Shepway District Council ICT Strategy 2018 - 2023

1.0 Introduction

- 1.1 This ICT strategy is effective for the period 2018 to 2023. It is based on a number of core principles aim to provide a framework by which ICT solutions can be designed to support the aspirations and delivery of the council's Corporate Plan, in particular the Transforming Shepway programme.
- 1.2 The core principles of the strategy underpin a new ICT infrastructure that is fit for purpose, well integrated, focused on self-service and demand reduction, supports agile working and facilitates improved communications, whilst being secure, resilient and affordable. The strategy will look to the future of ICT support beyond the end of the current outsource arrangements in 2022, bearing in mind the fast-paced changing trends in technology and the council's ongoing pressure to meet financial efficiency savings.
- 1.3 Data privacy will be embedded in solutions by default and systems and processes will be designed to reflect this. There will be a greater emphasis on business requirements and governance as the council seeks to work in more agile ways. Consideration will be given to a range of technologies to ensure they are appropriate and cost effective and though they may be predominantly cloud based it is likely for the time being the council will have a variety of solutions in place, both hosted and on premise in what is generally termed a "hybrid" model.
- 1.4 The strategy will be supported by a High Level Road map which will provide a structure and timetable for the delivery of technical solutions. This will necessitate an early review of hardware and systems provision to ensure ICT is fit for its future role and is not simply providing more of the same as that could lead to the council having outdated technology. Both the strategy and the roadmap will be reviewed annually to ensure they continue match the council's objectives moving forward for the next 5 years and beyond.

2.0 Purpose of the strategy

- 2.1 The ICT strategy and the High Level roadmap serve a number of purposes:
 - It underpins high level corporate objectives by setting out how the council expects to use technology to help to meet its goals.
 - It provides the framework for the ICT service and others to deliver the technical solutions for the council.
 - It provides the context for ICT related investment decisions and with the business cases that will be brought forward helps to identify major items of expenditure which can inform financial planning in the coming years.

- It helps to indicate how ICT can help the council to achieve its efficiency savings and cost reductions.
- It provides consistency and common purpose when aligning technology choices with business needs to in order implement solutions that are future proofed (as far as the rapid advances in technology allow), secure, affordable, supportable and well governed. Taking a holistic view avoids purchasing ICT solutions based solely on short term tactical or individual departmental requirements which leads to incompatibilities, inefficiencies and higher support and maintenance costs in the long term.
- To help inform decisions in relation to the councils ICT requirements during the process of the re-procurement of the current ICT contract. The process of contract renewal will have to start in 2019/20 in order to be complete before the end of the current contract in March 2022.

3.0 Strategic drivers

- 3.1 There are many drivers that can influence the production of an ICT strategy and those that are currently considered key to this Strategy are listed below:
 - 3.1.1 Transformation Project. The council's ambitious transformation project between 2017 and 2020 will depend heavily on making better use of technology for its success. Customers and officers must have access to information quickly and easily in order to self-serve regardless of how and when they need access requiring information and communication systems to be improved to support the council's new operating model.
 - 3.1.2 **ICT Services Contract.** The council's current ICT outsource arrangements with Sopra Steria come to an end in March 2022 so a clear vision of any future technology model is required in order to identify support requirements beyond that date in order to either procure a new contract or consider alternative models for ICT service provision.
 - 3.1.3 **General Data Protection Regulations (GDPR).** Data protection laws are changing and the arrangement of the council's current systems, which have many areas of duplication of customer records and information, will make compliance with the GDPR difficult. The new laws demand that management and privacy of information must be at the core of business systems and process design.
 - 3.1.4 Legacy systems. There are concerns about the risks associated with some legacy systems which may be approaching end of life or coming out of warranty or mainstream support within the period the strategy covers, they are sometimes difficult to access remotely on mobile devices, or non-compliant with expected changes to data protection legislation. Others may be lacking in resilience, require very specialist knowledge, or are highly bespoke.
 - 3.1.5 **Business Continuity.** The majority of the council's core ICT infrastructure is located in the civic centre server room which presents risks in terms of being vulnerable to the ever increasing threat of Cyber-

attack and the ability to recover from other business impacting incidents. It also restricts the council should it wish to move location at some point in the future therefore a more flexible model is required.

- 3.1.6 Efficiencies. The resource overheads in terms of the ICT service and internal system support technical staff required to manage the current on premise solutions and the continual need to secure, update and replace systems could be reduced by a more efficient model thus contributing to the councils overall savings targets.
- 3.1.7 **Working with others.** There may be opportunities for wider shared ICT services through working with other partners such as Kent Connects on the Kent Futures model and using the Kent Public Services Network. These options will continue to be considered as and when they arise.

4.0 ICT Strategy Core Principles

4.0.1 This ICT strategy is based on six core principles (discussed in para's 4.1 to 4.6 below) which collectively aim provide the framework by which ICT solutions are delivered in future.

4.1 Reduce costs and ensure affordability

We will seek to reduce costs and maximise efficiency through the use of technology through such things as:

- Deploying a core technology model based on a number of well integrated underlying platforms that support a single view of the customer and information held only once whether that be cloud based, on premise, or a mix of systems in a hybrid model as a means of controlling costs in terms of support, equipment, licences, training and skills and maintaining security. Where possible the number of diverse "back office" systems will be reduced as rationalising systems can reduce costs.
- Systems using automated processing and artificial intelligence will be deployed where appropriate to drive down internal staff costs and provide high quality easy to use customer self-service channels that are available 24 x 7 x 365.
- Accepting there is not a "one size fits all" solution and where specialist
 applications are needed for some business functions they will be assessed
 against the core technology model to understand to what extent they are
 able to integrate and thereby avoiding costly future issues arising from
 incompatibility and thus higher support costs.
- It is envisaged that most systems will be accessible via any web browser or an App therefore future choice of device will be based on being "Fit for purpose" rather than "Best of Breed" in order to control hardware costs.
- Technology and systems should be simple to use and staff will be encouraged and trained to get the best from their technology. There will be a greater requirement for self-help and devices that are increasing "plug and play" thus ICT support costs can be reduced.

- Using faster procurement methods such as G-cloud and pre-tendered frameworks will be used to reduce the time, cost and complexity involved with procuring solutions.
- The council will continue to take advantage of shared working opportunities as and when they arise particularly where they reduce costs, for example making use of the Kent Public Services Network.

4.2 Improve productivity

We will use technology to maximum advantage to enable the customer to selfserve and enable the workforce to be productive wherever they are working:

- Business systems will be properly integrated to the core systems to improve productivity by reducing duplication of effort retyping data from system one to another, and avoid using a number of systems in order to resolve a single service request from a customer.
- Processes will be built on well-defined workflows, minimising steps and using technology in place of a person where advantageous to do so.
 Customers should be automatically notified of progress of tasks without them having to access the council by other channels for updates.
- Self-service systems should be clear and easy to use allowing the customer to provide the right information first time and wherever possible the transaction should be handled from end to end and resolved automatically.
- For internal staff, tasks should be automatically scheduled and prioritised so they work on most important thing first.

4.3 Drive Demand reduction

We will use technology to move services delivery to cost effective solutions reducing the need for face to face or telephone contact:

- Both public facing and internal transactions should be provided by selfservice channels that are simple to use and ensuring those channels are available when customers wish to use them.
- Often requests to the customer contact centre is driven by "failure demand" which may be due to a problem with another service provider (e.g. waste contractor) or issue outside the council's control (e.g. service disruption due to bad weather) therefore systems should be able to recognise when requests for the same issue are being logged more than once for the same thing, automatically inform customers of those issues without them having to report a problem and provide alternatives or allow them find such information quickly and therefore flex demand to other available channels. Systems will provide analytics that will inform decisions related to service improvement and reduce demand.
- Where self-service is deployed, processes and workflows will be as short as
 possible and should allow customers to interact directly with back office
 systems in real time, for example, replacing static web forms with forms that
 dynamically build depending on the service requested and the information
 provided by the customer. Capturing all the data necessary at the start of a
 transaction removes avoidable contact later.

 Technology will be used to streamline internal systems and processes where appropriate to do so and officers and customers should use the same versions of systems and have the same view of the information.

4.4 Support agile working

We will support agile working with fit for purpose technology:

- IT systems will allow those staff who require it the ability to work in a truly
 mobile manner to support the concept of locality working in order to
 maximizes staff efficiency and reduces overheads such as travel costs while
 providing the requisite level of security.
- Mobile working solutions will provide officers with fast access to the right information how and where ever they choose to work regardless of device and location. Systems will allow data to be transferred real time whenever they are connected to the internet or have the ability cache data allowing officers to work seamlessly "off line" while connections are temporarily unavailable.

4.5 Improve communications

We will use technology to improve communications so that information can be passed efficiently to those who need to have it.

- Integrated systems will allow staff and customers to access to information held digitally quickly and easily without having to request it via someone else.
- Communications will be handled by automated systems or artificial intelligence where it is appropriate to do so, for example automatically informing customers of the progress of a request, or notifying an officer they need to progress a piece of work when a task in a workflow process is triggered.
- The customer contact centre technology will have integrated features such as calls, email, chat and social media all being handled from the same queue, and the ability to pass interactions to the person most skilled to handle the call and if necessary out of the contact centre to a specialist better able to deal with the transaction.
- Internal communications will be improved by providing a modern telephone system that includes such features as calendar integration (presence), easy to set up conference calling, shared whiteboards and video chat. Officers will be able to transfer their calls easily to the best device depending on where they are working. In some cases all that may be required to make calls in future is a web browser removing the need for telephony hardware.
- The website and associated forms require continual improvement, information is sometimes hard to find, integration with legacy back office systems makes some transactions difficult and forms are static rather than dynamic.
- A new Customer Relationship Management (CRM) system is required that provides a single view of the customer across the council so that anyone involved with dealing with requests, both internal and external, has the same

information. Likewise a single document repository is required so that information is held once and accessible easily to anyone who has the rights to access it and can find it through a simple search.

4.6 Maintain security and resilience

We will protect the council's data and systems to the highest standards:

- The council will continue to maintain its compliance with required security standards such as the Public Services Network Code of Connection as they provide an implicit level of assurance.
- New data protection laws demand that "Privacy by Design" becomes embedded in ICT systems and business processes. However it is important that security does not become an unnecessary barrier to using the information therefore the right level technical security measures will be applied to maintain the confidentiality, availability and integrity of the data at all times.
- New systems like the collaboration platform and CRM will reduce the amount
 of data that is required to be held by only keeping that which is necessary
 and providing the tools to be able to maintain that data in accordance with
 the council's retention schedules and securely share with it with those who
 have a legitimate need.
- The resilience of systems will be considered when re-procuring systems. Where systems are hosted in the cloud suppliers will provide assurance they achieve the required levels of security compliance.

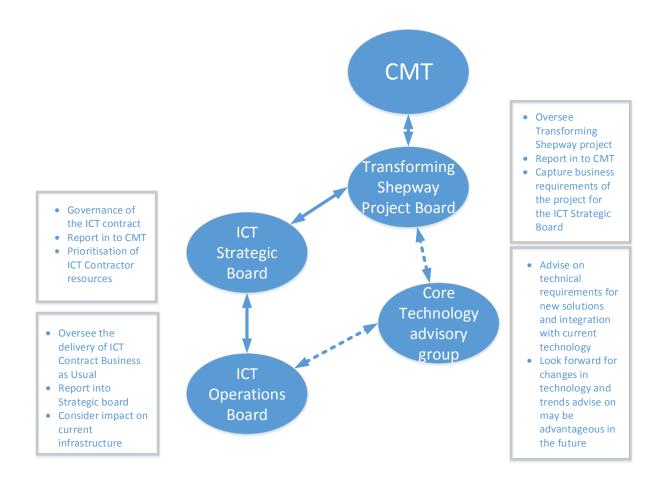
Delivering the strategy

5.0 Governance

- 5.1 This strategy will impact on all aspects of the councils ICT provision and there needs to be robust governance not least because it affects other council initiatives such as the Transforming Shepway project which will require available internal and contractor resources to be well used and timescales to be met, as well as contributing to the council's long term savings targets. A governance model is described as follows and as shown in diagram 1 below:
 - CMT will set the direction of travel and agree overall priorities and budgets and individual business cases as they are brought forward. Where there are a range of options available in order to deliver solutions in support of the council's objectives these will be made clear in the business cases.
 - The Transforming Shepway project group lead will capture and relay business requirements arising from the project to the ICT Strategic Board.
 - The ICT Strategic Board will provide the oversight of the contract with Sopra Steria and will consider how best to provide the technical solutions that meet the business requirements coming out of the Transforming Shepway project board. The ICT Strategic Board will consider the priority and timing of projects alongside ongoing maintenance works and advise the Transforming Shepway group project lead of issues related to the delivery of solutions.

- The ICT Operations Board will continue to manage the running of the day to day ICT business as usual work alongside the actual delivery of the technical projects in support of the Transforming Shepway project.
- The Core Technology Advisory Group which it is envisaged would comprise
 a small number of ICT specialists (for example web, network, telephony) will
 act a sounding board for checking technology solutions to ensure that all
 proposals comply with the principles of the ICT Strategy and other council's
 objectives and are compatible with the core technology model at the solution
 design / specification preparation stage of a project. This group would not
 be responsible for decision making.

Diagram 1. ICT Strategy Governance Model



6.0 Conclusion

- 6.1 This strategy aims to provide the framework for an ICT model by which the council's objective of delivering better services in a more cost effective way can be supported by technology. It is a time of great change not just within the council and wider in government but also in terms the solutions available. Old service models are disappearing in favour of cloud based solutions that provide greater availability and resilience at a lower cost that the traditional on premise method of delivery. At the same time the demand of customers to be able to interact with the organisations quickly and easily through digital channels in increasing apace. However, as the demand for digital services is increasing so are the risks associated with managing data so the ICT strategy needs to take account of all these factors.
- 6.2 Only by taking a well governed and holistic view of ICT systems and providing a well-designed and well-integrated technology platforms can the council hope to provide the first class technology enabling the seamless self-service platforms that customers increasingly expect meet its internal efficiency targets.

7.0 Next Steps - Key deliverables

7.0.1 In order to deliver the strategy there are a number of key deliverables required:

7.1 High Level Road Map

- 7.1.1 It is clear that there is a lot that needs to be achieved during the timeline of this strategy, with the Transforming Shepway Project, normal ICT business as usual to support, retiring and replacing systems (and in many moving those systems to alternative hosting arrangements), dealing with suppliers and procurement activities and addressing the issues that will be raised by the end of the Sopra Steria contract and transition to an alternative supplier. Therefore a High Level roadmap will be produced to underpin this strategy which considers key decision points and dependencies as far as they are known in order to indicate when decisions may need to be taken.
- 7.1.2 The High Level Roadmap which will look forward across the whole timeline of the strategy in terms of short (almost immediate up to 1 year), medium (2-3 years) and long term (up to 5 years) projects. The Roadmap will be supported by technical delivery plans which look at the delivery of solutions by individual projects over a 12 month period in order to plan resources.

7.2 Financial plan

7.2.1 High level Road map will be used to help inform the councils financial plans related the Medium Term financial plan by identifying when major costs related to technology may arise, and conversely when efficiency savings may be realised and to help calculate the overall benefits of the Transforming Shepway project. While using technologies such as cloud can reduce costs there is a shift from traditional upfront capital investment for ICT to revenue based subscription charging models.

7.3 Risks and Issues

7.3.1 There are a number of risks that will have to be considered due to a number of factors such as the current ICT contract running down and those associated with associated with changes in technology. A risk register will be maintained alongside the high level roadmap and risks to individual projects will be considered as and when business cases are submitted.