

To: Audit & Governance Committee
Date: 28 September 2016
Report of: Helen Bishop, Head of Business Improvement
Title of Report: ICT Transition to SCC: Lessons Learnt

Summary and recommendations	
Purpose of report:	To detail the lessons learnt from the ICT transition to the new service provider, SCC, on expiration of the contract with Oxfordshire County Council.
Recommendation(s):	That the Audit & Governance Committee notes the report.

Appendices	
Appendix 1	ICT Improvement Plan

Introduction and background

1. In July 2015, CEB approved the award of a contract for the provision of IT services to SCC on the expiration of its contract with the County Council (31st March 2016). At the same time, it was agreed to move the ICT service desk function that was previously provided by the County Council in-house. The basis for those decisions is set out in the CEB report.
2. A significant implementation plan facilitated 57 software applications and over 20 million files being successfully moved across from the County Council's systems to our new ICT platform Sentinel, managed by SCC, by 1st April 2016. One of the benefits of the new infrastructure platform is that it provides the highest level of government accreditation for security. However, coupled with moving so many files this created significant access issues for some users post the go-live date. These were highlighted in a briefing note to Audit & Governance Committee on 29th June 2016.
3. At its June meeting the Audit & Governance Committee requested that a report be presented to its September meeting detailing the lessons learnt from the ICT transition and indicating how the problems experienced would be mitigated in the future. This report addresses the following points:

- Costs of the transition of the ICT services against anticipated savings from the new contract
 - Lessons learnt
 - Reputational risk from the loss of public facing services
 - Relationship management
 - Consequences of service failure impacting on councillors' performance
4. A number of Lessons Learnt sessions have been held with key members of the ICT Transition Project Team and a separate Lessons Learnt session was held with SCC. The actions arising, together with the recommendations from the recent Society of IT Management (SOCITM) review and internal audit report on the ICT Service Desk have been incorporated into an ICT Operations Improvement Plan (summarised at Appendix A) that will move the ICT service to delivery of a customer-focused, best practice operation by March 2017.

5. Costs of Transition and Anticipated Savings

The cost of the ICT service provided by the County Council in 2015/16 was £1,129K. The City's Medium Term Financial Plan identified a saving in IT infrastructure of £150K per annum from 2016/17 so the budget for the replacement services was set at £979K.

Prior to starting the procurement there were several discussions with County Council about different options including remaining with the County Council. Ultimately however, the County Council advised they were not in a position to continue to provide a service to the City because they were moving towards becoming a commissioner, rather than a provider of services. They did advise that their view was that if they were able to offer a new service the annual charge would need to be in the order of £1.4M to £1.5M per annum, significantly more than the previous charge from the County to the City. The new contract with SCC and the cost of services that have been brought in house or are being managed directly has a total revenue cost of £940K pa against a revised budget of £979K. This leaves a small amount for in-year changes and adjustments.

The detailed financial implications for ongoing revenue costs and transition are set out in section 11.

6. Lessons Learnt

Whilst some of the technical issues arising from the migration could not have been anticipated and mitigated through improved procedural arrangements, a number of lessons have been learnt relating to the project management process and standard operating procedures as below:

Issue	Impact	Resolution	Target Date
<p>6.1 The contract was awarded to SCC in July 2015. The County proposed contingency arrangements that would result in a £392k charge per quarter if the City wanted to continue with County systems after 31st March 2016. Project management was therefore condensed into a challenging timeframe. Project planning commenced immediately following contract award which was not until 6 months prior to migration deadline with no Project Initiation Document (PID) in place other than the SCC technical PID.</p>	<p>The skills requirement of the project team were not articulated and agreed from the outset and initially the project was under-resourced resulting in the Project Sponsor having to assume responsibility for much of the technical work. Absence of an overall PID meant that there was no consideration of other project workstreams other than technical aspects of the migration (such as developing processes for the newly-formed ICT Service Desk and the Comms Plan). Project team were not working to a co-ordinated plan.</p>	<p>Project planning for a project of this scale to commence 12 months in advance to allow sufficient time for preparation of a robust PID. Project management principles have now been reinforced across the ICT Service and additional project management training is scheduled for October 2016. The ICT Improvement Plan (Appendix A) includes a processes workstream (WS4) to address current gaps in the ICT Service Desk processes which were not included in the project plan, and is due for completion December 2016.</p> <p>The Improvement Plan also includes a Skills workstream with a focus on Customer Services training to deliver the cultural shift required to ensure a customer-focused service desk function.</p>	<p>Training - October 2016</p> <p>IT Service Desk enhancements – December 2016</p>
<p>6.2 County held insufficient and inaccurate documentation on the City estate so the 'Discovery' phase of project took much longer than expected.</p>	<p>High Level Design for technical aspects of project were not ready when required and Low Level Design was not completed until post-migration. Therefore much of the technical work was undertaken without documentation and</p>	<p>As there was little documentation from County on handover to City, the City ICT team are currently working to complete documentation on the City estate. The ICT Improvement Plan (Appendix A) includes a Tools workstream (WS3) that sets out activities to capture and maintain knowledge and</p>	<p>Documentation complete and added to IT Knowledge base – November 2016</p>

	resulted in 'fire-fighting'.	documentation on the City's estate and assets.	
6.3 Technical Implementation Plans (TIPs) worked well and were a good example of Application Owners, project team and supplier working well. Infrastructure items were excluded from the TIPs process.	Migration of applications worked very well and no application outages were experienced. The most significant technical issues arising from migration were related to infrastructure items i.e Filestore (lost/duplicated data), Citrix and the Active Directory (logging in/remote working).	The TIPs process has been documented to be made available in the new ICT Service Desk knowledge base (Appendix A: WS3). The Skills workstream in the ICT Improvement Plan (WS1A) includes a Skills Transfer Seminar on the use of TIPs. Increasing the technical skills of in-house staff will mitigate against any future issues with infrastructure items such as Filestore and Active Directory.	Service Improvement Plan Skills Transfer – December 2016
6.4 SCC Project Plan and key milestones were not readily available to the City Project Manager or the project team resulting in lack of clarity concerning some milestones.	Unnecessary time was lost negotiating over points that should not have required negotiation had the project team had access to the SCC project plan e.g. date for handover to BAU arrangements on 1 st May.	Ensure sign-off by all key stakeholders of key project documentation and ensure integration of project plans. Project management principles have now been reinforced across the ICT Service and additional project management training is scheduled for October 2016	Project Management Training – October 2016
6.5 No in-house skills available for WAN technical work. This had been recognised and mitigated through recruitment of external contractors but initially their availability was limited.	Contractors worked long hours during migration and this led to mistakes. Limited external resource has also prevented any opportunity to transfer skills and knowledge to the in-house team.	Identify appropriate internal resource and arrange skills and knowledge transfer from contractors. The ICT Improvement Plan includes a Skills workstream (WS1A) with a structured handover and training schedule.	ICT Improvement Plan, Skills Training – December 2016

6.6 Not enough time to undertake a trial migration in advance of full migration.	Trial migration may have alerted the project team to the performance issues arising from use of the 'Double Take' software (for copying applications) on older servers that resulted in very slow speed when copying across.	If using the same process again for copying data, undertake a trial migration across a range of servers including older ones.	As required in future major projects
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7. Reputational Damage from Loss of Public Facing Services

Whilst 57 software systems were successfully migrated, there were significant issues related to infrastructure items such as Filestore and MS Exchange that impacted on public facing services. The City responded swiftly with messages advising customers of the issues with on line services on the website, extension to consultation deadlines were put in place where required and regular communications were maintained with affected customers and senior stakeholders, with general updates going to the whole organisation.

Issue	Impact	Resolution
7.1 Filestore migration resulted in missing data files on the m:drive and archive server that were not recovered until June.	Missing files impacted performance across a number of public-facing Council services although in most cases manual workarounds were applied to prevent serious disruption to service.	Improved documentation of the City estate and more robust Disaster Recovery arrangements with the new IT partner. See 6.2 above.
7.2 MS Exchange group emails did not transfer to Exchange 2010 including key public facing email accounts.	Loss of service to public email accounts for 4 days when public could not email a group service e.g. Building Control, Scrutiny, Planning.	As 7.1 above, improved documentation of the City Estate – see also Appendix A: ICT Improvement Plan 'Tools' workstream.

This needs to be put in the context of the two complete ICT outages in the period prior to the migration due to a bug in the County's network storage system that had a very big impact on front line services and in the absence of good communication from the

provider of services meant communication to service users and the public was limited. The City Council was able to learn from these experiences to improve communication with its in-house and public users.

8. Relationship Management

Relationships between City, County and SCC were strained at various stages during the project, largely attributable to expectations regarding roles and responsibilities. However good communications were maintained by a number of individuals across all three organisations and the addition of extra project resource from the County was a key turning point in the project. Relationship management with SCC going forward has been established on a more formal basis with clear performance schedules regularly monitored at monthly review meetings, as well as informal daily and weekly contact as required.

Issue	Impact	Resolution
8.1 County undertook to resolve the pre-requisites regarding the separation of the Active Directory but when the costs increased more than anticipated, the County queried responsibilities.	Damage to the relationship between County, City and SCC and delays to the project as project resource was diverted from other tasks.	A PID setting out roles and responsibilities and signed off by all partners should be in place for all significant projects. Project management principles have now been reinforced across the ICT Service and additional project management training is scheduled for October 2016 (see 6.1 above).
8.2 City expected that SCC would work directly with Vodafone but that was not the case.	Project resource was diverted to a task that had not been anticipated and created delays elsewhere.	See 8.1 above
8.3 Relationship between City and SCC was not as good as it should have been at point of migration when SCC moved to BAU ahead of the expected schedule.	Issues arising as a result of the migration were not treated with the appropriate level of urgency as SCC invoked the standard terms of the SLA.	See 6.4 above

9. Impact on councillors

A key factor on councillors' access post-migration was the deployment of Airwatch on iPads to replace Good, as Good was no longer supported and was hosted on a Windows 2003 server (also out of support). Airwatch had been selected as a replacement as a recognised market leader in Mobile Device Management software

and is PSN compliant. The issue did not affect all councillors and all were contacted individually to try and resolve the problems with access – Citrix was available as an alternative solution. Outlook has subsequently been identified as the preferred solution and has been rolled out.

Issue	Impact	Future Action
9.1 Although Airwatch works well on the majority of mobile devices including more than 500 users who successfully access emails via the new mobile phones, it is not compatible with all versions of IOS on iPads.	Intermittent 'hanging' of the Airwatch inbox which doesn't update email for hours/days at a time potentially leaving users without email access if reliant on the iPad.	Outlook does work well on iPads and has now been offered to all councillors and rolled out to most councillors. A Members Reference Group was established in July to trial new developments and equipment and serve as an informed user group for the ICT service.

10. Current Situation

The ICT Service has developed a detailed Improvement Plan (summary at Appendix A) that has been informed by the in-house Lessons Learnt review, the SCC Lessons Learnt Report, the recent SOCITM review of the ICT Service Desk and the internal audit of the ICT Transition Project.

The Improvement Plan is organised into five themes: Skills (Technical and Customer Services); Resources; Tools; Processes; and Communications with a lead officer assigned to each theme. The Customer Services workstream has been designed to bring about the cultural shift required to deliver a best practice, customer-focused service desk function through formal training sessions and adoption of the tools and techniques utilised by the Contact Centre when training Customer Services Officers.

The Plan has been shared with the ICT Service and feedback invited. The response from the ICT team has been very positive and there is a strong commitment to making the improvements – working groups are now being established to deliver key actions.

Progress on the plan is being reviewed on a weekly basis by the ICT management team and, alongside the ICT Work Plan, forms the key driver for the ICT Service.

11. Relevant Costs and Savings

11.1 Revenue Costs

The annual costs for the replacement services breaks down as follows:

Item	Description	Annual Revenue Cost £000's
Core Infrastructure	Provision of servers, storage, backups;	604

(SCC)	Server management, database management Security infrastructure	
ICT Staffing	Expansion of City ICT team to cover service desk and technical specialisms	210
Wide Area Network	Novation of Vodafone network charges previously paid within the County contract; Includes network links from City to SCC	75
Technical tools and resources	Support and maintenance of replacement ServiceDesk tool; Internet connectivity Remote Access solution (replacing RSA tokens)	51
Total		940

The Council has budgeted for £979k per annum within its medium term financial plan, a saving of £150k per annum against the previous cost from the County Council.

11.2 Project Costs

The transition project was a major undertaking with 150 servers, 57 line of business applications and 20 million files to be moved. At the same time we aimed to minimise disruption to operational services. A one off budget of £900k was allowed for in the Councils Medium Term Financial Plan.

Over the period of the migration the County suffered 2 major service outages which resulted in a loss of all ICT services for more than 48hrs on both occasions.

The one off cost of the transition project in 2015/16 breaks down as follows:

Item	Description	Annual Revenue Cost £000's
SCC Migration Project	Discovery, design and project management of core infrastructure components	120
City Project Resources	Project Management Technical specialist resource for network configuration and redesign, Active	94

	Directory migration	
Network Migration	Implementation of new network links to SCC data centre; Migration of existing lines Upgrade of links for St Aldates and Town Hall	83
Application Provider Migration costs	Specialist technical resource required to migrate applications to the new platform	45
Service Management Tools	Replacement of ICT service desk solution (vfire) Application and Server Monitoring tool (ICINGA) ITIL Training for ICT Team	48
County Resource	Cost for County resource outside of core Contract	30
ICT Operations Team	Additional ICT support staff recruited from Jan 2016 (1 Qtr before new contract commenced)	52
Dual running	Live services commenced from mid Feb onwards as services were cut over	45
Network specialists and other additional support	Additional one off staffing to assist with transition, allow for handover and various technical tasks up to August 2016.	307
Total		824

11.3 Cost Avoidance and Savings

The transition project provided the opportunity to redesign certain elements of the Council's ICT infrastructure, most notably it facilitated the replacement or upgrade of the majority of its 50 Windows 2003 servers which would otherwise have required extra support licences from July 2016 at an additional cost of £220K pa.

Additionally, a number of improvements and adjustments to existing software contracts were also made as a result of migration and have generated annual budgeted revenue savings as set out in below:

System	Annual Saving £000's
Lagan	15.0

NDL	17.5
Huddle	5.0
VI Scanning	4.5
SQL Database Licences	20.0
SAP Business Objects Licences	6.5
Total	68.5

12. Financial Implications

The City Council has made a saving on services previously provided by the County Council of £150k per annum. Additional budgeted savings were also made during migration on software charges of £68.5k per annum. The transition also enabled the City Council to save around £220k per annum of Windows Support license costs which might otherwise have been incurred. Transitional project costs, totalling £900k were budgeted for and costs have been roughly in line with this.

13. Legal issues

There are no legal implications arising from the lessons learnt.

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Background Papers: None