
REPORT TO:	FINANCE & MANAGEMENT COMMITTEE	AGENDA ITEM: 8
DATE OF MEETING:	16th OCTOBER 2014	CATEGORY: OPEN DELEGATED
REPORT FROM:	DIRECTOR OF FINANCE and CORPORATE SERVICES	
MEMBERS' CONTACT POINT:	KEVIN STACKHOUSE (01283 595811) kevin.stackhouse@south-derbys.gov.uk	DOC: u/ks/it/work plan 2013 to 2016 progress
SUBJECT:	ICT UPDATE AND WORK PLAN 2013 to 2016	REF:
WARD(S) AFFECTED:	ALL	TERMS OF REFERENCE: FM 10

1.0 Recommendations

- 1.1 That progress on the ICT Work Plan (2013 to 2016) is noted.
- 1.2 That an options appraisal is undertaken on moving the core IT infrastructure into a managed Data Centre with a report back later in the financial year.
- 1.3 That the introduction of cash payment machines in the Customer Services area is considered.

2.0 Purpose of Report

- 2.1 To provide a progress report on the ICT work plan that was approved in December 2013.

3.0 Detail

The Purpose of ICT

- 3.1 ICT provides the means to support more efficient and effective service delivery across the Council. Clearly, ICT is a fundamental part of the modern day world. It is increasingly a key element of service delivery and for communicating with residents and users of services.
- 3.2 In many instances poor or ineffective ICT can undermine council operations. Demand for the best technology, both from within and outside of the Council, continues to grow steadily. However, there is a cost of keeping up to date and capital investment continues to be made to enable efficiencies and service improvements.

3.3 The key aims of ICT are:

- **Resilience** – so that services keep working.
- **Availability** – enabling systems to be up and running at times which meet business needs; this includes outside of normal working hours.
- **Accessibility** – to enable remote working and the use of different hardware devices.
- **Stability** and up-to-date infrastructure (servers and associated hardware, etc.) to provide a fit for purpose platform.
- **Consistency** in key business systems common across the Council such as email and Microsoft office.
- **Security** at a high level to protect data and systems.

Work Plan 2013 to 2016

3.4 This is detailed in **Appendix 1**. The key areas were to:

- Complete the remaining phases of VDI and connectivity.
- Consolidate the updated infrastructure against the key ICT aims, to enable more effective use and to ensure that the Council remains in position to benefit from emerging technologies.
- Develop the Disaster Recovery and Business Continuity Work.
- Comply with the updated standards for the Public Services Network (PSN).
- Support greater mobile, remote and home working.
- Support developments in the Paperlite and Customer Access Strategies (*subject to resources and specific business cases*).

Virtualisation or Thin Client Technology

3.5 This was a major development included in the plan, whereby software and operating systems are stored and operated remotely from the hardware that uses it, i.e. a virtual desktop infrastructure (VDI). So for example, individual PC's or other devices do not hold the software, but access it through a common media such as a network or the internet.

- 3.6 The main benefit is that core operating systems such as email and Microsoft office, can be stored and updated centrally; this negates the need for them to be loaded on individual machines or items of equipment. It then ensures that all users operate the same version of software at the same time, updates are made available to all users consistently and overall IT capacity is increased.
- 3.7 Users effectively have what is known as a “virtual desktop.” This is basically just a keyboard and terminal, without the PC unit itself. Standardisation, consistency and security become less of an issue, reducing the associated risks and costs.
- 3.8 Except for 1 small service area which is due to be completed shortly, this project was fully completed in May 2014, alongside the upgrade of equipment where this was required.

Connectivity (Data Flow)

- 3.9 A key issue for the Council continues to be “*connectivity*” within the Civic Offices and, to a lesser extent now, between the Civic Offices and other service premises, i.e. the Depot, Oaklands Village and Rosliston Forestry Centre.
- 3.10 Although the Council’s ICT infrastructure i.e. the servers and systems that store data and information are now fit for purpose, the way in which that data and information is passed and used across the Council depends on robust communication/network links.
- 3.11 The Civic Offices are an ageing building and their construction and fabric has led to some inefficiency in connectivity in recent years. The nature of the building has led to the creation of a myriad of network points and switches, together with cabling that has been added to over-time as the building has been extended and altered.
- 3.12 Some improvements have been undertaken which has helped to improve the resilience. However, a long term solution to completely reconfigure the network around the Civic Offices would cost up to £150,000 based on an assessment undertaken by the Council’s communications provider.
- 3.13 The link to Rosliston was upgraded last year which has solved issues and the link to Oaklands Village (as a newer facility) is fine. The link to the Depot has also been upgraded but this is only a temporary solution pending the relocation to a new Depot.
- 3.14 Given the cost of a total reconfiguration, the most vulnerable points are being assessed for upgrade to keep costs within the annual budget for maintaining the network. Any upgrade will at least strengthen the network and reduce the risk of problems due to overload and power outages.

3.15 Downtime is rare, but when it does occur it disrupts service provision across the Council. It should be noted that the introduction of VDI has no real effect on the connectivity issue. This has come about by the increasing volume of network traffic, both internally and externally, as the use of ICT continues to grow.

Wi-Fi Connection

3.16 This was also limited within the Council offices. However, this is currently being upgraded, which will extend the wireless connectivity. The improvement will complement services and officers using portable and hand-held devices.

Remote Access

3.17 Previously, remote access to Council systems was through a "Citrix" network. This had become outdated and inefficient.

3.18 In accordance with the work plan, this has been replaced with an alternative solution. This development will provide greater opportunities for remote, mobile and home working.

Disaster Recovery and Business Continuity

3.19 Data is backed up on a daily basis and stored off site both locally and at a regional data centre. An upgraded recovery solution is currently being implemented off-site.

3.20 It is proposed that consideration is given to moving to a fully managed recovery and business continuity service provided by a Data Management Centre. This is commonly used nowadays by many organisations as it reduces the risk and negative impact of data loss and downtime, whilst increasing cost effectiveness.

Compliance with the Public Sector Network

3.21 Increased standards were introduced in 2013 and the Council received its compliance certificate in April 2014. Compliance lasts only for a year and is subject to an independent audit and application on an annual basis.

Paperlite Strategy

3.22 The strategy is aimed at eliminating as much paper as possible (with associated printing, stationery and distribution) from council operations and making greater use of ICT capability.

3.23 As previously reported, several projects were completed in 2013/14 regarding electronic outbound mail, a reduction in printing devices, together with the introduction of more hand held/portable equipment for communicating. Following some capital investment, this has generated on-going cashable savings for the Council.

Next Stage

3.24 Initial proposals for the next stage of Paperlite (which in principle remain unchanged) will involve a more significant switch in the way that the Council operates. It will also require a fairly substantial investment in ICT to facilitate the development.

3.25 Paper potentially provides a high risk to the Council (fire, flood, theft, etc.) and consumes significant storage space which could be released for more productive uses. Therefore, access to electronic data rather than hardcopy paper records is considered to be the next priority under this strategy.

3.26 There are two potential projects that have been identified.

- **Archiving;** there are thousands and thousands of pieces of paper currently stored around the Council and removing this is a key component of the Strategy. Around a quarter of this volume is expected to require secure destruction (due to its age) with the remainder needing to be scanned and securely stored as electronic images for future retrieval as and when required.
- **Digital Mail Room - Electronic Document Management (EDM);** this facilitates the capture, indexing and online retrieval of information from a single source and removes the barriers that exist when information is stored in a variety of different formats and locations. This functionality has been shown to work for many years in Revenues and Benefits at the Council and could now be expanded across other services.

This would entail increasing capacity of the Document Management IT System used in Revenues, with a separate and secure facility being introduced centrally to deal with all documents and correspondence coming into the Council.

In addition to overcoming the risks associated with paper, this would provide potential for more efficient working, to free up capacity for staff, to change ways of working, reduce response times and provide opportunities for revenue generation by freeing up office space.

Customer Services

- 3.27 In recent years, the Council has been developing the means to make it more efficient and effective for people contacting the Council to access what they require. Using specific Government funding at the time, the Council implemented an ICT system back in 2003 and following this, a programme of centralising resources into a Contact Centre has taken place to consolidate access for anyone contacting the Council.
- 3.28 In 2012, the Committee approved a strategy in 3 phases to improve what is known as “Customer Access.” The main aim of this is to reduce the amount of direct contact with a person, whether by telephone or face to face, by providing the facility for people to be dealt using ICT, and at the first point of contact.
- **Phase 1: Expansion of ICT;** a review is planned to upgrade the telephony system so queries can be more efficiently directed to the correct service.
 - **Phase 2: Appointment System;** investment in a corporate system is proposed which can be accessed, ultimately by all stakeholders. This will enable a structured approach to handling enquiries and requests
 - **Phase 3: Self Service;** this is the ultimate aim of the strategy. More people are using the internet for accessing council services and paying bills, etc. and the proposal will be to develop this option over the medium term. It will require a greater investment in ICT but will ultimately free up capacity and allow more streamlined contact with people who wish to deal with the Council in this way. Clearly, the Council will still need to make arrangements for those people who need more direct contact.
- 3.29 In the meantime, a new internal web (the Intranet) is currently being implemented and the Council’s Web Site is planned to be revamped in 2015, which will provide the basis for phase 3 above.
- 3.30 Direct contact can be time consuming for both the Council and person concerned. This is a longer term strategy and will not currently suit everyone’s needs or solve every enquiry.
- 3.31 Increasingly, people are contacting the Council using ICT and it is envisaged that in the future, more people will want to use the internet and mobile devices, etc. to deal with the Council. Therefore, it is important that the Council is well placed to respond to this change in contact.
- 3.32 However, many residents still visit the main Civic Offices and this has not reduced in recent years. In addition, some queries are taking longer to resolve.

3.33 People still require direct contact; mainly, this is to make payments and to enquire about benefits, planning and housing. The increase and complexity is considered to have arisen from the growth of the District and changes to Welfare Benefits.

Payments made at the Civic Offices

3.34 During busy periods, waiting times for residents can be lengthy. If the number of people making payments could be reduced or alternative facilities provided, this would free up resources to deal with general enquiries more speedily.

3.35 People making payments are encouraged to change to Direct Debit or are informed of alternative pay points (post offices, local shops, etc.) in the area. Recent surveys indicate most people visiting the offices live within a 4 mile radius of the main town.

3.36 Longer-term, additional staffing resources may need to be put into Customer Services. Completely closing the cash payment services and forcing people to direct debit or to other pay points, would be a radical step. However, this may be unrealistic at the present time given the demographics of the area and could be seen as a reduction in service.

Payment Machines

3.37 Some preliminary investigations of introducing electronic paying in machines in the reception area have been made. Each machine would cost approximately £10,000 to install with an annual running cost of around £1,000. These would reduce demand on resources by eliminating the need to manually handle cash and card payments.

3.38 Clearly, residents could still find themselves queuing but they would not be tying up resources to deal with general enquiries. However, no cash would be accepted on any of the customer services desks, it would be payment machines only.

3.39 Location and sign posting would need to be planned carefully given the limited space in the customer services area. Communication and support for people to start using the machines would also need to be provided. It is recommended that the introduction of 1 machine initially, on a phased basis, is considered.

4.0 Potential Risks

4.1 The main risks associated with the ICT Plan are set out in the following table.

Lack of Technical Expertise	<p>The Council's ICT service provider will be supporting and delivering many of the areas in the work plan. They have access to a wider resource base which can be utilised to back up the on-site team if necessary. This has been the case with much of the development programme involving VDI, etc.</p>
Insufficient Budgets	<p>The financial implications of the proposed work plan are detailed in Section 5. A substantial part of the plan will be financed from within existing ICT budgets and the ICT earmarked reserve.</p> <p>The largest investment is required to deliver the remaining two Paperlite projects. Opportunities for external funding are being kept under review. There would be some pay back of the initial investment, but it is considered that this would be ad-hoc over a period of time unless savings are identified immediately in current revenue budgets.</p>
Cultural Change	<p>Developments in ICT are usually delivered to provide more efficient and effective services. Updated technology usually brings opportunities but this inevitably means a change in working practices and the freeing up of staff capacity, together with changes needed to be accepted by residents and customers.</p> <p>The Council has an established change management policy in place; training and development will be undertaken as part of project implementation. Greater awareness of security by users is increasingly required and it will be important to review policies and provide training where necessary.</p>

5.0 Financial Implications

5.1 Some actions in the work programme will be delivered at no additional cost. Replacement of PCs, terminal and other devices, together with hardware upgrades will be met from within existing ICT budgets/earmarked reserve.

5.2 The cost of implementing the remaining Paperlite projects is estimated at approximately £300,000; this excludes the move to self-serve, which is still to be costed. The main cost is associated with EDM as the increase in software, hardware and technical support is extensive.

5.3 Definitive savings would be made following the initial investment, but their timing would depend on how quickly new working practices could be revised and new staffing structures implemented. Payback could be quick, but could also be much longer depending on the strategy adopted to achieve the savings.

6.0 Corporate Implications

6.1 Potential implications for service delivery and change management are detailed in the report.

7.0 Community Implications

7.1 As highlighted in the report, several of the proposals in the work programme are designed to benefit and meet the expectations of local communities when dealing with the Council.

Appendix 1 – ICT Work Plan 2013 to 2016

	Key Action	Measure / Outcome	Target Dates	Progress as at September 2014
1	Digital Mail Room EDM (Electronic Document Management) and Archiving	Introduction of EDM across the Council. Change in working practices providing efficiencies and eventually cost savings.	December 2016	Still dependent on securing resources. Estimated costs are £300,000 one-off with £30,000 per year on-going. Some resources will be available in the ICT reserve. Potential bid into the Government's Transformation Fund.
2	Reduction in Paper Outbound Mail	All outbound mail is sent electronically. Electronic archiving or off-site storage of paper. Reduction in paper, postage and associated stationery such as envelopes.	March 2014	Complete.
3	Reduction in and upgrade of Multi Functional Devices (MFDs)	New devices in place. Reduction in paper and printing.	January 2014	Complete.
4	Development of E-Committees	All meetings and forums being run using technology instead of paper. Minutes recorded and distributed in real time.	September 2014	Complete.
5	Modern and flexible working practices – Mobile, Remote and Home working solution	Infrastructure in place to provide the capability for flexible working practices. <i>Each service area will need to decide on how they wish to implement a solution including a business case.</i>	On-going as services demand	ICT work Complete. Portable devices replaced and upgraded. Platform for services to utilise provided.

6	Replacement of Citrix Network and Dual Factor Authentication for mobile, remote and home working.	Secure method in place for accessing required systems remotely.	January 2014	Complete.
	Extend wireless connectivity around the Civic Offices	As above	December 2013	Nearing completion.
7	Appointment System	System in place for Members, Officers and contractors and ultimately all people contacting the Council.	December 2014	Business case being developed. This will extend now beyond December 2014.
8	Expansion of ICT Customer Relationship Management (CRM) System across Council Services	Single view of a Customer available. Review of working processes across directorates and move to contact centre. Review of Intelligent Queue phone solution, helping people get to the right place first time.	December 2015	Still in early stages of development – this is a longer term objective. Some work being undertaken in Planning.
9	Move to self service	Reduced cost of service. Greater transactional services available using the Web.	December 2016	As above Some work being undertaken in Revenues and Benefits.
10	Core network ICT Infrastructure upgrade covered by support and maintenance.	Core Network infrastructure reviewed and updated. Support and maintenance contract in place for updated infrastructure (3 years)	March 2014	This is on-going within the confines of annual budgets to strengthen connectivity in the main Civic Offices. Complete. Current servers under warranty until December 2017.

11	3 Year PC/Thin Client Refresh Programme	Continuing replacement of the existing PC estate each year. Modern and flexible working practices available for users.	On-going from December 2013	Main replacements completed in line with VDI project.
12	Ensuring effective ICT Security is in place. Replace Firewall and anti-virus software	Monthly reviews undertaken of any incidents and reported to as part of ICT monitoring arrangements.	On-going Monthly March 2014	No major security issues to report. Internal Audit also regularly reviewing security arrangements as change continues. Policies and awareness to staff kept under regular review. Complete.
13	Continued compliance with the PSN (Public Service Network)	ICT Health Check undertaken by third party. PSN Code of connection submitted and compliance certificate received to demonstrate secure network in place. Switch to required IP address range for PSN.	Annually in October	Council accredited under new Code in April 2014. Next audit and review due early in 2015.
14	ICT Disaster Recovery (DR) and Business Continuity	Upgrade DR solution off site and transfer replica SAN. Upgrade Business Continuity solution to strengthen remote access.	December 2013 April 2014	Still to be fully implemented. Separate piece of work now proposed to review the core infrastructure being moved into a managed Data Centre.

15	Geographical Information System (GIS)	Reduction in Map Info usage. Wider utilisation of GIS across the Council. Move to open source solution.	January 2014	Complete.
16	Green ICT. Minimise the impact from ICT on the Councils carbon footprint	Equipment recycled appropriately. Reduction in energy use through use and rationalisation of technology.	On-going	All equipment recycled or disposed of in accordance with European and UK Government Environmental Legislation.
17	Emerging Technologies	Relevant technologies being kept under a watching brief and opportunities utilised appropriately. Next Work Plan completed for consideration	On-going October 2016	Nothing further to report at this stage.