Information Services Technology Plan

2011 – 2015

Author:	Tom James
Last revised:	3 March 2011
Version:	0.6
Status:	Draft for comment

> The role of Information Services is to get the **right information** to the **right people** in the **right place** at the **right time**– **every time**.
>
> This document sets out in detail the strategic and design considerations by which we will achieve this aim within Wiltshire Council over the period 2011 - 2015.

Contents

Wiltshire: 2015

For those Information Services veterans of early 2011 – when the opportunities for rationalisation presented by the ICT in-sourcing and the pressures faced by a council trying to do more for less simultaneously put the ICT / IM organisation under great pressure – it was hard looking back to comprehend just how much Wiltshire Council had changed. Indeed, in the early days of 2011, most people were more worried by a fear of the future than energised by the possibilities. Yet four years on, that fear had gone and been replaced by a confident, dynamic organisation at the heart of business change within Wiltshire. So what had changed?

Most Wiltshire Council staff worked at home for at least a part of their week, and many staff were more or less permanently based at home, or out on the road delivering services directly to their customers. Much of our key customer-facing infrastructure and applications had moved to a cloud computing environment. Apart from reducing cost, such a move increased resilience. Nationally, the 2013 heatwave was initially treated as a bit of light relief after four consecutive hard winters. However, when the weather finally broke on “Stormy Monday”, August 12 2013, the ensuing catastrophic storms dumped 200mm of rain on Wiltshire in just six hours. The flexibility of the remote access devices and the resilience of the network meant the council could direct care workers to the most needy even though both Salisbury and Trowbridge town centres were largely cut off by flood waters, preventing access by staff to those offices. The subsequent repair program of roads and facilities was made easier by the ability of mobile repairs teams to access job lists on the move. And Wiltshire’s citizens played their part: the council received hundreds of photographs showing the state of bridges and roads and helping to prioritise where to send resources. Modern camera- and GPS-equipped mobile phones meant that most of these photos were automatically geo-tagged and could be loaded directly into the council’s Geographic Information System with a minimum of intervention, providing a simple and fast method to identify exactly where the problems were located. Common data formats meant we could easily share this information with colleagues in the emergency and health services with minimal translation problems between systems.

It wasn't only during emergencies that the new streamlined Information Services proved its worth, however. In 2011, Wiltshire Council had won a contract to deliver payroll services for Wiltshire Fire Brigade. The roll-out of the Public Sector Network, and the accreditation to ISO27001/2 made such contracts easier to deliver in the future, with the result that by 2015, Wiltshire Council was delivering payroll and transactional HR services to much of the public sector in Wiltshire, as well as some bodies elsewhere in the country. A trial of delivering the whole information service for a neighbouring council had gone well, and there were further opportunities to expand that service, bringing with it economies of scale for Information Services. The focus on first time fix, and the quick resolution of the most common ICT requests – such as password resets – using transactional self-service facilities, were key selling points in demonstrating the capability of Information Services to other organisations.

The public was also better served, and this showed in increased customer satisfaction measured by the council. Applications rationalisation, delivered to a challenging timescale, had been a hard slog and involved much burning of midnight oil. But the benefits were immediate: processing times for planning applications decreased, and for the first time, residents were able to see immediately all the developments going on in Wiltshire. The public had also, after a slow start, embraced opendata. When the council made its first tentative steps, publishing financial data at the end of 2010, there had been some interest in searching the system, but very little use made of the raw data. But increasingly, the council had seen organisations mashing-up the data in new and creative ways. Indeed, it was a mash-up of travel time data (from the Department for Transport) and areas identified for future housing provision (from Wiltshire Council) that was instrumental in convincing the local rail operator that there was a business case in running a regular "trans-Wiltshire" train service from Salisbury to Swindon, via the little-used Westbury – Melksham – Chippenham link. The campaign to improve the link had been driven at a community level, co-ordinated by the Area Boards affected and making extensive use of the organising capabilities presented by social networking tools. But the initial analysis had come from an interested citizen, on the back of opendata made publicly available by two different public sector bodies.

Registrations to “MyWiltshire” had steadily increased from its launch in 2012, allowing users to be alerted to changes in their area. Telephone call volumes to Customer Service always used to peak around bank holidays when people phoned to ask when their rubbish would be collected; now users of MyWiltshire could be alerted by text message or by a message to their FaceBook page whenever there were service changes. Moreover, the same service was being used to drive revenue, such as early-bird booking of shows at Salisbury City Hall, or discounted late availability of facilities at leisure centres. The development of social care packages, allowing recipients to pick and choose the care package that best suited their needs, had led to major cost savings within the Social Care service – this had only been made possible by virtue of an upgraded social care IT system. All these developments had had a single underlying purpose: getting the right information to the right people in the right place at the right time – every time. Doing so made the transformation happen.

So much for the history of the future. Can it happen? This document sets out in detail the strategic and design considerations by which we will achieve this future within Wiltshire Council over the period 2011 – 2015.

It should be read in conjunction with the **Programme Roadmap**, which has a detailed timeline of the projects necessary to deliver this strategy. The roadmap will develop over the lifetime of this strategy as projects are completed and new projects started.

Document structure

The document is in five main sections:

- **Business drivers of the Information Services Technology Plan**. This section considers the major internal and external pressures and changes on the service. The development of this strategy, and the changes to the historic ICT and IM Service, are as a direct result of these drivers.
- **The Information Services Model**. This section presents a framework for thinking about how information drives the business and the relationship between the core infrastructure, applications and information.
- **Design criteria for new systems and services**. This section outlines how we will approach the design of new systems and services so that they meet the demands placed on us by the business drivers. Included in this section are the quality measures applicable to our infrastructure, applications and information that enable us to judge whether the service is delivering what the business requires.
- **Technology and data roadmap.** This section gives high-level overview of the infrastructure and applications technologies and data services we will be investing in over that period.
- **Summary programme plan**. This section covers the major thematic areas of the programme plan, by which we will deliver the objectives in this strategy. It also covers the relationship between the programme themes and the Wiltshire Council Business Plan priorities, and the impact carrying out the plan will have on the business.

Throughout the document, words underlined thus are defined in a **glossary**.

Business drivers of the Information Services Technology Plan

The key drivers that shape this strategy are as follows:

Cost saving

Context: Along with the rest of the Public Sector, Wiltshire Council is undergoing a significant reduction in its operating budget. Within Information Services, the budget for 2011/12 has fallen by £2.4m; we are anticipating further falls of £1m in each of 2012/13 and 2013/14. Overall, this represents a fall of 25% in our budget over 3 years, leaving a budget smaller in absolute terms than the budget held by just Wiltshire County Council in 2008/9, before the formation of the unitary council. Therefore, we must reshape the information service to deliver with a lower budget – while at the same time still meeting the expectations of the business and the public for provision of information and services.

How we will deliver: We have brought the service desk in house, reducing the cost of that service without decreasing service levels. We will continue to rationalise our infrastructure and applications, decommissioning duplicated and redundant equipment. We will restructure the team to work in a more cohesive fashion and remove management overhead. We will investigate cheaper hosted services ("cloud computing") and other technologies where it makes sense to do so.

Changing organisational structure

Context: Coupled with the reduction in budget, the shape of Wiltshire Council is also evolving rapidly. It is likely that, over the lifetime of this strategy, the services offered by Wiltshire Council, and the balance between which services are directly run, which are commissioned by third parties and which are devolved to community ownership or management will change significantly. In many cases, an external organisation may act as a data processor of data that Wiltshire Council is the legal data controller, or we may act as data controller for another organisation's data. Therefore, as an organisation we need to be resilient and adaptive to those changes.

How we will deliver: We will change the mix of skills within Information Services, reducing single points of failure in specialist knowledge and moving to staff with a

broader skills base. We will ensure we have robust technologies, policies and procedures in place to allow, for example, non-Wiltshire Council staff and volunteers to have access to our systems and information where it is operationally necessary, without compromising our requirements to protect sensitive information.

Campus and Operational Delivery Programme

Context: Wiltshire Council's Campus and Operational Delivery Programme is dramatically changing the way staff work. The large number of buildings owned or operated by Wiltshire Council is reducing to four main hubs and a series of smaller "campus" buildings in each community area; our workforce will become significantly more mobile with an expectation that they can carry out their jobs from any location – at home, on the road or in any Wiltshire Council owned building. We anticipate that over 1200 council workers will become mobile or home workers.

How we will deliver: We will continue to roll out new ICT equipment, based on Windows 7 operating system, "DirectAccess" connectivity, VOIP telephony, instant messaging and video conferencing and other technologies, that allows our users to connect to the Wiltshire Council network from any location. We will use these technologies to help foster collaborative working so that information can be shared without teams necessarily being geographically co-located. We are rationalising electronic data stores and applications to assist previously geographically dispersed services to come together, and to ensure that each service can see the same data and application regardless of their original source. We are rationalising and sorting our holding of paper files, leading to approximately 30% reduction in the overall volume stored, and moving the remaining paper into locations where access is maintained for files that are needed frequently, while ensuring that rarely-requested files are stored in cost-effective, secure and environmentally-controlled ways. We will ensure that information can always be appropriately maintained, secured, retrieved, and ultimately archived or disposed of.

Greening IT

Context: Wiltshire Council is committed to reducing its own impact on the environment, and in particular reducing the council's carbon footprint by 20% of

our 2008/09 footprint by the end of 2013/14. (See the "Energy Change and Opportunity Strategy"[1], which was adopted by Cabinet on 25 January 2011). Wiltshire Council is a signatory of the Nottinghamshire Declaration.

How we will deliver: We are amalgamating the networks of the five former authorities, reducing the number of data centres from five down to two. We are virtualising servers, reducing the amount of power needed and realising carbon savings from decommissioning physical machines. We are investigating mechanisms to ensure screens are powered down when not in use, reducing their energy consumption. Through the Campus and Operational Delivery Programme, more flexible working patterns can be developed. This will include, but will not be limited to, secure remote working, video conferencing capabilities, tele-conferencing capabilities, etc. All of these are designed to reduce the travel by staff to attend meetings at other sites, saving on fuel and carbon emissions. We are rolling out new laptops with more energy-efficient solid-state hard drives, reducing the power consumed by each laptop. We are investigating using waste heat from our new Primary Data Centre to provide heat to the building. We dispose of obsolete company (either through recycling or sale) and are able to provide a quarterly report of carbon and trace metal savings achieved.

Opendata

Context: A key strand of the Government's drive to improve public engagement in services and accountability by the public sector is to push Public Service bodies to open up their key service information. Data must be published both in a format that makes it easy for users to comprehend ("human readable" data) and also in a format, and with open licensing conditions, that enables it to be extracted by other websites and "mashed-up" with other data to present new analytical opportunities ("machine readable" data). The ethos is that service data is owned by the public, rather than being owned by Public Service bodies. Examples include the requirement on councils and other bodies to publish spending data online, allowing the public to audit our spending, and the recent publication of online crime maps, allowing the public to assess the effectiveness of their local police force. There is a particular concentration on financial data (such as spending,

[1] http://cms.wiltshire.gov.uk/mgConvert2PDF.aspx?ID=13581

salaries and contracts); democratic accountability (such as minutes and agendas, election results and councillor expenses and interests); and geographic data that matches service delivery to specific locations. These initiatives collectively go under the name "opendata".

How we will deliver: We have already published online spending data and salaries of key officers, councillor expenses and council minutes and agendas, and we will continue to meet such requests as they are introduced (see www.wiltshire.gov.uk/opendata). We will specify new applications to ensure they provide human- and machine-readable outputs of their key non-personal data and we will engineer existing systems to provide such data.

ICT in-sourcing exploitation and restructure

Context: At the beginning of 2011, Wiltshire Council successfully in-sourced its ICT service desk and support provision. For the first time in more than fifteen years, the entirety of ICT provision within the council is now provided by a single organisation, accountable directly through the management structure of the council. Not only will the in-source allow us to provide an enhanced service at reduced cost, but it also provides a once-in-a-generation opportunity to reshape ICT support and development according to the needs of the business, without the constraints imposed by a long-term contract.

How we will deliver: We will continue to streamline the service desk procedures, concentrating on the three major goals of finding a first time fix of faults; a clear focus on customer satisfaction and having clear and open communication with our customers. We will ensure we have staff with the necessary skills, knowledge and motivation to deliver the Information Services operations and programme objectives. We will develop job roles to ensure that service desk and field technicians rotate jobs, so that all service desk technicians develop a deep understanding of how information and communications technology is used in the business. Within the constraints imposed by the available budget, we will also ensure that contracts for key Information Services staff (including those on the service desk) allow us to offer out-of-hours support at times that are useful to the business.

New technology

Context: Information technology is a rapidly changing field. It is difficult to imagine work in a modern organisation without access to email, the World Wide Web and mobile telephones. Yet only fifteen years ago, all these technologies were in their infancy. Fifteen years ago, no council in Wiltshire had a website; now the Wiltshire Council website is used to transact millions of pounds of financial transactions every year as well as being a primary information source for our residents. Five years ago, online video for most users was grainy and jerky; now it is possible to film an event in high quality on a mobile phone and upload it instantly for distribution over the internet. Websites such as Google (founded 1998), Facebook (2004), Youtube (2005) and Twitter (2006), did not exist or were in their infancy ten years ago; now they each boast hundreds of millions of users and in Google's case is amongst the largest companies in the world. The Apple iPhone was launched in 2007; by the end of 2010, 73.5million iPhones had been sold worldwide and over 300,000 "apps" were available for download. Our users expect us to be adopting these technologies to service their needs in ever changing ways. Yet this pace of change presents its own problems: the ability to store information is outstripping our ability to find that same information, and there are significant privacy concerns to be addressed as we upload more and more of our personal lives to the web.

How we will deliver: We will investigate new technologies as they develop, and adopt them on their merits. Examples include moving some services to a "cloud computing" environment, as well as developing more mobile services and "apps". In partnership with Corporate Communications, we will exploit social networking technologies (such as Facebook, Twitter) to help us reach key segments of our population who may be difficult to reach by other more traditional mechanisms. We will also use those tools to help develop community engagement in our Community Areas. We will develop new storage and search solutions to ensure users can always locate information on our network, while at the same time maintaining a rigour of deleting or archiving redundant information. We will roll out customer self-service kiosks. We will develop and classify technologies on a roadmap based on "monitor" – "experiment" – "core use" – "legacy use" – "actively phase out".

Information Services has invested considerable time and effort in reducing risk and cost in its infrastructure. As our external and internal customers demand to consume information and access services through an increasingly diverse range of devices at any time of day, we will investigate the opportunities presented by hosted solutions or "cloud computing". We will consider and mitigate the security implications of moving services outside the council's boundary and identify services which would best benefit from solutions which are hosted by third-party suppliers and partners. The advantages and risks of exploiting software-as-a-service and infrastructure-as-a-service will also be considered. The Council has a successful track record of exploiting hosted solutions: for example, its SAP solution is a managed, hosted service and the Choice Based Lettings system is accessed through the cloud. Our website is hosted externally, ensuring we could continue to provide most information over the web even during an emergency that disrupted our internal systems.

Applications development

Context: Wiltshire Council has inherited a suite of several hundred applications. These applications have a complex picture of licensing conditions and in many cases equivalent functionality is duplicated – often, though not exclusively, where four different applications to manage the same function have come from each of the four original District Councils that went into the Unitary Council. This complicated mixture acts as a brake on service development within the business; for example, it is often not possible for service owners to use a single application to present a single view of their service. Moreover, the desire of services to change their service boundaries – for example, moving from a North / East / South / West service model to a Top / Middle / Bottom model is made complicated by the presence of legacy applications tied to the North / East / South / West areas. Having so many applications is also expensive in licensing, and presents complex support issues. In many cases, it means we need to cover a much greater range of application skills and knowledge. Finally – though by no means least – the split of applications means we cannot provide user-friendly service information on the Wiltshire Council website in some key areas of customer demand, particularly for planning enquiries and information about waste services.

How we will deliver: We are engaged on a program of simplifying and rationalising our applications, with major rationalisations of the Council Tax, Planning and Regulatory System and Geographical Information Systems taking place in 2011 / 2012. We have identified a core platform and suite of applications (including Microsoft Office, Exchange, SharePoint, SAP and the GIS) and datasets (including the Local Land and Property Gazetteer, background mapping and Active Directory) and we will concentrate skills in development on that platform where possible. In general, we will evaluate all requests for new business functionality against that core data and application platform before looking to the market for a new application.

Enabling secure partnership working

Context: Wiltshire Council is subject to an ever-changing security requirement as a result of its dealings with other Government agencies and commercial companies, (particularly the requirement for Payment Card Industry (PCI) compliance imposed by the financial industry). Historically, this has resulted in a variety of security protocols that are all similar but not quite the same: for example, we have different protocols governing our connection to the Department of Work and Pensions (for benefits processing), the Police and the NHS. This environment is changing, and in due course will be replaced by a single connection to the Public Sector Network. This will have its own security arrangements, but will considerably simplify our task by virtue of being a single set of controls to meet.

Simplifying and rationalising our security environment in this way will make it easier to share information with partner organisations (including carrying out support services on behalf of other organisations) and make it easier for other organisations to carry out work on behalf of Wiltshire Council. It will also make it easier to strike an appropriate balance between enabling the flexible working patterns increasingly demanded by the business, and complying with our duty to protect the personal and sensitive information with which we are entrusted.

Broadly, our security strategy is designed to prevent two major risk areas: firstly, attacks on our system designed to degrade our ability to function (for example, virus, malware and trojan attacks, denial of service attacks etc); and secondly

preventing accidental or deliberate disclosure of sensitive information to non-authorised recipients. It is notable that the Information Commissioner is taking a considerably tougher line with organisations that do not uphold their duties under the Data Protection Act.

How we will deliver: We have achieved acceptance status to the Government Connect under the current code of connection standard, which enables the Council to access DWP services and data. A compliance programme is continuing to develop the Council's security framework to comply with the forthcoming Public Sector Network, which replaces Government Connect. We will achieve compliance with ISO 27001/2, which will drive complexity and cost from our security environment and make it easier to bid to run services for other organisations. We will roll out a protective marking scheme for all information held by Wiltshire Council along with an associated training programme, making it easier for users to understand the security implications of the information they are handling. We will carry out an audit of information held within line-of-business systems (including physical records) to understand the Impact Levels inherent in such information. We will use this Impact Level assessment to refine the security framework for access to such information in different situations. We will re-write our acceptable use policy to cover access to both electronic and physical information in a pragmatic way, yet ensuring we meet the requirements to protect the privacy of our service users and staff.

Corporate priorities

The relationship between these drivers, the programme themes that have arisen as a response to these drivers, and Wiltshire Council's corporate priorities are explored further later in this document.

The Information Services model

Information

Information is at the heart of everything we do as an organisation. Every decision taken by an officer of the council – from a simple transaction such as collecting a payment from an individual for council tax, through to the most complex strategic decisions such as deciding on the future locations of schools or housing – will be taken in response to information supporting that decision.

The role of Information Services is to get the **right information** to the **right people** in the **right place** at the **right time**– **every time**. By doing so, we will support the delivery of high quality, low cost services; improve our democratic accountability and ensure we comply with legislation concerning the processing of information.

The **right information** means any information needed to support decision making within the council, whether that information is held electronically or in paper, and whether it is permanent such as a record, or essentially transitory such as a telephone conversation.

The **right people** means anyone who has a legitimate reason to access that information – which could be a member of the public, an officer, a councillor or an employee of a partner organisation. Equally, it means preventing access to sensitive, and particularly personal, information from those people who should not see it.

The **right place** means accessing information where it is needed to support the decision being made. This could be in a hub or campus location, at home or for some service information, out on the road. Our Customer Access strategy sees an increasing focus on going to the customer to deliver service, rather than expecting the customer to come to us. This will require the ability to access service information away from our own premises.

The **right time** means having access when the user needs the information to support the task they wish to accomplish. Increasingly, Wiltshire Council is developing services and fostering a working culture that requires information to be

available outside core hours. Facilities such as leisure centres are open from early in the morning until late into the evening, Monday to Sunday. Our website sees public information requests every hour of every day of the year – even on Christmas Day. Our systems need to support information provision to meet that demand.

Doing it **every time** means that the systems and support processes we put in place must accomplish the above in a resilient and reliable fashion.

Applications

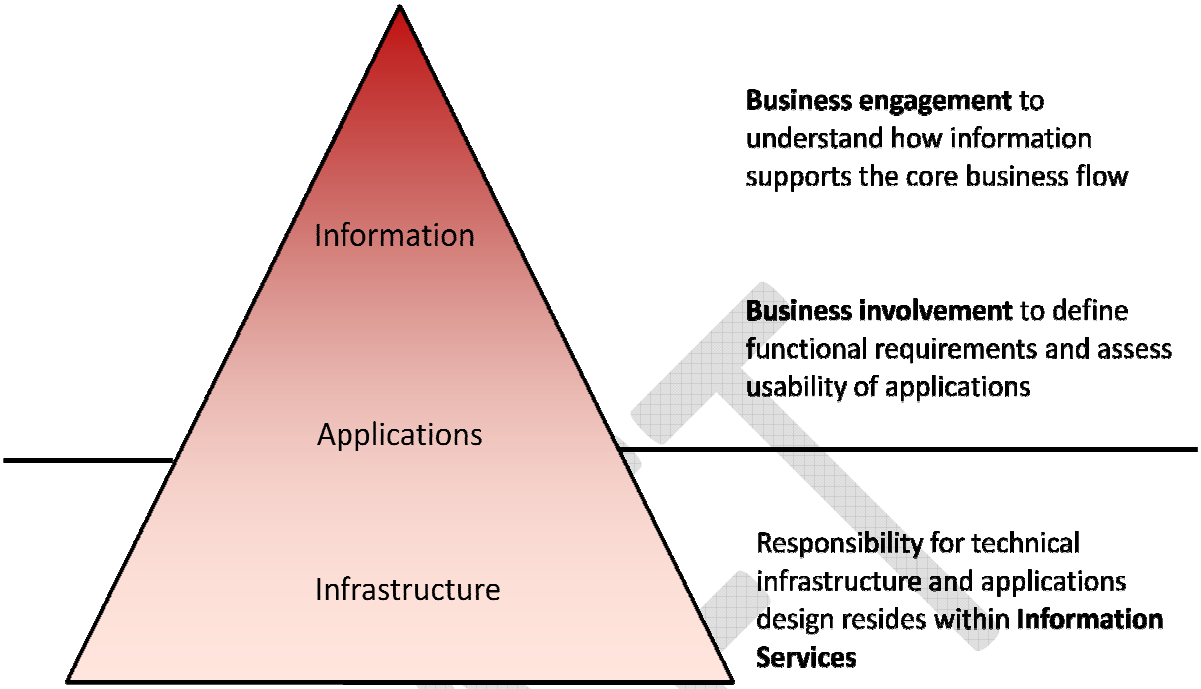
In order to achieve that goal, we need a robust suite of applications and a standardised application development platform that contain the information and facilitate the flow of information between all the parties involved in making a decision. The more smoothly information flows between all the parties involved in making a decision, and the less re-keying and duplication takes place along the way, the faster and more reliably decisions can be made – which reduces cost and improves customer satisfaction.

Infrastructure

The applications run on an infrastructure. The reliability of this infrastructure is of crucial importance to allowing applications to be supported wherever there is a business need. For example, if we wish to meet the needs of serving customers in their own homes, then we will either need an infrastructure that can support such remote working, or else we will have to process application forms in hard copy and transpose the text at a later time, slowing down the process and introducing transcription errors.

This hierarchy is represented by the diagram below. Service users will have a key stake in defining their information requirements (and will be responsible for ensuring that the maintenance of their information is adequately resourced). They will also have some input into design of applications, particularly around the required functionality and usability. However, the proper functioning and design of most of the applications suite and the entire infrastructure is within the professional expertise of the Information Services team. Therefore, Business

Engagement will take place wholly to define the requirements for accessing information to support the business.



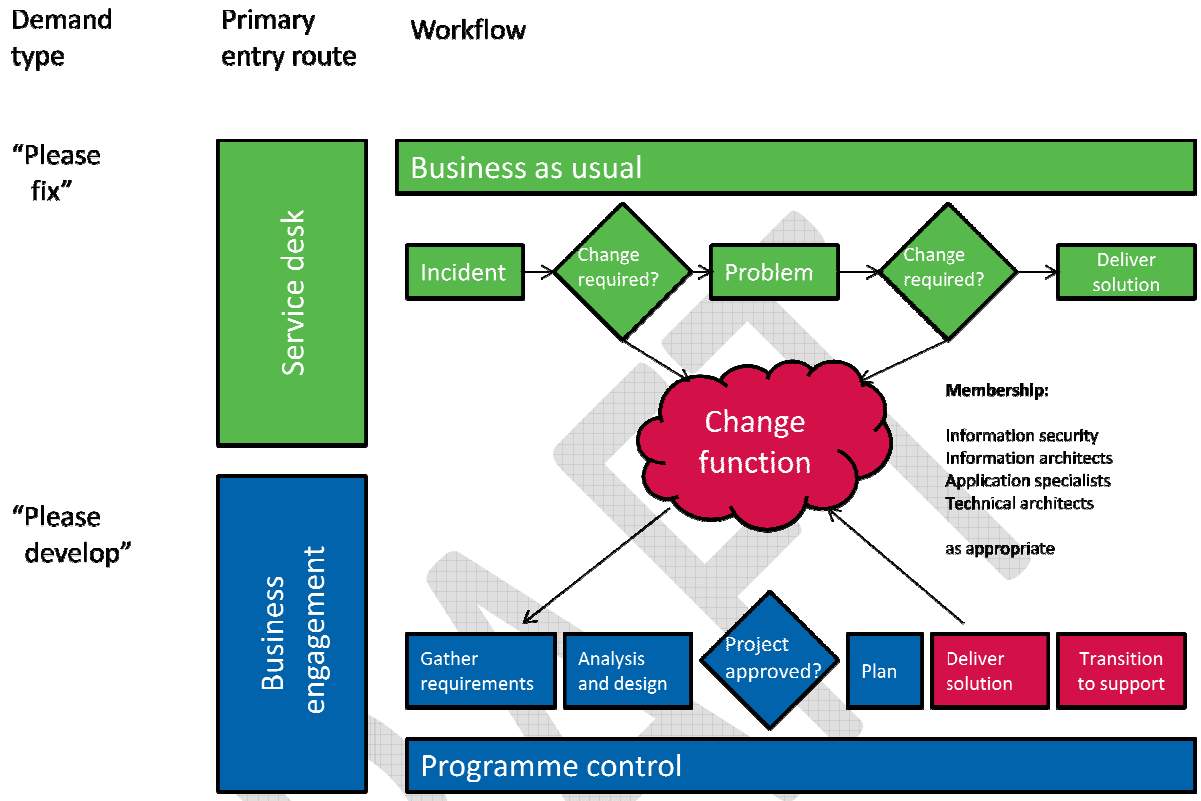
Demands on Information Services

Broadly, there are two major demand types into Information Services that generate work:

- **"Please fix:** The infrastructure, applications and information support what I want to achieve, but currently are not working as specified". This is a typical fault request. Normally, though not universally, such requests will enter our system via the Service Desk and will be resolved using the Service Desk processes.
- **"Please develop:** The infrastructure, applications and information are working as specified, but do not meet my business requirements". This is a typical service development request. Normally, though not universally, such requests will enter our system via the Business Engagement process. They will be analysed using the model below; if after analysis it is deemed that there is a project that is viable in business terms, this project will be managed as a development activity via the programme.

Some Service Desk demands may flag up a recurring incident that requires a more fundamental change to the system to fix. These will be managed by an

intermediate change process; where making the change has a significant resource impact, this will be managed as part of the programme control arrangements. This process is represented diagrammatically below.



Service desk

The service desk will be the primary mechanism for receiving and handling "please fix" type requests. The service desk processes are based on the ITIL framework. The service desk will prioritise its service and continuous service improvement on the following model:

1. Focus on first-time-fix of faults

   - We will employ more technically focussed staff at the first point of contact with users. This approach will allow staff direct contact with an individual capable of resolving their issue.
   - We will allow service desk staff to use customer authorised remote control facilities over customer's machines to repair faults or demonstrate fixes.

- We will provide our customers with access to a knowledge base of fixes for common faults that they can access to attempt to rectify their own issues themselves.
- We will provide automatic call ticketing facilities so that staff can raise their own non urgent service requests thus allowing service desk staff to deal with urgent calls.
- We will proactively monitor core infrastructure and back office systems to alert us to any failure as soon as they occur.
- We will employ fault management techniques to bring about faster resolution of incidents.
- We will update a knowledge management database to enable sharing of fault resolutions to enable faster resolution.

2. Focus on customer satisfaction.

- At each call closure customers will receive the chance to comment of the level of service they have received.
- Staff will also be surveyed regularly and at random to allow them the chance to comment on their opinion of the service that Information Services provide.
- Clearly defined escalation routes will be published to staff to ensure that issues are caught and dealt with as soon as possible to ensure they do not mutate into a major problem that involves a large amount of resource replying to complaints.
- We will review and refine the Service Level Agreements to introduce more flexibility in what is interpreted as a high priority service call e.g. prime customer facing services should have a raised priority rather than merely concentrating on large scale outages such as the present position requiring over 50% of the users of a critical service to be affected.

3. Clear and open communication with our customers

- The service desk function will be the point of contact for all ICT related requests for fault reports and requests for routine new service requests of catalogue items.

- Service desk staff and automated systems will give regular updates to customer as to the status of their request.
- The service desk system will be set to generate callback or escalation alerts
- A change schedule will be provided for all staff to see to ensure that planned works are publicised before those works take place.
- Staff will be advised when emergency work needs to occur to systems that may affect them.
- A service catalogue detailing expected levels of support, delivery schedules, supported equipment lists etc. will be published for all staff to see.

Business Engagement

The Business Engagement function will be the primary mechanism for receiving "please develop" type requests.

Business Engagement will take place with each service department in identifying and understanding individual business aspirations using the POTI (Processes, Organisation, Technology, Information) model. As far as is practical, Business Engagement will be aligned with the wider service engagement taking place as part of the Campus and Operational Delivery Programme, with the aim of making better use of information, property and staff.

The outline process for Business Engagement will adopt the following:-

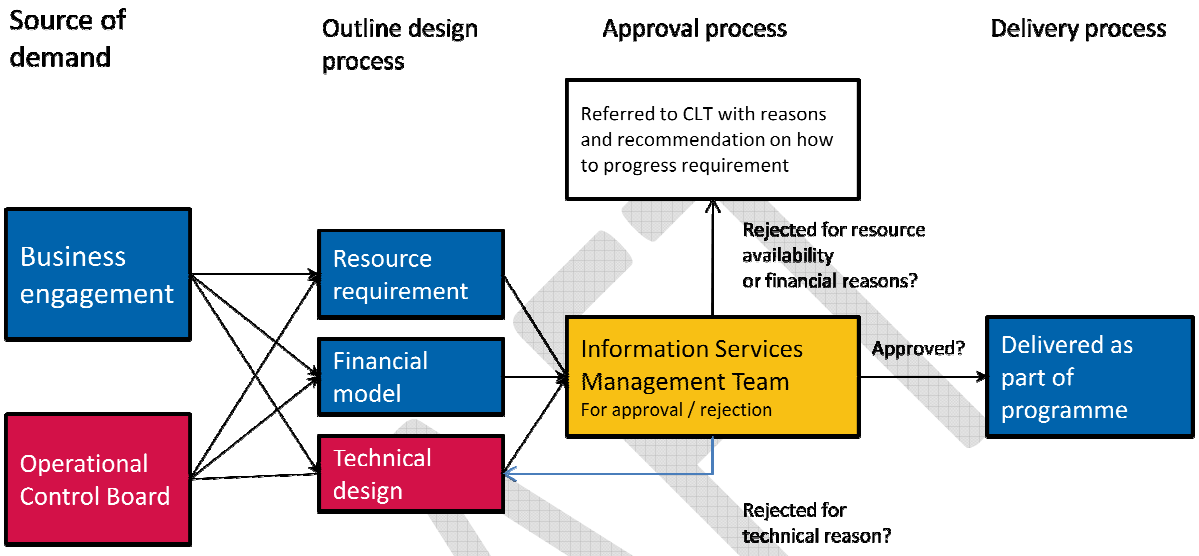
a) Baseline strategic assessment
b) Alignment to future direction of organisation goals
c) Gap analysis
d) Delivering the new capability
e) Changing & supporting the new capability
f) Measuring outcome and benefit improvements.

Each service department may go through several iterations of the above process as the level of change required will differ across each department.

When the outcome of Business Engagement is the likely need for a new Information Services project, authorisation for the project will come from the

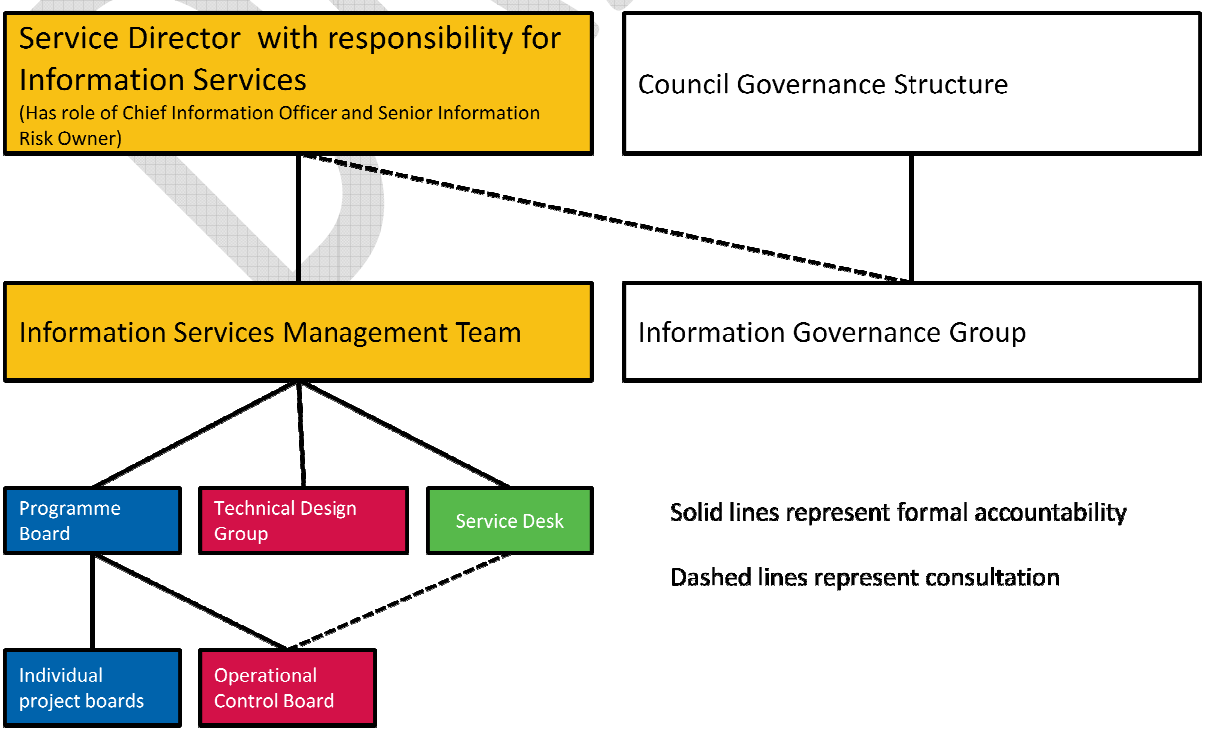
Information Services Management Team. Approval to progress will be granted on the basis of satisfactory outline understanding of the proposed technical solution (and its fit with this roadmap); the financial impact to Information Services (both capital and revenue) and the availability of resource to deliver the project.

This is illustrated diagrammatically below:



Information Services Governance Model

The overall governance structure within Information Services is shown in the following diagram.



The specific remit and membership of each group is as follows:

Information Services Management Team	
Membership:	Heads of Service within Information Services
Remit:	Overall delivery of the Information Services Operations and Programme objectives. The Information Services Management Team will have complete discretion to add new projects to the overall Information Services programme, acting on advice from appropriate specialists concerning the technical soundness, affordability and resource impact of a particular project. Where the Information Services Management Team decline a technically sound project on the basis of its ongoing affordability or the ability to resource the work within an acceptable timeframe, the project will be referred, with appropriate documentation on the resource and financial implications, to Wiltshire Council's Corporate Leadership Team for a decision concerning the viability of the project. Where CLT deem that such a project should go ahead, this would need to be backed by agreement to provide additional resource – either money, staff or an agreement to slip some other part of the programme as appropriate.

Information Services Programme Board	
Membership:	Heads of Service within Information Services; Portfolio Managers, other members by invitation.
Remit:	Operational delivery of the Information Programme. Project boards for individual projects or groups of projects within the programme will be convened on an as needed basis.

Technical Design Group	
Membership:	Senior Infrastructure, Applications and Information specialists
Remit:	The Technical Design Group will be responsible for signing off all designs before they are handed over to an implementation team to deliver. The criteria for sign off will be that the proposed design is consistent with the overall Wiltshire Council technical, applications and information architecture and design goals, as set out in this document or subsequently amended.

Operational Control Board (OCB)	
Membership:	Change Manager, Service Desk Manager, Incident Manager, Release Manager, Desktop Manager as permanent members; other Virtual Resolver Group Managers and the project managers as required by items on the agenda.
Remit:	To approve all non-standard changes to the technical infrastructure and applications, and any information changes that have a profound effect. (For example, a change to the data within Active Directory, such as updating the permissions of an individual user, would not have a profound effect and therefore does not warrant a request for change being approved by OCB. However, a change to the field headings within Active Directory would represent a profound change to the information architecture as it may have unintended consequences on many systems, and therefore would need approval). Changes which have an impact on programme resources require permission from the Head of Business Engagement to agree when they should take place. The Operational Control Board has the role of Change Advisory Board as defined within ITIL.

Information Governance Group (This group is not hosted by Information Services)	
Membership:	Head of Governance (chair), Head of Business Engagement, Information Security Manager; representatives from Wiltshire Council Internal Audit, HR, Communications, Legal Services and Performance / Risk teams.
Remit:	1. The group will develop and promote good practice in information management throughout the authority. 2. The group will identify vulnerabilities in the authority's arrangements for information management and: • Conduct risk assessments of identified vulnerabilities • Prepare action plans to address vulnerabilities • Be responsible for ensuring that action plans are implemented by appropriate colleagues at any level in the authority • Ensue that serious risks are escalated to the Corporate Risk Register 3. The group will develop and disseminate procedures for good information management across the authority. 4. The group will review lessons learned from failures in information management processes and/or security breaches and ensure that the learning is used appropriately to reduce the risk of recurrence.

Design criteria for new systems and services

When designing new information solutions to meet business requirements, we will base those solutions around the following design criteria.

Key design objectives

- Ease of use and accessibility by staff and members
- Ease of support by Wiltshire Council (for applications and hardware replacement)
- Maximum flexibility of where and how people work
- Value for money
- Standardisation of equipment and applications
- Security including continued compliance with evolving government standards such as the Public Sector Network
- Applications and infrastructure support getting the right information to the right people in the right place at the right time – every time.

Information

- There must be a properly resourced process for managing the **lifecycle** of information with named individuals responsible for each stage in the lifecycle. This means the commissioning, creation, editing and ultimate deletion or archiving or information.
- There must be proper control of **access rights** to the information, so that information is not seen by people who should not have access to it, but is accessible to those people who have a legitimate right to see it.
- The information is structured and stored in such a fashion as to make it easily **findable**. Simply put, if information cannot be found, it does not exist.

We will ensure that all our information is:

- **Useful** to a defined audience, helping them to solve a defined business problem.
- Presented in a way that is **useable**, helping users solve their business requirement.

- **Accessible**, regardless of the user's location, technology or any physical handicap
- Stored in systems that are technically and procedurally **resilient**
- **Managed in one place**. We will aim to remove duplicate information sets, defining the best owner for any information and ensuring this can then be shared corporately and, where appropriate, publicly.

We will ensure that Information Owners are identified to ensure the proper management of information generated by their service. Information Owners will need to be of sufficient seniority to ensure that the key processes that result in the provision and flow of information within their service are adequately resourced.

Applications

- All application services to be installed on managed hosts (PC and server)
- A single application that meets the corporate requirement for each business function
- Simple, standardised and service oriented application infrastructure
- Ease of user to be considered when purchasing new applications and services
- Security is embedded within each application and its support model
- Preference for commercial off-the-shelf, rather than bespoke, software
- In-house software build to adhere to application standards
- All software to be deployed under the most advantageous licensing terms
- Applications to support Information Management and Information Security policies as well as corporate strategy and objectives
- Applications may be hosted either internally or externally
- Removal of unsupported and/or obsolete applications
- Where a business need can be met using existing core systems at equivalent or near-equivalent cost and quality to purchasing a new system, we will utilise existing core systems rather than increasing the number of separate systems

We will ensure that any applications we choose are:

- **Useable**, allowing the core business process to be carried out easily and efficiently
- **Cost effective**, with licensing and support conditions that will adapt over time with the organisation
- Are assessed for their **development potential** to meet future requirements, not just current business needs
- **Enable publishing of core non-personal information to the web**, meeting current and future opendata requirements
- **Meet accessibility requirements** to ensure they can be used by users with disabilities
- Comply with our s**ecurity requirements**
- Able to **operate on the council's infrastructure**.

Infrastructure

- Systems are backed up to meet our customer's requirements.
- Systems will be designed and configured to be available in line with customer requirements.
- Systems will be secure, protecting customer information, but fully able to support the Campus and Operational Delivery Programme.
- Disaster recovery and business continuity requirements are met.
- Solutions are designed with a five year life cycle and known costs.
- Infrastructure to be based on standardised equipment and services.

We will develop the underlying infrastructure to ensure that:

- It is **resilient**, meeting our business continuity and disaster recovery requirements.
- **Supports access to our information** from all locations required by the business.
- Has the **flexibility to be adapted** as the shape of the organisation changes.
- Is **cost effective.**
- Complies with our **security requirements.**

- Enables us to meet the core information requirements of maintaining the **confidentiality, integrity and availability** of information.
- Supports **partnership working**.

Analysis and design

Taking the criteria and model above into account, our analysis and design function will approach problems in the following order:

1. What is the business need expressed by the service? What information is needed to support that service need? Does the information already exist – in whole or in part – either in the service or elsewhere, or will it need to be created? Is the information well managed (lifecycle, rights, findability understood) and of sufficient quality? In what situations (office, home, remote etc) will the information be needed? What volume of information will be created and how will this change over time?
2. What is the functional requirement for an application to support that information? Does a suitable application already exist within our existing suite, or can one of our core applications be developed to meet the requirement? If we do need to purchase a new application, is there a commercial off the shelf application available? We will only investigate new applications when we have exhausted the possibility that the functionality cannot be developed in a cost-effective manner on existing systems.
3. What infrastructure is needed to support the requirement? Will users be able to access the application in the locations they need to? Will the network support the necessary traffic and will there be sufficient storage space? Can we ensure an appropriate level of security over access to the information? How will the new application be supported once it is built?
4. Taking into account the above, is there a business benefit in delivering the new service? How will the service be financed or funded, both to implement and support? How will implementation of the project be managed?

It is inherent in this model that our analysis function will need to draw on the resources and skills of Information Specialists, Application Specialists/Technical Support Officers and Technical Architects.

Technology and data roadmap

The following section details the core data, applications and infrastructure that will support Wiltshire Council over the lifetime of this strategy.

For all technologies, we will plot their lifecycle against the categories “monitor”, “experiment”, “core use”, legacy use”, “actively phase out”.

Core data

The following data sources represent core data for use within Wiltshire Council. Therefore, if any project arises that has a need for data within this set (such as holding address data) the assumption is that the data will come from this central source rather than being created anew.

- **Address information:** Local / National Land and Property Gazetteer (LLPG / NLPG)
- **Street networks:** Local / National Street Gazetteer (NSG)
- **Background mapping:** Ordnance Survey maps as supplied under the terms of the Mapping Services Agreement (MSA) and its successor agreement the Public Sector Mapping Agreement (PSMA). The following mapping products are incorporated within the MSA/PSMA or will be additionally procured as a corporate resource:
    - OS MasterMap Topography layer
    - OS MasterMap Integrated Transport Network (ITN)
    - 1:10,000 raster (colour and black and white)
    - 1:25,000 colour raster (PSMA)
    - 1:50,000 colour raster
    - 1:250,000 colour raster
    - OS Street View
    - OS VectorMap Local (PSMA)
    - OS VectorMap District (Ordnance Survey Opendata)
    - Boundary-Line
    - Address-point/MasterMap Address layer 2
    - Code-Point/Code-Point with polygons
    - Land-Form PANORAMA (Ordnance Survey Opendata)
    - MiniScale (Ordnance Survey Opendata)

- Strategi (Ordnance Survey Opendata)
- OS On-demand datasets

Under the terms of the MSA, these products can be made available to third parties acting as contractors to Wiltshire Council. Other public sector organisations – such as Parish Councils – can sign up to the PSMA directly from April 2011.

- **Aerial photography:** We will make available aerial photography with datasets flown at 5 year intervals. Currently available data includes 1961, 1971, 1981, 1991, 2001, 2006 and we are planning to procure data for 2011.
- **Core GIS layers:** We will publish and police a central directory of all geographic information, both internally developed derived data and data available from third parties (e.g. Environment Agency, Utility Companies etc) as required by the INSPIRE Directive (Infrastructure for Spatial Information in the European Community). We will assess all requests for new development against our catalogue before committing to a new data capture exercise or purchase of additional datasets.
- **Staff directories, including access permissions to systems and data:** Microsoft Active Directory
- **Financial data:** SAP, including extracts published to the website under "opendata" initiatives
- **Physical records:** Space allocation database
- **Electronic information:** We will maintain a directory of key electronic datasets to ensure we understand the impact levels associated with inadvertent disclosure of information within each system.
- **Opendata:** From time to time, new datasets will be published under our "opendata" initiatives. These will be considered key definitive corporate datasets in the areas they cover. A list of data currently published is available at www.wiltshire.gov.uk/opendata.

Applications

Development platforms

Database

- Microsoft SQL 2008
- Microsoft SQL 2005
- Oracle 10g or above
- MY SQL

Application Platforms and Tools

- SharePoint 2010
- Microsoft .NET framework
- PHP/MYSQL
- Web content management system
- Java
- Java script/Ajax
- HTML/XML
- SQL/XSLT queries
- Flash
- Microsoft Active X
- Microsoft Reporting Services

Application Deployment Mechanisms

- Citrix XenApp/Microsoft Remote Desktop Services
- Internet Explorer for internal browser-based apps – systems should be operable in the current stable version and the previous stable version.
- Vendor software deployed through System Center/manual software installation
- Application virtualisation (AppV)
- We expect public-facing applications and content (both third party and developed in house) delivered by web browser to be fully usable in the browsers listed as 'A Grade' or 'A Grade (upon GA release)' in Yahoo!'s Browser Support Chart, detailed at http://developer.yahoo.com/yui/articles/gbs/. Yahoo's browser grading is

the industry standard when determining support, and provides continuity with the development strategy used to build our current web estate.

Corporate applications

Function	Application
Office automation (Word processing, spreadsheets, notes etc)	Microsoft Office
PDF reader/writer, web document creator, optical character recognition, document archive.	Adobe Acrobat
File compression	7-Zip
Web browser	Microsoft Internet Explorer
Email, calendar, task list, personal / external contacts	Microsoft Exchange/Outlook
Internal instant messaging / voice calls and video conferencing	Microsoft Lync
Spatial and geographic information system	ESRI UK ARC GIS suite
Cash receipting / payments	Civica ICON
Enterprise Resource Planning (HR, finance, procurement, payroll)	SAP
Telephone and contact centre management software	Mitel ICP 3300 / 6000 series software and Enterprise suite
ICT service desk and systems management	Microsoft Systems Center
Reporting	Microsoft SQL Reporting Services SAP Business Intelligence

Function	Application
EDRMS	Microsoft SharePoint or using functionality embedded in line-of-business systems
Search	Internal: Google Mini (will be replaced by Microsoft Fast Search in 2011) External: Google Mini (will be reviewed in 2011/12)

Strategic Line of business applications

Department	Service area	Function	Application
Children and Education	Education	Education pupil records	Under investigation
		Education special needs records	Under investigation
	Social care	Case management	OLM Carefirst
Community Services	Social Care	Case management	OLM Carefirst
		Domicilary care	Under investigation
		Emergency Duty Team	Under investigation
Neighbourhood and Planning	Planning and regulatory services	Planning Building control Trading standards Food health and safety Public protection Pest control Licensing Land charges	Out to tender
	Transport	Route management	Under investigation
		Highways management	Under investigation
	Housing	Choice based lettings	Abritas
		Housing stock management	Tender in preparation
Resources	Customer Services and Shared Service	HR	SAP
		Recruitment	Tender in preparation

Department	Service area	Function	Application
	Centre	Finance	SAP
		Procurement	SAP
		Payroll	SAP
		Customer services	Under investigation
		Registrars	Under investigation
	Legal and democratic services	Legal case management	Under investigation
		Legal time recording	Under investigation
		Elections management	eXpress
		Committee management	Modern.gov
		Governance	SharePoint
	Finance	Finance	SAP
	HR	HR	SAP / SharePoint
	Pensions	Pensions	Hosted solution
	Revenues and benefits	Council tax and benefits	Northgate SX3/Northgate@Work (go live November 2011)
	Learning and development	Learning management system	Under investigation

Infrastructure

Telephony

- Build on current investment made in Mitel equipment.

- Implement VOIP to maximise use of existing network infrastructure and reduce call costs
- Remove main legacy telephony switches (thus saving support costs)
- Use unified messaging to bring greater flexibility to a mobile workforce
- Mobile telephony (including Smartphones)

Server platform

- Twin data centres
    - Primary Data Centre = County Hall, Trowbridge
    - Secondary Data Centre = Monkton Park, Chippenham
- Virtual servers to be used for low resource requirement servers
- Clustered Virtual Server farms across twin data centres will be provided for standard servers giving better resilience.
- Critical SQL database servers will be provided on a clustered platform for better performance and resilience
- Low importance SQL databases can be installed on standalone servers with a lower speed restore function.
- Critical Oracle database server services will be provided on a clustered platform (Oracle databases tend to be used for Critical Applications)
- A clustered Exchange platform will be provided on servers across twin data centres

Data Storage

- All data will be saved to Storage Area Network (SAN) based data shares, saved into an Electronic Records and Document Management System (EDRMS) linked to a line of business application, or into Microsoft SharePoint.
- SAN strategy to be based upon iSCSI technologies
- HP Lefthand clustered SAN equipment will be used for virtual server farms and critical data storage.
- Other SAN equipment such as HP EVA (ex Salisbury District Council), Dell Equalogic (ex North Wiltshire District Council and West Wiltshire District Council) etc to be re used as archive, backup or test devices

Network connectivity to remote sites and homeworkers

- Twin Internet lines will be provided (one into each data centre) to provide resilience for staff utilising browsing facilities.
- Staff to be provided with end to end supportable broadband home worker solutions to improve support functions and meet our security requirements.
- Twin home workers MPLS bearers will be provided (one into each data centre) to provide resilience for those accessing the Corporate network via their home worker connections

Printing

- Local Team and personal print solutions will be replaced with a managed solution centred around the use of multi-functional devices that provide printing, fax, scanning and copying facilities.
- Multi-functional devices will be networked.
- Users will print to the 'nearest' devices.
- Secure printing will be enabled.
- Specialist printers and scanners will be provided in cases where a clear business requirement warrants this e.g. scanning A0 plans for planning applications or large format GIS maps.

PC equipment

- Laptops will now be provided to all staff unless an agreed business case is submitted for specialist needs for a desktop, such as a scanner connection requiring a specialist driver card to be installed. This will be by exception only.
- Swan neck docking station stands will be provided for those staff wishing to use the dual screen facility with their laptop

Programme themes

The detailed Information Services Programme consists of more than 170 discrete projects, detailed in the accompanying programme plan document. Moreover, over the lifetime of this strategy, the programme will develop as projects are finished and replaced by new developments. However, to meet our key drivers, the programmes can broadly be grouped into a number of key themes:

Programme control and governance

Our programme governance will ensure that we maintain control over the overall programme, while being responsive to rapidly evolving business requirements; and we will ensure that the programme is delivered on time, to budget and to quality. Our programme governance is based on Managing Successful Programmes (MSP). Our project management framework is based on PRINCE 2.

Infrastructure and applications rationalisation

We will reduce the estate of legacy systems and applications to simplify support and improve reliability of our systems. We will concentrate application development on a strategic suite of applications (including SharePoint, MS Office, MS Exchange, SAP, ESRI and the corporate web environment), moving towards the goal of “one function, one application”. When applications or infrastructure are decommissioned, we will ensure this occurs fully so that we are not left with residual ongoing revenue costs.

Access to information

We will simplify and rationalise our stores of paper and electronic information, ensuring that information has proper controls over its lifecycle, can be easily found, and access is open to anyone with the necessary permissions. We will ensure that services can have access to all their electronic information in a single location, rather than scattered over many different servers and file stores. At the same time, we will ensure that key corporate information (such as the Gazetteer, background mapping and Active Directory) are as widely disseminated as possible and linked into corporate systems, maximising our reuse of information and reducing the need for different services to each separately collect and store duplicated information.

Campus and Operational Delivery Programme

We will deliver solutions that support new ways of working, in particular allowing a user to connect to all their systems and data from any location. We will ensure that our policies governing the handling and storage of information reflect the desire of the business to have a more mobile, flexible workforce.

Application development on core applications

We will develop expertise in a series of core applications. Requests for new business functionality will be assessed first for their development potential on that core application platform, before a presumption is made to purchase a new application.

Streamlining business processes and business transformation

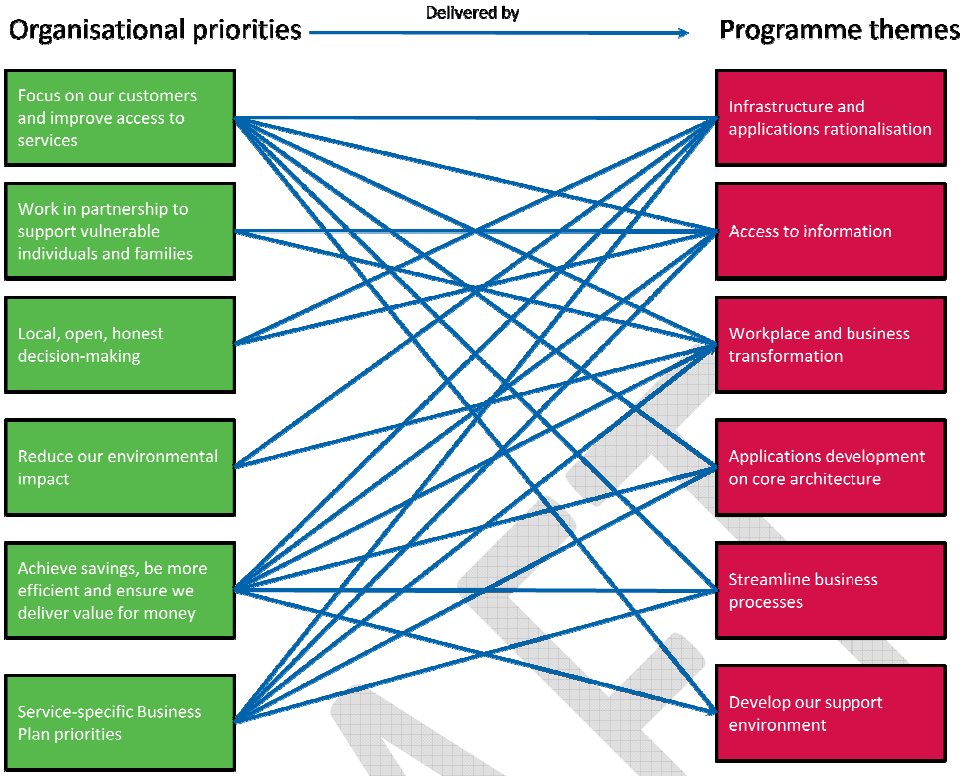
We will streamline business processes - particularly key HR, Finance and ICT processes - using a combination of SAP, e-Forms and internal websites, to remove bureaucracy from our internal processes. We will use a systems thinking approach when looking to streamline business processes.

Developing our support environment

We will continue to make improvements in the support we provide through the service desk and other arrangements, in line with what we learn from the performance information. We will ensure that staff have the skills and knowledge and contractual flexibility to deliver the level of support demanded by the business, at the times demanded by the business, within the overall constraints of finance available to pay for support.

Overlap with corporate priorities

The following diagram summarises how the programme themes help with the delivery of the Wiltshire Council Business Plan priorities.



Business impact of the Information Services Strategy

At any moment in time, the resource available to the Information Services team is broadly fixed. However, there is flexibility in how this resource is deployed. In particular, the more resilient and standardised we can make our infrastructure, the less resource will be required fixing problems, and the more resource that becomes available for service development.

Therefore, our programme objectives will change over time, with an increasing resource available to drive service performance by exploiting our information, applications and infrastructure. Broadly, this will occur in three overlapping phases:

- **Phase 1 – Drive IS performance by building in resilience**
  During this phase, we will concentrate on projects that will improve the overall reliability of the ICT infrastructure. This phase will reduce the number of incidents caused as a direct consequence of the current fragmented infrastructure, and make problems quicker to resolve when they do occur.

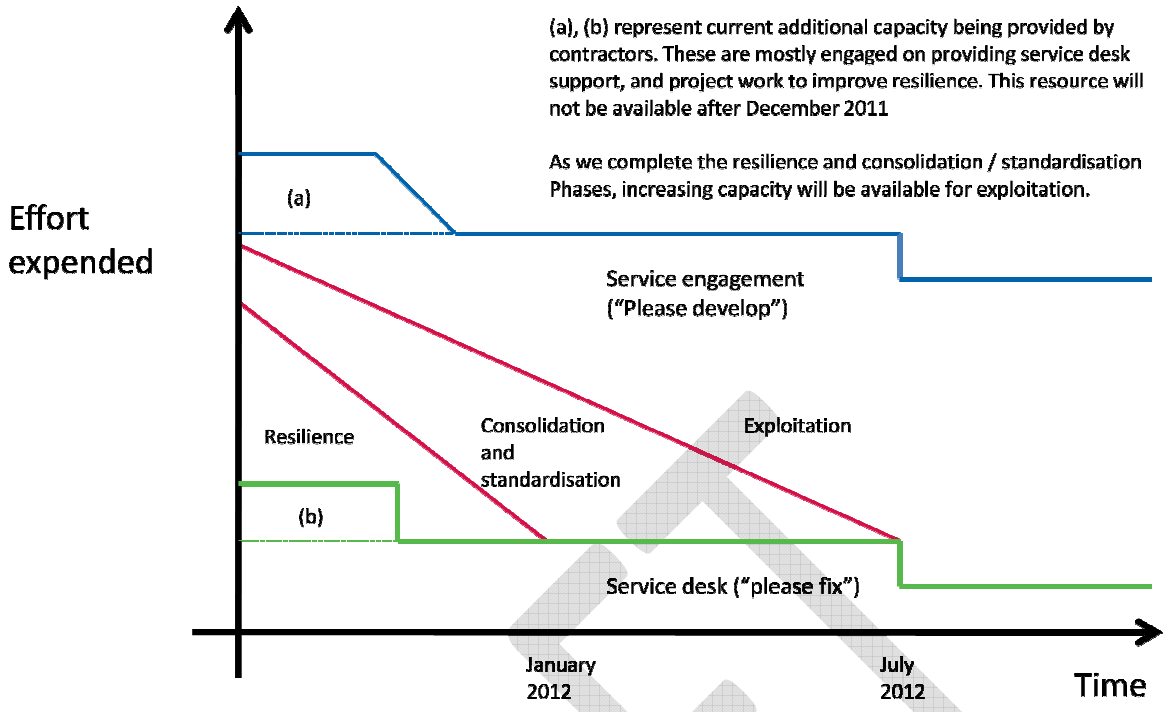
Projects in this phase include rationalisation of our Active Directory, removal of legacy domains, rollout of machines built to the Windows 7 standard operating environment and continual service improvement of the service desk.

- **Phase 2 – Drive down IS cost by consolidation and standardisation**
  During this phase, we will concentrate on applications and information rationalisation and standardisation. This will reduce direct application costs (for example, by replacing five legacy systems with one single system on more flexible and advantageous licensing terms) as well as reducing ongoing support costs (for example, by reducing the need for specialist knowledge on different, but overlapping, systems.

  Projects in this phase include single systems for Revenues and Benefits, Planning and Public Protection, Housing and GIS, and rationalisation of storage of electronic and paper information.
- **Phase 3 - Drive service performance by IS exploitation**
  During this phase, the extra capacity freed up by the development of a resilient and consolidated information and applications architecture will be available to drive service improvement on the back of that architecture.

  These dividing lines are not rigid: for example, many of the application rationalisation and data consolidation projects are also key enablers driving service performance within their respective service.

This shifting availability of capacity is illustrated schematically below:


(a), (b) represent current additional capacity being provided by contractors. These are mostly engaged on providing service desk support, and project work to improve resilience. This resource will not be available after December 2011
As we complete the resilience and consolidation / standardisation Phases, increasing capacity will be available for exploitation.
Effort expended
(a)
Service engagement ("Please develop")
Resilience
Consolidation and standardisation
Exploitation
(b)
Service desk ("please fix")
January 2012
July 2012
Time

Glossary

Active Directory	Active Directory is a system used to store information (such as name, email address and permissions to systems) about every user, group of users and generic mailbox in use within Wiltshire Council. Information within Active Directory can be used both to provide information to users (for example, an online contact directory) and also control access to systems (for example, all users within the planning group can have access to the planning system).
AD	See **Active Directory**
App	In mobile computing, an app is small application designed to allow completion of a single task.
Cloud computing	Cloud computing is a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. From a business perspective, resources in the cloud are typically leased as required (and paid from revenue as a utility service), with responsibility for support, backups, disaster recovery and capacity planning being the responsibility of the provider. This contrasts with a more traditional model where resources are purchased (using capital), with responsibility for support, backup, disaster recovery and capacity planning lying with the organisation.
Denial of service attack	A denial-of-service attack (DoS attack) or distributed denial-of-service attack (DDoS attack) is a concerted attempt to make a computer resource unavailable to its intended users, temporarily or indefinitely. Typically this involves co-ordinating a large number of users to simultaneously request network connectivity (such as connection to a website) with the effect of shutting down the service by swamping the available resources of the target system.

DirectAccess	DirectAccess is a technology that allows automatic connection to the council's network from any suitably-equipped computer whenever it is connected to the internet. It thus provides equivalent functionality wherever a user is connecting from, unlike previous remote working solutions (such as WoW) which required an explicit login whenever the user was not connecting from a council location.
EDRMS	See **Electronic Document and Records Management System**
Electronic Document and Records Management System	An electronic document and records management system (EDRMS) is a system for storing files (such as word documents, spreadsheets, presentations etc) in a structured fashion. Typically, an EDRMS allows management of such files, for example deletion of files beyond their retention period, and preventing changes being made to certain types of document which constitute a record of an action.
Geographic Information System	A geographic information system (GIS) is a system that integrates, stores, edits, analyzes, shares, and displays location-based information for informing decision making. Nearly every service delivered by Wiltshire Council is delivered to a location (such as an address) or in an area (such as a parish). Therefore, geographical information is at the heart of decision making in nearly every service within the council. Wiltshire Council has a legacy of several GI systems covering different services and areas within Wiltshire; a major project in the 2011/12 programme will see these systems, and the data within them, consolidated into a single application and datastore.
GIS	See **Geographic Information System**.
Home worker	A home worker is a user whose contract requires them to spend some or all of their time working from home. Such users will be provided with suitable equipment (including a dedicated broadband line) to enable them to work from home.
Impact level	Impact level refers to the potential impact caused to the

	organisation / or to individuals following the unauthorised disclosure of the information within the system. The security controls required to protect a given system are dependent on the impact level of the information within that system. There are six impact levels defined for UK public sector information, ranging from IL1 to IL6. Most information within Wiltshire Council would be classified as IL1 – IL3 – however note that where large volume of a data of a specific level are stored together, the overall system itself may need a higher level of protection (aggregation of risk).
Infrastructure-as-a-service	Infrastructure-as-a-service is a part of a cloud computing model, whereby responsibility for infrastructure is devolved to a cloud computing supplier, rather than being provided by the organisation concerned.
INSPIRE directive	INSPIRE is a Europe-wide directive requiring public sector organisations to publish information about their spatial datasets in a common format such that data can be viewed and shared between different organisations, and that data required to ensure good governance should be readily and transparently available.
Instant messaging	Instant messaging is a collection of technologies used for real-time text-based communication between two or more participants over a network. Instant messages are typically ephemeral (in that if the recipient is not available to receive the message, then the message disappears); in this way it differs from email, where the message is permanent but not necessarily real-time.
iSCSI	iSCSI (standing for Internet Small Computer System Interface) is a protocol for linking dispersed data storage systems. It enables information to be located and retrieved independent of its physical location.
ITIL	ITIL (the Information Technology Infrastructure Library) is a set of practices for managing an IT Service, based around the concepts of strategy, design, transition, operation and continual service improvement. Wiltshire Council manages its service desk function

	using ITIL processes.
LLPG	See **Local Land and Property Gazetteer**
Local Land and Property Gazetteer	The Local Land and Property Gazetteer (LLPG) is a database of every unique address within Wiltshire, maintained to a standard format. It also includes items not conventionally thought of as addresses, but which have a defined location; for example, plots of land available for development, or tank crossing points on Salisbury Plain. Each addressable point has a location, which enables them to be located on a map, and for us to show the spatial distribution of services according to their address. It is thus a key component of the Business Plan objective to provide online postcode-based lookup of service information for key services. The consolidation of four separate LLPGs (one from each former District) into a single LLPG for Wiltshire took place during 2009/10. The LLPG acts as the data source within Wiltshire for the National Land and Property Gazetteer (NLPG) which provides the same service nationally.
Local Street Gazetteer	The Local Street Gazetteer (LSG) is a database of every unique street within Wiltshire. It forms the Wiltshire component of the National Street Gazetteer (NSG) which is the definitive list of all streets in England and Wales.
LSG	See **Local Street Gazetteer**
Malware	Malware, or Malicious Software, is software designed to secretly access a user's computer system without the informed consent of the user. Typically this access is used for some kind of harmful intent.
Mapping Services Agreement	The Mapping Services Agreement (MSA) is a framework procurement agreement between local authorities and the Ordnance Survey for the provision of a set of mapping data. By signing the MSA, each authority received the right to use a variety of maps within their organisation for any business purpose (except for resale). Authorities could also allow free access to the mapping

	to any organisation acting as a contractor on behalf of the authority. In exchange, authorities had the legal requirement to maintain a gazetteer of addresses (the LLPG). From April 2011, the MSA is being replaced by the Public Sector Mapping Agreement (PSMA).
Mash-up	A mash-up is a web application that combines data from two or more different sources (that may come from entirely different organisations) to present new functionality or analysis that would not be possible by looking at either source independently.
Mobile worker	A mobile worker is a worker whose job requires them to connect for some or all of their time in locations away from council offices.
MPLS	See Multi Protocol Label Switching
MSA	See **Mapping Services Agreement**
Multi Protocol Label Switching	Multi Protocol Label Switching (MPLS) is a mechanism for carrying data on a network. The primary benefit is to allow seamless transmission of data across multiple networks that have different underlying technologies.
National Land and Property Gazetteer	See **Local Land and Property Gazetteer**
National Street Gazetteer	See **Local Street Gazetteer**
NLPG	See **National Land and Property Gazetteer**
NSG	See **National Street Gazetteer**
Opendata	Opendata refers to a philosophy of making data available, freely and with non-restrictive licence conditions for its reuse, in a format that promotes reuse of the data to create new analytical and service models, and public scrutiny of an organisation using that data. Examples include the release of our spending data, allowing the public to scrutinise our spending, and also potentially allowing

	a mash up of the data with an online mapping service to show – for example – the geographic spread of our spending. These examples demonstrate use of opendata to promote scrutiny, and to allow a new service or analysis to be performed outside of council control.
PRINCE 2	PRINCE 2 (standing for PRojects IN Controlled Environments) is a specific methodology for controlling projects. It is widely used in the public sector, and has been chosen by Wiltshire Council for running major projects.
Protective marking	Protective marking is a system of classification used to indicate the actions required to appropriately protect the information contained within. The level of protective marking is usually a reflection of the information's Impact Level.
PSMA	See **Public Sector Mapping Agreement**
Public Sector Mapping Agreement	The Public Sector Mapping Agreement (PSMA) is the successor agreement (from April 2011) to the MSA. The most significant practical difference between the two agreements is that under the MSA, Wiltshire Council could provide mapping free of charge to each parish by signing the parish up as a contractor to Wiltshire Council; the responsibility for ensuring that the mapping was used correctly and according to the licence conditions thus lay with Wiltshire Council. Under the PSMA, parishes can sign up directly to receive mapping. They still get the mapping at no charge, but the responsibility is now with the parish to ensure that they use it according to the licence conditions that they have signed.
SAN	See **Storage Area Network**
Service desk	The service desk acts as a single point of contact between Information Services and the rest of the organisation, through which users can log faults (such as "the system isn't working") and requests for standard new infrastructure and equipment (such as "I need a mobile telephone").
Social	Social networking refers to a website that promotes social

networking	interaction between a group of individuals sharing a common interest. Typically social networking websites have the majority of their content provided by a large number of individuals of equivalent status, rather than a more traditional editorial model in which a small number of “experts” provide content that is essentially passively consumed by a large number of “readers”. Typical social networking sites include FaceBook, Twitter, Flickr etc
Software-as-a service	Software-as-a-service is a part of a cloud computing model, whereby responsibility for software applications is devolved to a cloud computing supplier, rather than being provided by the organisation concerned.
Storage Area Network	A Storage Area Network (SAN) is a network of linked storage devices providing a large volume of available storage space, but which appears on the network as a single location.
Trojan	A Trojan is a piece of software that appears to the user to carry out a desirable function, encouraging the user to run it, but which secretly carries out a malicious function.
Virtualisation	Virtualisation refers to the separation between the logical building blocks of an IT infrastructure (such as servers) and the actual physical reality of those building blocks. For example, traditionally an IT environment that had two different systems may have required two different physical servers on which to run; in a virtual environment both logical servers run on a single machine of greater capacity. The primary advantage is that the use of resources can be optimised, for example, when one system is running at maximum capacity, the other may be idle. In a real environment, this requires two servers each capable of running at maximum load, but which most of the time will be sitting idle and unused. In a virtual environment, the peaks and troughs tend to cancel each other out, such that the virtual machine can be smaller and cheaper to run than the sum of the two machines, but will spend more of its time running at optimum capacity.

Virus	A virus is a computer program, typically designed to carry out malicious intent on a computer, that can replicate itself and thus spread from computer to computer.
VOIP	See **Voice Over Internet Protocol**
Voice Over Internet Protocol	Voice Over Internet Protocol (VOIP) refers to a technology in which voice traffic (from a telephone) is carried over an organisations data network, rather than over an entirely separate telephony network. The benefits include avoiding having two network infrastructures, integration with data systems (for example, allowing dialling a number held in a users online telephone directory) and location-independence of the phone line (allowing a user to have the same phone number wherever they are physically based).