either of these ways. Perhaps the requirement is too complex for existing capabilities, and there is no suitable SaaS solution on the market. In this case, we will look to host a more traditional application in the cloud, through Infrastructure as a Service (IaaS). With IaaS, we will have a cloud-based infrastructure available to us to host systems and data in the cloud, as if they were running in a local data centre. However, we will access the systems over the internet rather than a local network.
17. Our overarching aim is to limit the amount of on-premise infrastructure to the bare minimum, through the use of existing cloud capabilities, SaaS and IaaS. This enables us to free people up to help services redesign the way they do things, making the most of modern technology, to meet those challenges of increased demand and reducing budgets. However, there are significant challenges in deploying these approaches for two of the council's key line of business systems; Planning and Revenues and Benefits. The market for these systems is underdeveloped and incumbents' roadmaps for the development of these systems is unclear.

Dissolution of the Census ICT partnership

18. The Census ICT partnership is now being wound down. Network infrastructure and two key line of business systems are being disaggregated and returned to the individual councils. The Council hosts Horsham's Revenues and Benefits system, Horsham host MSDC's Planning system and document management system. Projects are underway to disaggregate these and will be completed by the end of the year.

Section One: Headline Review of the Digital Programme 2018/19

Themes and challenges - data architecture, migration and quality

19. One of the aims over the phases of the digital programme has been to introduce a consistent approach to data architecture. This includes the policies, rules and standards that govern which data is collected, how it is stored, arranged, integrated, and put to use in data systems. This means that the Council knows what data it has and how it can be used across multiple systems. Done effectively this provides a number of single data sources where we know the data handling practices are highly effective and therefore data within them can be regarded as a definitive record. For example, the Council's Gazetteer complies with British Standards and is the standard for address data in the UK. It is updated through our Street Naming and Numbering Service.
20. This approach also means we are able to monitor the Council's compliance with the General Data Protection regulations (GDPR), including the Council's retention policy for information.
21. There continues to be significant challenges in migrating data from old systems to newer systems. This is because in many older systems suppliers make it difficult to extract data without substantial switching costs. This can mean taking advantage of newer systems with improved usability and functionality can be prohibitively expensive if only comparing licensing and support costs. Positively this is a one-off cost as once data is cleansed, rearchitected and placed in a system where it can be extracted easily via APIs, then it is easier for the Council to exploit developments in the software market as the cost of moving is significantly reduced.

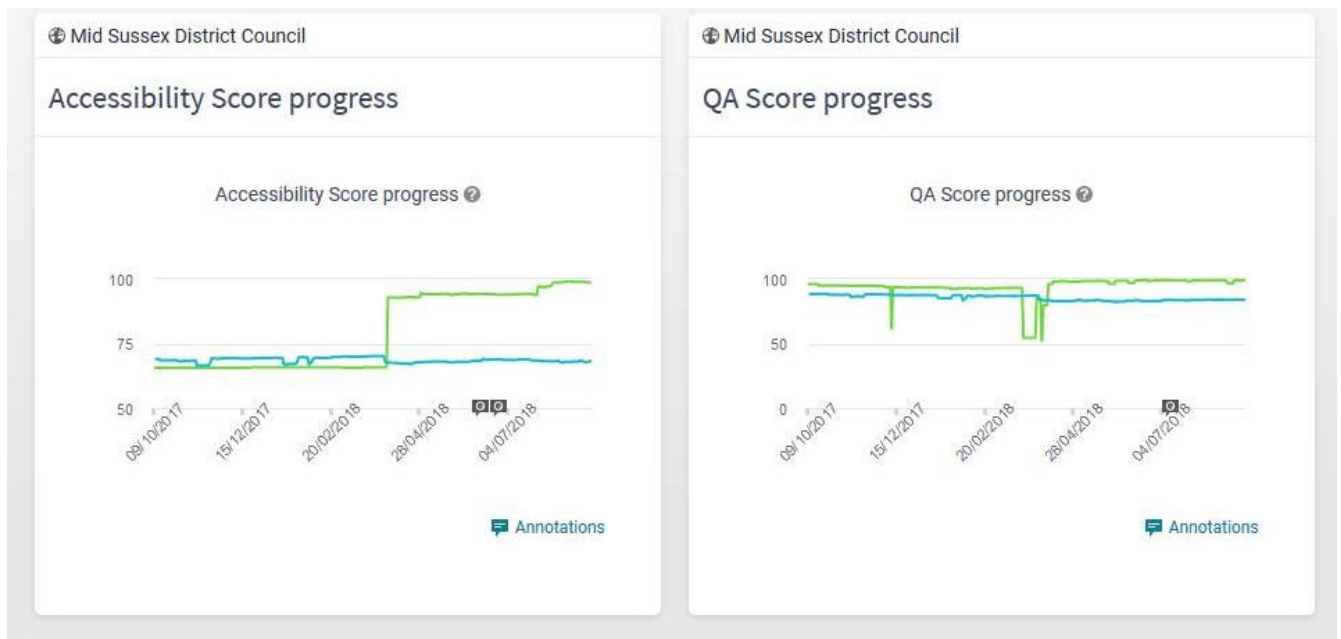
Mid Sussex website redesign

22. The website redesign went live in April 2018 scheduled with its move to being hosted in the cloud. Its development involved significant user testing to improve usability, involving the highest number of customer's we ever have in its redesign. We have also improved the monitoring information across the site, so we are more easily able to adjust content according to use. This has significantly reduced the number of clicks for navigation, given more prominence to highly searched for pages and improved search results.
23. The problems were:
 - Problems accessing the site on tablets and smartphones.
 - Unclear information and structure because of new content being added without any rationalising, moving or amending old content.
 - Poor page ordering because of a lack in understanding priority tasks for customers.
 - Unclear technical language not aimed at customers.
24. Since being hosted in the cloud uptime has been 99.98% (the site has been inaccessible or 'down' for under two hours a year) compared to 99.80% for the same period last year (under 18 hours a year).

25. The website also only allowed a small amount of system integration. Most of the content guided users towards acting by either contacting the service by phone or printing out a PDF, filling it in and submitting it through the mail.

26. This redesign has delivered a number of efficiency gains. Website analytics for comparable periods pre and post redesign have assessed the effectiveness of the redesign. The Quality Assurance and Digital Certainty Index scores have all increased significantly when the website was updated and have continued to improve. These have resulted in reductions in calls to the contact centre in the first quarter of its launch.

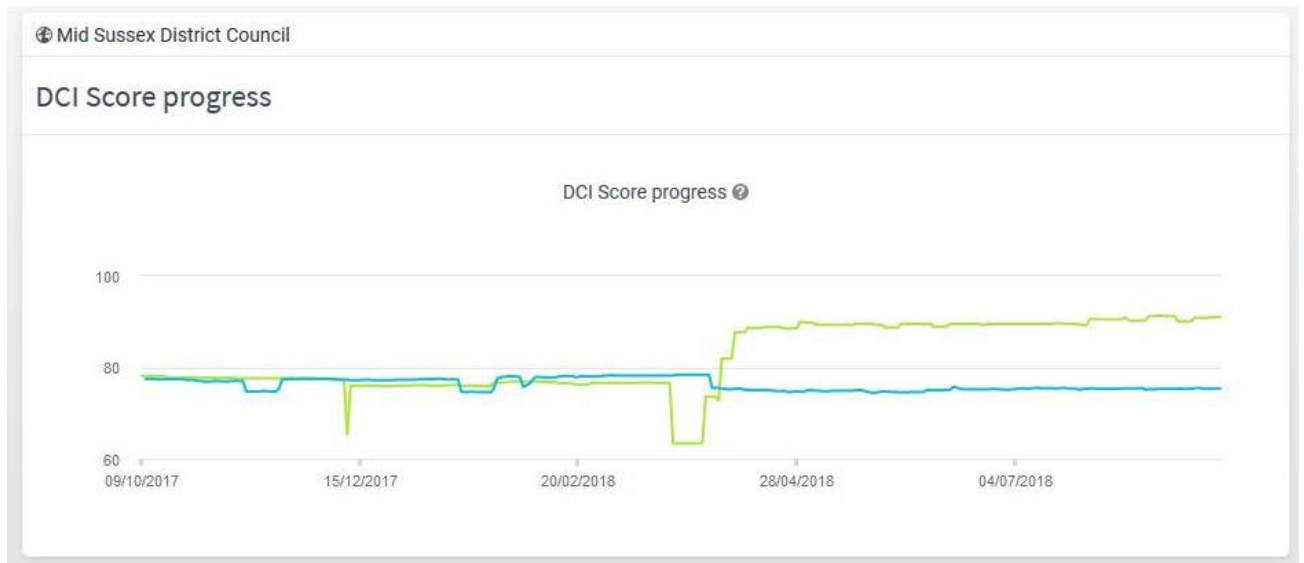
27. Accessibility and Quality Assurance Scores old and new MSDC website



28. Digital Certainty Index is an industry standard measure of the quality and potential impact of a site's digital presence, including:

- A website's accessibility and usability;
- A website's credibility and trustworthiness; and
- How well-poised a website is to respond to Search Engine Optimisation (SEO) challenges.

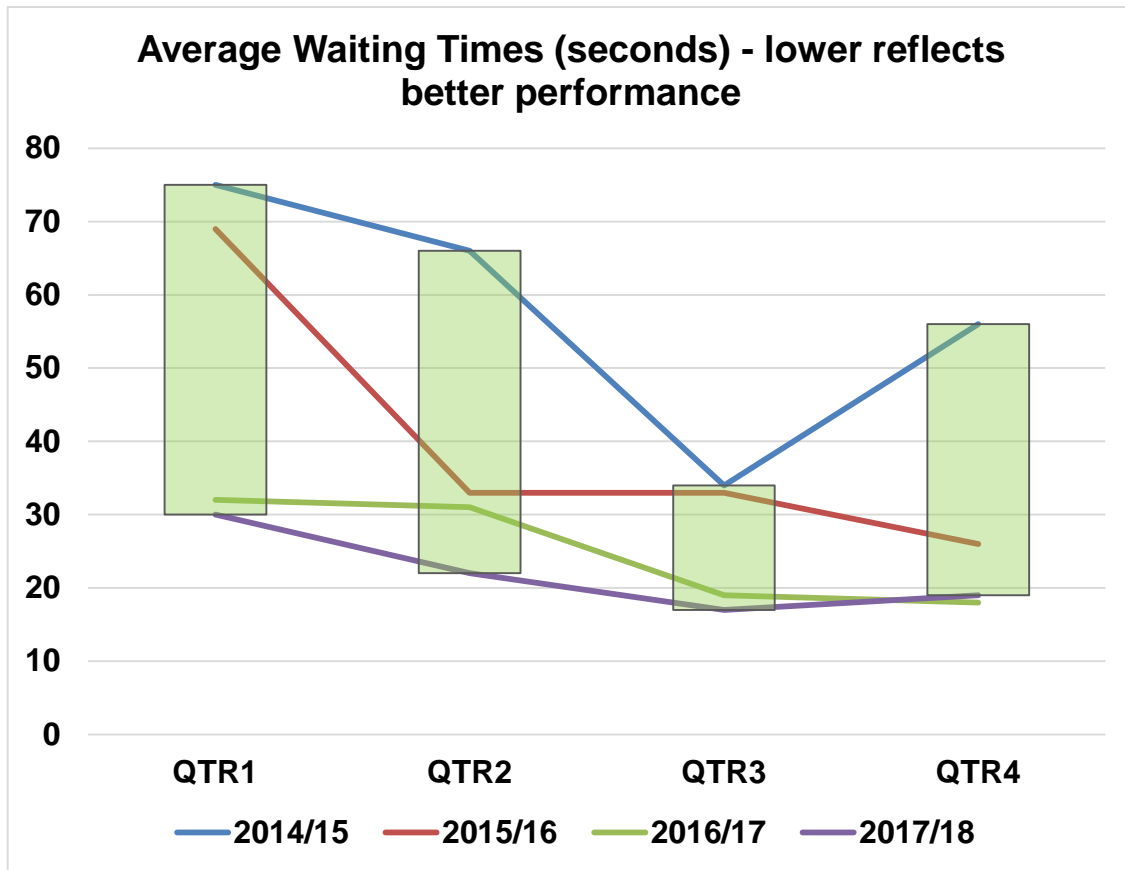
29. Digital Certainty Index scores old and new MSDC website



Customer Relationship Management (CRM) development

30. The Council's Contact Centre had been operating a CRM system procured in partnership more than ten years ago. In 2015 the Council left the partnership following increases in costs.
31. The CRM had limited integration with other systems across the Council. This meant that data was not reused by other systems potentially reducing data quality and meaning many customer contacts took additional time to resolve. These issues meant that the Contact Centre was not meeting targets on call response times and calls were not reducing. The new CRM, as demonstrated in previous reports, allows easier technical redesign of business processes and integration with other systems.
32. As detailed in the reports; Service Design and Digital Programme 8th February 2017 and Service Design and Digital Programme 13th February 2018, the new CRM has enabled:
 - productivity gains by enabling new ways of working;
 - faster responses to service requests between customers and contractors;
 - resilience, process transparency and scalability to processes reducing marginal costs; and
 - Improvements in data quality, eliminating double-entry and duplication of data.

33. COMPARISON OF CONTACT CENTRE WAITING TIMES BY QUARTER 14/15 TO 17/18

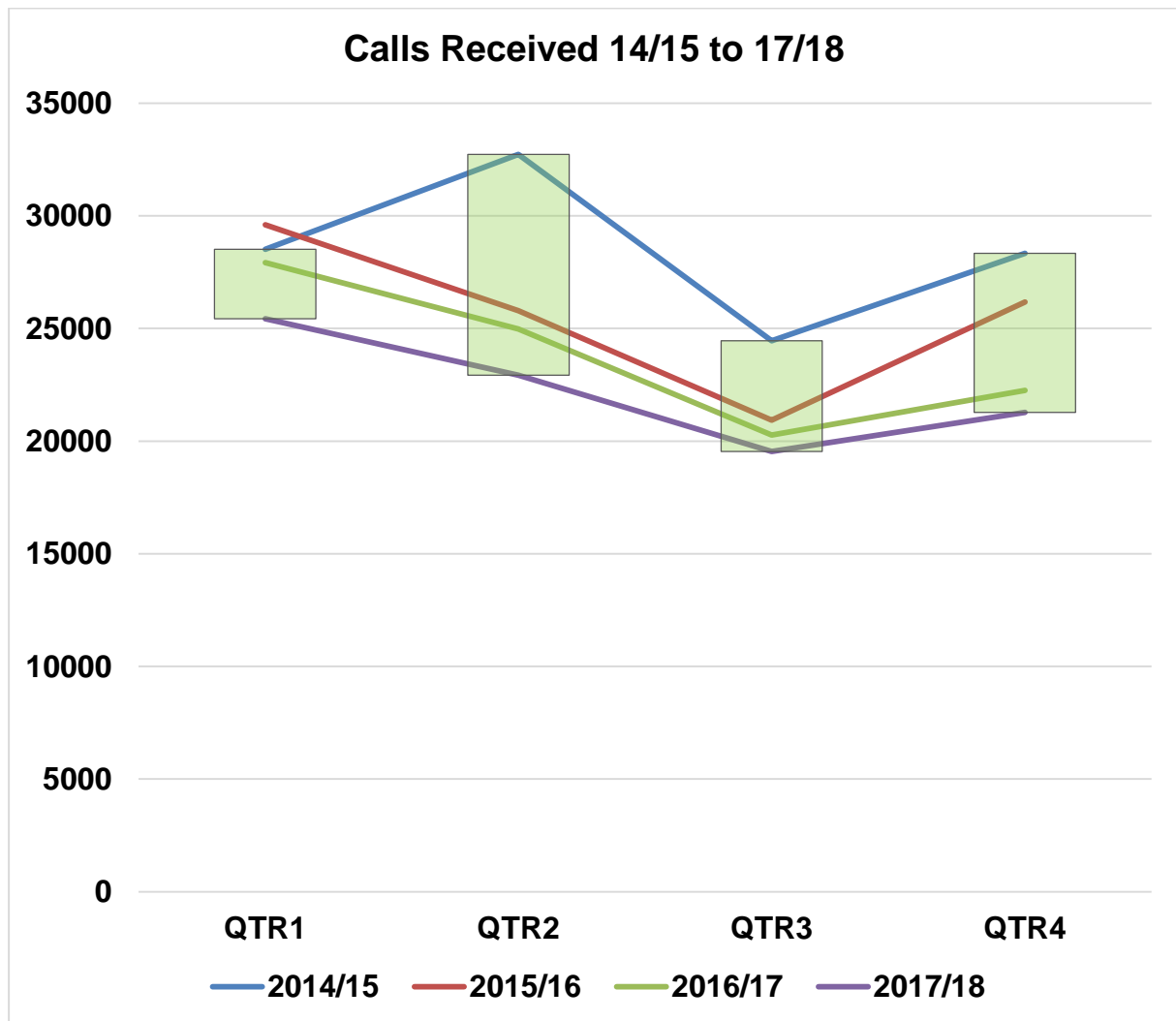


34. The green bars illustrate the overall reduction in average waiting times for each quarter from the years 2014/15 to 2017/18.

35. Response times in the contact centre are a function of the number of calls, the complexity of calls and the time taken to resolve service request. There are seasonal variations in the numbers of calls, for example the 4th quarter sees a rise due to annual billing, licencing and other year-end activities. Additionally, volumes increase during elections and other 'one-off' activity. The lines show a decreasing trend since the introduction of the CRM and as it has been developed based on the metrics provided on customer behaviour. The response time has reduced by almost two thirds since 14/15 from an average of 59 seconds to 19 seconds. This means the response time target of is now being exceeded and new services being incorporated with no additional contact staff being recruited.

36. Web forms have also been improved in two ways. Frequently used web forms have been simplified and placed more prominently on our webpages. The team have also enabled a number of key forms with 'web to case' functionality. This means that the web form creates a case in the CRM and this can follow the same workflow as if a customer contacted the Council by phone. This automation reduces the need for staff to extract information from emails created by forms and then enter them into the CRM. This has helped to reduce calls and increase the use of forms.

37. COMPARISON OF CALLS TO THE CONTACT CENTRE BY QUARTER 14/15 TO 17/18



38. The lines show calls decreasing since the introduction of the new CRM. From 14/15 baseline call volumes have decreased by over 23,000 calls. The green bars indicate reductions in calls when comparing quarters. This represents approximately a £68,200 recurring efficiency gain for the customer services team in reduced calls. There are also efficiency gains within other parts of the Council where services have been moved to the contact centre and 'web to case' has been implemented. An example of this is detailed below in the development of the Waste System.

39. The gains for customer services are being used to take in more lines of business and provide more customer channels. This includes using social media as a customer services channel (Social CRM) in line with customer expectations. Examples include notifications about the conditions of pitches, publicising events and health and wellbeing initiatives as well as responding to customer queries.

Customer Relationship Management (CRM) and Waste system integration and development

40. The Waste Services System has been developed in tandem with the CRM and is built on the same software, Salesforce. The focus of this development has been to reshape the Waste Services System to reflect the shift of the Contracts team away from transactions to managing and developing the contract with SERCO. The Waste System allows service requests to flow directly from customer contacts online or through the contact centre directly to SERCO. Performance on these service requests can be monitored by the waste team with alerts and reports for any that fall outside or are getting close to exceeding completion targets. SERCO are now able to receive these service requests directly through Salesforce meaning response times are improving.

41. System developments include:

- Access Issues – these are now reported directly by Serco to the Customer Contact Centre. Previously these were emailed by SERCO (a photo) to the Waste Management Team who then emailed the Customer Contact Centre. Customer Contact staff can now immediately see if a customer rings up that there is an access issue on their street and explain why the Council was unable to pick up their bin. This has reduced the process time from one and a half hours to real time and significantly reduced process errors where the Contact Centre were not notified.
- Bin deliveries, upgrade/downgrades, replacements have now been amended on the system and all changes are dealt with on one report which SERCO use to deliver all new and replacement bins. This has enabled SERCO to respond more quickly to these requests by, on average, reducing response times by two and a half days.
- Assisted collections are now managed with workflows for new customers, changes, and cancellations. Additional functionality has also introduced a facility for people who go into hospital, so that the service can be paused. Customer details are retained so that staff do not need to add details again. SERCO are informed to pause the service for the duration of the hospital stay and resume collections when the customer returns.

HR system replacement

42. A new HR and Payroll system is replacing the current range of systems. The system is cloud based, based on the Salesforce Platform and provides easy and secure access to information for staff and managers. Licencing costs are higher than the previous system, however hosting costs at the Council have been eliminated and the Digital and ICT teams are able to develop the product to provide efficiencies elsewhere. The Digital and ICT team are already familiar with supporting Salesforce (CRM and Waste) and are able to design workflows that work with the system. This is beginning to provide increased automation reducing manager time spent on collating information. Hardware has been retired and resources previously focussed on hardware support have been redirected.

43. Initial benefits analysis has shown:

- It is easier for staff to use resulting in reduced transactional times;
- Mobile functionality has been developed allowing remote authorisations, this has facilitated more flexible working;

- Maternity leave has been automated reducing the need for complex calculations;
- Increased visibility for staff and managers for HR records; and
- Expenses have been automated linking the Financial Management System with the HR system reducing transactional costs.

Infrastructure modernisation (Servers, Wi-Fi, cabling)

44. Network infrastructure is a fixed cost for the Council of doing business. It provides services with connectivity to systems and the internet. As with all infrastructure, cabling, switches and servers have a lifespan. As the equipment gets older the costs of support, particularly for switches and servers becomes more expensive and parts harder to source. Cabling similarly ages. It is categorised according to the speed of data it can transmit and can oxidise over time meaning lost data and slower transmission speeds which in turn means systems can crash or timeout.

45. Over the last two years ICT have :

- consolidated 16 servers on more modern systems reducing support costs.
- replaced 5 servers by migrating web content server to cloud services for the same cost as the current licence with improved resilience, development and security updates.
- reduced the specification of 4 servers (reducing costs) in the cloud by SaaS (e.g. Office 365 and XCD) with improved resilience, security and updates for the same licencing costs.
- 15 removed entirely by the Council enabling decommissioning of 5 underlying infrastructure elements that supported all of the servers.

46. This has been enabled by moving to SaaS products, for example by replacing the SiDem parking system, which has also supported additional functionality such as cashless payments.

47. Efficiencies here relate to savings in the fixed costs related to the server room (energy), reductions in licencing costs, and efficiencies in IT staff time linked to supporting hardware and cost avoidance of more expensive support contracts for ageing hardware.

48. Cloud infrastructure as a service

49. At the beginning of 2018, the Council is entering the implementation phase of our cloud infrastructure as a service (IaaS) project, which will see our data centre progressively move into the Microsoft Azure cloud.

50. The move to cloud IaaS provides several benefits:

- Increased resilience – the sheer scale of operation of large cloud providers such as Amazon, Microsoft and Google mean that the availability and uptime of their platforms cannot be rivalled by in-house offerings. Disaster recovery is a major risk for all Councils at present and the move to the cloud would also help mitigate this.

- Better performance – again, the scale available to cloud providers means that the latest technology is available and supported, meaning our technology will run quickly and efficiently.
- Access to skills and knowledge – as a relatively small organisation, with limited financial resources, it is difficult to recruit staff with skills and knowledge in the latest developments in IT infrastructure. Working with much larger, specialist organisations will ensure that niche and expensive skills will be available when the Council needs them.
- Information security – the Council can maintain an emphasis on excellent IT security by tapping into the greater resources and knowledge that partners will be able to provide. Utilising the guidance issued through central government on cloud security, the Council can ensure maximum flexibility is delivered in the technology stack whilst also ensuring data is as secure as it can be.

51. A managed service provider, Eduserv, will work alongside the Council's teams to plan migration where it makes sound business sense. Before each system and its related data is moved to cloud IaaS, a bespoke migration plan will be developed to identify the approach and manage related risks. The relevant service areas will be fully informed and any disruption to services will be kept to an absolute minimum.

Revenues and benefits system migration and improvements

52. The CenSus Revenues and Benefits system (Academy) has moved to a virtualised infrastructure running the more common and cheaper to support RedHat Linux operating system. This has also supported the disaggregation of the CenSus Revenues and Benefits service and will significantly reduce system downtime related to annual billing.
53. The system now has storage issues resolved. The server now has enough capacity to support future database growth, and can be easily extended if required which was not possible under previous system
54. Batch job run times, for example annual billing, have decreased between 25% and 75% depending on job type. This enabled the Council to complete annual billing in significantly fewer hours, reducing overtime cost, with reduced downtime for staff and customers. In previous years, annual billing had overrun from the weekend into Monday morning taking 39 hours, up until lunchtime / early afternoon. In 2018/19 billing was completed within 19 days.

Section Two: Work programme 2018/19

Work Prioritisation

55. The selection of service lines for redesign uses the following principles:

- high volume, high impact service lines where improvements will benefit a lot of customers rapidly;
- quick wins, where there is opportunity to do a short sharp piece of work to transform a service (or important aspects of it), for example ordering of the green waste collection service;
- breaks in contract provision, where a change offers an opportunity for a re-appraisal of what is delivered and how, for example the CRM and HR system replacement;
- a service line currently perceived as problematic or 'failing', where a service redesign will reduce customer frustration or operational inefficiencies; and
- opportunities and inter-dependencies within or between business units to provide more connected services to customers (internally and externally).

CRM, Waste and HR systems development

56. Digital, ICT and service teams will continue to develop the systems in house. Developments underway and currently in test for the CRM and Waste Systems and shortly to go live are:

- A new way of working for missed bins is due to go live shortly. SERCO will take over the bin justification process (whether they were missed because of access issues, the customer not leaving them out or by mistake). This will save the Customer Contact Centre time in entering this data and also allow proactive contact with customers to alert them to access issues.
- Bulky waste e-form requests will soon create a case in the system, this will go directly to SERCO eliminating a separate spreadsheet which is emailed twice weekly. This will speed up the bulky waste process, reducing the amount of time the Waste Management Team spend and enable the service to shorten the time customers have to wait for a collection.
- Garden Waste subscriptions s in test. Teams have been cleansing the subscription data ready for upload. Previously this data was stored across four systems with no dynamic links and now will be on the Waste System with a link to the Councils Financial Management System.
- Clinical waste will soon be added to the system and be administered directly by SERCO. As with Bulky waste this will considerably reduce the amount of time the Council teams spend administering the service.

57. The next stages of development for the HR system include:

- Time and attendance module allowing staff and managers to record attendance on the system both on site and remotely. This will also eliminate the spreadsheets currently used and allow significantly improved analysis of work patterns, resourcing and productivity.
- Enhanced reporting – for example, attendance records and patterns, pinch point analysis for leave, ageing analysis for remaining leave to ensure it is smoothed across teams at times of high demand, outstanding leave alerts.
- Automated and detailed Sickness analysis.

Windows 10, workstation and laptop upgrades

58. The current desktop operating system, Windows7, will go out of security support in January 2020. the majority of desktops will be upgraded or replaced before this to ensure security & PSN connection certification compliance. The windows10 operating system is more cloud based and this will enable staff to take full advantage of the additional web services available from the Cloud environment and ensure compatibility with software support after Windows7 goes out of support.

59. Over 200 desktops & laptops will be replaced and additional 200 will have memory upgrades to support the new operating system. There is also some desktop software that will need to be upgraded to a Windows10 compatible version. This will support mobile working capabilities for field staff including:

- environmental health
- building control
- estates

Office 365 GDPR Configuration

60. Design work is imminently to start on implementing Information Rights Management for electronic data. This will provide the ability to control the copying, printing and forwarding of content based on user roles and responsibilities, ensuring greater control of information sharing both internally and with external parties. This is particularly useful for protectively marked emails that might otherwise be shared.

61. Similarly, implementing retention policies for Office data will introduced providing the ability to ensure data that must be kept is not deleted and data that must be deleted is identified. The latter is likely to apply to non-sensitive financial data held that may need to be kept for a long period of time for regulatory purposes.

Telephony Replacement

62. Our current telephony system is over 15 years old and comes to end of life soon ere it will no longer be supported by its manufacturer or third-party suppliers. This means if there is a hardware failure it would not be replaced resulting in the Council being unable to make or receive calls. While the system is reliable, clearly this would represent a significant service failure and procurement of a telephony service following failure could take a matter of months and incur significant costs in order to meet an 'emergency' timescale.

63. The telephony systems inflexibility and limited/aging functionality also restricts the services the Council is able to offer staff and customers and the Council is falling behind customer expectations. Our Customer Services team is being adversely affected by these restrictions. A modern telephony system would enable us to:

- Provide alternative channels of communication to customers through channels such as email and chat;
- Integrate customer contacts over multiple channels being able to link emails, telephony and face to face. This means the Council will be able to prioritise incoming communications based upon the channel being used enabling us to interact with our Customers the way they want;
- Evaluate Customer preferences from the full reporting functionality;
- More tightly integrate into back office digital systems.
- Support more flexible ways of working.

64. For staff a new telephony system will help to deliver efficiencies from the extra functionality available which in turn will give better support to our customers. For example:

- Call Routing - automated call routing software allows the system to direct calls to the most appropriate team or customer service officer. It does this by detecting caller information such as familiar numbers or the information given by the caller. Intelligent call routing can help to streamline the flow of communication through the Council, increasing call handling efficiency and reducing costs. It also provides callers with a better service, removing the need for them to be put on hold and transferred until they reach an appropriate person or service.
- Mobile Twinning - mobile twinning allows calls to be forwarded to mobile devices, to be answered by staff working remotely. This significantly reduces the chances of important calls being missed, as staff will be able to answer them whenever and wherever they are. Mobile twinning can also be set up to ensure that specific telephone numbers are automatically redirected to a mobile device this is significantly effective for on-call numbers. This will also simplify the technical support required for out of hours arrangements.
- Multi-site Networking - this allows staff to contact colleagues free of charge, regardless of their location. Whether employees are working from home or a different location, all calls between them will effectively be internal as if they were working in the same building.
- Call Management - call management software provides a real-time view of all call activity and produces useful reports which analyse call activity. These can be used to compare the performance monitor call waiting times across all numbers, the length of calls and how long callers are waiting before hanging up. This will enable the Council to target specific areas for training and improvement in order to increase efficiency and productivity to improve our customer care standards across the Council.

- Computer Telephony Integration (CTI) - this links the telephone and computer systems, so that staff can dial a telephone number with one click. Customer Services staff will also be able to see who's calling and enhanced CIT features will allow "screen popping" a record on the CRM database triggered by an incoming call. This will give you great productivity benefits and help the Council improve customer service by greeting people by name and quickly having their account / call details in front of them.
- Unified Messaging - this can display voice and email messages in one inbox. Messages can then be accessed by telephone, mobile device or PC.

65. As part of the procurement suppliers will be required to investigate efficiencies across the Council by deploying particular features and this will form the detailed business case prior to award.

Network Hardware Replacement (Firewalls)

66. Part of the firewall infrastructure installed in 2012 as part of PSN security requirements is coming to end of life support and will no longer receive updates. This will leave the Council vulnerable to emerging threats. It will also support the harmonisation of firewalls and anti-virus hardware and software. An up-to-date Next Generation Firewall will enhance the level of security to better deal with emerging threats, support the growing number of cloud-based systems (both MSDC and 3rd party), and enable real-time monitoring and analysis of network traffic.

Policy Context

67. The Digital Programme is intended to support the Council in its aim of continuing to increase efficiency whilst protecting front-line services, in line with the Corporate Plan and Budget.

Financial Implications

68. The work will be delivered through existing budgets and the IT reserve established for the digital programme. A number of projects require initial capital investment in order to achieve longer-term savings. Requests for such investment will be made in the usual way as a bid to the capital programme for approval by Cabinet each bid will be supported by a business case.

69. Under the GDPR the potential fines for breaches are discretionary, rather than mandatory. They must be imposed on a case by case basis and should be effective, proportionate and dissuasive. There are two tiers of fines that can be applied:

- Up to 10 million Euros or 2% of global turnover, whichever is higher
- Up to 20 million Euros or 4% of global turnover, whichever is higher

70. Infringements of the organisation's obligations, including data security breaches, will be subject to the lower level, whereas infringements of an individual's privacy rights will be subject to the higher level.

Risk Management Implications

- 71. Making changes to services carries with it a risk of impacts on service quality. These risks are minimised by ensuring staff are fully involved in the development of any changes, and that proposals are prototyped and tested to ensure they result in a positive impact on the service and the customer. Customer involvement is also ensuring the changes reflect customer need and expectations.
- 72. A comprehensive ICT Risk Register is maintained. The current top five risks and associated mitigation strategies currently are:

Risk Description	Controls
Insufficient capacity to cope with workloads and unexpected demands (for example introduction of unforeseen legislation, significant system changes outside skills set of the team)	<p>Ensure that adequate resources are identified and included in project costs – ongoing.</p> <p>Monitor ongoing service capacity levels (weekly) and take appropriate action as necessary – ongoing action</p> <p>Procure more commonly supported hardware and systems to reduce support costs and take advantage of third-party suppliers supporting common technologies.</p> <p>Establish trusted suppliers with specific technology expertise.</p>
Failure to maintain service delivery in the event of disruption e.g. fire, flood, power failure, IT failure, Industrial action etc.)	Upgrades to ageing network infrastructure to ensure it remains supported by the market. Develop & maintain departmental business continuity plans in line with specific BCP/DR processes.
Penalties imposed due to failure to meet government agenda and or legislation	All ICT management to keep abreast of changes and report implications to the Head of Digital – ongoing review through monthly Management meetings.
Failure to implement and manage agreed security controls	Project in place to move, where possible, to IaaS to take bulk of patching processes & agree maintenance windows for patching & testing of servers. An ITIL compliant Change Control process has been in place for and has greatly reduced the risk (incidence) of errors & downtime.
Compromise of IT systems due to unknown vulnerability (software, hardware, physical and staff behaviour)	Training and awareness programme for staff. All non-essential administration accounts and servers have been deleted or decommissioned to minimise the potential for errors & introduction of vulnerabilities.

Equality and Customer Service Implications

73. When making changes to services, those with 'protected characteristics' under the Equality Act are given particular consideration. Wherever possible the Council aims to maintain choice in how a service can be accessed (i.e. by phone, face-to-face, or via the web) to provide maximum flexibility to the customer. Service changes are also subjected to customer impact assessments prior to their implementation.

Background Papers

Service Redesign report of the 14th September 2016;

Service Design and Digital Programme 8th February 2017; and

Service Design and Digital Programme 13th February 2018.