Technology 2018

ICT Strategy for Colchester Borough Council

2015 to 2018

Introduction

In designing the future of technology at Colchester, the place to start is understanding business objectives, envisaging how people want to work with their technology and considering how customers want to use technology to interact with our services.

This strategy describes the technology needed to deliver effectively in the future, from the sales person pitching for business to the planner inspecting a development. The technology must suit our customers paying their Council Tax bill or booking an aerobics class; our councillors reviewing evidence in deciding policy or dealing with a problem for a resident; our partners liaising on sensitive case work or receiving a work request.

Underpinning this vision for technology is the ethos that to work effectively, people need access to the right information, wherever they are. That could be anywhere, any time. Technology then acts as the enabler for delivering the organisation's strategic vision, empowers staff to embody our goals, behaviours and attitudes; and ensures statutory functions are maintained whilst commercial opportunities are maximised.

All this is proposed in harmony with the cultural shift in personal technology and connectivity, as the generation entering our workforce and becoming a large part of our customer base is now completely acclimatised to an *always on* relationship with technology. Asking people to separate their work tech from their personal tech is no longer necessary, and in many ways is undesirable when seeking flexibility, engagement and commitment.

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The Technology Picture

Since mobile technology has become a facet of daily life, the way in which people interact with friends, family, services and businesses has changed. And it keeps changing. For a local authority, with its wide range of services, keeping pace with the advancement of technology and communication methods is challenging. New digital technologies such as wearable devices, mobile apps and massively scalable computing power are combining with mobile connectivity and social media to transform how organisations and their customers communicate.

At the same time as this technology shift takes place, local government must be smarter and better at a lower cost. Flexibility is the key to this.   Colchester Borough Council must transform to meet expectations by creating a flexible technology infrastructure allowing customers and officers to personalise and flex their experience.

The Council will adopt the innovative models of some of the most forward thinking and efficient companies across the globe as it harnesses cloud environments to deliver technology anywhere anytime, focusing on the customer experience, as we make the most of the uplift in digital skills across the community.

Building on our investment

The Council's technology has undergone significant transformation through investment from the Universal Customer Contact Fundamental Service Review (UCCFSR) over the last three years. A wide-reaching ICT improvement programme has been delivered, investing in robust, reliable infrastructure and systems to ensure a stable ICT platform supporting the aspirations of the organisation.

Some notable improvements from 2012 to 2015 include:

- Implementation of Microsoft Dynamics CRM within the Customer Service Centre (CSC)
- Investment in new top tasks website functionality
- Implementation of the MITEL Voice over Internet Protocol (VOIP) telephony system for the whole organisation (including CSC)

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- Upgrading our systems from Windows XP to Windows 7
- Upgrading from Microsoft Office 2003 to Microsoft Office 2010
- Upgrading our email system
- Implementing new file storage systems to improve availability and response times
- Upgrading our anti-virus protection and performance
- Implementing a new backup solution to improve resilience
- Moving our servers from a server room within Angel Court to a dedicated space with Braintree Council's server room
- Delivery of a new self-serve solution for Council Tax, Benefits, Housing and Business Rates (NNDR).

Aligning to business objectives

Technology acts as an enabler for the delivery of the Council's ambitious Strategic Plan, business objectives and goals for the next three years.

Strategic Plan 2015-18

The Council has recently adopted an ambitious new Strategic Plan for the borough. The plan focuses on capitalising on the borough rich heritage, and maximising opportunities for its future. It aims to ensure Colchester is a vibrant, thriving, prosperous and welcoming place.

Colchester's place ambition

As a growing borough with a population of 180,000 , likely to reach 230,000 by 2031, the Council has been clear that housing and population growth must be accompanied not only by improvements in infrastructure but also in employment and leisure opportunities.

We have an ambitious regeneration programme and are delivering a range of large scale projects to make Colchester an exciting urban centre both in Essex and the region.

Performing highly

By applying a detailed budget strategy, pursuing opportunities to transform services, embedding an established programme management approach, and incentivising staff, we aim to be a high performing council.

Three organisational goals

In 2014 the Council adopted three internal change goals:

Customer To help our customers access our services and deliver on our communities' needs

- Self-serve: We have adopted a channel management strategy that seeks to create attractive and user-friendly options for customers to serve themselves via electronic channels. We aim to shift much of our contact with customers from face-to-face and telephone to electronic channels.
- Shared hubs: With Essex County Council, we have introduced an innovative Community Hub based at the Library in Colchester town centre. This is a shared delivery point for face-to-face services and assisted self-serve. We aim to introduce smaller neighbourhood hubs for the larger villages in the borough.
- Community enabling: We have recently adopted a strategy to transform services and to encourage communities to help themselves. We believe we can make changes that protect core services, help communities achieve their ambitions, and deliver savings.

Business   To become commercially focused and even more business-like in order to be free of government grant by 2017

- Improving existing income streams (such as community alarms, building control, Colchester Borough Homes – our housing ALMO).
- Becoming more commercial in our procurement dealings (managing existing contracts better whilst procuring others more commercially).Turning many of our assets from capital into revenue-generating income streams (land holdings, Community Stadium).

Culture   To have inspired staff who do the right things and are proud to work for the Council

- Through our People Strategy, Learning and Development Programme, Talent Management programme and staff incentive scheme, we aim to change the culture within the organisation to achieve our objectives.

The Digital Challenge

The over-arching vision for the Digital Challenge is to change the way we work by making our next technological leap.

Our existing technology and work patterns still place limits on our effectiveness and on our efficiency. Our systems are still not readily available on mobile technology; our files and data are not easy to share; we under-utilise the benefits of some of our technology; and we have a large array of different ICT applications.

We can make significant improvements to productivity by harnessing new technologies. This will involve new ways of working for all of our people (councillors and staff) and further culture change.

These changes will also help us achieve our ambition to earn more income from commercial trading. The changes propose creating new ways that customers can self-serve, improving our workflows, automating our processes, and improving the extent to which staff can access information wherever they are. By doing this we will position ourselves well for capitalising on commercial opportunities and trading beyond our current geographic boundaries.

By taking advantage of the opportunities new technologies present, we will change the way all of our people work and further change how we serve customers. These changes will be significant and will result in improved customer service, improved effectiveness, and greater productivity. They will require us to build on the culture change work started during the last organisational review (the UCCFSR).

The changes proposed in the Digital Challenge business case will achieve 12 outcomes:

1. Customer processes are digital by default with face-to-face or telephone backup to ensure accessibility
2. All outbound contact will be delivered digitally by default
3. All non-sensitive data will be searchable by the public
4. Fully electronic working for councillors and staff
5. Open access for all councillors and staff to all files by default
6. An organisation-wide Document Management/Storage System
7. Geographically indeterminate system access - the place you work is no longer relevant, or constrained by systems
8. Duplication in processing and storage is removed
9. The number of applications we use is reduced
10. Paper in the back office is removed
11. The principle of 'capture once and re-use' is instilled
12. To free us from the confines of our locality and allow us more easily to work with partners, and use resources from further afield. This is intended to open up wider commercial opportunities.

A major part of these changes will be the implementation across the organisation of a cloud document storage and management system.

This will incorporate a new file plan structure that delivers workflow and allows for easy document storage and access.

The Technology Approach

The Council has made great strides over recent years by enabling flexible working, improving processes and allowing customers to serve themselves. The next steps on this journey will involve embracing truly paperless working, extended self-serve and more efficient sharing of information across staff, councillors, customers and partners. The strategy provides the technological direction of travel – an evolutionary technology model - and outlines the investment required to lay the foundations upon which we will work to deliver our Digital Challenge programme.

The Council's technology landscape is still burdened by pockets of siloed and ageing applications, in which both data and processes are duplicated causing inefficiency and over-complication.

To enable the Council's vision, the future technology landscape will

| Be designed with the expectation of change | Be flexible enough to cope with unanticipated change | Enable services that are cheaper, better and faster |

Delivery of this technology strategy brings:

- Improved operational efficiency
- The foundations for anytime, anywhere, any channel access for customers
- Agility, flexibility and responsiveness
- Mobility for customers, councillors and staff
- Greater opportunities for harnessing data.

Features	Benefits
Digital Challenge	Increase awareness of digital technologies and capabilities
Upskill staff in digital skills and thinking	Adapt service delivery processes to digital environment
Digital by default	Reduce dependency on email and mail
Communication and collaboration technologies	Increase capacity of staff to support and embrace change
Customers	Reduce back office activity through channel shift
Improved online experience	Services are accessible 24/7
Accessible from any device	Increase customer engagement
Social media channel exploitation	Meet customer expectation
Cloud	Replace legacy applications with cloud alternatives
Web-accessible applications	Reduce supplier lock-in and cost of application support
Configurable common functions	Reduce large capital investment
Scalable services	Reduce lengthy projects with slow delivery
No local infrastructure	Release configurable incremental cloud solutions
Low maintenance	Enable a single view of the customer
Mobile	Staff work where they need to work
Mobile by default	Customers access services where it suits them
Accessible anytime, anywhere	Reduce pressure of office locations
Improved wireless internet infrastructure	Increase flexible working for staff
Data	Share across the organisation
Centralised, accessible information	Deliver services tailored to individuals
Open by default	Improve evidence for service decisions
Publish open data	Reduce FOI requests
Enable analytics	Reduce infrastructure costs
Unlimited data and document storage	

Infrastructure and cloud

Previously, the focus for enterprise technology was to provide a network at the centre, delivering out.

> The 2018 focus has the individual at the centre; drawing on cloud solutions, sharing knowledge in the cloud, being trusted, taking personal responsibility and being more effective as a result. True flexibility.

Delivering this approach calls for a mix of MS Office 365, MS SharePoint, enterprise cloud infrastructure and hosted applications. This diminishes the Council's physical ICT infrastructure over time. One day, it will remove the requirement to sustain or co-habit data centres ourselves, eliminating utility costs for their air-conditioning and power. Resilience is improved as our dependence on physical sites is removed.

Cloud computing is being adopted across the private and public sector as the delivery method of choice. Whilst public bodies have, in the past, been nervous about this direction of travel, official guidance from Gov.uk recommends it and departments such as the Ministry of Defence are letting major contracts to move into the cloud environment.

Cloud computing offers the opportunity for organisations to move from traditional procurement and ownership models of ICT delivery to a model where one consumes the services from a central location outside of a traditional network. There is no need for separate and costly investment in servers, upgrades to systems or applications and general infrastructure support because all of that is included in the cloud offering. Essentially we can consume services at a transparent unit cost – a pay as you go model that provides transparency and clarity in our new commercial environment.

Well implemented cloud platforms offer:

Flexibility	Ensuring that systems are available to those who need them from a wide range of locations and across platforms and that they can meet changing customer needs and circumstances quickly.
Accessibility	Facilitating the sharing of information and knowledge across staff, councillors and customers through the removal of artificial barriers created by our networks, and delivering real opportunities to enable people to optimise their work patterns and methods.
Affordability	Ensuring that solutions offer best value for money and that they pay for what they use.
Scalability	Ensuring that computing power is capable of being scaled both up and down as the requirements of the organisation change.
Security	Maintaining trust with customers that access to the network is undertaken in a secure manner and that all communications including transfer of data is undertaken in line with data security principles.
Mobility	Ensuring that staff are able to work from anywhere, from any device; making staff truly mobile workers.
Continuity	Disaster Recovery and Business Continuity capabilities can be built into the solutions at the point of delivery; removing the need for decision around the risk and reward of maintaining expensive dedicated local disaster recovery capability.

Is this environment safe? The knowledge is in the cloud, where world-class enterprises keep it every bit as safe as we could aspire to. Information on the device is encrypted with simple but effective applications. And all those in our trusted environment know how to use what they need whilst protecting information that needs it. So keeping everything accessible and usable is a matter of course.

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Applications

Key to enabling people to work the way they want is simplifying their IT experience. A legacy of multiple complex systems, replaced in a piecemeal way and with singular narrow focus over many years, has resulted in a complicated and difficult-to-manage environment.

A new breed of enterprise applications is maturing. These are simple to use, simple to administrate; enabling staff to conduct their work professionally, to share knowledge, to work at their desk or on their mobile device without compromise. These applications enable the customer to access a service directly, and see the entire process through to the end. They don't rely on legacy architecture, nor the complexities and workarounds introduced over decades of technology and process change - they run in data centres in the cloud with gold standard security and resilience, and they deliver simply and as expected. If you were building a Council from scratch today, you wouldn't consider anything else.

Sustainability

Secure robust platforms, managed by global enterprises, take much of the technical management away. It's their reputation at stake, so maintaining safe and reliable 24/7 environments is their core business. We can exploit those products, winning by letting them deliver us consistently cutting-edge security and stability.

In this new world, disaster recovery becomes a thing of the past. We can work anywhere, so location-based disaster is no barrier to business continuity. Technology-based disaster becomes so unlikely as to be negligible. And in its unlikely advent, new services can be spun up almost instantly.

The Technology Foundations

Investment

It is recognised that the Council's response to the funding pressures has been to encourage self-serve and demand management to deliver efficiencies. To enable this, ongoing investment in ICT is essential, and must be well planned and executed to deliver maximum benefits.

Future models of delivery will see a relative shift from capital-heavy application procurement and installation towards a revenue-focused consumable model where costs will be based on a per user, per access basis.

Investment in technology delivers the core requirements which keeps the business working effectively *and* the transformation which enables the organisation to deliver smarter, better services. Standing still is not an option, and these streams are intertwined rather than running in parallel.

The principles

The architectural principles supporting this strategy are aligned with modern technology approaches and Government Digital Service principles. This aims for a balance of innovation with the constraints of a legislative environment.

Buy not build	For applications the focus is on configuration, not development. Bespoke applications increase reliance on the supplier and therefore increase cost and effort. Suppliers struggle to support bespoke solutions, particularly where their customer base has multiple variants of the same application.
In house configuration	We aim to reduce reliance on suppliers and increase our ability to configure and administrate applications for ourselves, to enable responsive adaptation to business needs. Applications we choose and use must enable us to deliver our own agenda, not that of the supplier.
Get the most from what we have	Evaluate before replacement. What are the deficiencies of the existing technology? Can they be overcome or reduced to deliver a fit-for-purpose solution? Are there other applications within the organisation which can be exploited? Thorough evaluation supports specification for replacement if necessary.
Open architecture	By encouraging transparency in design and build, we enable easier integration and exploitation moving forward.
Infrastructure free	Supporting our drive towards cloud and hosting, we reduce local reliance and cost whilst making the most of security and performance delivered by enterprise quality platforms.
Mobile by default	Mobile interfaces first, desktop interfaces second.
No Sacred Cows	No application or technical solution is irreplaceable and all are subject to evaluation when appropriate.
Effective data management	Optimising the 'create once use many times' principle, master data will be managed according to best practice, and technology must enhance data management rather than obstruct it. Application data and unstructured data will be governed effectively.

Confidentiality, integrity, availability	These fundamental principles of information security are paramount for the protection of our customers and the delivery of our services.
Keep it simple	Understand the requirements. Challenge unnecessary complication and intricacy. Ensure return on investment and don't implement intricate technology to deliver infrequent processes or low-complexity cases.
Scalable and flexible	Ramp capacity up and down as required. In a cost model based on consumption, only pay for what you use. Rely on increased capacity when it is needed. Don't accept limitations.
Balance quick wins with long-term solutions	Robust, future-ready technology is the right investment, but engaging stakeholders and users from the outset is key to adoption and exploitation. Engagement requires evidence of delivery, and short-term gains must be planned.
Consider shared technical opportunities	When appropriate, think wider than the Council. What can be delivered in partnership? What do others do well that we can adopt or adapt?
Consider more than "Best of Breed" in local government	Understand the full technology environment. Options appraisal should be innovative and diverse.
Seek robust but flexible contractual arrangements	Technology suppliers must ensure our data is protected and must meet our requirements for support. They must also demonstrate willingness to help us deliver successfully to our customers.
Remember the effort needed to make change happen	Evaluation of technology must include the skills and resource required to implement changes. Return on investment must include these elements in its calculation. Activity planning must be realistic rather than optimistic.

Governance and best practice

Corporate ICT is managed within Corporate and Financial Management, reporting into the Strategic ICT and Communications Manager. The team provides strategic leadership on information and communications technology

The team manages a number of ICT contracts with third party suppliers to ensure value for money and effective service delivery. The largest of these contracts is the outsourced technical ICT contract with Capita IT Enterprise Services (Capita).

Corporate ICT's role is to provide specialist advice and support, alongside innovation and insight, underpinned by best practice and good governance. Effective relationship management, through collaboration, consultation and challenge, ensures that 'solutions fit requirements' and services are supported in the practical application of ICT by ICT Business Partners, and the Corporate ICT team more widely.

The Technical Design Authority (TDA) is an active group within the Council's programme management structure, acting as the expert on ICT elements. Membership is drawn from Corporate ICT and the Council's technology partner Capita. All technology requirements are reviewed by the TDA to ensure compliance with strategy and with data standards or protocols.

Projects with ICT elements must be authorised and monitored by ICT Programme Board, membership of which is drawn from the Council's services.

Corporate ICT and the TDA refer to best practice including Information Technology Infrastructure Library (ITIL) and recognised project management methodologies.

Collaboration

Colchester Borough Council supports collaborative approaches and activities to deliver quality service and maximise value.

The Council shares a contractual arrangement for ICT services (Capita) with Braintree District Council, Castle Point Borough Council and Rochford District Council. Strategic governance of this contract is managed by the Strategic ICT and Communications Manager and the Assistant Chief Executive. Operational management of the contract is undertaken by the ICT Manager. This contract has a break point in April 2017.

Essex Online Partnership (EOLP) is a collective consisting of all Essex local authorities, Essex Police and Essex Fire & Rescue. Funded by subscription, it employs co-ordinating resource and runs active group meetings including a management group, the Opportunities Through Technology group, a geographic information (GI) group and a web group. Collaborative procurement frequently brings substantial savings to EOLP members and shared technologies are tested and exploited.

Risk management

The management of risk forms a core part of the organisation's project management methodology. In change and release management, within the ICT environment, risk is always a primary consideration.

As part of incident management, risk to confidentiality, integrity and availability will be the priority (in that order). Reasonable endeavours will be made to minimise disruption.

Risk management provides a proven methodology for reducing the impact and likelihood of adverse effects upon ICT services. To support the delivery of this strategy the following approach will be adopted:

Changes to the operational ICT environment will be subject to change control procedures (based on ITIL) which will include an assessment of risk. If the assessment remains high, even after mitigation, then changes will not be permitted during working hours.

Managers of ICT projects will be required to maintain project risk registers which will be reviewed as part of the monthly reporting process. Where there is a high level of severity, specific risks will be escalated to the ICT Programme Board.

TDA will maintain a risk register in relation to risks affecting the longer term overall delivery of ICT services and the achievement of this strategy. Where they determine there is a high level of severity, then such risks will be escalated to the ICT Programme Board.

The Technical Operations Meeting group will maintain a risk register for risks affecting current service levels and service resilience. Where they determine there is a high level of severity which they cannot mitigate, then such risks will be escalated to the ICT Programme Board.

The ICT Programme Board will consider any escalated project and service / strategy risks at its monthly meeting. Where it feels unable to provide additional mitigation or consider the risk to be of significant severity, it will escalate the risk to the Corporate Governance Manager for evaluation.

As part of its overall ICT governance and management role, the ICT Management Team will ensure that these registers are maintained, reviewed and collated.

Financial management

Sound financial management is required to optimise the benefits of capital investment and revenue expenditure. This strategy and its associated Investment and Action plan are intended to provide a basis for financial planning over a number of years, and to reduce incidents of unexpected expenditure.

Data management

The Council remains committed to membership of the Public Sector Mapping Agreement, and by association, the Data Co-operation Agreement. The Local Land and Property Gazetteer is the definitive dataset for addressing within the authority.

Good information governance is in place. The Senior Information Risk Officer (SIRO) is the Chief Operating Officer who reports annually to the Chief Executive acting as Accountable Officer (AO). Information Asset Owners are kept informed about their responsibilities.

As a signatory to the Whole Essex Information Sharing Framework (WEISF), the Council commits to share data across the public sector so long as it is subject to appropriate protection for the data subjects and to secure transfer and retention procedures.

The Council endeavours to implement the obligations of INSPIRE, in line with guidance and recommendations from the controlling body (DEFRA) and the Local Government Association.

The Technology Schedule

NEW: CLOUD

Windows Azure
SharePoint   Exchange
Office 365   Enterprise applications
Yammer   Active Directory   Microsoft Dynamics CRM

LEGACY

Microsoft Dynamics CRM
Intranet decommissioned
Local applications decommissioned
Infrastructure decommissioned