

KCC ICT Strategy

Overview

2011-2015

Version 1.3

November 2011

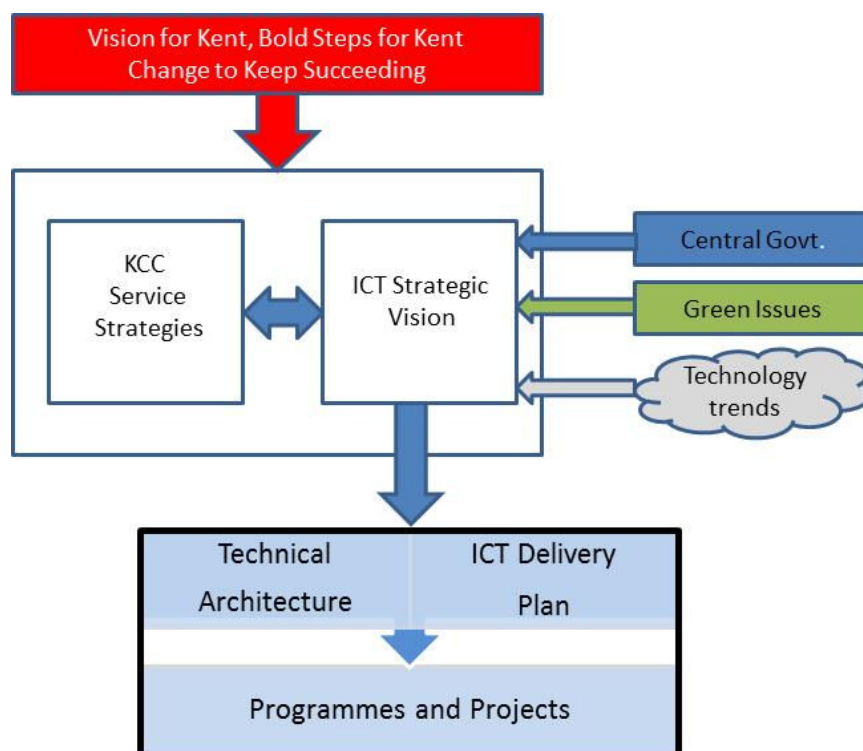
INFORMATION AND COMMUNICATIONS TECHNOLOGY STRATEGY

Executive Summary

One ICT Strategy to Support One Council

This document comprises the executive summary of an extensive ICT strategy framework which has been produced to reflect the policy objectives of the Council and other wider public sector organisations across Kent. The main sources of reference for KCC have been: The Vision for Kent; Bold Steps for Kent; Change to Keep Succeeding; KCC Service Strategies; the National ICT Strategy and 'Planting the Flag' the local public agencies response to the national strategy.

The simplified view of the framework shown below shows how the ICT strategy is positioned in relation to the published Council vision and the other influences that have a bearing in setting ICT strategy,



The objective is to anticipate the drivers for change that will demand a response from ICT critical for the delivery of the desired outcomes, the most pressing policy areas being identified as:

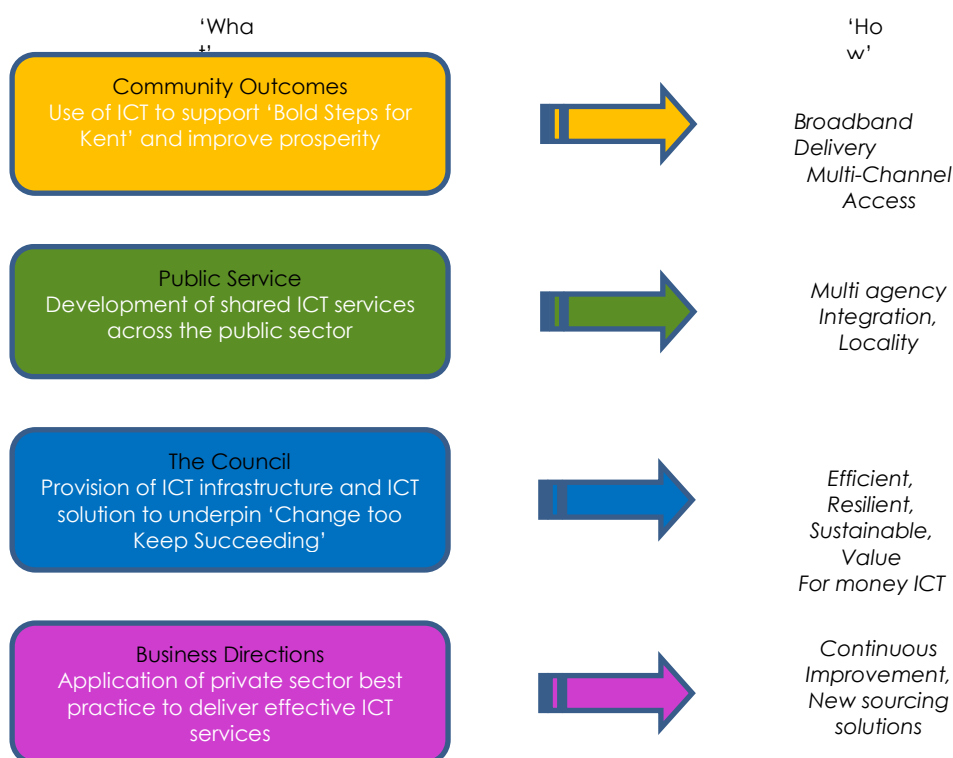
- **Open Innovation** – how communities and council taxpayers can get real leverage over public services investment in digital services.
- **Open Public Services** – mapping the move to the new enabling and commissioning culture and away from the old supply and delivery approach to public services

- **Digital by Default** – charting the relationship between the move to online channels and the implications for social inclusion.
- **Technology Developments** - defining the benefits and a hype-free route-map for government and public services in areas such as Cloud Computing, Agile, 4G communications, etc.
- **New Public Governance** - how the digitally-driven shift to cooperative and collaborative governance will impact on, public engagement, public management and public administration.
- **Public Service Redesign** – identifying the blockages to redesigning public services that impact of the above and good practice in how these can be addressed.
- **Digital Infrastructure** – Broadband agenda

These drivers for change need to be accommodated alongside the existing priorities such as the Council's approach to maximising the value of investments in information and technology in the efficient management of resources, understanding the needs and delivering the best outcomes for the communities and citizens of Kent.

Vision

The vision for ICT is to be an enabler for community outcomes and a foundation for future public services.



ICT provision is not an objective on its own and will always be used as a facilitator of a business requirement and hence all ICT investment should be judged from the perspective of its contribution to service outcomes.

The strategy is designed to support the council's service strategies which are vehicle for delivery of the three ambitions in Bold Steps. Technology delivery can also be used as a tool to directly support community infrastructure, as well as providing a framework for more effective service outcomes.

A framework, in which overall outcomes are greater than the sum of the parts, requires a rigours application of 'One Council' principles and a disciplined approach to the common elements of infrastructure. The following ICT principles have been defined with this objective in mind.

Principles

Delivery is entirely dependent on good governance and will require the council to adopt a more disciplined approach to investment in technology if this is to underpin policy objectives; successful service strategies and delivery of a One Council approach.

Principle 1: Investment

Our investment decisions will be based on a robust evaluation of each business case supported by appropriate management information, and delivery aligned to policy outcomes and service strategies.

ICT investment will be affordable, deliver tangible community or service benefits and demonstrate excellent value for money.

Principle 2: Delivery & Change Approach

We will consolidate and re-use enterprise assets, remove duplication and waste to deliver an efficient, coherent and stable 'One Council' ICT service.

Principle 3: Technology Architecture

Our Technology strategy will require compliance with published technical standards that will be adopted across the enterprise and where appropriate aligned with our public sector partners.

Principle 4: Partnerships

Shared ICT services will be evaluated by their capacity to deliver tangible and demonstrable benefits through efficiency savings or through improved partnership working.

Our priority is to secure best value for the citizens of Kent. To achieve this we will actively seek opportunities to share ICT services and infrastructure with our public sector partners.

Principle 5: Business Systems

Business applications will be reviewed periodically or in advance of renewal, and where no longer viable or efficient will be decommissioned and where viable replaced with lower cost or more effective alternative in line with a single integrate systems architecture.

Principle 6: Customer Service & ICT improvement

Solutions design and organisation structure will be driven by a customer centric approach and exploit the potential of new technologies and sourcing solutions to improve customer experience and service outcomes.

Principle 7: Security

Data security, information governance and ICT security best practice will be maintained at all times.

Approach

Partnership working

- Provision of ICT services from local shared services agencies will always be a priority in service procurement
- The Council's infrastructure will be integrated with that of partner organisations supporting a multi-agency shared service culture across shared office locations.
- Council staff will work in joint teams with staff from organisations across the public, private and voluntary sector, for instance Health service partners.
- Mobile staff and multi-agency workforces will utilise common solutions to share information and processes to ensure seamless joined up working.

Information

- Information is a corporate asset and will be managed to deliver maximum value to the Council and its partners
- Information will be held and processed in accordance with best practice both internally and by partners. Information will be held securely whilst at the same time promoting sharing with other organisations
- Detailed, reliable information will provide the basis of rapid and evidence based decision making across the Council
- Council systems will be connected both to other Council systems and partner organisations via common standards, consistency applied.
- Data will be publicly available in commonly supported data formats

Value for Money

- Investment decisions for technology will be guided by clear principles to ensure that money is focused to deliver business priorities, maximised value reducing duplication and providing economies of scale
- The number of systems will be reduced , leading to decreased maintenance costs focussed at key business systems

- Systems providing duplicate business functionality will be rationalised to a set of common solutions to enable maximum value
- Technology support for flexible and mobile working will support efficiency gains through rationalised offices.

Boosting Productivity

- Staff will use common processes across business functions streamlined to remove duplication, boost efficiency and support business transformation
- Training will be mandated to ensure that investments in ICT can be fully exploited. Where system facilities exist to replace manual or outdated business practices these will be promoted to enhance productivity and increase the return on investment
- Joined up systems will accommodate common data sharing across systems reducing errors and reducing the effort to populate data into systems. Data quality will be a key issue to providing an enhanced quality of service to our citizen customers
- ICT will work to remove barriers to the widespread adoption of technology to support common business requirements

Citizen Outcomes

- A prosperous and vibrant economy provides jobs and prosperity to local citizens and is actively supported and promoted by the Council
- Access to services will be a seamless experience across all channels: web, smartphone apps, phone, personal callers (Gateways), the citizen will be able to make the choice of how to engage with us.
- Council investment whether in the community or on its own mechanisms to provide services should drive support for the local economy
- Information gathered by the Council must deliver insight into the quality of life for citizens and the state of the real economy to ensure that the Council is able to appropriate and timely services.
- Technologies and solutions that improve the customer experience should inform investment decision and priorities.

Where appropriate Council assets and services will be made available to support local businesses particularly where these facilities are not available from other sources e.g. use of KPSN to support broadband provision.

Impact

In the past ICT has been seen as a set of back office solutions to support front office delivery services. In the new world our approach will need to alter as technology becomes not only a primary point of access to, and assessment for services, but also in some cases the medium through which the services is delivered directly into the home of the citizen

Where previously solutions have been designed around public service processes and organisation, future versions will need to be accessible online 24 by 7, the approach employed in online retail environments where the users are your customers. This is a radical change for how KCC delivers ICT services.

Change is implemented through programme and project activity. Successful delivery is dependent on programme and project management skills which must be a priority area of professional development.

Delivery Plan

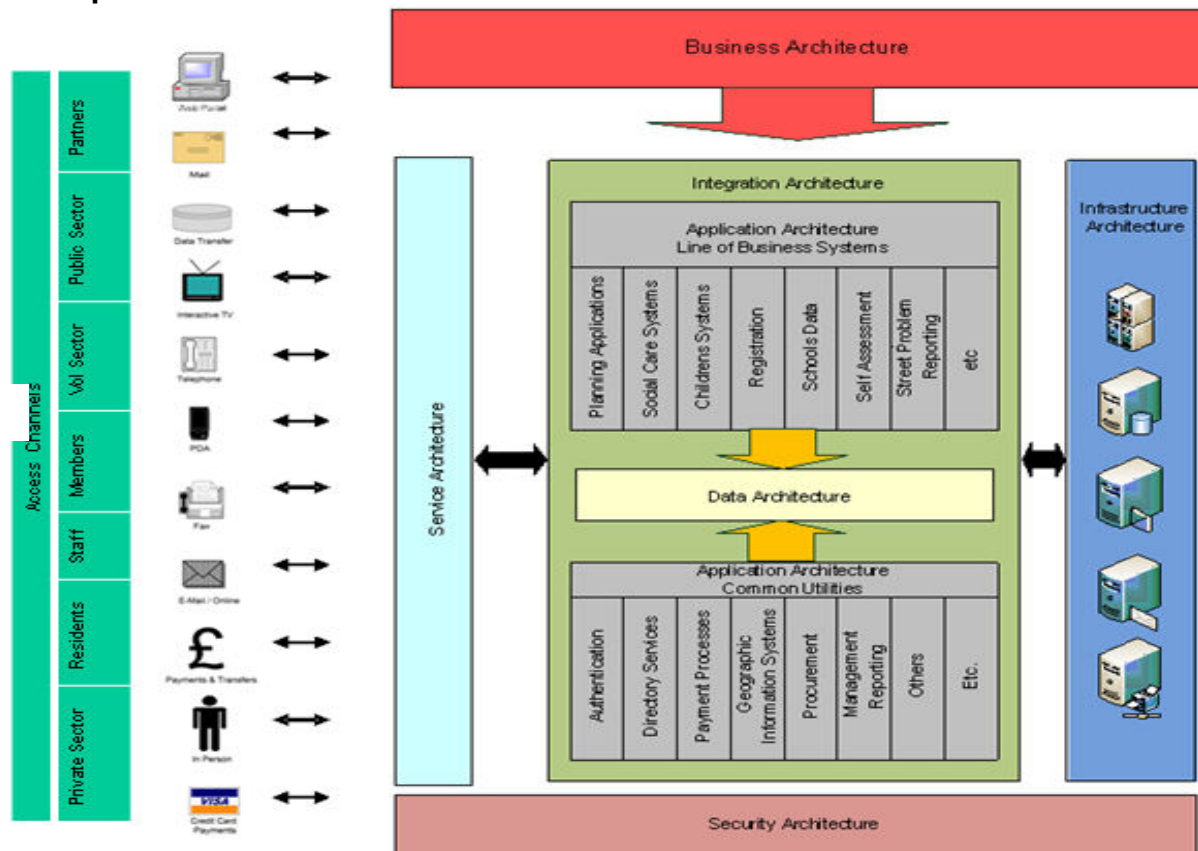
For ICT the Vision outlined above needs ultimately to be reflected in a design for an enterprise architecture that can be used as a blueprint for the development of the components that comprises the council’s technology assets.

ICT Technical Architecture Layers

The ICT Technical Architecture layers referenced below are intended to provide a coherent relationship map across the business organisation and processes, services, security, software applications, operating systems, database technologies, server technologies, desktop and mobile computing technologies, and communications and connectivity technologies.

The development of each of these layers will need to be evaluated against the objectives of the strategy and adhere to the principles outlined above. The following definitions provide a high level explanation of each of the elements.

Enterprise Architecture



Business Architecture Layer (What we need to achieve)

The top layer of the Enterprise, the Business Architecture provides the blueprint for the business vision, drivers and constraints, business capability, process and organisation. The business layer represents the council's service strategies that need to be captured as the primary inputs into the technical architecture, this will increasingly comprise enterprise strategies E.g. Customer Service Strategy, rather than the functional perspective prior to adoption of the 'One Council' approach..

Service Architecture Layer (How it will work for service users)

A layer that is common to many of the Enterprise Architecture Layers, the Service Architecture defines the blueprint for the relationships between pan public service organisation and service boundaries, the provision of service to customers and the consumption of service from suppliers. It provides the blueprint in terms of Service Management considerations. The layer is considered as an integration layer because ALL layers of the enterprise can be used to deliver service to customers or can contribute to the delivery of service to customers, what service architecture considers

Security Architecture Layer (Keeping it safe)

Another common layer of the Enterprise Architecture, the Security Architecture provides the blueprint for Information Security across all layers of the Enterprise. By including security as a layer within the Enterprise Architecture ICT are bringing security to the forefront of its ICT strategy and governance to ensure that Information Security is built into its services as a matter of course and in a calculated and coherent manner.

Application Architecture Layer (Technical view of systems)

Sitting beneath the Business Architecture layer but above the Data Architecture layer is the Application Architecture. The Applications Architecture provides the blueprint for the software applications utilised by the organisation. The scope of these software applications includes all software, including office applications, business applications, communications and messaging applications as well as specific software applications required to deliver particular services. It describes the functionality provided by the software applications estate and contains the catalogue of the complete set of software applications leveraged across the business together with the functionality that they provide. The Application Architecture will provide the roadmap for how software applications will evolve to improve customer experience, reduce costs, improve quality and deliver service outcomes.

Data Architecture Layer (How data becomes information)

ICT have deliberately introduced the Data Architecture layer into the Enterprise Architecture to enable the council to manage information as a corporate asset by providing an enterprise-wide approach to information management. The Data Architecture layer will provide a corporate data model which will describe information from an enterprise wide perspective and will contain reference models of how the data entities described in this model are managed across the application architecture. The Data Architecture layer will also provide an enterprise-wide blueprint for Master Data Management and Business Intelligence.

Integration Architecture Layer (How it all fits together)

Traditionally disparate applications have been integrated in an ad-hoc manner using a variety of technologies. This can result in an ever increasing complex network of point-to-point integrations resulting in the daisy-chaining of information across multiple applications (rather than sourcing data from a master repository), data inconsistencies, latency, high cost of ownership, unnecessary complexity, inflexibility and fragility in the Application Architecture and Business Architecture.

To raise the focus on the problems of point-to-point integration and to begin to establish an enterprise-wide approach leveraging real-time transactional integration technologies. This Layer will provide an integration blueprint that will underpin goals of the Business Architecture, Application Architecture, Data Architecture, Service Architecture and Security Architecture.

Infrastructure Architecture Layer (The hardware)

The Infrastructure Architecture provides the blueprint for the underlying physical ICT Technology that is used to process and store applications and information. It provides the blueprint for server technology, storage technology, communications and connectivity technology, as well as user devices such as laptop and desktop computers and mobile devices.

Programmes and Projects

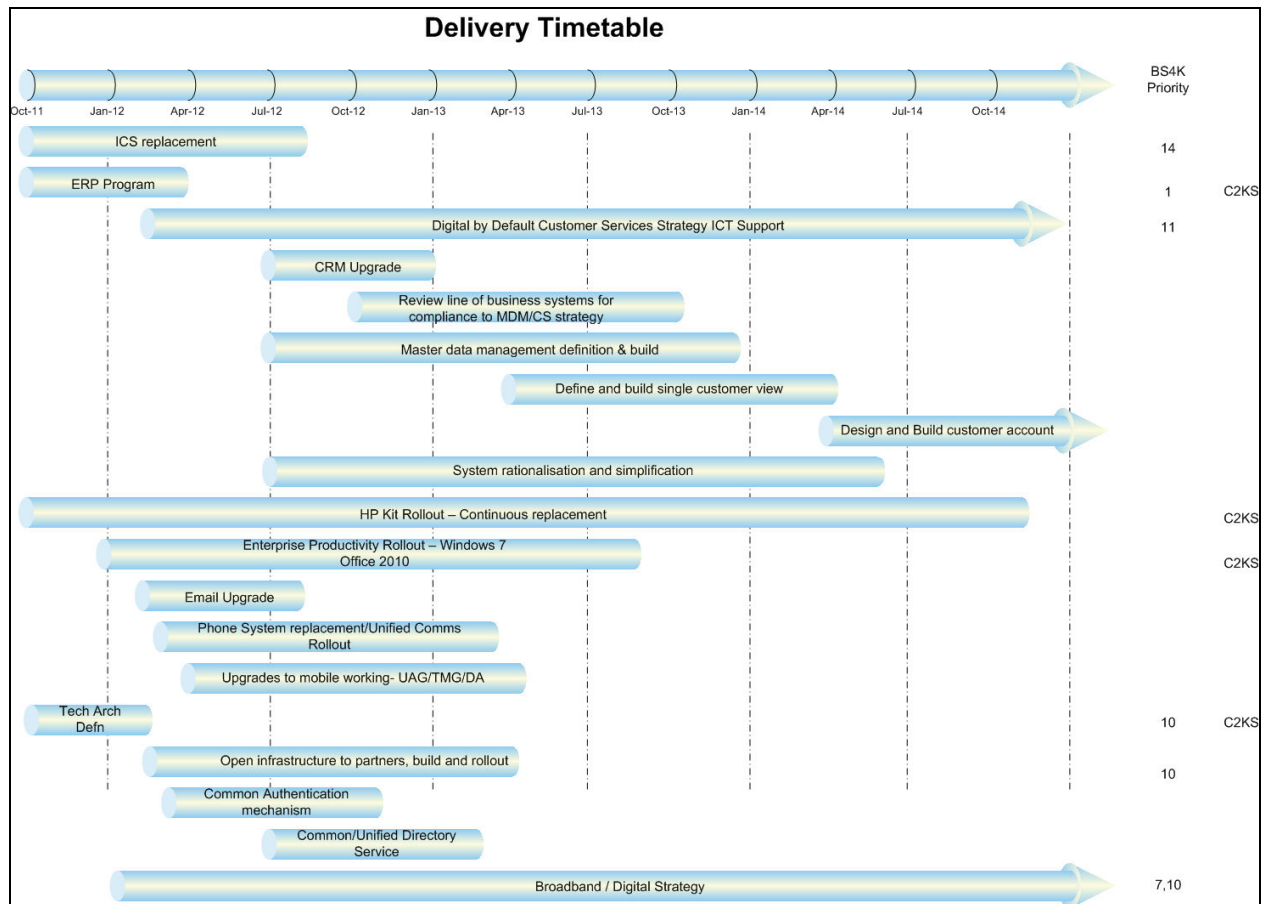
Delivery will be through the application of the principles outlined in this strategy to the change projects initiated in support of Bold Steps. This will provide a framework for continuous improvement, ensuring that each investment decision consolidates and strengthens the 'One Council' approach.

This is illustrated in existing ICT priorities:

- CSS Improvement Programme and replacement of the integrated Children's System
- Enterprise Resource Planning programme – Reengineered Finance and Business Processes supported by a new Oracle implementation
- ICT capital programme to upgrade core infrastructure
- Enterprise Productivity Tools – Upgrade of desktop hardware and software with standard application of Microsoft software
- Digital by Default – Technology Programme to support Customer Services Strategy.

Timescale

The programme of change is aligned to the objectives outlined within Bold Steps and the timescales for the associated service strategies.



This high level plan links key programmes over the next 3 years with their associated Bold Steps priorities. Whilst many projects will deliver specific business objectives others will deliver capabilities to improve business efficiency. The goals of rationalising and simplifying the ICT environment will be achieved through a combination of activities including an enhanced approach to implementing line of business systems.