Brighton & Hove City Council ICT Strategy

2011 - 2016

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1. EXECUTIVE SUMMARY

Public service organisations face unprecedented social, environmental and economic challenges. This places huge demands on Local Authorities to respond with creative and innovative services. Although challenging, for Brighton & Hove this environment presents new opportunities for the City to be a leader in innovation and a magnet for innovative businesses, where technology is applied rapidly, effectively and sustainably to create wealth and enhance quality of life.

We live in an information age where the initiatives propelling the city towards change have information at their core. These include requirements for the City Council to be more transparent by opening up its data to public scrutiny; to share more with citizens and partners what we do, what we spend and why and to use information and technology to engage more with our communities in decision making and the development of place based services. Our citizens must be able to participate fully in the democratic process through digital inclusion; to embrace opportunities to self serve when and where they wish; and to access services when they need them and take control of their own information.

The City Council is fundamentally changing the way it operates. The objectives of 'A council the city deserves', underline the need for us to change the way we deliver services to save money and protect frontline services. We can no longer afford to work in isolation or in silos and will only achieve our aspirations by working collaboratively within the Council, with local communities, with other public services, private organisations and third sector partners.

The Council is a large and diverse business, engaged in many forms of activity. Using information, systems and technology effectively together to transform council's processes will underpin our ability to commission and deliver services with partners to meet evolving needs of the city.

Our strategy demonstrates that ICT has a deep understanding of organisational ambitions and is able to align itself as a strategic partner to deliver citywide services. We propose to radically change the structure of all components which make up the existing enterprise architecture[1]. We will develop a technology platform which underpins transformation by enabling us to rapidly develop self-service web based products, to model, automate and manage the business processes behind these products and improve the connections and flow of information between systems.

ICT will provide reliable, secure, useful and easily accessible information resources and related services that are innovative and coordinated, cost effective and crucially place customer needs at the centre of service delivery. The key to success will be our determination to ensure that we develop high value systems and technology services that are;

Information driven
able to reliably and continuously gather data
and information from physical environments.

Intelligent
to enable the extraction of value from collected data

User centric
to fit with user requirements, preferences and processes, whether the
user is internal, a citizen, a business or a local partner.

[1] **Enterprise architecture** is a comprehensive framework used to manage and align ICT assets, people, operations, and projects with its operational characteristics. The enterprise architecture defines how information and technology will support the business operations and provide benefit for the business.

2. ICT CONTRIBUTION TO ORGANISATIONAL SUCCESS

Public sector leaders continue to recognise technology's critical role in changing the way public services are designed to work and for raising productivity in response to increasing business and public policy demands. Information and technology not only serves the needs of the councils business functions but has become a driving force for change, innovation and service delivery across the city.

Our strategy concentrates on addressing the immediate needs by responding to reducing budgets and increasing business and citizen expectations whilst keeping one eye on the future as technology continues to evolve at an increasing pace. The role of ICT has shifted from being a provider of technology services to concentrating on business processes, enhanced organisation IT and business skills with a more active role in change initiatives.

The current technology environment has grown organically over many years and reflects the traditional silo organisational structure. This has generated an environment with more than 300 applications, duplication of systems and data, applications which force business processes and discrete information structures preventing data from being joined up across applications.

The existing environment has broadly met the needs of the organisation but is costly to maintain and is a barrier to interoperability and information sharing.

The technical architecture lacks flexibility, prevents agility, has a reliance on expensive hardware preventing cost effective integration between systems which leads to an inconsistent customer experience. Many of the systems are proprietary and expensive to change further restricting the ability to interface easily with partners in the city i.e Health, Police and CVS.

The imperative to move from traditional methods of public service delivery highlights the role of technology to support different ways of working, different patterns of engagement with customers and communities and underpin the delivery of services designed around customer needs.

ICT intends to put in place an ambitious programme to radically change the structure of all components which make up our technology and information architecture. This will be underpinned by service redesign, the development of strong governance based on best practise, an IT workforce skilled in business and change management and improved financial and supplier management.

ICT will provide reliable, secure, useful and easily accessible information resources and related services that are innovative and coordinated, cost effective and place customer needs at the centre of service delivery. The key to success will be the development of high value systems and services. Collectively these changes will deliver a technology platform that is agile, collaborative and supports the council in achieving its stated outcomes.

Information

Through the prolific growth of service centric IT systems and data repositories the council is regarded as being information rich but knowledge poor, unable to easily join up and exploit the volumes of information available. Information is held in 'islands' preventing it from being joined up across applications or effectively shared with partners. Much of our information is held as unstructured data in millions of documents unable to be made useful and representing multiple versions of related information. In order to be useful information needs to be accurate, findable, shareable and structured before it can be used intelligently to allow the design of services that meet evidenced based need.

An objective will be to break down information silos, both within the organisation and between partner organisations with which the council engages. By increasing information flows between organisations we will be able to support intelligence led service commissioning providing accurate and timely information which underpins good decision making and cost reduction.

ICT will introduce an operational (information management framework) and technical information framework (technical enterprise architecture) supported by standards and guidance for the organisation to effectively manage and exploit its information assets. We will deliver a simplified and more flexible architecture which provides seamless information sharing between front and back office functions;

Collaboration

The council has established itself as a lead and enabler for development of strategic partnerships throughout the city. It will bring together the diverse groups, communities, service providers, charities and businesses across the city in order to achieve common goals and aspirations.

In the council we have a prime difficulty in marshalling accurate and timely information to support decision making and information sharing. The drive for joined-up, early interventions to deliver better outcomes at lower cost challenges existing information sharing practice, and makes new demands on information analysis, presentation and systems

The ICT team will build upon existing capability developing the skills necessary to build partnerships, support service redesign, and to help business areas develop innovative solutions. Our focus will be on developing collaborative partnerships providing a transparent but tangible view of the value contributed by ICT to the delivery of service outcomes.

We will provide simple and flexible solutions which facilitate information sharing and an environment in which employees are no longer constrained by physical location, and able to work seamlessly across organisational boundaries.

New Ways of Working

The council provides over 700 services and functions that differ in terms of content, scope and scale leading to a range of technology and systems needs. Historically this has led to a variety of approaches to technology solutions with investment often being driven principally by immediate departmental needs rather than in the context of a bigger picture. This approach is costly both in terms of sustained investment and support resources.

Many of our legacy IT systems drive inefficient business processes, are inflexible and require users to input information into multiple systems. Information is duplicated and inconsistent with customers often being asked to provide the same details each time they contact a different part of the organisation.

Our focus will be to implement a variety of new ways for working which maximising opportunities to mobilise our field workforce, enabling more flexibility for staff and make better use of resources for the council to improve the customer experience.

These new ways of working will also support partnerships models requiring the flow of information between multiple organisations' networks, wider use of mobile devices and the need to establish consistent data capture and reuse.

We will extend self-service to staff in any given locality, including through their own personal devices, enabling more efficient, effective and flexible workstyles to be adopted.

ICT Key Priorities

The following table describes the key organisational themes that this strategy will underpin and illustrates how ICT will take these themes forward:

Organisational requirement	ICT contribution
Deliver services using information that is joined and can be used effectively	Establish an information framework, introduce standards for information management and provide shared repositories for data.
Support organisational change with skills, expertise and resource to enable service redesign	Develop a federated model for business support services
Reduce the total cost of ownership of technology systems and services.	Adopt technologies which reduce administration and release service efficiencies and savings. Support staff to use ICT effectively.
Work collaboratively with other departments, partners and the public.	Provide new ways of collaborating safely, securely and with confidence on-line across organisational and city boundaries. Capitalise on existing partner networks and multi agency service delivery
Improve employee efficiency and customer experience by enabling self service options and improving access to knowledge and services over the web.	Replace outdated technology in order to improve web services and enable online transactions, personalisation and self-service
Remove technical barriers to sharing information and delivering services in partnership.	Explore opportunities for shared ICT services and options for shared infrastructure with partners. Establish design principles to prevent purchase of unnecessary bespoke solutions.
Ensure that all our citizens can fully participate and enjoy the benefits of digital access channels	Work with our customers to ensure that all avenues for digital engagement are exploited, including social media, customer contact points, learning opportunities through schools and other partners
Enable staff to work in a flexible environment and increase the efficiency of the field workforce	Introduce systems and exploit existing functionality to build in process flow. Provide mobile solutions to those who need them. Introduce access to real-time location data so that mobile fleets and workforce can be allocated and update tasks on demand. Support automation of standard business processes
Identify and implement solutions and technologies which reduce environmental impact	Provide appropriate electronic document and records management solutions. Actively seek technologies that reduce the organisation's carbon footprint. Where possible, use local providers to support sustainable economic development.

Table 1: ICT Contribution to organisational objectives

The following diagram gives an overview of the strategy and a visual representation of the role of ICT within the context of the organisational environment.

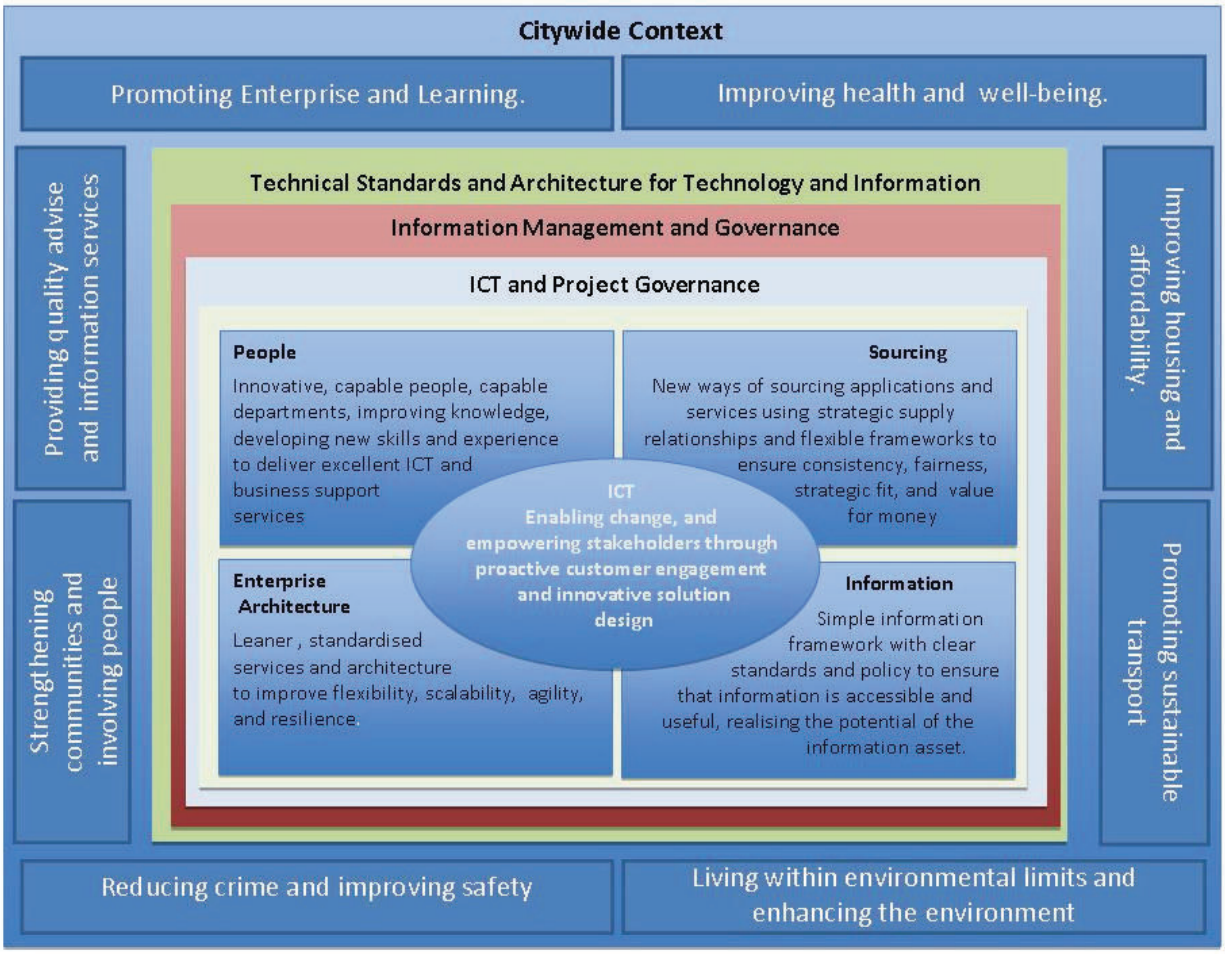


Fig. 1 ICT strategy on a page

3. DELIVERY OF THE ICT STRATEGY

3.1 Enterprise Architecture

Our ambition is for an evolving architecture that delivers over time for a set of principle use cases across the city – these include:

Use Case	Characteristics
Customer	Mobile, Social, Transactional, Personalised, Face to Face
Community	Business, Social, Open, Democracy, Consultation
Workforce	Mobile, Real-Time, Location Aware, Collaborative, Intelligence Led
Partner	Intelligence, Collaborative, Knowledge Sharing, Commissioning, Services

Our aim is to enable simple, secure and sustainable sharing and collaboration across these different user bases providing common views and user experiences. We recognise the differing needs and characteristics of these users, but will demonstrate the value of common platforms which can be combined in different ways for different needs.

The following diagram shows the vision for the future application and information architecture which we expect to have completed designs for by 2015. This model shows how information will be held at the core, structured and processed through subsequent layers and presented through a ubiquitous platform and personalised according to location and role.

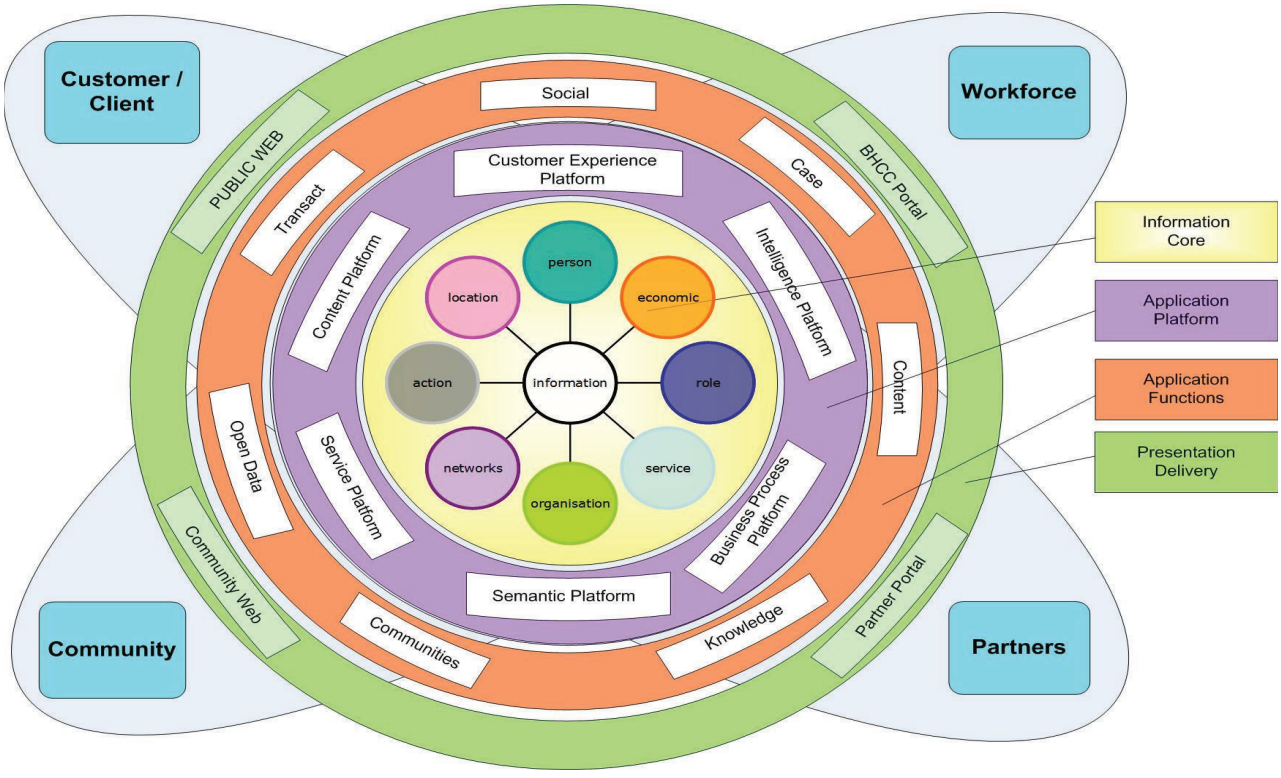


Fig. 6 Future Information/application architecture

By the end of the decade digital delivery is expected to be the default for the majority of local government service interactions with citizens and businesses. These interactions will be characterised by being available on demand with simplified and automated processes providing

more accessible and joined-up service designed around individual needs. By progressing towards an enterprise architecture, based on emerging open standards, that decouples the technology itself from the users and the application layers we can plan and design technology to support the way we need to work in the future.

3.2 User Architecture

Our aim is to deliver a user experience that is underpinned by the following principles:

Simplicity

Accessibility

Mobility

Standardisation

Flexibility

We will develop a single, personalised user interface over time which can be accessed from anywhere with an internet connection allowing individuals to customise and control their environment to meet their need. This will reduce overall support, management and training costs, improve the customer experience and improve public perception of the organisation and the city.

Technologies will be used which capture data at source in real time thereby avoiding inefficient re-/post processing. Integrating mobile capability with back office systems will support timely decision making allowing front line staff to be truly peripatetic.

The conceptual user interface below shows how this may look for a front line worker and a resident. The interface will remain the same for any user whether they be a citizen, business or frontline worker, however, the information will be personalised for that user.

3.3 Information Architecture

Fundamental to the delivery of the council's vision is the effective utilisation and management of information. We must become excellent at understanding our citizens, the service we provide and the market in which we operate.

Information needs to be recognised as a strategic resource that requires management alongside other key resources (i.e people, finance and physical assets). Data and information, both structured and unstructured, will be essential for effective collaboration. ICT will work with all areas of the business and city partners to create an architecture and environment in which information is managed at every point of its lifecycle, from creation and collection through storage, control of access, amendment and deletion, retrieval, usage and eventual archive and destruction.

Furthermore, the intelligent use of information will enable us to understand the impact of services on delivering outcomes for the city, target investment where it will bring the greatest value and continue to find new efficient ways of working to reduce costs and increase income.

ICT will develop information management and assurance processes which ensure that the automated flows of information are secure, appropriate, robust and efficient.

In order to achieve this ICT will introduce an information architecture with the appropriate standards for interchanging data, which ensures we keep data safe but also which supports transparency and open decision making.

These are the operating principles as related to Information Architecture and will be used to aide decision making and future technology investment.

3.3.1 Information Architecture Operating Principles

- **Capture once and re-use information** – Information is treated as an asset, that is captured once, combined and used many times to avoid duplication of information and process. Information assets are re-used wherever it leads to improved data quality, a single version of the truth, reduced cost and increased sustainability.
- **Information held is fit for purpose** - Information remains relevant, adheres to records management standards and industry best practice. The use of information and data takes into account legal and moral obligations to protect confidentiality, privacy and intellectual property. Information and data is made available to those who need it subject to appropriate safeguarding to ensure security.
- **A presumption to safely share information corporately, publicly according to role, unless positively restricted** - All data is held responsibly and shared lawfully. The presumption is to share, except where it can be demonstrated it would be inappropriate to do so. Information is positively made available based on the role of the individual.
- **Manage, govern and publish to common information, data and metadata standards** - Information and data is described using a common and widely understood language and vocabulary so that it can be stored and found easily and is of consistent quality.
- **Information designed for use -** Information and data is portable, accessible and personalised. Information and data is easily available to those that need it, when and where they need it and access will comply with required standards, policies and agreements. Information design authority is vested in the Chief Information Officer / Head of ICT.

- **Information for intelligence –** Information and data is captured, combined and managed for re-use and analysis within intelligence. Information lineage, relationships and sources are recorded and made visible to enhance the quality of information.

Up to now within BHCC, there has been no overwhelming requirement for a collective approach to Information Management. This has led to:

- localised management of information within departments
- local line of business applications
- large quantities of paper files
- small applications aimed at the needs of distinct teams
- lots of separate information stores with significant duplication

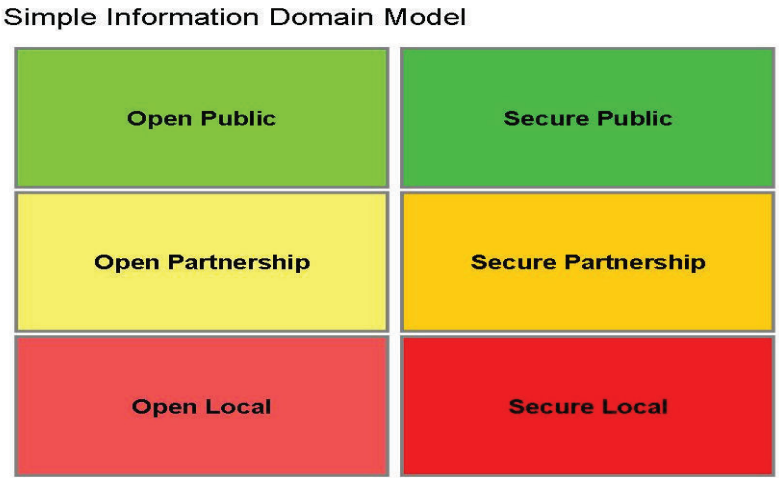
The organisation is changing and now needs to provide for individuals, teams and organisations to work together across information areas. The characteristics of this approach are:

- information drawn together on a subject to improve collaboration and understanding
- eliminating duplication of information to reduce the management overhead and error
- broadening access to what have been paper records to improve access, support workforce mobility and reduce cost
- reduce the burden on staff in seeking out information by delivering the information needed for a role
- encourage resident engagement through proactive publishing of public domain information
- facilitate engagement in decision making through shared knowledge profiles for communities

The varied nature of public sector information means we need to map and categorise our information to understand what can be shared and what can be published. In combining information we drive the development two essential elements –

3.3.1.1 A model of what to combine

3.3.1.2 A description of where information can be shared



3.4 Application Architecture

These are the operating principles as related to Application Architecture and will be used to aide decision making and future technology investment.

3.4.1 Application Architecture Operating Principles

- **Technology change is governed by the needs of organisational and partner strategy and demonstrable business benefit** – Technology fits with defined architectural design, standards and direction of travel; meet communication requirements for the city; be based on clear strategic and business requirements. Technology allows for and encourages the capability to rapidly and innovatively change business services and processes in a cost effective way to contain total lifetime cost. Technology design authority is vested in the Chief Information Officer / Head of ICT.

- **Simplified and standardised technical architecture** – Technology is provided across a standardised infrastructure that reduces technical diversity and is available to all parts of the organisation and partners ensuring interoperability, sustainability and consistency with established architecture models.

- **Maximise benefits from existing and planned technology investments** - Technologies is retired, re-used or redeveloped to meet similar or changed business requirements across the organisation and with partners, to ensure maximum value for total lifetime cost. Where duplication exists, technologies are rationalised to maximise the value against the total lifetime cost across a functional area.

- **Adopt open standards to enable technical interoperability** - Technologies allow for information, process and services to work across the organisation, the public and with partners. Technologies deliver interoperability supporting effective, sustainable and rapid change by working to defined open standards.

- **Leverage opportunity presented through emerging technologies** - Technology opportunities are used to provide socio-economic and environmental advantage and to maintain relevance to our customers and the users of technology based services.

- **Maximise products and services that support environmental, economic and inclusiveness outcomes** – Technology products and services are designed and commissioned which consider the environmental impact and support sustainable

economic development. Technology products and services are designed to be inclusive of different needs including accessibility requirements.

- **Sustainable solutions design -** Services and technology offered to the end user and are designed to balance the requirements of the user's role and some elements of personalisation with the need to only implement solutions that are affordable, supportable, have longevity and add value.

The diagram below shows the current application and information architecture which reflects the organisation's traditional siloed structure grown organically over many years. This has created an environment with more than 300 applications, duplication of systems and data, applications which force business processes and non-standard disparate information structures. This is both costly to maintain and is a barrier to interoperability and information sharing which are critical requirements for delivery of intelligent commissioning and the wider ambitions of 'A council the city deserves'.

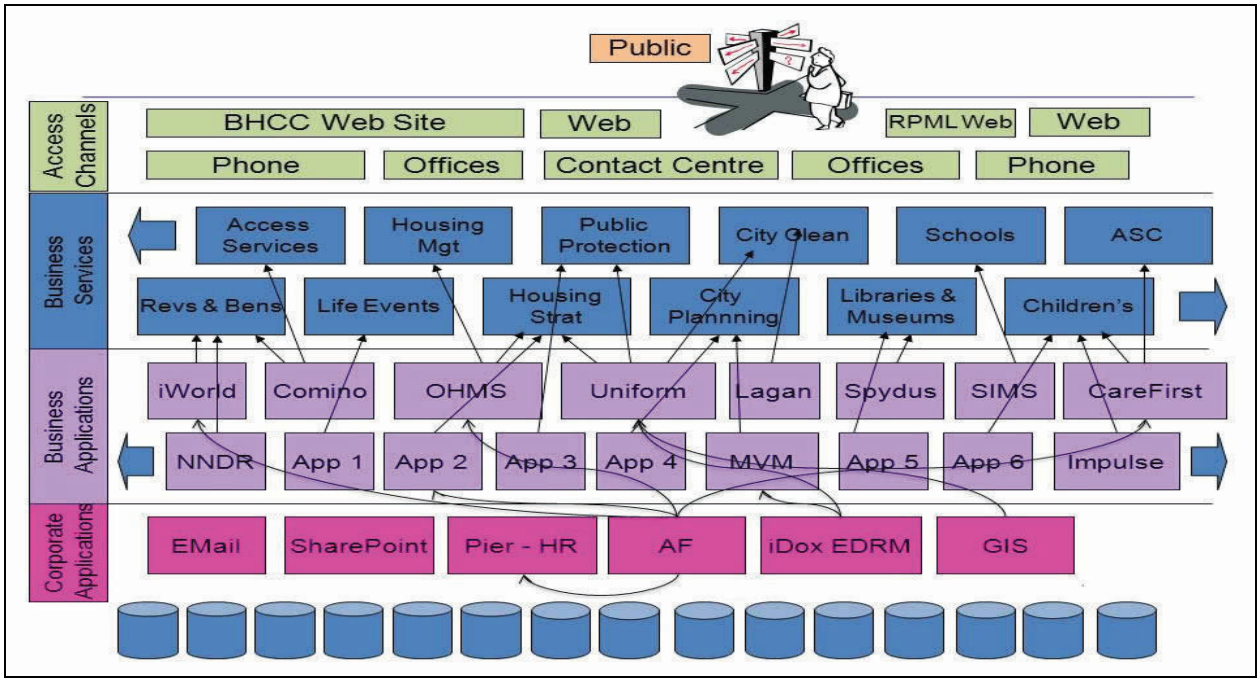


Fig. 4 Current Information/application architecture

The current architecture (Fig.4) is no longer fit for purpose and must be redesigned to meet the requirements of the organisation's new operating model. As the information and application architecture is intrinsically linked to business processes any changes need to be made in conjunction with business partners and users. We will take a staged service oriented approach and will design and develop our architecture using common descriptions and open standards. We will target and align the development of the architecture by identifying common processes and priorities together with stakeholders to ensure service continuity during the transitional phase.

The diagram below shows the transition phase in which platforms and applications are consolidated and rationalised around 6 common platforms.

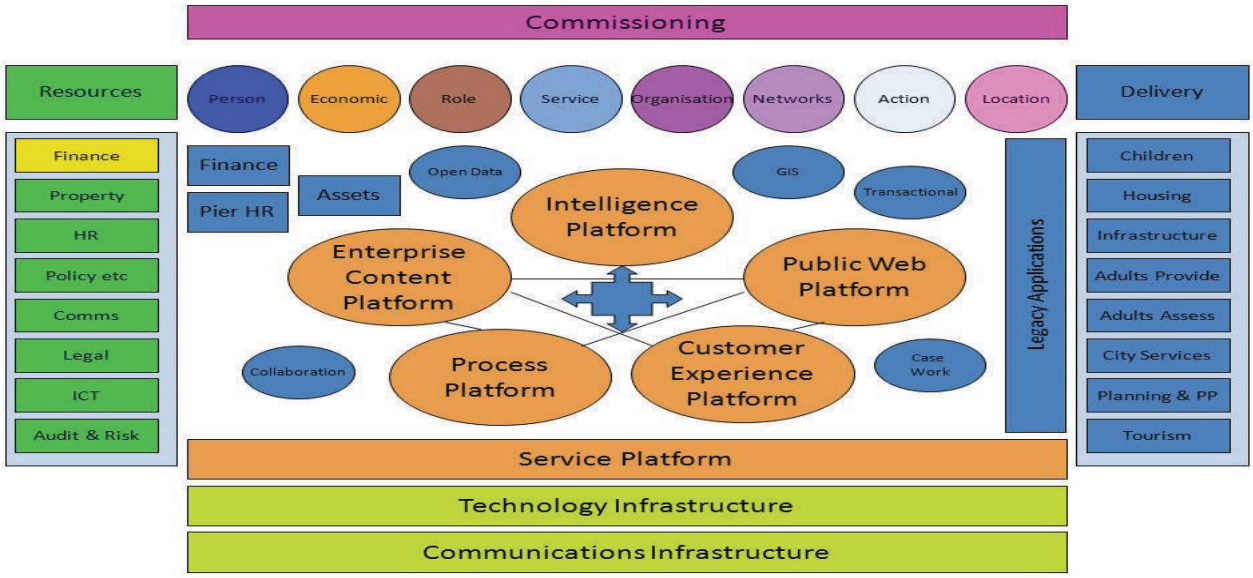


Fig. 5 Transition state Information/application architecture

Ultimately, we will deliver a leaner architecture that will enable delivery of the council's overall objectives to provide value for money and a better customer experience through;

- Reducing ongoing cost of ownership and development by rationalising and re-using systems and applications
- Reducing duplication in systems and data to improve data quality
- Enabling information sharing and delivery of business intelligence to improve workforce efficiency, enhance collaboration and support intelligent commissioning
- Enabling customers to drive business process change through greater transparency
- Improving customer experience through personalised access to services
- Increasing technical flexibility which accommodates business change

3.5 Technology

The technical architecture comprises the hardware configuration, operating systems and networking solutions used by the organisation. It addresses issues such as access, performance, resilience, storage and backup. This section of the strategy describes our approach to the technology architecture which will support the delivery of the organisation's business requirements.

The technology requirements of the organisation will be underpinned by the principles outlined below:

3.5.1 Technology Architecture Operating Principles

- **Technology change is governed by the needs of organisational and partner strategy and demonstrable business benefit** – Technology fits with defined architectural design, standards and direction of travel; meet communication requirements for the city; be based on clear strategic and business requirements. Technology allows for and encourages the capability to rapidly and innovatively change

business services and processes in a cost effective way to contain total lifetime cost. Technology design authority is vested in the Chief Information Officer / Head of ICT.

- **Simplified and standardised technical architecture** – Technology is provided across a standardised infrastructure that reduces technical diversity and is available to all parts of the organisation and partners ensuring interoperability, sustainability and consistency with established architecture models.
- **Maximise benefits from existing and planned technology investments** - Technologies is retired, re-used or redeveloped to meet similar or changed business requirements across the organisation and with partners, to ensure maximum value for total lifetime cost. Where duplication exists, technologies are rationalised to maximise the value against the total lifetime cost across a functional area.
- **Adopt open standards to enable technical interoperability** - Technologies allow for information, process and services to work across the organisation, the public and with partners. Technologies deliver interoperability supporting effective, sustainable and rapid change by working to defined open standards.
- **Leverage opportunity presented through emerging technologies** - Technology opportunities are used to provide socio-economic and environmental advantage and to maintain relevance to our customers and the users of technology based services.
- **Maximise products and services that support environmental, economic and inclusiveness outcomes** – Technology products and services are designed and commissioned which consider the environmental impact and support sustainable economic development. Technology products and services are designed to be inclusive of different needs including accessibility requirements.
- **Sustainable solutions design -** Services and technology offered to the end user and are designed to balance the requirements of the user's role and some elements of personalisation with the need to only implement solutions that are affordable, supportable, have longevity and add value.

Current Situation

Significant investments in ICT have been made over time by the Council to develop a corporate ICT infrastructure, including network, communications systems, a standard desktop environment, a corporate web presence and internet services, and support for flexible and mobile working using Citrix. A sophisticated central Data Centre has been established providing servers and databases to support corporate and service systems, with secure storage and backup facilities for documents and business data.

Like all technical systems the corporate ICT infrastructure needs to be maintained and kept updated. This ensures the value of the original investments is maximised, and that an effective technical environment for the Council can continue to be provided

Future Plans

During the lifetime of this strategy we will build on the foundations we have laid and move the technology infrastructure into a more flexible and scalable architecture where services can be extended out to partners and are available to those who need it on a self-service basis, wherever they are working. This approach will support the changing shape of the organisation and its relationships with partners and customers.

Through our investment programme ICT will ensure our infrastructure and core technologies remain resilient, fit for purpose with capacity to grow in line with increasing demand. As expectations continue to grow for information and online services we will invest in technologies which ensure we continue to deliver services safely and securely whilst protecting the integrity of personal and sensitive information.

Currently applications are delivered to end users from our data centre and/or installed directly on desktop machines. It is our aim to replace this model with applications delivered remotely on a "pay as you go" model to reduce ICT hardware related capital expenditure. We have recently completed the initial virtualisation of our server estate, which will enable us to effectively run our infrastructure until the time, where a full migration to a remote delivery model can be achieved.

Consumerisation and Mobility

The rapid pace of change in technology and in users expectations is expected to continue providing more choice to consumers and blurring distinctions between work and personal technology provision. Our strategy is to support this shift by encouraging wider use of consumer devices and technologies supported safely in the workplace to reduce cost, introduce greater flexibility and wider efficiency.

There is a parallel change programme underway in the organisation expected to deliver increased mobility for a flexible workforce and for the capability for staff (and partners) to work from multiple locations dependent on their role. These demands are driving our investments in technologies (such as cloud and Virtual Desktop Infrastructure (VDI) to follow the user, releasing them from the boundaries of their office.

There is a need over a relatively short period to refresh of a substantial part of the desktop estate with more flexible, lower cost desktop computing solutions. As a stepping stone towards these new models we will continue to implement a Virtual Desktop Infrastructure (VDI) to provide desktop services without requiring costly and powerful local machines. Introducing the VDI infrastructure will allow the ICT organisation flexibility and agility in managing the transition towards Cloud Computing as models mature. For instance, it will allow applications to be deployed and tested across different user bases with practically no deployment or administration overhead.

Over time, we aim to replace most of the desktop applications we are currently running with alternatives delivered from the "cloud". In conjunction with this changeover, we aim to significantly reduce the amount of separate applications running in the council by standardising on a few key platforms and limiting the amount of customisation done in response to user requirements focusing instead on finding ways of enabling business processes through standard applications.

Open Standards and Open Source

It is critical that all platforms and applications brought into the council on this model conform to open standards for interoperability and data exchange. This is necessary to reduce the risk of vendor lock in and to ensure seamless integration between systems. Where a business case will support it priority will be given to Open Source software alternatives. Continuous

monitoring of the evolving space of cloud computing standards will be necessary going forward to accommodate this goal.

The following table outlines the prime areas themes for technical delivery.

Servers and Data centres
• Maximise opportunities for server virtualisation to increase the capacity of the data centre with lower energy consumption, and to upgrade to later versions of virtualisation to provide more flexible scaling of server capacity. • Establish a model of facilitated infrastructure facilities to partners • Assess options for off-site hosting and outsourcing opportunity. • Actively explore a business case for utilising the Cloud for storage, processing and as an architecture for resilience
Mobile Technologies
• Creation of a common, secure local Public Sector Network (PSN) infrastructure to service shared office space and common mobile access • Establish a common set of standards for personal, mobile and office based end-user devices • Deploy Identity and Access management solutions (Single Sign-On) • Provide appropriate personal computing facilities to suit all categories of staff and their working locations • Develop solutions for secure remote working (i.e encryption, end point management)
Shared Services Infrastructure
• Public Sector Network and GSI adoption with interconnects between regional authorities • Explore options for shared/hosted data centres, applications and infrastructure • Develop integrated Directory Services • Design Enterprise Architecture requirements for shared capabilities
Desktop computing
• Support models for consumer and mobile devices • Unified Communications platform integrating mail, presence, messaging, collaboration and voice services • Design a desktop strategy that can evolve and converge with any cloud strategy and to ensure that it is designed in this way. • Continue to explore virtual desktops as a way of extending the life of older equipment and providing greater central management. • Increase the usage of web-browser based applications in order to move away from the desktop centric environment and allow for future cloud based services.
Voice and Data
• Development of government (IL) accredited networks for secure hosting and transmission of data • Modular approach to provision of wireless network coverage • Implementation of Public Sector Network (PSN) • Development of Local Broadband Plan alongside Superfast Broadband development • Deployment of digital (IP) telephony to allow extension numbers to follow staff wherever they logon to the council network • Support initiatives for 'one number' and associated solutions such as IVR • The modernisation of the telephony systems that support voice communications and automated call handling.

The diagram below highlights ICT intended direction of travel for key technology areas

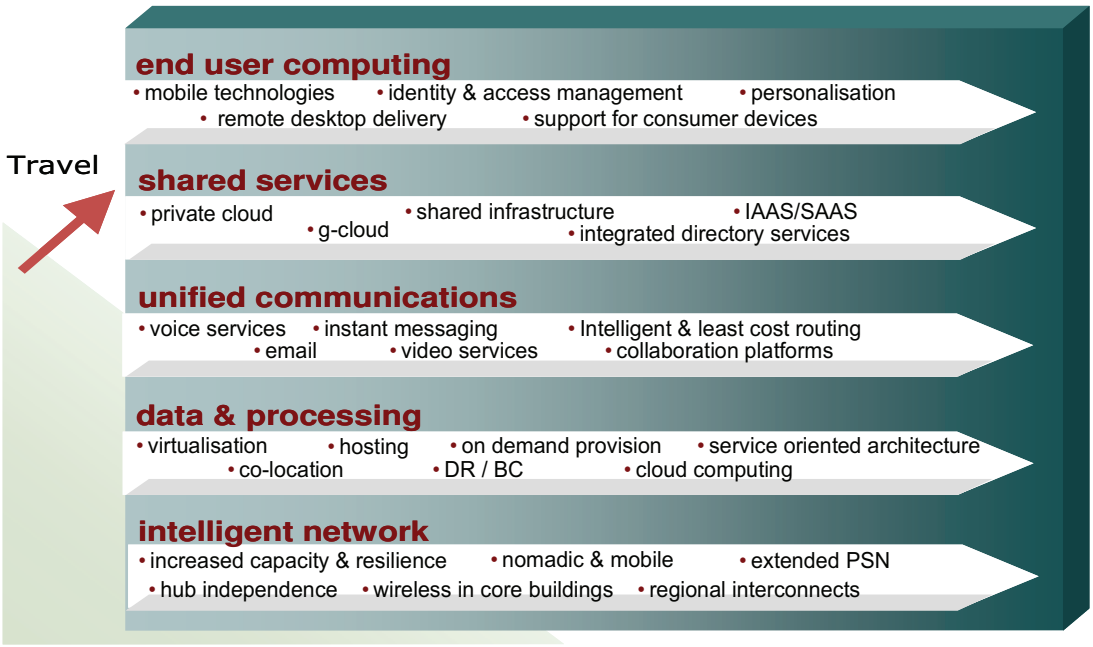


Fig. 6 Direction of travel for technology based services

3.6 Organisational Capability

In order to deliver the strategic position ICT will support the organisation to build on existing capabilities and develop new ways of working that will deliver sustained improvements now and in the future. The organisation will need to become proficient in:

- Enabling change
- Delivering change through strong leadership and a clear transformational change framework.
- Creating an environment for change by building an organisational culture that promotes creativity, social entrepreneurship, trust and collaboration
- Developing partnerships
- Identifying opportunities for collaboration with internal and external partners
- Negotiating and develop meaningful and sustainable relationships
- Delivering services across traditional boundaries

- Understanding the needs of the City
- Engaging with businesses and residents
- Providing citizens with the opportunity to influence
- Using business intelligence to target services effectively
- Managing information
- Establishing the value of the organisation's information and data assets
- Managing and make best use of data and information assets
- Ensuring transparency
- Making data publicly available and promote its innovative use

- Exploiting technology
- Promoting the innovative use of technology to drive efficiency and lower costs
- Making better use of existing technologies
- Improving workforce efficiency by raising IT awareness and capabilities

4. ICT PROCESSES AND SERVICES

ICT processes are based on ITIL (Information Technology Infrastructure Library) which provides the best practice framework for delivering ICT services.

The following table summarises the services currently provided by ICT:

Service category	Services currently provided
Network and internet connectivity and data management	Installations, maintenance, support and data storage/backup
Hardware	Installations, maintenance, support and disposal
Communications (including email, VoIP and telephony)	Installations, maintenance and support
Business application, software and information systems	Installations, maintenance, development, change management, supplier management, disaster recovery planning, training and support
Security and information compliance	Procedures, protocols, standards, guidance and investigations
Business support	Business engagement, ICT Consultancy, Project Management, Contract management, invoicing
Office moves	Network installations, telephony, print and copy installations, desktop moves

Table 2: ICT services

4.1 People

Capability for leading and managing ICT enabled change will become more critical in the Council than it is seen to be today as ICT will be expected to deliver innovation, improved customer service and organisational change programmes - not just run traditional ICT services.

Our ambition in ICT is to transform our service from a reactive supplier of technology, to a strategic partner and advisor to the organisation, its partners and the city. The first step towards realising this ambition was to restructure the ICT service to build capacity for increased business support and engagement. This was completed in July 2010 and moving forward needs to be consolidated by a shift capability and skills from where it currently lies.

Organisational change, programme and project management, information management, collaboration and commissioning (procurement) will become more significant roles for ICT staff. Stronger links to business areas including customer service, channel management, HR, facilities management will be developed as ICT increasingly lies at the heart of these activities and can only be leveraged by experienced and capable ICT professionals - staff who know about running change programmes, service design and understand the risks and opportunities for technology.

A major change is needed in attitudes of staff within the ICT profession and the way ICT professionals are viewed by the council. Service reform and business change management will be a capability and skill we develop within ICT so the council stops seeing ICT as a 'centre of

technology' or just as a support service; regarding ICT instead as a source of innovation, efficiency and improved service.

ICT will build capability and skills to encompass:

- Organisational change management and process simplification
- Business (re)development enabled by ICT
- Management of the organisations information assets
- Commissioning and supplier management

There are two further factors heavily influencing the organisational design of ICT service provision.

The first is the need to reduce cost and increase productivity. To this end, ICT will become more efficient by removing duplication, centralising ICT category spend and services currently distributed across the organisation, breaking down silos and inconsistent working practices and developing the skills that provide best value.

In addition technological advances together with the emergence of a supplied services marketplace have opened opportunities to commoditise some technical and support services. This is an approach which has been taken by many organisations in recent years to achieve improved value for money.

The second factor is the degree and pace of change across the city which will increase demand for technical solution design, service design and business support services described in the previous section. To meet this demand our workforce will be supported to develop new skills through a programme of Continual Professional Development (CPD) and performance management.

New and additional skills will be developed in the following areas to support the strategy:

Strategy and Architecture

Information management; records management; enterprise and solutions architecture design

Business Change

Business, data and process analysis; business process testing; business modelling; stakeholder relationship management; project management skills

Solutions Development and Implementation

Business reporting; solutions and integration testing; solutions development and systems development; requirements definition

Procurement and Management Support

Supplier relationship management; negotiation skills; contract management; financial management; workforce development, category and contract management

Alongside this approach ICT will engage with local and national organisations in the private and public sectors that can provide short-term expertise and transfer knowledge to our workforce. This is duel approach is essential to shorten the time required to develop the skills needed to deliver new services and scale service provision against demand.

These three approaches, centralisation, commoditisation and re-skilling will position ICT to become a strategic partner and advisor to the organisation.

4.2 ICT Governance

The ICT Governance process is a collection of decision making frameworks with business representation. This provides a setting for the effective management of ICT and creates an environment in which organisational business objectives can be achieved. The processes empower the ICT workforce to make decisions more rapidly and remove the reliance on hierarchical structures. By formally integrating our customers into a more holistic decision making process which is both consistent and transparent, customer relationships will be improved and solutions will be better aligned to business and user needs.

As stated earlier in the strategy ICT has a new and more demanding role as a facilitator to enable the organisation to realise its ambitions to increase operational impact, improve efficiency and reduce operating costs. Indeed technology is one of the biggest areas of investment for any organisation seeking to increase efficiency and reduce cost. For BHCC the investment required to deliver the full benefits of our transformation programme is likely to be significant so it is essential that a robust framework is in place to ensure the rational allocation of resources.

Currently, our governance process considers two main elements, the technical feasibility and the financial feasibility of the change proposals.

Technical decisions concerning security and risk or changes to our enterprise architecture, are made by the Change Advisory Board (CAB) which has representation from technical and information experts to guide its decision making.

All ICT decisions and programmes that require financial investment are subject to corporate change board and in line with established organisational decision making procedures. This is designed to ensure that investments are transparent, deliver value for money and are closely aligned to business and IT strategy.

It is important that the existing framework matures and introduces new governance domains. A complete ICT governance model is shown below;

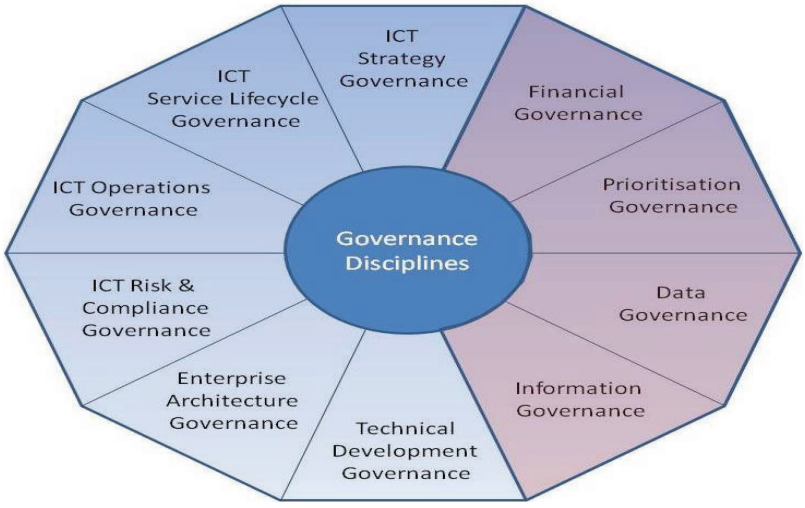


Fig. 9 the ICT governance landscape

4.3 ICT Financial Management

The Council uses different plans and strategies at all levels of the organisation to plan and monitor the achievement of its objectives. This overall context of working can be explained by our Corporate Planning Framework. The priorities from the Corporate Plan influence the ICT strategy, and the financial implications of this flow into the Medium Term Financial Strategy.

Many of the requirements identified in this strategy will inevitably have associated costs and where this is the case a full business case will be prepared. This business case will list the alternative approaches and solutions considered, make a considered and explained recommendation, and then give a complete cost breakdown of what will be involved. Where appropriate a clear rationale will also be provided for the requirement which shows demonstrable return on investment.

It is not possible to provide costs within this document, as these will depend on analysis work at the time the requirement is being further investigated however in order to support the benefits outlined through delivery of the ICT strategy it is assumed the following are in place:

- Revised financial arrangements to facilitate investment in corporate facilities outside service department budgets.
- A corporate approach to planning investment in technology balanced against improvement and savings in business delivery units.
- Robust governance to make sure that all technology investment and all service delivery partnerships work with and make best value use of our existing technical infrastructure.

To plan and cost-justify the implementation of the new technical architecture we will define an ICT Delivery Plan that connects with programmes of work established through corporate governance processes including a timetable for projects and full cost models.

Previous ad hoc funding and procurement of ICT systems has encouraged piecemeal development and the proliferation of separate small-scale applications, leading to duplication, inefficiencies, and increased maintenance costs. Investing in ICT on a strategic basis, focusing funding to deliver shared and re-usable solutions for widely shared requirements, is a vehicle to help develop a more flexible and effective Council serving the local community, in line with priorities in the Corporate Plan, Community Strategy, and key service strategies.

ICT aims to adopt a new financial model which will support our role as strategic partner to the organisation. Through the adoption of this model we will ensure that the cost of ICT systems and services are more transparent and in doing so, raise awareness and ownership at a business level.

We will work within the following parameters;

- Deliver internal services agreed and negotiated against a centralised performance compact
- Deliver traded services where they are to the benefit of the city's outcomes
- Manage the financial investment profile in line with agreed service planning assumptions and the constraints of funding profiles
- By exception deliver additional, directly funded "exceptional" services to discrete business areas.

Each of these is described in more detail below.

4.3.1 Internal Services

It is proposed that the costs of ICT services are defined as management costs which are distributed across Delivery Units and monitored against a central performance compact. The performance compact will contain financial performance measures to include for example -

cost per desktop, cost per head, cost per MB storage etc. The focus will be on commodity costs where the greatest opportunities exist to drive down costs.

This will achieve the following benefits:

- Ensure prioritisation of ICT services is driven by strategic outcomes not individual competing demands of delivery units.
- Remove administrative overheads (e.g. recharging processes) across all budgets.
- Support application & infrastructure rationalisation
- Support ICT to operate as a gatekeeper for new services and inhibit extravagant and specialist separate line of business solutions.
- Gain business accountability for spend and expose year on year maintenance costs

The benefit for delivery units will be a transparent funding regime delivering to them a common set of services prioritised in line with the Council's agenda. The benefit for the organisation as a whole is the improved ability to strategically direct ICT spend to support agreed outcomes. The benefit for ICT is the ability to plan and execute rational investment in services.

4.3.2 Traded Services

ICT has a successful track record in delivering cost effective and valued services in a traded capacity. The excellent service delivered to schools is an example of this. The services delivered benefit the individual schools, the organisation through the effective information flows and the wider community through the collaborative environments and creative use of learning technologies across the city.

This model and the financial base which underpins it could be expanded to new opportunities where they support the strategic outcomes for the city. Examples may include services to health partners (e.g. G.P. consortia). This has benefits beyond the straight supplier services on offer, as it can enable the effective sharing of information, intelligence and collaboration. There are also likely to be services which we may want to trade (financial or in kind) with other public sector bodies locally in support of the strategic outcomes

In addition the intelligent commissioning model suggests that our engagement with the Community & Voluntary Sector is likely to develop. Here we need to be clear that the benefits of a traded service may not only be measured on financial value. We may decide to supply service to providers within this sector at below cost in order to gain the wider socio-economic benefits that a commissioning model can achieve. The value placed on good information flows (like those already achieved with schools) and a broadened voluntary workforce could be seen to outweigh the direct costs of supplying the ICT services.

4.3.3 Financial Investment Profile

ICT will aim to deliver a holistic investment profile across the ICT Category and identify the required levels of funding to deliver services which support the strategic outcomes of the city. This will support the management of the underlying infrastructure components (see fig 8.) through an asset lifecycle and capacity planning programme. This will also allow us to achieve sustainability benefits, delivering;

- a financially known and viable asset costings planning horizon
- known capacity planning to deliver for other projects and in support of strategic outcomes

4.3.4 Exceptional Services

There are some circumstances where individual service areas within Delivery Units will have an absolute requirement to go beyond the core, prioritised services delivered by ICT to the organisation as whole. An example would be 24/7 service requirements for Children's Social Care to ensure availability.

These will require agreed business cases being supported by ICT Governance Processes and ratified through the relevant corporate project prioritisation process. A judgement will also need to be made on where the costs should be born for these services, whether they are significant enough in their socio-economic impacts to warrant corporate support (similar in model to the below cost support that could be provided to 3rd sector).

Exceptional service costs should be transparently modelled, to ensure that the true additional costs of this additional service are known and understood.

4.4 ICT Metrics

ICT investment represents a significant percentage of the organisation's budget and underpins an increasing number of business critical processes; therefore, measuring the success of the investment is essential. ICT cost management is clearly an important measure, but the introduction of a balanced scorecard approach will provide a more holistic measurement which will add context and perspective to a pure financial measure.

For some time the balance scorecard approach, originally developed by Kaplan and Norton, has been proven method for performance management and strategic alignment across many industries. However, it is Van Grembergen's ICT specific adaptation that will help us develop meaningful metrics to understand and demonstrate ICT's value to the organisation.

In recent years ICT has been taking a useful measure of **User Orientation** by running annual ICT customer satisfaction surveys to assess how our internal colleagues perceive our services. However, it is important that this measure is extended to include the organisation's customers and partners.

Fig. 10 Van Grembergen's ICT Balanced Scorecard

Increasingly services are presented to the public using technology as well as other more traditional channels. The quality of our technology therefore, makes a significant impact on the customer's perception of the quality of Council services. We must acknowledge that we are being compared to other commercial organisations that offer transactional and information services over the web.
Consequently, when developing user orientation metrics, it is important to ensure that we benchmark our performance against comparable services.

To demonstrate **Business Contribution** it is important that we measure the alignment between ICT strategy and organisational strategy in order to ensure that the organisation's entire project portfolio is coordinated and can deliver expected benefits. In the new organisational landscape, ICT will be increasingly measured on the outcomes of IT investment to ensure that ICT can demonstrate value and return on investment. It is expected that these outcomes will be articulated through the service performance compacts.

In order to address the **Operational Excellence** sector, we will continue to use benchmarking services such as those provided by the Society for IT Management (SOCITM) to compare costs and performance with other local authorities and use the findings to inform improvement strategies. The SOCITM benchmarking indicators are aligned to the UK Public Sector Audit Agencies' 'Value for Money in Public Sector Corporate Services' and are used to review:

- ICT costs and staffing
- ICT performance
- Service quality/quantity
- Information management and quality
- Technology metrics
- Server Infrastructure by platform
- Data and Voice Network services, Internet & Security
- Desktop Services
- Business applications

Finally, to demonstrate ICT's **Future Orientation** we must be able to measure the capability of ICT to innovate and support future business transformation. This measure should include both the flexibility of the technology and the ICT workforce to innovate and respond to variable demand and rapidly changing technological environment.

4.5 Sourcing

ICT will adopt the following set of sourcing principles to ensure consistency, fairness and strategic fit. The application of these principles will be managed through ICT Governance and be subject to performance measures.

Manage cost

We will explore options for collaboration, joint procurement and shared or hosted services with other public bodies (such as South East 7 partnership and Local Strategic Partnership) and partnering arrangements with suppliers.

- Where possible we will ensure suppliers use widespread open source languages and open standards.
- We will engage with communities of interest, such as the local development community and local businesses.
- We will encourage a competitive supply market.
- We will consolidate current supplier numbers to a more strategic and manageable level.

Add value

- We will engage with relevant stakeholders and service users to ensure that needs analysis and design of specifications reflects community requirements and recognises the contribution of existing local services.
- We will encourage an innovative and varied supplier market.

Sustainability

- We will ensure that products and services are energy efficient.
- We will encourage partners and suppliers to consider the environmental impact of their products and services.
- Where appropriate we will use local providers to support sustainable economic development.

Ensure flexibility and scalability

- We will always have an exit strategy when entering contractual agreements.
- Contracts will enable us to scale supply in accordance with demand.
- Suppliers must be willing and able to support integration with our enterprise architecture.

Legal

Procurement will always be conducted in accordance with the relevant UK and EU legislation.

In order to minimise the overall cost of procurement, we will seek to extend current contracts or use existing framework agreements before considering full OJEU tenders.

5. RISKS

Table 4 outlines the major risks associated with the implementation of the ICT Strategy and considers approaches to mitigation.

Risk category	Risk description and impact	Mitigation
Cultural change	There is always an element of risk associated with significant change, however, full benefits of technology changes, can only be realised when implemented alongside cultural, policy and process change. There is a risk that the technology changes are made in isolation and benefits are not realised.	Establish an environment for change across the Council with robust governance to ensure that the cultural, policy and process changes are embedded as an integral part of any change.
Interdependencies	All elements of the strategy are interlinked. Failure to invest sufficiently in one element would significantly reduce the value of the overall investment.	The organisation must be made fully aware of, and commit to, the investment required to deliver the strategy.
Financial investment	Across the board cost cutting could result in ICT being unable to secure the investment to deliver the strategy. Risks that could prevent or delay investments are: ICT is not recognised as an enabler of organisational efficiencies and savings. High value, long term investment for strategic objectives are overlooked in favour of short term returns.	Ensure that ICT strategy is clearly aligned with the desired outcomes for the organisation. ICT must be able to demonstrate value and clear return on investment.
Interoperability standards	Development of universal interoperability standards may be delayed or insufficiently developed to meet the timescales for our technology programme which could prevent the development of an enterprise architecture.	Review and monitor the development of standards, make partners and the organisation aware of the risks associated with a lack of defined standards.
Corporate governance	There is a risk that the organisation will not define and implement strategic criteria for selection and prioritisation of corporate projects. There is also a risk that when decisions are taken, ICT impacts are overlooked. This could result in ad hoc or extravagant investments and missed objectives.	The organisation establishes robust governance for change and a process for strategic prioritisation of projects.
Capacity and organisational support for information and change	There is a risk that the organisation provides insufficient resource to manage technology and information change programmes. If we do not appropriately support these change programmes there will be delays to, or inability to achieve organisational outcomes as envisaged	Develop strategic partnerships with both private and public sector organisations. Invest in a programme of continual professional development and identify additional alternative funding sources.
Impact of strategic delivery on business as usual	The increased demand for resources to deliver change work will diverts resources from business as usual resulting in a degrading or inconsistent level of service.	Implement strategies to free up business as usual resources (SCC contract, service desk channel shift, licence management system).

Table 4

6. APPENDIX 1 - GLOSSARY OF TERMS

Application architecture
See **Information and application architecture**

Architectural design
The process of translating strategic business need into effective enterprise technologies as carried out by the Enterprise Architect. The scope of architectural design includes the people, processes, information and technology of the enterprise, and their relationships to one another and to the external environment.
See also **Enterprise architecture**

(ICT) Asset
Any ICT resource or capability that could contribute to the delivery ICT services. Assets can be one of the following types: management, organisation, process, knowledge, people, information, applications, infrastructure, and financial capital.

Asset lifecycle (management)
The end to end financial, contractual and inventory management of all software and hardware in the business environment. An asset life cycle typically includes the phases of planning, acquisition, deployment, management and retirement.

Business analysis
Business analysis is the discipline of identifying business needs and determining solutions to business problems. Solutions often include a systems development component, but may also consist of process improvement, organizational change or strategic planning and policy development.

Capacity planning
The process of determining the maximum amount of work that an organisation is capable of completing in a given period of time needed in order to meet demand

(ICT) Category management
Category management is the process of managing product categories (instead of the individual products or services) as a strategic business unit.

Commoditise
To source consumer type services (those where quality is unaffected by the market background of the supplier) from the broadest possible marketplace, covering: public, private, shared and cloud service providers, with the aim of reducing cost.

Commodity costs
The cost of a product or service which is supplied without qualitative differentiation across a given market.

Customer Engagement Management software
Applications which integrate the management of customer service, marketing, and sales into a unified system. Customer Engagement Management (CEM) systems provide an enhanced ability to share information, track customers, automate routine services, and enable the customer to manage parts of their own data.

Customer experience platform
Environment that manages all customer contact across multiple channels – web, mobile, phone, face to face etc. The aim is to ensure that the experiences that customers have meet their needs, expectations and delivers the results that the organisation requires.

Data governance
The practice of organising and implementing policies, procedures and standards to ensure the quality and effective use of structured and unstructured data assets

Development governance
The decision making framework which controls the development of applications.

Electronic document and records management
A type of content management system which integrates document management (used to track and store electronic documents and/or images of paper documents) and records management (document lifecycle management) in a single system.
See also **Records management**

Enterprise architecture
A comprehensive framework used to manage and align ICT assets, people, operations, and projects with its operational characteristics. The enterprise architecture defines how information and technology will support the business operations and provide benefit for the business.

Enterprise architecture governance
The decision making framework which ensures that the development of the enterprise architecture is reflective of both current and anticipated, strategic business need.

Enterprise content platform
An integrated environment that allows content to be easily re-used, reassembled and adapted for different purposes and requirements

Financial governance
The policies, processes and controls implemented to ensure that investment is aligned to current and anticipated strategic business need.

GCSx
The Government Connect Secure Extranet (GCSx) is a secure network which enables secure interactions between connected central government departments and national bodies. It also provides secure access to other secure networks, such as the National Health Service (N3), the Criminal Justice Extranet (CJX) and the Police National Network (PNN)
See also **GCSx Code of Connection**, **N3 Governance**

GCSx Code of Connection
The GCSx Code of Connection (CoCo) is the high level security standards which, when met, enable an organisation to join the GCSx (Government Connect Secure Extranet)
See also **GCSx**

Hardware configuration
The settings that have been applied to the various computer devices (e.g. IRQ lines, DMA Channels, memory address settings, etc).

Information architecture
The practice and processes for developing frameworks for ensuring the maximum exploitation of an organisations information assets. Will include the development of structures and processes to ensure that information is findable, usable and useful.

Application architecture
The practice and processes for developing a framework for all applications and information systems across the organisation. The aim is to ensure the appropriate fit for now and the future between business requirements and the delivery of applications. This will include whole life planning and where appropriate development, procurement, decommissioning and replacement.

Information governance
The policies, processes and controls implemented to manage information to ensure that it supports the organisation's immediate and future regulatory, legal, risk and operational requirements.

Information management
A business process that formalises the management and use of an enterprise's information assets. Information management promotes a collaborative and integrative approach to the creation, capture, organisation, access and use of information assets, including the tacit, uncaptured knowledge of people.
Information management is also referred to as IM and knowledge management.

Integration testing
The phase of software testing in which software modules are combined and tested as a group.

Intelligence Platform
An environment which allows users at all levels of the organisation from frontline workers to strategy developers to access, analyse, manipulate and act on structured and unstructured information sources using a variety of tools and visualisations appropriate to their role. Allows the development of predictive analysis for decision making based on existing intelligence.

Interface
The protocols that unrelated technologies use to communicate with each other.

Interoperability standards
Commonly agreed and established protocols that provide a common interface between different technologies and/or applications.

ISO270001
An Information Security Management System (ISMS) standard published by the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC).

Local Strategic Partnership
Local Strategic Partnerships (LSPs) bring together representatives from the local statutory, voluntary, community and private sectors to address local problems, allocate funding and discuss strategies and initiatives. The LSP for Brighton & Hove is the 'Brighton & Hove Strategic Partnership'.

N3 Governance
The processes and controls that organisations must comply with in order to gain access to the NHS National Network (N3). N3 Governance is also known as The Information Governance Statement of Compliance (IG SoC).
See also **GCSx**

Network
A system containing any combination of computers, terminals, printers, audio or visual display devices, or physical communication equipment or cables: used to transmit information

OJEU
Official Journal of the European Union

Operating system
An operating system (OS) is the software that controls the allocation and usage of hardware resources such as memory, CPU time, disk space, and input and output devices.

Operations governance
The policies and controls used to ensure the quality and effectiveness of ICT processes and services.

PCI DSS
The Payment Card Industry Data Security Standard (PCI DSS) is an information security standard defined by the Payment Card Industry Security Standards Council developed to help prevent credit card fraud.

(Web) Personalisation
In ICT terms, personalisation refers to the use of technology to accommodate the differences between individuals.
Personalised web pages use the characteristics and attributes of the individual user to determine the type of content provided. This could be based on as diverse as interests, social category, role or functional area within an organisation.

Portfolio management
A systematic and formal approach to managing ICT capabilities.

Prioritisation governance
The decision making framework used to establish the relative importance of ICT projects and pipeline work.

Process analysis
The analysis of a chain of logical connected, repetitive activities that utilise the organisation's resources to refine an object for the purpose of achieving specified and measurable results or products for internal or external customers.

Process platform
A framework of services which allow for the development, management, automation, review and interaction between human and transactional processes within the organisation.

Programme management
The process of managing several individual but related projects in order to produce an overall outcome.

Public sector network
The Public Sector Network (PSN) will create the effect of one network from multiple suppliers and different infrastructures for use by the public sector.

Public web platform
Web environment used for the delivery and development of applications, content, social media and interaction with the public across multiple web channels (website, mobile etc.)

Remote access to desktop
Applications and data (traditionally accessed from only a single desktop computer) are accessed from any location, using any device with an internet connection, thereby providing a more flexible, mobile work style.

Records management
The practice of managing the end to end lifecycle of an organisation's records from the time they are created until their eventual disposal. This includes classifying, storing, securing, archival preservation and destruction of records.
Records Management is also referred to as RM.

Risk and compliance governance
The policies, processes and controls used to manage operational, financial, strategic and regulatory risk and the management and monitoring of compliance with agreed policies and procedures.

(Web) Self-service
Web self-service allows customers to access information and perform routine tasks over the Internet, without requiring any interaction with a representative of the organisation. It offers the customer immediate access to information without having to wait for an email response or a returned telephone call. Web self-service is dependent on the quality and quantity of information available and the ease with which it can be accessed.

Service life-cycle governance
The controls used to manage changes (including retirement) of live ICT services.

Service oriented
A technical design principle in which functionality is organised into a set of interoperable services. Services are subsequently used within multiple, separate systems from several business domains. Also referred to as Service Oriented Architecture (SOA).

Service platform
Integrates and brings together business applications and processes. Allows for the reuse of existing and new services in support of a service oriented approach. Helps to identify gaps/areas for innovation and drive down cost and accelerate the speed of change.

Software development
The act of working to produce software to meet a specified need. In its broadest sense the term includes all that is involved between the conception of the desired software through to it's final delivery.

Solution design
The design of a service or product based on a specified need. The output of this process is a technical description of how the specified requirement will be met.

Solution development
The assembly of the modules described in the solution design phase. This process may require software development and/or the acquisition and configuration of off-the-shelf technologies. Iterative unit and module testing will be carried out in this stage by the developers.

South East 7 partnership
The South East 7 (SE7) is a partnership of seven Councils (Brighton & Hove City Council, East Sussex County Council, Hampshire County Council, Kent County Council, Medway Council, Surrey County Council and West Sussex County Council) that have committed to working together to improve the quality of services and to achieve savings.

Strategy governance
The processes and controls implemented to manage the initial development of ICT strategies and any subsequent changes made to them.

Strategic partner
A long term partner that shares resources in order to achieve a common objective. ICT/technology to be recognised as part of the service delivery model.

Unified communications platform
A unified communications platform enables the convergence in communication networks and applications into a single unit replacing discrete or separately sold applications.
Major elements that fall under "unified communications" include telephone calls, e-mail, unified messaging, presence, instant messaging, contact management and web, video and audio conferencing.

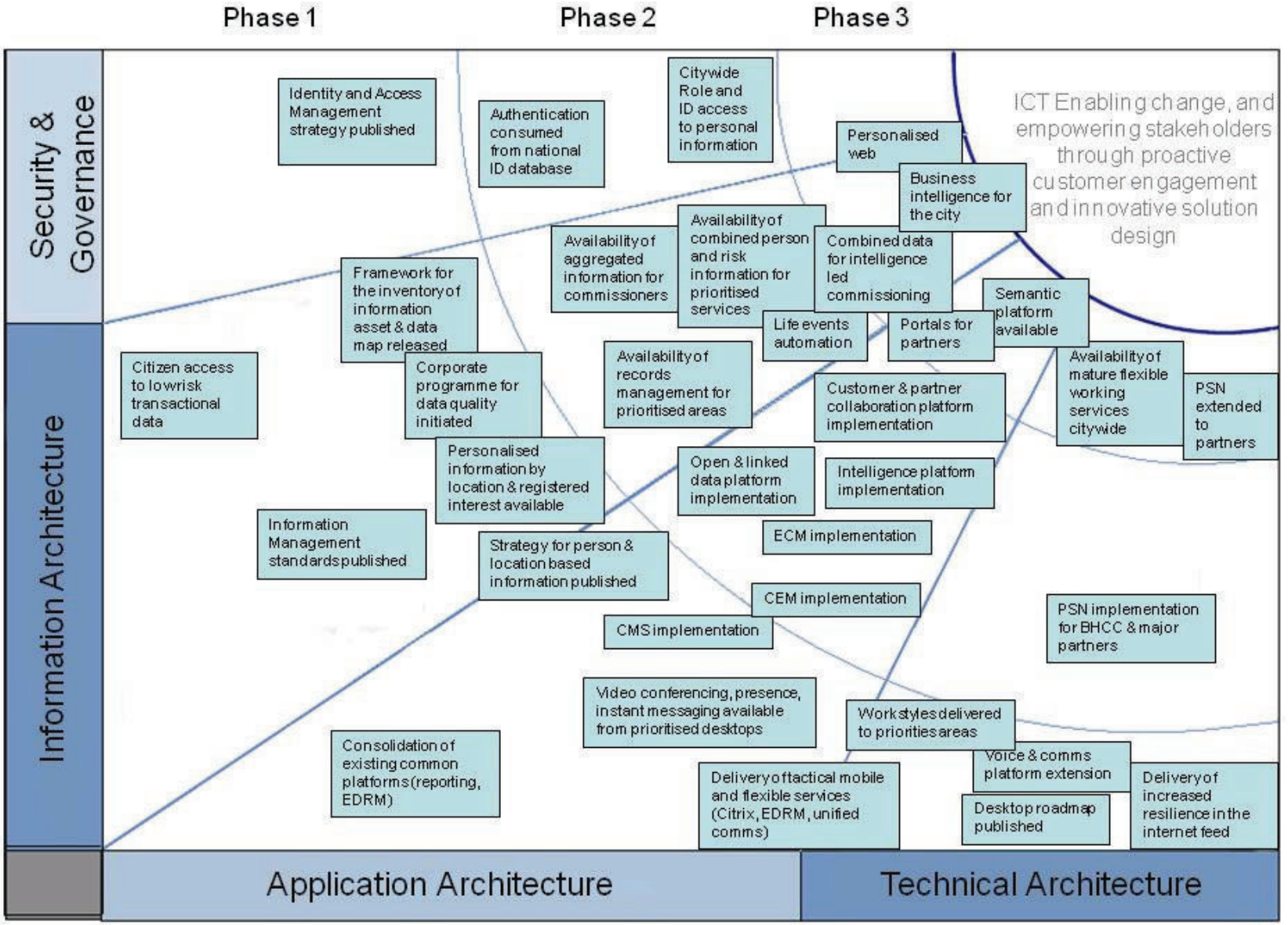
User architecture
The understanding and design of all interactions between the user and any ICT enabled service. This covers all channels from desktops to phones to written communication.

Virtual collaborative environment
Secure area for collaboration between partners and BHCC staff

Application virtualisation
Application virtualization allows computing resources to be distributed dynamically in real time. In standard computing, applications install their settings onto the host operating system, hard-coding the entire system to fit that application's needs. With application virtualization, each application brings down its own set of configurations on-demand, and executes in a way so that it sees only its own settings. This leaves the host operating system and existing settings unaltered.

VoIP
Voice over Internet Protocol (VoIP) describes the technique for transmitting analogue voice calls as data over IP networks such as the Internet. VoIP is also referred to as Internet telephony and IP telephony.

7. APPENDIX 2 - ICT STRATEGIC DELIVERY PLAN



8. APPENDIX 3 - ICT STRATEGY GOVERNANCE

8.1.1 Duration

This strategy will remain valid until 1st April 2016 or until superseded by a replacement ICT strategy. Interim updates are only permitted through the ICT Strategy change process outlined below.

8.1.2 Change to strategy

The Head of ICT will carry out an annual review of the strategy to ensure it remains consistent with organisational objectives. Any changes made under the review must be approved by the Head of ICT and the Strategic Director Resources prior to release.

Significant change to this strategy will require an updated strategy will be issued to cabinet for approval under the direction of the Lead Member Central Services.

8.1.3 Measurement

The alignment between ICT and organisational strategies and the execution of the ICT Strategy Delivery Plan will be measured in the 'Business Contribution' quadrant of ICT balanced scorecard.

8.1.4 Responsibility

All aspects of ICT strategy governance are the responsibility of Head of ICT Business Strategy.

9. APPENDIX 5 – MAJOR APPLICATIONS LIST

Applications	Supplier	Description	Area(s) of use
Case Management / Customer relationship management (CRM)			
Attila	Compiforce	Case management system for debt recovery by baliffs	City Services
CareFirst	OLM	Case management system for adult and children's care services.	Adult Assessment; Adults Provider; Children & Families
CentrePoint (Respond)	CDC Software	System to manage the feedback, comments and compliments processes from capture through to resolution.	Policy, Performance & Analysis
Clients of Concern	BHCC	Database of people who as a result of violent or abusive behaviour pose a risk to employees.	Organisation-wide (front-line services)
InCase Intelligence	INTEC	Fraud case management software	Finance; Housing & Social Inclusion
iTrent (PIER)	MidlandHR	Human Resources, payroll and workforce planning solution	HR; Organisation-wide
i-World	Sx3/Northgate	System managing the administration of Revenues (Council Tax and Business Rates) and Benefits (Housing Benefit and Council Tax Benefit).	City Services
Lagan Enterprise Case Management (ECM)	Lagan	Service delivery platform which supports case handling through configurable business processes.	City Infrastructure
Marval MSM	Marval	IT service management (ITSM) software used to record and track ICT incidents, problems and changes	ICT
Mayrise	Mayrise	A suite of inter-related environmental management modules covering, street lighting, street works, highways, waste management and grounds maintenance.	City Infrastructure
MVM	MVM/Northgate	Planning application case management tool	Planning & Public Protection
OHMS	Northgate	Housing Management, Contractor Management and Financial	Housing & Social

		Management	Inclusion
IDOX Uniform Suite (inc. TLC)	IDOX	A suite of integrated modules for the management and administration of land and property	City Infrastructure
VIDESS (iris legal)	Iris legal solutions	Electronic case and practice management for the legal sector	Legal & Democratic Services
Core desktop tools			
Citrix XenApp	Citrix Systems	Application virtualization/application delivery product that allows users to connect to their corporate applications remotely.	Organisation-wide
MS Office suite (inc. MS Outlook)	Microsoft	Inter-related desktop applications. Includes the tools provided as standard (Word, PowerPoint, Excel) and those available with an additional licence (Visio and Project). Also includes the corporate email Outlook.	Organisation-wide
The Wave	n/a	BHCC intranet	Organisation-wide
BHCC corporate web site	n/a	BHCC public facing web-site	Organisation-wide
Data analysis			
AccsMap	Buchanan Computing	Map-based road casualty analysis system	City Infrastructure
BHLIS (Brighton and Hove Local Information Service)	n/a	Access to national and local statistics and indicators relating to Brighton & Hove.	Organisation-wide
uEngage	Limehouse/Objective	A suite of tools for consultation management, analysis and reporting.	Organisation-wide
Document management (EDRM)			
Comino DMS	Civica	Captures paper records electronically and stores them for later viewing.	City Infrastructure
IDOX EDRM	IDOX	Document management system enabling document scanning, indexing and viewing.	Organisation-wide
Finance			

Authority Financials	Civica	Core accounting and finance administration tool.	Organisation-wide
Authority Purchasing	Civica	Core procurement and finance administration tool.	Organisation-wide
ICON	Civica	An integrated cash receipting, income management and epayments system	Organisation-wide
Mapping			
ArcGIS	Esri	Suite of tools for advanced spatial analysis, operational processes modelling, and geographic visualisation	Organisation-wide
Local Land & Property Gazetteer (LLPG)	n/a	A unified and consistent database of addresses for the city	Organisation-wide
Localview	Esri	A browser based GIS application used to deliver geographical services to citizens via the corporate web site.	Organisation-wide
Reporting			
Business Objects XI	SAP AG	Business Intelligence tool used for multi-data source reporting, query and analysis.	Organisation-wide
Crystal Reports	SAP AG	Business Intelligence tool used for multi-data source reporting	Organisation-wide
InfoMaker	SAP AG	Database management report writing and building software	Housing & Social Inclusion
Other			
SIMS	Capita	Schools' administration system for managing school business processes and whole school improvement	Children & Families
Interplan	CAM Management Solutions	Integrate corporate planning, monitoring, budgeting and reporting.	Policy, Performance & Analysis

10. APPENDIX 6 - SUPPORTING DOCUMENTS

External supporting documents

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