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OXFORD CITY COUNCIL

To:	**Audit and Governance Committee**
Date:	**28 June 2017**
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(s): That the Audit and Governance Committee resolves to:	
1. Note the report.	

Appendices	
Appendix 1	Summary ICT Transformation Plan

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. It requested a further update be brought to this meeting. The current summarised version of the plan is included as Appendix 1.

2. In the last 6 months a comprehensive transformation plan has been agreed and is in delivery. It focuses on improving the three tenets of infrastructure, people and processes and has included: a wholesale appraisal of ICT infrastructure, both on premise, as well as provided by our Managed Services Providers (MSPs), along with the continuous development of our technical teams and processes, in pursuit of the Information Technology Infrastructure Library (ITIL) standard.

3. The plan is updated weekly using an interactive programme management tool (Trello) and monitored by the Chief Technology and Information Manager. Fortnightly progress meetings are held with the Head of Business Improvement and the Executive Director for Organisational Development and Corporate Services. Progress highlights over the last 6 months over the three workstreams are as follows:

People

4. Since January 2017, the ICT Operations Team has been organised into smaller, more focussed sub-teams: help-desk, end-user support, networks, telephony and datacentre and core systems. This allows staff to focus and grow their knowledge and become more proficient in specific areas. This has also enabled training to be targeted more appropriately.

5. There is now a permanently staffed telephone help-desk with a new Service Desk Team Leader. The knowledge base for the service desk software is continually updated to assist staff with resolving issues. There is now a greater focus on service delivery and closer monitoring of performance, which is reported weekly.

6. All operations staff have been assessed against the "Skills Framework for the Information Age" (SFIA), individual training needs have been identified. Development plans have been agreed, and are now monitored and documented through the staff appraisal process.

7. We are presently finalising a revised ICT structure to improve operational effectiveness and further embed process improvements into the department. This will ensure consistency of approach, better delivery of service standards and more resilience within the business operation. It is hoped that the consultation will commence in July, and that the restructure will be completed by September.

Infrastructure

8. BT One Phone is now operational across the whole organisation with the exception of the contact centre, this will be transferred in phase 2 scheduled for later this financial year. 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 free 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. The Multi-Functional Device printers have been replaced across the organisation resulting in a significant reduction in paper and toner cost, elimination of waste, and improved security through on-demand printing

9. In order to address the transformational activities post transition, additional technical resources have been brought in, and these are helping to complete the following by the end of June:

- review of the specifications for the virtual servers that run our applications;
- review of the datacentre network routing and firewall rules;
- re-build and re-deployment of 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. This was used recently to apply emergency patch updates to council devices to counter the 'WannaCry' cyber outbreak; and
- re-design and data-cleanse of the active directory that authenticates and authorizes users and devices in our Windows network, as well as providing application level security and authentication.

- review of current data storage and backup volumes to manage both more effectively. An action plan is currently in progress to better manage volumes of both.

10. A replacement Local Area Network switch programme and improvements to site WiFi services is now in progress, following the successful capital bid that was approved in the 17/18 budget process.. We are currently evaluating product options and identifying best-fit vendors with a view to tender.

11. The production of an End-User Device strategy, which sets out the design and implementation principles for replacing items including the organisation's laptops, work stations and tablets, is in progress. An options appraisal is well under way, and a number of solutions are now being considered. These are based around a review of 'worker-types' and ensuring we provide the best device for each type of user as determined by their role, location, working habits, and applications used. A number of supplier sessions have been undertaken to consider applicable technologies, affordability, deployment options and supportability. These activities are now approaching completion, and a draft strategy document should be completed by 30th June.

12. Improvements to the Council's Citrix environment are currently being undertaken. As City Council skills in this area are limited, SCC Professional Services have been engaged and have evaluated our current Citrix environment, and identified the root causes of a number of issues we have identified. The following issues are being addressed,

- User Environments persistence – retaining the logged on user's desktop and application settings
- Secondary two-factor authentication password issues – second password box displayed
- Netscalar connectivity broker issues with fail-over between devices – availability issue

13. Active Directory (AD) is a Windows directory service that enables working with interconnected network resources in a unified manner. The re-design and configuration improvements of AD are substantially completed. Further works to reduce over 200 Group Policy Objects (GPOs) inherited from the Oxfordshire County ICT Services is now completed, and over 150 defunct policies have been removed. Focus has now switched to nearly 4,000 groups, used to divide AD objects (people and devices) into a more manageable number is now in progress, with plans to reduce this number by around 90%. A test connection to MS Azure for Office365 has completed successfully, confirming the AD clean-up work is producing the required outcome.

14. Work has started to plan the transition from the datacentre to Microsoft Office365; primary opportunities will be with email and file shares, with email transitioning to Outlook.com, and M-drives and U-drives being migrated to OneDrive. Both these are hosted by Microsoft as part of our Office365 subscription

15. 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, which approves and oversees the delivery of projects within the

Council. The first phase of this project, a new iPad build for members iPads is approaching completion, and should be going into test phase by mid-June.

Processes

16. A real-time communications tool (Slack) has been introduced to the ICT Support teams, which has made collaboration much easier and faster, and is especially useful given staff work out of a number of different locations. Moving to this, and reducing reliance on email for peer communications has made the whole department more responsive and now offers a better co-ordinated service.

17. An ICT Service Catalogue and Service Level Agreement (SLA) has been produced, and will shortly go to the ICT Steering Group for comment and review. Service definitions and associated performance levels are included, and include agreements to define priority assignment and timescales for handling incidents, service requests, and projects. This work is expected to be finished by the end of June, and will be published to the Council.

18. Real time, "always-on" dashboards giving real time monitoring for network, datacentre and applications environments have been introduced, and this includes alerting through both email, and the real-time comms tool Slack.

19. The service desk case management tool (vFire) for logging, analysing and monitoring call handling and resolution has been refined and upgraded, and went live on May 10th with a number of key enhancements. The system now differentiates between an incident and a service request, and also has a category for project requests. The system has a workflow engine now, which is able to route calls automatically to the most appropriate team for triage, a good example of this is an improved "new starter" process which automatically captures all the separate workflow items and directs them to the appropriate resource for action. An automatic escalation facility which will alert staff of cases which are approaching SLA non- compliance has also been introduced. The system also has improved reporting capabilities.

20. The data shows that we have circa 400 active cases at any point in time, with an additional 300 'stopped-clock' cases on average. Stopped-Clock cases are those where ICT have taken the case as far as currently possible, but are now either awaiting confirmation of closure, needing additional information, or items to be procured or built in order to complete the case.

ICT Work Plan

21. The 2017/18 ICT Work Plan is being finalised, and for the first time now is being projected over a two year period into 2018/19, rather than just the current year. The remaining 2016/17 items that began in 2016/17 and are set for delivery in 2017/18 have been consolidated into this list and are all on track for delivery as scheduled. Critical ICT development issues for 2017/18 include an Agresso upgrade, the replacement of the Northgate Housing system, Servitor updates, an ICT work stream for the LATCO implementation; and the ICT Transformation Plan itself.

Cyber Security

22. The City Council's systems were not affected after the recent cyber-attack. All our systems are regularly patched, and we maintain both an inbound email secure gateway, and regularly updated anti-virus software. Our datacentre is protected by our infrastructure provider SCC, and they regularly patch our systems when updates are released. Antivirus signatures are updated constantly, and our MS product is known to protect against the execution of this vulnerability. We have been monitoring the growth in malicious and spam email activity over the past few months, and are imminently procuring additional software to improve both inbound threat defence, as well as outbreak containment should our defences be breached.

Financial implications

23. There are sufficient financial resources within the 2017-18 budgets and within the Medium Term Financial Plan to accommodate the costs of resourcing, training and transitioning the team and for the purchase of software and hardware necessary to complete the 2017/18 work plan.

Legal issues

24. There are no legal implications arising from this report

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Summary ICT Transformation Plan

INFRASTRUCTURE

I1.0	SCC Datacentre Virtual Server resource specification check	Vic Frewin	Jon Petre	Michael Pearce	T.B.C	SCOPING	WK3	WK26	GREEN	Access & Co-operation from SCC required, and has improved
I2.0	SCC Datacentre LAN routing and Firewall rules	Vic Frewin	Jon Petre	John Galbraith	T.B.C	IN PROGRESS	WK5	WK26	GREEN	F/W ruleset analysis is under way
I3.0	OCC Laptop & Desktop Gold-build and version control	Vic Frewin	Jon Petre	Steve Hobday	T.B.C	COMPLETE	WK52	WK12	BLUE	"gold" Images for 4 laptops & 3 desktops complete
I4.0	OCC Laptop & Desktop role-based application bundles	Vic Frewin	Jon Petre	Steve Hobday	T.B.C	IN PROGRESS	WK52	WK52	GREEN	Continuous ongoing progress
I5.0	End-User Device strategy	Vic Frewin	Vic Frewin	Jon Petre	T.B.C	IN PROGRESS	WK2	W26	GREEN	Meetings held with suppliers, Dell, HP, SCC options discussed
I6.0	Citrix environment re-design, persistence desktops, true VDi, application streamin	Vic Frewin	Jon Petre	SCC Prof. Svcs.	T.B.C	IN PROGRESS	WK4	W24	GREEN	SCC Engaged and work is under way
I7.0	Citrix 6.5 to 7.x upgrade	Vic Frewin	Jon Petre	SCC Prof. Svcs.	T.B.C	HOLD			GREEN	Workstream is on HOLD pending completion of End-User device strategy - Transformation 2
I8.0	SCCM re-configuration	Vic Frewin	Jon Petre	Steve Hobday	T.B.C	COMPLETE	WK1	WK12	BLUE	Server rebuilt & relocated to TH
I9.0	AD re-design and configuration to include:	Vic Frewin	Jon Petre	Michael Pearce	T.B.C	IN PROGRESS	WK1	WK52	GREEN	Continuous evolutionary process
I9.1	Sites & Services configuration	Vic Frewin	Jon Petre	Michael Pearce	T.B.C	IN PROGRESS	WK18	WK26	GREEN	Under way, will transfer to Transformation 2
I9.2	Distributed Local Logon servers	Vic Frewin	Jon Petre	Michael Pearce	T.B.C	STARTING	WK18	WK26	GREEN	Under way, will transfer to Transformation 2
I9.3	Distributed Local File & Print servers	Vic Frewin	Jon Petre	Michael Pearce	T.B.C	STARTING	WK18	WK26	GREEN	Under way, will transfer to Transformation 2
I9.4	AD Federation to MS Azure	Vic Frewin	Jon Petre	Michael Pearce	T.B.C	HOLD	WK29	WK48	AMBER	Awaiting completion of AD clean-up
I10.0	Replacement LAN Network switch programme, and improvements to site WiFi ser	Vic Frewin	Jon Petre	John Galbraith	T.B.C	HOLD	WK9	WK26	GREEN	Awaiting budget 2017/18
I11.0	Completion of BT OnePhone programme	Vic Frewin	Jon Petre	John Galbraith	Tim Martin	COMPLETE	2015	WK7	BLUE	Phase 1 complete. Scoping Phase 2
I11.1	OnePhone Phase 2 - Contact Centre	Vic Frewin	Vic Frewin	John Galbraith	Tim Martin	HOLD	WK27	Wk39		To start - will transfer to Trnsformation 2
I12.0	MFD/Papercut Implementation & Printer replacement	Vic Frewin	Jon Petre	Yi Jing	Christian Lucy	COMPLETE	W44	WK10	BLUE	Sharp MFD Deployment in progress
i13.0	Members ICT Upgrade programme	Vic Frewin	Jon Petre	Jon Petre	Christian Lucy	IN PROGRESS	WK1	W24	GREEN	Scoped, user assessments in progress

PEOPLE

P1.0	SFIA based skills, competencies and training-needs assessment - ICT Ops	Vic Frewin	Jon Petre	Marus Jung	T.B.C	COMPLETE	WK49	WK11	BLUE	Skills profile & training needs complete
P2.0	SFIA based skills, competencies and training-needs assessment - ICT Apps	Vic Frewin	Simon Park	Simon Park	T.B.C	IN PROGRESS	WK5	WK24	GREEN	Application needs profiling under way
P3.0	Re-structure ICT Operations Team into technology sub-teams	Vic Frewin	Jon Petre	Jon Petre	T.B.C	COMPLETE	WK49	WK11	BLUE	
P4.0	Establish permanently staffed help-desk	Vic Frewin	Marus Jung	Marus Jung	T.B.C	COMPLETE	WK49	WK52	BLUE	
P5.0	Produce and execute training plans to address skills and competencies gap	Vic Frewin	Marus Jung	Marus Jung	T.B.C	IN PROGRESS	WK2	WK20	GREEN	Continous process
P6.0	Develop ITIL compliant ICT Servicedesk	Vic Frewin	Marus Jung	Marus Jung	T.B.C	IN PROGRESS	WK1	WK16	GREEN	Blending Service Catalog & vFire
P7.0	Introduce additional back-fill highly-skilled technical resource	Vic Frewin	Jon Petre	Jon Petre	T.B.C	COMPLETE	WK50	WK24	BLUE	
P9.0	Identify and baseline key performance metrics for service and individuals	Vic Frewin	Marus Jung	Marus Jung	T.B.C	IN PROGRESS	WK1	WK20	GREEN	Individual performance metrics measured
P9.0	Remediation plan to address shortfalls in perfomance levels	Vic Frewin	Marus Jung	Marus Jung	T.B.C	IN PROGRESS	WK1	WK26	GREEN	Some performance management in progress
P10.0	Transformational ICT Restructure - with Jan Heath	Vic Frewin	Vic Frewin		T.B.C	IN PROGRESS	WK1	WK26	GREEN	Restructure planning under way

PROCESSES

R1.0	Develop ICT Service Catalogue	Vic Frewin	Marus Jung	Marus Jung	T.B.C	IN PROGRESS	WK2	WK26	GREEN	Service Catalogfirst draft complete. Presenting to IT Steering Group
R2.0	Additional skills-based ticket queues to improve performance and manage backlo	Vic Frewin	Marus Jung	Vicky Fensome	T.B.C	COMPLETE	WK50	WK4	BLUE	Now established and in use
R3.0	vFIRE UI re-design and enhancements to user portal	Vic Frewin	Simon Park	Vicky Fensome	T.B.C	COMPLETE	WK52	WK21	BLUE	Currently in test & refine phase
R4.0	Improve and strengthen relationships with Managed Services Providers	Vic Frewin	Joe Unia		T.B.C	IN PROGRESS	WK52	WK52	GREEN	Ongoing process
R5.0	Introduce real-time communications tool to ICT Support teams	Vic Frewin	Vic Frewin		T.B.C	COMPLETE	WK49	Wk2	BLUE	Slack in Daily use - Introducing Trello
R6.0	Push to identify benefit realisation of Managed Service Contracts	Vic Frewin	Joe Unia		T.B.C	COMPLETE	WK51	WK12	BLUE	Contract settlements negotiated
R7.0	Establishment vFire knowledgebase for both Helpdesk use, and customer self-se	Vic Frewin	Marus Jung	Vicky Fensome	T.B.C	IN PROGRESS	WK49	WK52	GREEN	Continuously operating embed process
R8.0	Implementation of automatic ticket escalation on SLA breach	Vic Frewin	Simon Park	Vicky Fensome	T.B.C	COMPLETE	WK2	WK22	BLUE	Awaiting vFire-2 go-live
R9.0	Improvement in Business Partner relationships with customers	Vic Frewin	Vic Frewin		T.B.C	IN PROGRESS	Ongoing process		GREEN	Ongoing process
R10.0	Develop and implement more effective communications plan - internal & external t	Vic Frewin	Jon Petre		T.B.C	IN PROGRESS	Ongoing process		GREEN	Ongoing process

NB Key Dates: week 14 = end March, week 18 = end April, week 22 = end May, week 26= end June, week 52 = end December