ICT Strategy

April 2015 to March 2018

Foreword

The Council, along with other public sector organisations is going through an unprecedented and rapid period of transformation. Our customers expect us to deliver more and more services through digital means and increasingly in collaboration with partner organisations.

This strategy describes the ever-increasing role that technology will play in driving change and supporting the Council to deliver its services. Our aim is to make it as easy as possible for service users to interact with the Council and its partners through innovative service delivery and better use of its technological and information assets.

The vision for the future of the County is an 'Altogether Better Durham'. We are working to achieve this vision through the County Durham Partnership's Sustainable Community Strategy. Information and Communications Technology (ICT) has a fundamental role in the achievement of the five priority themes of work:

- Altogether wealthier focusing on creating a vibrant economy and putting regeneration and economic development at the heart of all our plans;
- Altogether better for children and young people enabling children and young people to develop and achieve their aspirations, and to maximise their potential in line with Every Child Matters;
- Altogether healthier improving health and wellbeing;
- Altogether safer creating a safer and more cohesive county;
- Altogether greener ensuring an attractive, 'liveable' local environment and contributing to tackling global environmental challenges.
- An additional Altogether Better Council theme ensures that corporate improvements are achieved against the five priority themes.

Durham County Council has considerable experience in delivering technological improvement. We are building on this expertise by continuing to embrace technology to develop creative and innovative ways of improving service delivery. To achieve this we will invest in ICT in a value for money way that will continue to make a positive difference to the lives of everyone who lives in, works in or visits County Durham.

Councillor Jane Brown,
Cabinet Member Corporate Resources

Don McLure,
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Executive Summary - Why we need an ICT Strategy

Durham County Council is a complex organisation with millions of transactions across hundreds of different services. Its relationship with its customers, clients and members of the public is changing rapidly.

Information and Communication Technology (ICT) plays an ever increasing role in people's lives at work, at home and in the way that services are accessed and delivered. Our customers expect us to deliver more and more services through digital means and increasingly in collaboration with partner organisations.

This, along with the period of economic downturn has led to a rapid transformation affecting all public sector organisations.

This strategy describes how technology will be used to support the Council to deliver its Altogether Better Durham themes and make it as easy as possible for service users to interact with the Council and its partners through innovative service delivery and better use of its technological and information assets.

What are the issues that we are trying to address?

Durham County Council's ICT Services has considerable experience in delivering technological improvement and will continue to use this experience to deliver better life chances and improved services for the people of Durham against a backdrop of:

- A greater and increasing demand from our customers for faster service delivery across longer opening hours and from many locations in line with the Customer First Strategy.
- A need to support our staff and elected members to enable them to do their jobs and fulfil their roles better.
- The Government's Digital by Default and Welfare Reform agendas.
- An almost daily introduction in the market of new technologies and a growth in new ways of communication such as social media, digital television and video on demand that heighten user expectations.
- Recognition that not everyone has access to technology and that a digital divide has the potential to exacerbate existing social inequalities.
- An expectation that technologies used outside of work can be used at work and a blurring of the relationship between home and work life.
- A move to greater self-service.
- The need to demonstrate greater efficiency to meet the Council's medium term financial plan (MTFP) and provide Council services using more effective technology for less.

A digital transformation

The use of digital technologies is growing and affecting all walks of life. Within the next few years such technologies will be integral to nearly all services that consumers use.

Access to the Internet is becoming increasingly important. The Council continues to invest in improving access to both fixed line and mobile access through the Digital Durham programme.

To meet this demand the Council is making a fundamental shift in its approach to digital from a passive or reactive approach to a much more leading edge approach by.

- Meeting the needs of the already web enabled customers who demand online services 24/7 and are accustomed to working in this way
- Designing services to be digital by design, that is online first and while alternatives will be available, design services for the majority and provide systems to work with the minority
- Improving the management of digital data
- Reducing total cost (and paper use) through the use of technological solutions

The digital approach will be as much about those who are not digitally literate as those who are, it is through the digital approach that we will ensure that those without online access will be assured of access to Council Services

The increased use of digital will affect the Council in five related areas:

- Becoming a 'digital organisation' will allow the Council to deliver its services in more consistent ways, from many more locations, at higher quality and at lower unit cost. It will allow us to transform working practices and become able to respond to emerging needs and expectations of our customers, partners and neighbours. To achieve this, we will introduce initiatives that maximise channel shift to digital transactions, improve engagement via digital methods and promote agile working.

- Becoming a 'digital place' through improved broadband and mobile communications coverage will improve interaction with and between service users. The Digital Durham and Mobile Infrastructure Programmes support this activity.

- Creating a 'digital economy' where businesses can grow on the back of the digital infrastructure and a skilled workforce. To achieve this will require a combined approach from partners across the private, public and learning sectors.

- Having 'digital communities' that support the development of the digital skills of individuals to allow them to access the opportunities that digital technologies will provide.

- Continuing to use technology to create 'digital wellbeing' as part of the Council's wider support to promote the health and wellbeing of our communities and families. This will include assistance in supporting safe online participation.

County Durham vision

The vision for the future of County Durham is an [Altogether Better Durham](#).

ICT Services has a cross-cutting role in supporting and facilitating the Council in achieving all of its objectives.

The Council has five values which support our vision and underpin our corporate priorities. These values demonstrate how staff contribute to the success of the organisation, and what is required for us to deliver high-class services to our residents. The values are:

- **Customer Focus** - Putting our customers at the heart of everything we do, treating internal and external customers the same.
- **Respect** - Delivering on promises and being open and honest. Treating everyone fairly. Reducing bureaucracy and simplifying how we do things.
- **Sharing** - Working together to improve how we provide services to customers and work with our partners. Helping each other through change.
- **Learning** - Encouraging questions and listening to our customers. Being innovative, learning to be different and improving.
- **Ambition** - Wanting to be the best and working together to achieve this. Making improvements through being efficient and delivering value for money.

This ICT Strategy describes our ambition to help deliver the vision, as well as the technological direction of the Council in a way that supports the needs of all of our customers. It reflects the authority's overall strategic objectives and core values and links closely with other strategies and the Council Plan's themes.

During the three years this ICT Strategy runs (up to 31 March 2018), we will continue to experience a lot of change both in the technology itself but more importantly in its use.

The financial climate will remain very challenging and so focus on improving efficiencies and getting the most out of the Council's investment will still be of the greatest importance.

In addition the next three years will see significant changes in the way the Council uses technology and we will:
- Work with service providers and residents to digitalise as many of our services as possible making it much easier to do business with the Council online.

- Mobilise those services that need to work away from the office either due to the type of services that they deliver or to meet customer expectations.
- Open the Council's data where appropriate and applicable to improve decision making and generate the opportunity to create new service offerings.
- Improve the digital skills of all users in order that they are able to make the most of the existing and emerging technologies.

ICT Services will support the Council to achieve its Altogether Better themes by continuing to deliver in the following five outcome areas:

- A focus on Durham
- Better Technology
- Better Engagement
- Better People
- Better Processes

The strategy is aimed at anyone who is interested in the technological direction of the Council, including residents, elected members, partners, politicians, suppliers, visitors and employees.

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Progress during the previous ICT Strategy

By the end of the previous ICT Strategy the Council had been in existence in its current form for six years. Following Local Government Review (LGR) in which the former seven District Councils and the County Council came together to form a new single organisation, there was a period of significant change and consolidation. Our main focus has been to bring together the various systems, processes and cultures that the new Council inherited in 2009.

This work has now been completed and we have developed a 'Maintain, Fix, Change, Supply and Inform' model to understand our ICT business. We have made considerable progress.

Maintain
Maintenance programmes are in place across the whole of the ICT estate and an Asset Register created. We have moved all of our desktops from an estate with all variants of Windows between 98 and XP to an estate of Windows 7 and Office 2010. No desktop device is now older than four years. We have moved to a single anti-virus, a single patching tool, a standard build and a single domain. A remote management and monitoring product is now in use with the school estate, which provides for expanded remote support and maintenance of the school equipment.

Technology is in use that allows any user to have secure access to the systems they require from any location as long as they can get a broadband connection and have a corporate device. We achieved compliance with the Public Service Network and Payment Card Industry security standards. Our core network has been fully updated to a modern Multi-Protocol Label Switching (MPLS) network. Business Continuity Planning has been improved. The server environments are now highly resilient and tested across two sites, using another Local Authority's data centre.

Fix
Our main focus on fix work is through the Service Desk where live issues are reported and monitored. The volume of outstanding issues at any given time has remained steady at the equivalent of one and a half days demand. Work is ongoing to manage work queues: 26% of issues are older than a month; 88% are aged less than three months; 31% of calls relate to technology that has failed; with the balance relating to issues that require an update. Telephone response times remain good with the number of calls answered within a minute at 85%. The number of issues resolved within the service level agreement is at 94%

Change
A prioritisation process is in place to ensure that ICT Services' resource is optimised and applied only to those change projects which are of the greatest importance to the Council and its customers. The process has been refined further to give greater consideration to the Council's key, or Core Systems

covering finance, human resources, assets and customer. The number of applications in use at the Council has been rationalised from approximately 1300 to less than 700. Over 100 projects were delivered in the last year alone including the decommissioning of five major sites, improving wireless access, a new telephony system giving voice and video, the introduction of mail fulfilment technologies and the replacement of all printers with Multi-Functional Devices and on demand printing.

Supply

A significant portion of ICT Services' business is in supporting around 800 external organisations across the North East region. This includes other public sector organisations, schools, and Community and Voluntary bodies, supplying them with a wide range of goods and services. Managed services are supplied to several secondary schools, and maintenance engineer services are provided to the vast majority of the primary school estate. Network services are provided to many locations including for County Durham and Darlington Fire and Rescue Service and Durham Constabulary. We have developed a service catalogue to make it easier for our customers to understand the breadth of products and services that are available. New services have, and will continue to be developed to ensure that we are able to offer the right services to our customers in the ever changing ICT market.

Inform

A Business Development team is now employed to foster relationships between ICT Services and its customers and to identify any opportunity to grow our service offering. A number of mechanisms have been introduced, based around an engagement plan, which includes: newsletters; online learning; on-site workshops with the services; planned business development visits and six-monthly conferences to external and internal customers. These mechanisms complement the day-to-day engagement between our staff and customers.

Financial position

The above changes and improvements have been made against a background of very tight financial constraint. Since 2011/12 ICT Services has made a saving of £2.86 million. A further £1.57 million is to be made during the upcoming strategy period ending 31 March 2018. The total savings over this period is the equivalent of 42.8% of the services' net budget. Savings have been realised by a mixture of savings in supplies and services as well as a reduction in the number of employees. ICT also plays a major role in helping the delivery services achieve their own savings objectives.

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Major change programmes and expected timeline

We are planning some major changes during the life of this strategy aimed at making better use of the technological, financial and people resources that are available to the Council.

Descriptions are given in the narrative and tables within each outcome further on in the document, and details are available in the Council Plan, supporting Service Plans and the associated Guide to Services.

There are several major areas of focus which are worth highlighting however, as they will help shape the Council over the coming years. They are included in the narrative within this document. At a high level they are:

- Accommodation programme including:
  - A drive towards greater use of digital technologies
  - Skills improvement
- Customer relationship management
- Greater use of data assets
- Improved connectivity across County Durham
- Regional collaboration

Accommodation programme (2015 – 2019)

The Council is seeking to increase organisational performance through the rationalisation of its property estate and the development of their future workplace strategy. This will include a comprehensive review of the existing workplace estate, the transformation of the way staff work, improvements in the systems and policies that support them and the re-imagining of the places and spaces in which they work.

This will help to improve staff performance against fewer costs, support cultural change, increase flexibility and creativity, enhance job satisfaction, staff retention and recruitment, and ultimately to deliver better services to the community.

The Council is seeking to determine the workplace and property needs of officers and members who currently occupy around forty separate office buildings (including the existing County Hall building at Aykley Heads) and to develop a robust business case for the Council's future property strategy. A key driver for the Council is the transition from the outdated accommodation within County Hall into new accommodation that can support news ways of working and help to implement the Council's corporate strategy.

ICT will play an important role in realising the required outcomes. More modern and agile ways of working require the support of readily available and easy to use technologies. The development of these is included in the relevant service plans. Projects that use digital technologies to drive out low value added processes will get significant attention and are also included.

In addition a range of interventions will be used to work with Council employees to help raise skill levels in order to maximise the use of the new technologies and improve the overall efficiency of the Council.

Customer relationship management (2015 – 2018)

The Customer First Strategy recognises the changing role that technology will play in meeting customer expectations. The Council is reviewing its customer relationship management (CRM) software which will play a significant role in raising service levels and improving efficiency.

The CRM will provide a single route in and out for our customers. Enterprise middleware will be employed to manage the relationships between our customers, our partners and the service delivery and asset management applications.

A consistent approach to customer authentication, payments and mobile application delivery will be applied across the Council with each service using the same underlying platform.

The enterprise middleware will improve the way that applications are connected and will also enable improved data analysis and data management.
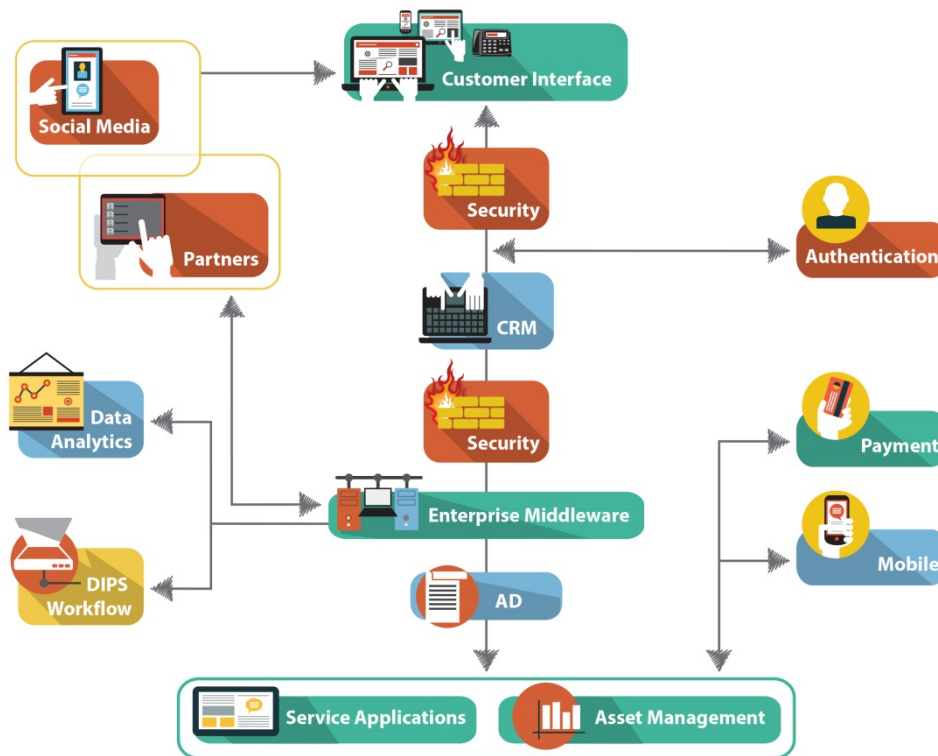
The advantages of this approach include:

- A single systems approach to our customers as opposed to a separate route for each service application
- Improved data flows
- Improved data quality
- Improved data analysis and data management leading to improved decision making.
- Reduced interdependency between applications
- A reduction in the number of applications
- Increased use of core applications
- Availability of necessary tools not available currently.
- Improved ability to turn technology on and off (plug and play)
- The delivery of key tools not currently available
- Assisting the Council in more rapid decision making over its technology.

Greater use of data assets (2015 – 2018)

The Council provides hundreds of services to thousands of residents, visitors and businesses across the county and wider region. All of these services rely upon Information and Communications Technology to support their delivery. The applications that underpin the service delivery produce huge quantities of data which is predominantly held for the needs of that specific service.

Within these data sets we believe that there are opportunities for service improvement in four areas:

- Retrospective analysis and key performance indicator (KPI) reporting – Traditionally data are used to analyse performance by measuring outputs against pre-conceived targets and measures. Better data analysis would provide more accurate reporting.
- Reverse understanding – Current performance reporting relies upon an agreed measurement methodology yet this may ignore other more important measures that exist within the recorded data.
- Internal service development – The data will hold information that could lead to new or improved service delivery from the Council.
- External service development - The data will hold information that could lead to the creation of new or improved services that can be developed commercially.
- The data could be used by partner organisations to develop and improve their services for the benefit of the residents and businesses of Durham and the wider region.

This programme will work to realise the opportunities within our data. A demonstration of what is possible, using anonymised Council data and/or additional data from external sources, will be developed in the first instance.

Improved connectivity across County Durham (Current – 2016)

Digital Durham is a programme of activities to improve the availability of next generation broadband access and services to all residents and businesses in County Durham.

Working in partnership with nine other local authorities across the region, the Council has entered into a contract to deliver fibre based broadband to areas which have not been previously commercially viable.

Phase 1 of the programme is well underway with over a third of the structures built and properties passed. Additional phases are under consideration.

Activities designed to improve awareness and stimulate demand have been introduced and take up is growing ahead of expectations.

Work is also underway with providers and as part of the Government's Mobile Infrastructure Programme to improve access to mobile phone signals especially in more rural areas of the County.

Regional collaboration (Current – 2018)

The concept of developing 'shared service' models for local authority service delivery is growing, with the aim of making cashable efficiency savings whilst at the same time providing at least the same level of service for those organisations partaking in the shared services arrangements.

Efficiency saving opportunities may be made by reducing overheads such as by rationalising estate buildings, removing duplication of activity and systems, management and support cost savings from economies of scale.

Shared services can build operational capacity and capability across those organisations partaking in the shared services arrangements which can thereby extend sustainability of service provision in times of austerity.

Since 2014 the ICT Services of Durham and Northumberland County Councils have been working on a number of joint projects as part of a wider desire to work more collaboratively across the region. The Council also provides services to other public bodies.

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Supporting the Council to achieve its Altogether Better themes

This strategy is not just about the Council's organisation; indeed the real beneficiaries are the residents and businesses of the county.

This strategic aim is to ensure that everything that we do in ICT Services is to improve the wellbeing of the people who live in, work in, learn in or visit the County, either directly or by underpinning the delivery of services to them. To achieve this we must:

Provide reliable and robust systems that underpin the key services that our customers and employees rely upon, including systems which:

- Provide communication systems such as telephony, web and email.
- Provide revenue collection and benefits payment support.
- Provide information and personalisation services to vulnerable adults.
- Provide information and safeguarding services to children and young people.
- Systems that support Council services such as Planning and Refuse collection.

Provide reliable and robust systems that underpin the Council's support and compliance activities, such as:

- Financial management
- Human Resource management
- Place management
- Environmental Health monitoring
- Support efficient effective and working with children, young people and adults who have social care needs.
- Provide information systems to support safeguarding services.
- Enable children, young people and adults to achieve their maximum learning and development potential.
- Enable effective and sharing information partner organisations.
- Improving contact with our customers

Provide reliable and robust processes and policies that underpin the key systems and services that our customers rely upon through:

- Business Continuity Planning.
- Performance management and key performance indicators (KPIs).
- Bringing all support, maintenance, and set up activities into a single ICT Services.
- Bringing the management and budget for all hardware, operating systems and software licences under the control of ICT Services.
- Addressing business improvement in all parts of the service through our Optimisation activities.

Help residents to get more out of technology:

- Make connections available to every home, business and community across the County to superfast broadband through the [Digital Durham](#) programme.
- Make technology available and accessible to the public in Council venues, such as libraries.
- Improve mobile access by implementing the Mobile Infrastructure programme.
- Ongoing better engagement with residents.
- Provide low-cost technology using the Council's recycled PCs through the Digital Skills for Durham (DS4D) programme.
- Work with our partners and the learning, community and voluntary sectors to develop ICT skills.
- Assist our residents to use technology in line with the Government's [Digital by Default](#) and [Welfare Reform](#) agendas.
- Work with internal services to make more services available electronically and increase the appetite for change among the users.
- Improve access to the Council's data and use it to improve the understanding of users' needs and to target services better.

Support the regeneration of County Durham by:

- Implementing the Digital Durham programme.
- Implementing the Mobile Infrastructure programme.
- Developing systems that provide supply chain support to businesses in the County.
- Work closely with colleagues to develop regeneration initiatives.
- Continue to provide support to the Council's business centres, such as NETPark.
- Helping small businesses with start-up technology support.
- Working with the learning community, including schools, further education colleges and the universities to improve educational standards and attainment.
- Playing a greater regional ICT role as members of [Dynamo](#), North East ICT Managers (NEICT) and Society of ICT Managers (SOCITM).
- Supporting the aims and objectives of the North East Combined Authority.
- Developing an apprentice hub

Invest in the right technologies to:

- Make sure that the Council continues to develop as an organisation.
- Bring technological foresight and expertise to the Council and its partners.
- Make greater use of the technologies we have by consolidation of applications into, where appropriate, our core applications.
- Support current and prior version of operating and desktop systems only, with strong version control.
- Support the Council's accommodation programme.

Develop capable people by:

- Continuing the improvements in management within the Senior Leadership and Management teams.
- Investing in customer services training through the [Institute of Customer Services](#) and the Customer First Strategy.
- Investing in the necessary training to support the Council's required skill sets and technologies.
- Investing in the future through ICT apprentice schemes.
- Developing an apprentice hub.
- Working with users, including officers and members to develop better ICT skills.
- Consolidate and make better use of the Council's data.

Continue to develop a modern and forward thinking ICT Service by:

- Having a proactive approach to information management, security, Freedom of Information and Data Protection.
- Improving communications using a variety of media including social networking.
- Developing the understanding of our ICT business using the Fix, Maintain, Change, Supply and Inform model.
- Maintaining a focus on cost reduction and value for money.

What difference will this make?

The Council will continue to become more proficient in using appropriate ICT and will embrace its use to develop new and more efficient and effective services. Our technology will continue to be used as a mechanism to provide equal opportunities and improve the wellbeing of the residents of the County.

We will work to improve access to and the use of technology across the county, particularly in those digitally disenfranchised groups.

ICT will be used as both a physical and social medium to drive service improvement. It will become a part of everyday life for more people in the County, developing a workforce that understands and is comfortable with technology.

Durham County Council believes that digital technology will play a lead role in the future economy of the county and region and aims to become a leader in delivering information and services using ICT.

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Our architecture

It is not possible to know for sure what the future will hold yet we can be certain that there will be continuing pressure to reduce costs, increase efficiency and that these pressures will inevitably lead to a change in the way technology is used by the Council.

The Council's investment in technology is expected to have a five year life span. This can mean that it is difficult to invest in technology which is proportionate today but which will continue to be capable of meeting the Councils requirement going forward. Technology choices which seem reasonable today may become a disadvantage in future, which can result in the Council failing to fully realise the value of its investment.

Furthermore, to gain the best advantage from large-scale systems it is often necessary to compel their use, which can become a constraint on working practices, and ultimately counterproductive.

Such uncertainty brought about by the rapid changes in the technology market has caused us to consider more frequent reviews of our overall approach. What used to be a three year cycle is now annual and this may not be responsive enough in future. Work has already started to review and develop further the work described below.

Fundamentally, the role of ICT Services is to facilitate the Council in delivering its strategic aims. ICT Services works with service users to translate their business requirement into a suitable technology choice, then procure, implement and support that technology. The technology should not mandate working practices, or define the business processes, rather is should enable the Council to realise the benefits of its business decisions.

The ICT Strategy will avoid attempting to define large-scale architectures, which risk becoming restrictive or obsolete before their natural end of life. Rather the strategy will be to build a flexible, modular architecture which will enable the technology to adapt to changes in the Council's requirement.

To achieve this, the focus will be on developing a set of standardised building blocks. Each building block will be a module that represents one of the component pieces of technology necessary to create a fully working system. Each new system will be provisioned as a collection of modules, and by adding, modifying, or removing modules, the system can adapt and change. This will allow ICT Services to deliver tailored systems which meet the specific requirements of the Council, while still having the standardisation and consistency which allows the service to be delivered in a cost-effective and efficient manner.

This flexibility should allow technology resources to be apportioned and allocated on demand, enabling an infrastructure which can change in shape and size as needed. This will give the Council the opportunity to become more agile, more cost-effective, and to reduce the time taken to implement change.

Virtualisation is the key to this flexibility. Virtualisation separates workloads from the hardware it runs on. This allows for resources to be shared, and allocated at a granular level. At present, much of the back-end technology within the datacentre that supports the Council is virtualised, for example servers, storage and the core network. However, a more pervasive adoption of virtualisation is needed to fully realise the value of this approach.

Extending the concepts of virtualisation beyond the datacentre also extends the benefits of flexibility and adaptability. At present, most employees within the Council work from a fixed location, in part because the technology currently available effectively ties them to a specific device. Currently the solution to this is to provide staff with a portable device.

A better solution is to use a virtualisation approach to break the link between the user and the device. The device becomes generic rather than bespoke, and customisation is associated with the user rather than the hardware. This then allows staff to work from any device, or multiple devices, or from home, and still receive a consistent service. To this end, desktop, application, and telephony virtualisation will be deployed as an integral part of the infrastructure, enabling the Council to work flexibly. This infrastructure will also reduce costs and increase efficiency within ICT Services by reducing the burden for supporting individual bespoke devices.

This approach also promotes partnership working, as the same underlying technologies can be used to provide a controlled and tailored interface to internal systems, helping third-parties to access and share data with the Council.

The modular, virtualised approach also opens up opportunities to share infrastructure and provide ICT services to other organisations. Multi-tenant capabilities are inherent within the infrastructure, and it therefore becomes considerably simpler to share costs with other organisations and potentially derive income. At present, the Councils core network is shared with other Local Authorities, Police, Fire, and NHS organisations.

The Council must continue to be mindful of its obligations in regards to information security. The Council must comply with legislation such as the Data Protection Act, and must also comply with externally imposed security standards such as the Public Services Network Code of Connection (CoCo) and Payment Card Industry security standards (PCI).

Appropriate security is built in to the architecture. This will be multi-layered, and will be designed to provide defence in depth. Technologies which protect the Council from the effects of cyber-attack and help to prevent data loss are deployed and these must be coupled with policy and user education to form a complete picture. This approach also supports the Council's approach to Business Continuity.

While the technology components necessary already exist, and in many cases are already in use, building this architecture is not without challenges. Issues with software licensing models can preclude the sort of fluid concurrent model that would best suit a virtualised infrastructure. The infrastructure is in itself flexible in this regard. It will continue to be possible to operate separate stand-alone systems and dedicated hardware. This gives the Council the maximum possible scope for technology choice.

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Outcome 1 – Focus on Durham

Improving the economic position and financial wellbeing of the County and the region is the first of the Council's Altogether objectives. ICT Services will continue to be key in supporting service delivery, by improving connectivity, by supporting learning opportunities to improve digital skills and by helping to create an environment in which new businesses can start up and thrive.

We are developing and implementing processes and procedures that help maintain growth, employment and are in line with the Council's values. These include the development of an apprentice hub, support to help young people into the ICT industry and involvement in regional bodies that are focused on developing the North East as a centre of excellence for technology.

The Digital Durham programme is working in partnership with nine other local authorities to deliver access to superfast broadband (at speeds of over 24Mbps) to every business, home and community in the County but this is not just about infrastructure. We are working, along with our partners, to improve the gross value added (GVA) of the region, working with businesses to understand the opportunities and threats that improved connectivity will bring and working with people to develop the skills needed to operate in a technical age.

These skills are becoming increasingly important for our residents against the background of the Government's Digital by Default and Welfare Reform agendas where more and more services will only be available through the Internet.

These efforts are supported by the Digital Skills for Durham programme (DS4D) which refurbishes Council desktop equipment to provide low cost technology for community use.

We are also working with the mobile telephony providers and the Government's Mobile Infrastructure Project (MIP) to improve mobile coverage across the County including 3G and 4G coverage.

Energy reduction and asset maximisation is a focus of ICT Services in order to improve the impact upon the environment. New technologies are in use which: allow more people to work in their localities, leading to improved sustainability, less travel and reduced congestion; reduce energy consumption, such as evaporative cooling for the server environment, cold-air containment and energy management systems. Energy usage is considered when purchasing new equipment when refresh opportunities allow.

Where appropriate we will make use of server virtualisation, a process where many computer environments can run on a single physical machine. This will maximise the use of our technical estate, reduce overall power consumption and improve the life span of equipment.

Planned projects:

Project	Expected outcome	By when
Collaboration with neighbouring LAs	Work with other local authorities to deliver ICT services in collaboration through a joint organisation.	Mar-17
Big data	Use the Council's data to develop new opportunities for service provision, improve reporting and decision making.	Mar-16
Mobile phone coverage	Work with commercial providers to improve mobile phone coverage in the county in conjunction with the Government's Mobile Infrastructure Project.	Sep-16
Digital Durham	Deliver the programme to provide superfast broadband to all businesses, homes and communities in the County.	Sep-16

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Outcome 2 – Better Technology

The Council needs modern applications to support service delivery to our customers and employees. This must be supported by robust and well-maintained technology platforms across a variety of delivery methods and user devices including smart phones, tablets, personal computers and televisions.

A refresh programme is in place to ensure that all technologies are maintained within an appropriate life-cycle.

We are consolidating applications through our Core Business System methodology into an appropriate number of prime systems for each of the major areas of our business, with the ability to interface and share data effectively. These are finance, people, customer, planning and social care. A process of Prioritisation is in place to align development requirements with the Council's key objectives.

The remainder of applications may or may not be hosted by Durham County Council but accessed through the Internet cloud, using software as a service (SaaS).

Our process for addressing new software requirements is to: question whether an application is needed; consider existing applications; procure a package solution. Only after considering these options will we proceed with any in-house development. When packages are procured we will endeavour to remain as close to the original product as is practical, using effective business cases for any further development work.

Applications are underpinned with consistent and supportable technologies, which are maintained across our server environments. ICT Services' architecture enables some of the complexity to be removed from the interfaces between these numerous and varied systems.

We will continue to:

- Rationalise the number of applications and backend databases.
- Rationalise the number of development environments and programming languages
- Develop in-house applications using the Microsoft Development Framework (.NET & SharePoint).
- Develop and support applications on Oracle and SQL Server.

The Council is focused on business continuity planning and maintains two separate data centres to mitigate against a catastrophic disaster at any one of our sites. This is being done in co-operation with Northumberland County Council and Sunderland City Council. In addition to this, all information stored electronically will continue to be backed up regularly and removed to a third site and stored in a fire and flood proof environment.

Planned projects:

Project	Expected outcome	By when
Centralised Document scanning and workflow	Unitise the varying document management systems, currently 8, and apply these to all incoming documentation.	Mar-16
Data and servers Archiving system	Introduce an archiving system to allow access to all legacy data and servers where the business case allows.	Mar-16
PSN	Retain Public Services Network security standards compliance which is a mandatory requirement for the Council to operate. Including Mobile Device Management; Network Access Control; Review of file shares.	Annual
Public Internet access	Improve access to the Internet for the public in Council buildings in a secure and robust way	Mar-16
Virtual Desktop Infrastructure pilot	Consider the replacement of existing desktop technology, to deliver more efficient and reliable desktop technologies, reducing deployment and support costs.	Mar-15
BCP	Continued development of ICT service availability for critical systems. This includes: Improvements to electrical systems at Tanfield DC; Installation of additional equipment and communications link at our space in Sunderland's Data Centre at Doxford Park; Configuration of systems to provide automatic failover where possible; Data duplication and transaction logging; Testing of system resilience	Dec-15
Schools Services Security Review	To provide better security of service provision to schools, a higher level of security analysis and risk mitigation work will be undertaken. This will include penetration testing, development of software patching systems, monitoring and reporting.	Dec-15
Power Upgrade at Tanfield DC	The Tanfield Data Centre mains power feed will be upgraded and revised to allow regular testing and maintenance to be carried out without adversely affecting provision of ICT services.	Oct-15
Information	In line with various audit	Mar-16

Security Management System	recommendations and to meet a good level of assurance with DCC Risk Management standards, a system will be developed to maintain records relating to information security and associated policies.	
Desktop replacement	Desktop replacement; Upgrade to the latest version of Windows 8	Mar-16
Architecture	Implement agreed corporate ICT architecture including middleware in line with corporate CRM project.	Mar-18
Libraries	Replacement of the library infrastructure and replacement of the public PC's with Windows 7 devices	Jan-16

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Outcome 3 – Better Engagement

Continuing communication and engagement with customers, partners and colleagues is the only way to keep ICT in sight. Communications and Engagement plans are in place for ICT Services for both internal and external audiences.

A mixture of methods is used to communicate including training, engagement days, trade shows, newsletters, key performance and trend analysis data, presentations and social media. Engagement is done through the ICT Core Group, which includes key people from all service groupings, targeted events with delivery services and business development meetings with customers. ICT managers and project leaders will continue to have regular discussions on performance with customers to seek their views and understand what we do well and where we could improve.

Targeted communications and marketing are in place to support the markets in which we operate or see as new opportunities, using materials such as catalogues, marketing shows and service level agreements.

Our business development approach has produced a customer segmentation plan and a targeted engagement plan across all markets which has led to a better understanding of our customers' business aims and how ICT Services can support these, as well as identifying opportunities for growth within existing and emerging markets.

To create a more flexible and responsive organisation we are continuing the development of a service component delivery model to make it easier for customers to understand what we are able to offer.

We are improving the Prioritisation process to allow greater responsiveness to changes in demand from customers and are looking to provide ready-made products rather than bespoke products wherever practical. This process allows us to focus on what is important for the Council as a whole and to get the right balance between service demand and technological innovation.

ICT Services is governed by the Strategic ICT Group which is chaired by the Corporate Director Resources and meets monthly and has representation from each of the Service Groupings at Strategic Officer level.

Planned projects:

Projects	Expected outcome	By when
Core systems and Prioritisation process	Focus on the Council's core system development and consolidation in line with the Prioritisation process	Annual
Office Accommodation	Support the Council's Office accommodation programme through the	Mar-18

Programme	development of required technologies and improvement of underlying ICT skills across the Council.	
Central schools element	The central element of the BSF solution is in need of updating. A review and analysis of the central solution and an assessment of the customer requirements.	Aug-15
Events calendar	Develop an events calendar to improved ICT skills and identify opportunities for greater use of technology throughout the organisation and its customers.	Aug-15
Big Data	Use the Council's data to develop new opportunities for service provision, improve reporting and decision making.	Mar-16

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Outcome 4 – Better People

The Council's technology is delivered by people for the benefit of people and we are striving to ensure that everyone has the capability to make use of the technology and the capacity to deliver and absorb it.

Annual skills assessments are carried out as part of the personal development plan process (PDP) and a programme of essential training is developed to invest in the required skill sets and technologies which have been identified.

Other skills gaps identified through the Optimisation methodology and Prioritisation process are added to the programme covering all users, including officers and members, as well as the residents of Durham using the Digital Skills for Durham programme.

Investment will continue to be made in management development for the Senior Leadership Team and Management Team. ICT Services has embarked upon customer training to support the Council's Customer First Strategy, working with the Institute of Customer Services. A mentoring programme has been developed which will be cascaded throughout the service.

Succession planning is in place and is regularly a key discussion item at Senior Management Team level and an arrangement has been made with various providers to implement an apprenticeship scheme specifically for ICT Services. This scheme will be enhanced further to provide an apprentice hub for the public and community and voluntary sectors.

Planned projects:

Projects	Expected outcome	By when
Collaboration with neighbouring LAs	Work with other local authorities to deliver ICT services in collaboration through a joint organisation.	Mar-17
Facilitate greater agile working	Improve the Council's ability to work from multiple locations including home by providing the correct equipment and facilities, as part of the Accommodation Programme	Mar-17
Unitise remaining parts of ICT outside of ICT Services.	Work with Service groupings to identify remaining ICT work currently being performed outside of ICT services and unitise into ICT Services.	Mar-16
Training	Deliver a training programme that covers both 'hard' technical and 'soft' people	Annual

	skills, including a mentoring programme.	
Apprentice hub	Create an apprentice hub for the public and community and voluntary sectors to increase the number of apprentices.	Mar-16
Big Data	Use the Council's data to develop new opportunities for service provision, improve reporting and decision making.	Mar-16

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Outcome 5 – Better Processes

ICT Services has an operational and quality model based upon its five key functions: Maintain; Fix; Change; Supply and Inform. All of our activities to support our customers, employees and members fall into one of these areas:

- Regular maintenance of equipment or its replacement through the refresh cycle;
- Fixing equipment or software that is not working;
- Developing new applications or introducing change through existing or new technology;
- Supplying goods and services;
- Keeping our customers informed of issues and new opportunities.

We have developed an Optimisation methodology designed to improve service delivery through an improved understanding of customer demand and work flow. Constant assessment of the day-to-day workload is carried out and is focussed both on the hard side of the business, such as up-time, call closure rates and implementation times and also the softer sides of the business, such as the contentment of the customer and ease of use.

Work on analysing ICT Services is fundamental to indicate to our customers and internal management team how well, or not, ICT Services is performing. Analysis of our activities (support versus development), best value (use of money against required volumes and quality), skills (staff knowledge and experience) and current technologies (hardware, software and operating systems) is vital to baseline our service. An updated series of performance indicators is published.

Our focus is to continue building on what we have achieved by creating an organisation that is ready to adapt to rapid change in circumstances, requirements and market conditions. To maintain and sustain this we are working to make our processes and procedures simple to understand, communicate and use.

Throughout our work there is a clear focus on cost reduction and value for money and a commitment to deliver our own responsibilities, as well as those of our customers, within the Council's medium term financial plan (MTFP).

The Council complies with security and quality standards including the Public Services Network Code of Connection (CoCo), Payment Card Industry security standards (PCI), the International Standards Organisation quality standard (ISO 9001) and the International Standards Organisation information security management system standard (ISO 27001).

It is committed to upholding the principles of the Data Protection Act which protects data personal to individuals from being misused, as well as the Freedom of Information Act, which ensures openness and transparency in government.

ICT Services is using its existing business and technology skill sets to provide services through a trading organisation that meet the needs of the public and voluntary sectors in the region but which is also capable of addressing private sector areas where market failure can be demonstrated. We are working with neighbouring Local Authorities to cross sell and buy services where this is cost effective and adds value.

Planned projects:

Projects	Expected outcome	By when
Maintain required security standards (ISO 9001, CoCo, PCI, CoICo etc) Security standards 27001	Security across Council technology that is compliant with government standards and maintains a safe environment that allows employees and members to work effectively.	Annual
MTFP savings	Deliver the required Medium Term Financial Plan savings.	Mar-18
Develop further the single ITBM service desk system	Following the successful merger of the corporate and schools' service desk systems into one instance, we will develop the single system to add extra functions such as incident, software, asset management and the ability to self-serve.	Sep-15
Support services next phases	Develop in conjunction with all Service Groupings an approach to Business Support Services across the whole Council	Mar-16
Digital Approach	Develop a programme of opportunities to improve service delivery across the Council using digital technologies in conjunction with the delivery services. This will include the improvement in work flow of authorisation and administrative processes.	Mar-16

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