



**REPORT OF THE CHAIRMAN OF THE FINANCE AND PROPERTY
COMMITTEE**

ICT STRATEGY 2014-17

Purpose of the Report

1. The purpose of the report is to seek approval of the ICT Strategy 2014-17 (set out in the appendix).

Information and Advice

2. The ICT Strategy 2014-17 will replace the current plan for 2011-14. It moves the focus forwards from developing the ICT platform and introducing a range of modern enabling technologies (e.g. Microsoft tools and the SAP business management system), to supporting business transformation for ICT users and customers. It incorporates the key business drivers emanating from the County Council Strategic Plan 2014-18, the proposed new operating model, the ICT Review undertaken by Atos Consulting and Technology Services in 2013 and the developing technology market place. The strategy then pulls together the five ICT strategic themes that will support business transformation across the County Council:
 - **Workforce mobilisation:** using technology to transform the productivity, efficiency and mobility of the workforce
 - **Customer channel shift:** using technology to support the delivery of effective web based self-serve functions for public service users
 - **Business performance reporting:** using technology to improve how business data is extracted from multiple systems, interrogated and reported through to users
 - **Partnership working:** using technology to support the greater integration of public facing services, including the effective sharing of data, systems and ICT solutions
 - **Reliability and compliance:** maintaining a current and fit for purpose ICT estate that supports improved business continuity and is compliant with Public Services Network (PSN) standards

3. In order to support a business transformation approach and the driving through of financial savings, it is proposed that the five ICT strategic themes are best supported through the introduction of a range of technologies, described in the strategy as a “transformational ICT platform”. This “transformational ICT platform” is essentially made up of three types of technology:
 - **Middleware technology:** this layer of technology particularly supports workforce mobilisation and enables back-office systems to be intelligently presented onto mobile and touch screen devices e.g. smart phones, tablet computers. This technology will largely comprise of Total Mobile software and Microsoft products that the County Council is using in the pilot projects with social care teams. The use of middleware technology and mobile devices will support an effective mobile workforce.
 - **Workflow technology:** this layer of technology particularly supports channel shift to web based service provision and also supports the automation of processes and data flows between the web and back-office systems. This approach to automation cuts down the need for manual intervention in the provision of services and supports the delivery of web based public services. The technology largely comprises of Microsoft products (Dynamics) and builds on the investments already made, and will enable the County Council to more effectively provide services over the web that are tailored to the needs of the public.
 - **Reporting technology:** this layer of technology provides an “enterprise” approach to reporting by enabling users to extract data from multiple systems, interrogate the data and produce bespoke reports. The technology also comprises Microsoft tools, builds on the existing investment and supports a cross County Council approach to reporting. This would replace the current bespoke reporting tools and arrangements that currently exist for each ICT system.
4. The delivery of the ICT Strategy 2014-17 will be through prioritised programmes of work, aligned to the proposed County Council operating model, and following normal programme and project management processes e.g. Prince 2 and Agile. This would include the development and delivery of costed and approved business cases, which utilise the technology investments to support the achievement of business transformation, productivity and efficiency gains and cashable financial savings. There will also be an ongoing ICT programme to refresh the ICT infrastructure so that it remains reliable and fit for purpose.

Other Options Considered

5. The ICT Review, led by Atos Consulting and Technology Services, identified the key business drivers and resulting technology direction following a comprehensive consultation with key stakeholders across the County Council. The business drivers have been refined further to align with the County Council Strategic Plan 2014-18 and the proposed new operating model. The technology direction of travel is consistent with Gartner analysis (independent international

ICT market place research analysts) and builds on the investments already made in Microsoft and SAP products through the 2011-14 plan.

Reason for Recommendation

6. The ICT Strategy 2014-17 has been devised on the basis of supporting business transformation for service users and the delivery of cashable financial savings. There has been a rigorous and independent business needs analysis through consultation with key stakeholders across the County Council. The technology investment will support the delivery of the 5 ICT strategic themes which are consistent with County Council's proposed new operating model.

Statutory and Policy Implications

7. This report has been compiled after consideration of implications in respect of finance, equal opportunities, human resources, crime and disorder, human rights, the safeguarding of children, sustainability and the environment and those using the service and where such implications are material they are described below. Appropriate consultation has been undertaken and advice sought on these issues as required.

Implications for Service Users

8. The principal service users affected are County Council staff and members of the public. The proposals will provide a range of technologies to support access to and delivery of County Council services, through the effective use of ICT.

Financial Implications

9. Section 7 of the ICT Strategy 2014-17 identifies an estimated investment requirement of £6.5 million over the 3 year period to fund the "transformational ICT platform". Within the ICT review, Atos Consulting and Technology Services identified a potential ICT investment requirement of £15 million to support business transformation. The appendix to the strategy document identifies the estimated phasing of costs, which include the ICT infrastructure, software licences, mobile devices and design and build costs.
10. Funding for the ICT Strategy 2014-17 will be incorporated within the County Council's capital programme and drawn down on the basis of costed business cases. Although many of the cashable savings associated with this ICT investment are not identifiable at this stage, a number of business cases to deliver existing budget reductions rely on the workforce mobilisation technology proposals. In respect of the mobilisation pilot project, savings associated with process, staffing, productivity, transport and premises have been identified. A key aspect to this transformational ICT approach is the cultural change to service provision that managers will have to drive through, and which is reflected within the proposed new operating model.

RECOMMENDATION

That the ICT Strategy 2014-17 be approved.

Councillor David Kirkham
Chairman of the Finance and Property Committee

For any enquiries about this report please contact:

Ivor Nicholson
Service Director (ICT)
0115 9774006
ivor.nicholson@nottsc.gov.uk

Constitutional Comments (SLB 15/04/14):

The recommendation in the report falls within the remit of the Policy Committee.

Financial Comments: (SEM 15/04/14):

The financial implications of the report are set out in paragraphs 9 and 10 above.

Background Papers

ICT Review 2013, Atos Consulting and Technology Services

Electoral Division(s) and Member(s) Affected

All



ICT Strategy

2014 – 2017

ICT Strategy 2014 – 2017

1. Introduction

This ICT strategy will support the business transformation priorities of the County Council as services are remodelled and sized to meet local needs within an increasingly restrained financial environment. The emphasis is therefore focussed on identifying, designing, building and deploying ICT solutions that underpin a more mobile workforce, customer channel shift to effective web services, increased partnering, improved performance reporting and are reliable and compliant. The ICT Services operating model and staffing structure is also undergoing transformation in 2014 to reflect this new direction of travel.

2. ICT Achievements 2011-14

Nottinghamshire County Council's ICT Strategy 2011-14 focussed on the two priority areas of improving the underlying ICT platform and introducing a range of modern enabling technologies. ICT investment had previously been managed in departmental based teams and so the strategy was a new opportunity for a One Council approach to technology design and deployment.

2.1. ICT Platform Changes

The ICT platform was not appropriately designed or developed to support a workforce using a modern set of technologies and needed significant enhancement to make it fit for purpose. Substantial progress has been made over the last three years as summarised below:

- A secure broadband network was installed across the county connecting more than 600 school and corporate sites.
- The County Hall data centre was fully refurbished and modernised to resolve acute property, power and air conditioning issues, and to accommodate current server technology enabling applications and databases to run from a shared platform.
- The ICT platform was re-designed (including the use of a second data centre site) to move from an outdated disaster recovery centric approach to supporting business continuity in order to provide improved service up-time and resilience.
- For the first time, a modern anti-virus solution was introduced to protect the whole of the ICT estate from viruses and attacks.
- Modern data cabling and network switching was installed into County Hall and Trent Bridge House to enable the introduction of newer technologies.
- Substantial re-configuration of the Microsoft Active Directory architecture (provides the authentication and authorisations for all connecting computers and users) has supported a One Council approach to the design and implementation of a range of Microsoft technologies.
- The wireless network was upgraded and a joint wireless arrangement with health partners enables County Council and Health colleagues to securely connect to their respective ICT networks from each other's premises.

2.2. Technology Changes - Workforce Modernisation

Over the last three years a range of technologies have been deployed to support workforce modernisation and to support the County Council's Ways of Working programme, as summarised below:

- A standard baseline desktop and laptop computer solution running Windows 7, Office 2010 productivity tools and BitLocker security.
- Bespoke print solutions have been replaced with shared multi-functional print devices, connected to the IT network and operated through swipe card technology.
- A range of Microsoft enabling and communication technologies have been deployed to support the County Council's new Ways of Working programme including Microsoft Exchange 2010, SharePoint and Lync.
- The 'Get Connected' access service and 'Good' have supported more than 2,200 staff to work remotely whilst away from their bases.
- The introduction of the iPad tablet, supported by the 'Good' device management solution, is supporting productivity enhancements for Member and Officers at all levels.
- The SAP Business Management System (BMS) has been deployed to school and corporate users to support payroll, finance, HR, procurement and plant maintenance processes.
- A secure portal solution supports integrated safeguarding working between the County Council, Health, Police and Probation partners at the Multi Agency Safeguarding Hub (MASH).
- Web based fault mapping was introduced for highways queries enabling the public to report faults on-line (potholes, street lights etc.). Using 'middleware' the Customer Service Centre is able to record highways faults which automatically update highways' IT systems.
- On-line maps and Twitter provide the public with gritting routes and weather updates.
- Various ICT systems have been introduced to support workforce modernisation, including room booking (Stopford), credit card payments (Civica), document management (Opentext), e-petitions, performance monitoring (TotalNotts), court bundling, traffic accident reporting, beds monitoring and sharing of births, deaths and marriages information (Tell Us Once).

3. Strategic Context for ICT Services

The ICT strategy has been developed in the context of the key business drivers which will effectively support the County Council in delivering its strategic priorities over the next four years. These business drivers fall into three main categories: Strategic, Stakeholder and Technology.

3.1. Strategic Drivers

Budget Challenge – Annual cuts in Central Government funding allied to increased demand and spiralling costs of Adult Social Care and Health and Children's Services mean that it is estimated that the County Council will face a budget gap of £154m by 2017 given the level of services currently provided. Even after savings derived from planned transformation activity (approximately £83m) there is a shortfall in funding in the region of £80m which must be found through further service efficiencies and improved working practices.

Revised Operating Model - Long term financial challenges and the increased demand on services make the County Council's existing model of public service provision unaffordable and unsustainable. Key to the success of any new/revised operating model will be the manner in which members of the public access services and support, with a growing reliance on new media and technology.

County Council Strategic Plan 2014-18 – The plan sets out a clear vision for Nottinghamshire with core values to guide decision making and a set of strategic priorities to achieve its vision. Underpinning this strategy is the need to be innovative, creative and collaborative in the way that we operate and deliver services in order to maximise quality whilst delivering cashable savings and real value for money.

3.2. Stakeholder Drivers

Key drivers from services, partners and the public include:

- The need for a more mobile County Council workforce using IT to deliver greater productivity and requiring a suite of technology solutions (Mobilisation) to suit the different worker styles.
- Greater demand from the public for personalised web based ‘user journeys’ with improved access to services through multiple channels (Channel Shift) and using a variety of devices.
- Increased use of IT to automate and self-serve, to support reduced staff numbers and service delivery costs.
- An increase in shared and co-located services allowing more effective service delivery and providing efficient use of the property estate.
- Increased reliance by service providers on IT systems availability and for business continuity planning.
- Greater demand for home based care services and the provision of assistive technologies.
- Demand for multi-faceted performance information to inform service delivery and improvement.
- Increases in the number of commissioned services, necessitating more data sharing agreements with a wider range of stakeholders.
- Partnership, integration and collaboration with other public sector organisations e.g. delivering on the Care Bill outcomes with our Health partners.

3.3. Technology Drivers

These drivers include the need for an efficient range of ICT services and the exploitation of new and emerging technology:

- The growth in off-premise (Cloud) solutions and a Cloud first design strategy.
- Mobile technology developments including tablet devices, the emergence of 4G wireless connectivity and new web based applications.
- Consolidate the use of, and leverage maximum benefit from existing platforms and applications such as Microsoft and SAP.
- Rationalise the applications estate as a One Council approach to technology use.
- Technology and security roadmaps of the current ICT estate necessitate a programme of continuous upgrades relating to the applications, databases, server infrastructure, network etc.
- Replacing the existing Wide Area Network that is shared with schools (1C1N contract expires October 2015).
- Reduction of operational delivery (Run estate) costs across the ICT estate.
- Employ industry best practise in support of the different technology stacks (e.g. servers, storage, networks, desktops, applications, databases) and ensure compliance with data and information security protocols.

4. ICT Strategic Themes

Given the strategic context there are 5 ICT strategic themes that shape the strategy. These themes are: Workforce Mobilisation; Customer Channel Shift; Business Performance Reporting; Partnership Working and Reliability and Compliance.

4.1. Strategic Theme 1 – Workforce Mobilisation

A more mobile and efficient workforce is considered by the County Council as one of the main enabling factors for the transformation of service delivery. Key to unlocking the benefits of mobilisation is the ability to deliver mobile ICT solutions which enable staff to streamline and improve working practices in order to deliver a more effective and efficient service.

The ICT mobilisation theme will allow for a truly mobile workforce, able to access and input essential information into and from key business systems at the point of service delivery by taking advantage of developments in wireless and 4G connectivity. Information will be available off-line as well as on-line and a platform based approach will allow information to be integrated and sourced from multiple systems where required.

For example, a children’s social worker will be able to access combined information from both Frameworki and Capita One systems on a mobile device, thereby presenting a more holistic picture of the current situation. The same capability can apply for joint teams from multiple agencies; Health trust staff and social care teams having access to a complete view of interactions and interventions by both organisations at the point of service delivery.

An evaluation of products to deliver this requirement has been undertaken during 2013 and has resulted in a pilot of the Total Mobile platform. With a track record in the successful delivery of mobile solutions to both local authorities and various NHS trusts nationally, early indications are that the product is considered fit for purpose to deliver the mobilisation needs for the County Council. A major advantage of the Total Mobile product is that it includes scheduling and monitoring functionality which can be exploited to support staff delivering front line services. This functionality will enable improved business processes covering scheduling, allocation and monitoring of service delivery and provide significant opportunity for both cashable savings and service improvement.

An important element of providing mobile solutions is the security of the devices and the information held on them. In order to conform to both legislative and compliance requirements it will be necessary to implement a “mobile device management platform” that delivers a secure environment for the data, an ability to manage the device remotely and to monitor and manage deployment. Currently, this security requirement is delivered for none Microsoft devices by the suite of products provided by “Good Technologies”. This suite is deemed fit for purpose and an alternate product is not considered a requirement in the short to medium term. However, technology and products in the mobile space evolve rapidly and therefore the ICT strategy includes the provision of other mobile devices and their management within its scope.

4.2. Strategic Theme 2 – Customer Channel Shift

The essence of channel shift is that the public can engage easily with County Council services through the on-line channels of their choice and it is recognised that the potential benefits for both the public and the County Council are significant. As well as improving the way in which the public engage our services, channel shift also affords the County Council the opportunity to radically

change the way in which it delivers its services. Therefore, the ICT channel shift theme will not only set out how technology can improve and transform communication but also how technology can be exploited to deliver improved outcomes for both the public and County Council.

The Digital Development Plan 2013-17 and the channel shift programme of work will drive the specific technology requirements to support channel shift, however the underpinning technology will be focused on web based services accessed through static and mobile devices.

The services delivered via channel shift will fall into four main categories which are:

- **Providing Information:** Changes will include an enhanced web presence via the County Council website, the introduction of web chat functionality to enable real time web based interaction between the public and the County Council and the introduction of web portals which are designed around the public “user journeys”.
- **Transactional Services:** Services such as paying fines, purchasing permits and booking appointments will be delivered via a portal provision utilising a platform based approach.
- **Service Requests:** Service requests will be enabled via self-service portals e.g. Assessments for occupational therapy support, Meals at Home, Home Based services etc.
- **Public Feedback:** Ability to provide feedback to the County Council via web forms accessed from the website.

In addition to changing the way the public initiate interactions with County Council services, channel shift should also consider the opportunity to reduce demand through developed use of assistive technologies. Although assistive technology to support the public to live in their own homes has been provided by ASCH&PP for some years, innovations in this area will see an increase in the range and degree of intelligence and sophistication of devices. It is already possible to link devices such as vital sign monitors, blood pressure monitors, motion detectors, pressure pads, door sensors etc. via Bluetooth to home access hubs that collect key data. As a result there will be an opportunity to exploit the provision of assistive technology by aligning the ICT strategy with the direction of travel of both the ASCH&PP Department and the Health Service in this field. Importantly, capturing data from devices in people’s homes and incorporating this into both social care and health service core IT systems moves the interaction with the service user from being reactive or scheduled to being proactive and on-demand.

For example, Health care professionals might be able to view clinical information such as blood pressure, oxygenation and heart rate remotely before deciding whether a visit was needed, whilst social care staff might reassess need only when thresholds for mobility, safety, social interactions etc. are breached. As these intelligent devices become connected to external systems then their functionality could be expanded to provide services such as video conferencing for family/friends and portals for family monitoring.

4.3. Strategic Theme 3 - Business Performance Reporting

Business performance reporting is planned as a centralised function managed through a Corporate Performance Team. In order to enable reporting to deliver information to manage services more effectively, a new approach to reporting technology is required and the ICT strategy is integral to providing this capability. However it should be noted that whilst this strategy will deliver the technology to build reporting solutions, the value of the information provided will be reliant on the

quality and content of the source data available. The structure of the data at an organisational level is not currently defined and as such merging data from multiple systems, with no common unique identifier, is not available. Therefore, business performance reporting across the organisation will only become available as information management principles are applied to the current disparate IT applications and datasets.

Technology will support and enable business performance reporting in three key areas:

- The tools for the production of datasets: The technology to build the datasets is not specific to the application or database that the data is extracted from and therefore more generic tools can be used. Consequently, in line with current ICT strategy, this functionality will be provided by the Microsoft suite of reporting products available as part of the Microsoft SQL Server stack.
- The tools for the interrogation of datasets: Once extracted the data needs to be interrogated to produce contextualised information for the business user. The options for carrying out this function are many and varied and a range of tools are currently deployed across the organisation e.g. Working with the Corporate Performance Team, the ICT strategy will identify the technology to develop a corporate solution for data interrogation, ensuring a consistent approach and delivery of reliable and accurate information to business users. It is envisaged that the ICT strategy will deliver a core set of reporting and presentation tools built on the Microsoft reporting toolset that enables integration with the Microsoft products already in use across the organisation.
- The tools for presenting information from datasets: Reports, dashboards, trends analysis etc. will be provided by using a combination of advanced functionality within the Microsoft Office suite and capabilities provided via SharePoint collaboration services.

4.4. Strategic Theme 4 – Partnership Working

The ability to work more effectively with our partners across the public, private and voluntary sectors is an essential goal for the County Council. At the same time national initiatives and legislation are driving the requirement for integrated information systems and data across the public sector, with the current economic challenges also necessitating more efficient use of property and technology assets.

From a technology point of view successful partnership working is underpinned by an ability to transfer seamless, secure and reliable information between partner organisations in order to fully integrate services. Whilst information governance will be key, the technical challenges to deliver integration are not insignificant. Data must remain secure across public and private networks and data centres, unique identifiers will need to be present in all records and information and systems architecture must be consistent across all partner organisations.

The ICT strategy will provide the technology platforms that enable the integration of systems at a local, regional and national level. This requirement, and the technology needed to deliver it, is consistent with the strategic approach defined for the other themes previously noted. A platform based approach will enable the integration of systems both external and internal to the organisation and the development of portal solutions will support access for colleagues in partner organisations as well as the public. A secure, reliable and segmented IT network will allow the secure transit of data, and the introduction of the Total Mobile product, with its track record of integration with Health and local government ICT systems, will enable data from numerous systems from multiple organisations to be presented to colleagues working in joint teams.

4.5. Strategic Theme 5 – Reliability and Compliance

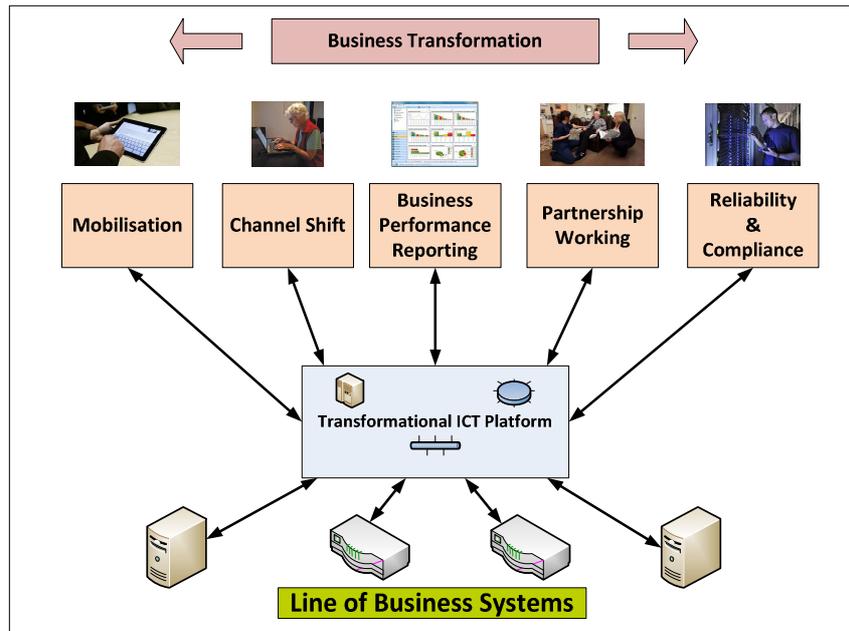
An outcome from the previous ICT strategy was a major overhaul of the County Council's ICT platform (see 2.1) with an emphasis on supporting improved business continuity and delivering reliable ICT services. The ICT estate is large and complex, and over the coming period it is likely to be subject to considerable further change as the organisation seeks to deliver its strategic priorities. In order to effectively manage and deliver this change whilst continuing to provide reliable and robust systems and services, ICT Services has recently moved to a new operating model and staffing structure. This new operating model will enable ICT to focus dedicated resources on maintaining and improving the services delivered by both internal and external service delivery teams. It must be noted however, that external influences will impact on these services as the drive to integrate more and more public services gathers pace. Therefore, it is necessary to ensure that compliance with statutory regulation and security recommendations in the ICT arena are risk managed on behalf of the Authority.

The ICT strategy will support reliability of both the current operational estate and in the design and implementation of new technology solutions:

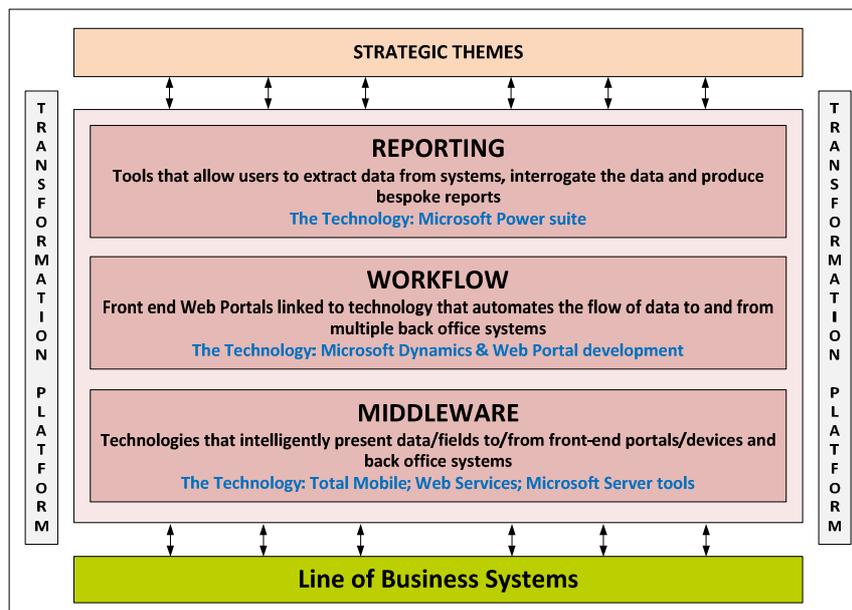
- The Operational Delivery Group, within ICT Services, will drive improved reliability and performance in the existing estate through an ethos of continual service improvement, supported by well-defined and executed core management processes and a yearly refresh programme to ensure that equipment and the ICT platform remains fit for purpose.
- The new ICT service operating model introduces a Design Authority function which will provide essential guidance and design assurance for proposed new technology solutions. The Design Authority will ensure that solution designs are in-line with the ICT strategic direction of travel, fulfil the user requirements, meet business objectives, are scalable, reliable, efficient and are cost-effective to maintain.
- The ICT network will be segmented to enable a 'walled garden' approach to data separation. This will enable greater control over access to sensitive data sourced from other public sector partners such as Health, Probation and Police.
- Access to sensitive information to be used in the mobilisation theme will be transmitted over secure connections from both internal and external data sources.
- Data stored on mobile devices will be secured through high grade encryption as recommended by the Cabinet office CESG group.
- Interagency network connectivity will conform to both PSN (Public Services Network) and N3 (Health) codes of connection.

5. Building a Transformational ICT Platform

In each of the 5 key theme overviews, reference is made to delivering the outcomes of each through a platform based approach. This "Transformational ICT Platform" would be a new layer of technologies that operate between the County Council's core ICT systems and the end users' devices and access channels. The "Transformational ICT Platform" supports the delivery of all 5 key themes and utilises a range of Microsoft technologies, building on the investment that we have already made.



Importantly, the capability delivered through this platform approach will provide the County Council with a scalable, adaptable, sustainable and reliable means of enabling transformational services across the organisation and through partnership working. The “Transformational ICT Platform” comprises 3 types of ICT technologies: middleware, workflow and reporting technologies.



5.1. Middleware Technology

Typically, middleware technologies are used to provide three types of functionality:

- **Point to Point Integration** – used to pass data from one IT system to another to negate the need for manual processes to be employed or to ensure data consistency.

- **Functional Integration** – used to deliver functionality not provided in the core IT system e.g. an assessment undertaken in one IT system may, through the use of middleware, trigger a change in entitlement to services provided by another service area.
- **Data Translation** – used to manipulate data in some way e.g. a change to the data format to enable integration with another application.

Recognised as a key enabler for business transformation, the use of middleware in the delivery of ICT solutions is not new. Currently, middleware is used in the County Council to provide integration between the Lagan Customer Relationship Management (CRM) system and the Highways Asset Management System (HAMS), to enable information flows from one to the other. However, the middleware platform needs to be considerably expanded in order to support the 5 key themes.

The key middleware technologies will incorporate the Total Mobile solution (used in the workforce mobilisation pilot with social care teams) and Microsoft tools. The structure and content of the middleware platform will evolve over the life cycle of this strategy as departments and services develop their service requirements. Capacity for new functionality development will be provided using strategic development partners and in-house expertise where appropriate.

5.2. Workflow Technology

The introduction of workflow technology will support the County Council in automating many of its processes and functions, reducing manual intervention and re-keying and supporting real “channel shift” to on-line service provision. A key workflow technology will be the Microsoft Dynamics solution which provides a customer management and workflow toolset that allows an organisation to “stitch” together back-office systems, enabling new workflows to be presented to both corporate users and the public.

5.3 Reporting Technology

An enterprise wide approach to reporting would make use of Microsoft tools, as recommended by a recent review of County Council reporting.

As the County Council’s use of Cloud based services develops the ICT strategy needs to reflect the benefits that migration to these services will offer and in turn ensure the most economical and effective Microsoft licensing agreement for the organisation. In order to prepare for a Cloud first approach and in recognition of a new emerging operating model for the County Council, it is necessary for the Microsoft Enterprise Licensing, due for renewal in 2014, to migrate from a device based model to a subscription based model where users rather than devices are licensed. This licensing model will allow for future migration from current on premise service provision to Cloud based services without additional license costs at the point of migration, and allow investment to be scaled up or down as appropriate based on user numbers.

6. Delivering the Strategic Themes

As well as introducing and developing the technology to deliver the platform capability, each of the 5 key themes will themselves require technology to be introduced and upgraded to provide the functionality to support and enable service transformation. Much of this requirement will be informed through Service Plans and business cases. However, within each of the themes there are

already some known technologies that ICT Services will either need to introduce, upgrade or develop over the first twelve months of the strategy. These include:

- Devices – A range of devices that securely connect to corporate IT systems enabling functionality and data to be available at the point of service delivery.
- Connectivity – A mobile application platform that will support multiple device types and allow development and deployment of role specific functionality.
- Operation – ‘Total Mobile’, a mobile device management solution that enables real time and off-line mobile working with integration into core and line of business systems.
- Management – ‘Good for Enterprise’, a suite of products providing secure mobile communications, remote device management and device monitoring.
- Mobile applications development for colleagues, allowing direct access through a mobile device to core applications and services.
- Mobile applications development for use with the public, allowing direct access through a mobile device to portal based services.
- Web portal design and development offering self-service for transactional services and service requests, and available through static and mobile devices.
- Interim web chat functionality development and procurement.
- Transition to the use of Cloud based infrastructure and software services where appropriate.
- Planning for the transition to a new Wide Area Network (replacement for the 1C1N WAN).
- Develop the mobile element and carry on deployment of the desk top element of communication capabilities such as video conferencing, instant messaging and Voice over IP (VoIP) technology.

7. Funding Overview

The County Council currently has an annual £1 million capital budget for Microsoft licences and an annual £1 million capital budget to refresh the technology layers that make up the ICT platform (network equipment, servers, storage, back-up etc.).

The investment plan in support of this ICT strategy identifies a need for an additional £6.5 million over the next 3 years in order to design, build and run the “Transformational ICT Platform” and to deploy solutions into departments that take advantage of it (to deliver workforce mobilisation, customer channel shift, business reporting, partnering, reliability and compliance). In 2013 Atos Technology and Consulting provided support for the ICT strategy development and identified an estimated £15 million technology investment to underpin a business transformation approach.

The Appendix identifies provisional investment of £4 million over the next 3 years to build and run the ICT platform (equipment, licences, systems and design and build costs), £2.3 million to deploy mobile devices (hardware, licences and support costs) and £250k revenue costs (maintenance contracts). Appropriate business cases will need to be developed for this funding consideration.

8. Risk

The ICT strategy will be delivered through a series of concurrent managed programmes of work delivered in line with the County Council’s project management standards based on PRINCE2, Managing Successful Programmes (MSP) and Agile methodologies. In line with these methodologies, processes and management tools will be in place and managed by the relevant boards to control and contain risks to successful programme and project delivery. Prioritisation of programmes and resources, and monitoring of progress, will be overseen by cross County Council governance arrangements.

Some of the high level risks associated with the delivery of the strategy are:

- A lack of prioritisation across the transformation programme resulting in resourcing constraints associated with having too few ICT and/or business staff whilst running significant concurrent programmes of work.
- The need for business colleagues to be fully engaged in the transformation programme.
- Funding constraints due to unrealistic and under developed business cases.
- Funding constraints where funds identified through business cases are either not made available or are not made available at the appropriate times.
- Changes in scope that can have an impact on cost, resourcing and timescales.
- Business continuity and disaster recovery vulnerabilities associated with the significant changes to the underlying ICT infrastructure.
- Important and urgent organisational business priorities emerging which require significant ICT resourcing, necessitating the redeployment of ICT staff onto new non change related activities instead.
- The technical complexity and interdependencies inherent in the concurrent deployment of large scale ICT solutions.
- Cultural challenges associated with new ways of working, the use of technology and the desire for customised local solutions.

NCC ICT Strategy - Funding Overview

| Building the Transformational ICT Platform (Capital Investment): | | | |
|---|-----------------------|-----------------------|-----------------------------------|
| 2014/15 (£000) | 2015/16 (£000) | 2016/17 (£000) | Investment Required (£000) |
| 1,640 | 1,350 | 965 | 3,955 |

| Deployment Costs (Capital Investment): | | | |
|---|-----------------------|-----------------------|-----------------------------------|
| 2014/15 (£000) | 2015/16 (£000) | 2016/17 (£000) | Investment Required (£000) |
| 690 | 795 | 835 | 2,320 |

| Revenue Consequences of the above: | | | |
|---|-----------------------|-----------------------|-----------------------------------|
| 2014/15 (£000) | 2015/16 (£000) | 2016/17 (£000) | Investment Required (£000) |
| 94 | 103 | 60 | 257 |