

To: Audit and Governance Committee
Date: 11 January 2018
Report of: Head of Business Improvement
Title of Report: Review of ICT Transformation Project

Summary and recommendations	
Purpose of report:	To update members on progress with the ICT Transformation Plan
Corporate Priority	An Efficient and Effective Council
Policy Framework	None
Recommendation: That the Audit and Governance Committee resolves to:	
Note the report.	

Introduction and background

1. The Audit and Governance Committee held on 14th December 2016 received a report on progress in delivering the ICT Transformation Plan, following transition to the City Council's new infrastructure provider SCC. This report provides a further update on progress with implementing the transformation plan, the auditor's recommendations and the ICT restructure as subsequently requested.

Transformation Plan Achievements

2. The transformation plan covered three distinct work streams: processes infrastructure and people, and incorporated the industry recognised ITIL (Information Technology Infrastructure Library) V3 standards Framework into delivery. Paragraphs 3 to 13 below detail the achievements under these three work streams.

Processes

3. The service desk has gone from strength to strength in reducing the time taken to resolve reported issues. A dedicated telephone help-desk has been key to responding to incidents requiring real-time resolution, while the software service portal (vFire) and email are now functioning better as the route for managing service requests. Logging vFire requests now generates a number of automated workflows that improve resolution time by allocating tasks directly to analysts, and

in a way that allows tasks to be worked on in parallel rather than sequentially. It also provides for escalation of tasks if they are not actioned (see para 6 below).

4. The knowledge base in the system is continually updated to assist staff with resolving issues and will eventually be on-line and searchable by officers as a self-help option.
5. The total number of open cases has reduced in the last 6 months from 756 to 471. Open cases are made up of active incidents and those cases where the “clock has stopped” (i.e. we are either waiting for further information from the user, contractor or, the matter is technically not an incident but a development request and is awaiting allocation of resources). In the last 6 months open incidents have reduced from just under 400 to an average of circa 150 at any point in time. “Stop clock” cases have remained fairly constant at circa 300 in number. There are no open incident cases raised prior to November 2017.
6. A Service Catalogue and Service Level Agreement has been developed and shared with the business. Due to the more manageable number of active incidents. We have now enabled call escalation, which generates alerts to analysts and managers as calls reach certain thresholds associated with the SLA for the case type, so that we can ensure that the service levels the service has signed up to deliver are achieved.

Infrastructure

7. BT One Phone is now operational across the whole organisation with the exception of the contact centre as planned. This has enabled office phones and mobiles to be replaced with a single device with all the features of a dedicated local branch telephone system. This together with voice messaging, texts and inclusive intra-business calling functionality, as well as the ability to work outside of the office accessing 4G and over 5 million BT wi-fi hot spots has enabled more effective mobile working, which is essential for the flexible office/home working policies that we enjoy.
8. The Multi-Functional Device printers have been replaced across the organisation resulting in a reduction in paper and toner cost, elimination of waste, and improved security through on-demand printing
9. Real time, “always-on” dashboards have been introduced, that give monitoring information to our Infrastructure and Operations Team in respect of the network, datacentre and applications environments, and this includes alerting through both email, and a real-time communications tool.
10. The infrastructure offering has been improved by:
 - Improving system performance by amending the specifications for the virtual servers that run our applications and the datacentre network routing and firewall rules.
 - A re-build and re-deployment of the system management software (SCCM) that provides end-user device (mainly laptops) automated build capability, remote control, patch management, software distribution, network access protection and hardware and software inventory;
 - A re-design, data-cleanse and re-configuration of the active directory that authenticates and authorises users and devices in our Windows network, as well as providing application level security and authentication.

- Improvements to the Citrix solution including resolution of the secondary two-factor authentication password issues and Netscaler connectivity broker issues
11. Business continuity and disaster recovery arrangements have been improved as follows:
- Two disaster recovery test scenarios have been completed with SCC at their recovery centre in Birmingham within the last 6 months. The initial test was limited in scope to test the recovery process and obtain confidence that the procedures were in place to effect a recovery. This completed successfully in March this year. In October we completed a full test of the entire key Infrastructure and Applications environment, with the exception of a small number of specialist production servers that could not be tested without interrupting service delivery. SCC's operational manual has been brought up to date as a result of this testing. This now includes an agreed schedule for loading infrastructure and applications servers and this has been incorporated into the corporate disaster recovery plan.
 - The disaster recovery and business continuity plans for ICT have also been reviewed.
 - Resilience has been added to the wide area network connections at St Aldates and the Town Hall via a fibre link across the road. If required, this link has been configured to automatically re-route not just data traffic but also voice traffic for the Contact Centre.
 - Staff password conventions have been strengthened to improve security. Following the cyber-attack in May 2017, an enhanced security patch was implemented as recommended by Microsoft.

People

12. The new ICT Structure has been consulted on and in accordance with the Council's change management policy recruitment to the structure is now in progress. The Chief Technology and Information (CTIO) Manager post is currently being recruited to. Vic Frewin (the Interim Manager) will remain in situ until the new CTIO is in post, to ensure a robust handover and to allow the remaining transformation projects to be substantially delivered.
13. Features of the new structure include:
- Better opportunities for ICT staff to develop their technical skills with more rewarding roles.
 - A technology led Infrastructure and Operations support and development function.
 - A robust Service Delivery function, providing a great service from the help-desk through to client-side troubleshooting and delivery. Reducing the time taken to resolve critical issues and improving service delivery and case closure rates.
 - An expanded and re-focussed Applications Development and Support team, that is more resilient with staff providing support in small groups for common application components, rather than relying on staff providing single point of failure support for individual applications.

- Project Managers working more closely with technical teams, to improve implementation of ICT projects and the ICT Work Plan.
- Better opportunities to leverage the provisions of managed service contracts.
- Out of hours ICT service provision to support the public facing digital services interface, and maximise availability.

Transformation Work in Progress

14. The Hybrid Datacentre model to provide cheaper data storage and back up on physical servers is in train. This is an alternative to the virtual servers provided by our infrastructure providers SCC. The file archiver is now up and running, and we are gradually moving 'cold' files out of the SCC datacentre onto a pair of synchronised archive servers in the Town Hall and St Aldates. Additional significant benefits will be realised by archiving Exchange mailboxes, and applications databases. This will help ensure compliance with the new requirements of the General Data Protection Regulation that come into force in May 2018. The next steps are to remove approximately 70 non-production, test and development servers from the SCC datacentre, resulting in a highly significant drop in consumption charges. These servers will begin to migrate from the beginning of December. In total, we should be reducing consumption by 90 virtual CPUs and 200 Gb virtual RAM, resulting in significant cost reductions. This work is anticipated to be finished by mid-February 2018.
15. The design for the Local Area Network refresh has now been finalised, and we are in advanced discussions with a local supplier to deliver both wired and wireless network upgrades in St Aldates, and the Town Hall. The work is expected to be finished by 31st March 2018.
16. The End-User Device strategy has been agreed by the One Council Board. This sets out the design and implementation principles for replacing items including the organisation's laptops, work stations and tablets. We are just starting to analyse the 'worker-types' required, ensuring we provide the best device for each type of user as determined by their role, location, working habits, and applications used. The procurement process should be completed by end of February 2018, and we aim to begin deploying devices by the end of March 2018. It is anticipated that the roll out of approximately 1100 devices will take in the region of 6-9 months, and will be largely accomplished with in-house resources.
17. Preparation for migration to Windows10 is under way and implementation will be aligned with the refresh of End User devices, as Windows7 goes out of support in 2020.
18. A test image for Windows10 has been built, and ICT users systems are being upgraded to support "dual boot" with legacy Windows7. This means ICT staff can test applications for Windows10 compatibility, while retaining access to current production operating systems for support purposes. This should be completed shortly. Application compatibility testing for all council enterprise applications will identify areas requiring remediation, and from this identification of solutions. This work is already underway, and the ICT applications development and support team are making good progress.
19. We are currently reviewing our current Citrix environment, and it is likely the approach taken will be to re-develop this platform rather than build again from

scratch on the basis it will be faster and cheaper. We are working with Citrix to develop a proposal for a phased deployment to support Windows10, and an upgrade to the current 6.5 system to ensure legacy applications remain compatible with Windows10.

20. A project brief for the approach to Member's ICT has been accepted by the Member's ICT Group and a Project Initiation Document has been signed off by the One Council Board. Testing of an improved iPad has been carried out by 6 members over a four week period. This has proved to be successful, and plans to roll out to all members in 2018 are currently being drafted.

ICT Work Plan

21. There are currently 16 'live' projects in delivery in the 2017/18 ICT Work Plan with a further 20 awaiting resource allocation and scheduling. There is one item showing as amber, none as red. The amber item is HMO Licensing Online form, which has been delayed in waiting for user sign off.
22. Significant ICT projects currently underway include: Agresso and Paris upgrades, the replacement of the Northgate Housing system, and potential associated Servitor activity for Direct Services, the ICT work stream for the LATCO implementation; the end user device replacement programme; developments required for the new General Data Protection Regulation; and the ICT Transformation Plan itself. Projects recently completed include: Connect & Serve for landlords; the Netcall Liberty upgrade; the PARIS upgrade and most recently Webchat, which allows website visitors to communicate in real time with council staff to help guide them to the pages they are looking for. The webchat feature is managed by the Customer Service Centre. We have also recently updated the Contact Us page, and website visitors can now navigate more easily to the specific service they need, and find out how to apply online or the other ways they can contact the council about their enquiry.

ICT Audit Recommendations

23. There are 3 outstanding recommendations relating to the Cyber Crime audit. Actions in progress to address the issues raised are:
 - The Information Security and Acceptable Use policies are both being revised to incorporate additional guidance for users associated with the General Data Protection Regulation (GDPR) and cyber security.
 - The information asset register is also being reviewed and audited for completeness.
 - Training materials are being reviewed and updated with additional GDPR and Cyber Security guidance. GDPR training sessions are being rolled out.

Financial implications

24. The 2018-19 Consultation Budget and Medium Term Financial Plan approved at City Executive Board on 20th December 2017 includes budgetary provision for an additional £800k expenditure over the next two years and ongoing increased spend of £200k per annum on the ICT service. This is sufficient to meet the requirements of the restructure referred to above and deliver the benefits identified. In addition to the above there is provision in the Capital Programme for

around £450k per annum for ICT infrastructure and hardware including for the refresh of 'end point devices' i.e. laptop, keyboards, monitors etc. as well as additional provision for the refresh and implementation of major systems such as Housing Management and job costing system which is currently being undertaken.

Legal issues

25. There are no legal implications arising from this report

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Please note in the table below the version number of your report that was finally cleared at each stage

Report Stage	Version Number
First Draft <i>Cleared by Service Manager/ Head of Service</i>	
Second Draft: <i>Cleared by Legal/ Finance</i>	
Final Draft <i>Cleared by lead Member</i>	

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