

Gravesham Borough Council

Report to: Performance & Administration Committee
Date: 10 September 2015
Reporting officer: Darren Everden (Service Manager, IT)
Subject: IT Strategy Update

Purpose and summary of report:

To provide an update on progress made with implementing actions arising from the IT Strategy (2015 – 2018).

Recommendations:

For information only.

1. Background

- 1.1 Members will appreciate that technological support is the foundation for the majority of our services. The IT Strategy was agreed by this committee in April 2015 and consisted of four themes;
- Service Modernisation
 - Communications
 - Self-Service
 - Website
- 1.2 The IT Strategy was aligned with the IT Service Review and Digital Strategy and has helped set the priorities of relevant work streams.
- 1.3 Progress is being made in all areas and the updates are detailed below. Some works streams overlap between themes, but for brevity they have been included only once.

2. Service Modernisation

- 2.1 Tablets and training have been provided for Members and senior staff and positive feedback received. There was a relatively short time to implement between Overview Scrutiny Committee and the conclusion of the Local Election but strong commitment from IT Staff and the Committee Section ensured all targets were met. The scope of the project expanded to include upgrades to the Civic Centre wifi coverage and use of a faster internet connection. This led to some concern as we were at the mercy of the third party supply chain for the delivery certain items for the upgrade, but workarounds were found. Due to the complex and interconnected nature of today's network environment there were

- many factors to consider in diagnosing internet performance but this was completed by Ross Evans (Technical Services Manager) with a successful outcome resulting in no further cost to the council.
- 2.2 Procurement has concluded for a new Storage Area Network (SAN) and the system has now been installed by Ross Evans (Technical Services Manager). The raw capacity of the new SAN is 34TB and consists of conventional and solid state disks. The system also uses compression and de-duplication technology to further expand storage capacity. Migration to the new storage is now underway with approx. 20 servers already utilising the greater capacity.
 - 2.3 Procurement has also concluded for new virtual host servers which are required to increase the computing capacity alongside the new storage. The new servers have been delivered to site and are being installed with the latest VMware software by Ross Evans (Technical Services Manager) and Sam Hunn (Technical Services Support Officer). Completion of this work is due within the next few weeks. We have been able to reduce the number of servers required in the cluster from four to three whilst increasing memory and computing capacity. The specification of the old cluster was 256Gb of shared RAM and 96Ghz of shared CPU. The specification of the new cluster is 768Gb of shared RAM and 165Ghz of shared CPU.
 - 2.4 In the past our disaster recovery and business continuity arrangements have been served by duplicating critical server infrastructure at Brookvale. However, with the increases in storage and computing capacity the current setup is no longer viable due to both cost and capacity of the server room at the depot. In light of the South Oxfordshire incident a more robust disaster recovery infrastructure is required for the new SAN, and we are participating in the Kent Connects “Disaster Recovery & Backup as a Service” (DRBaas) project which leverages the Kent and Medway Data Centre at Gun Wharf in Chatham which has shared storage and computing resources available for business continuity. The project consultants are now engaged with Ross Evans (Technical Services Manager) in order to progress our installation once the new virtual servers have been installed.
 - 2.5 Under the leadership of Geetha Hosakoti (Business Applications Manager), SQL Server which is one of the modern and well established database technologies is being explored and implemented in comparison to the old Wintegrate technology. This is a more cost effective and less resource intensive platform to maintain. SQL Business Intelligence services like SQL Server Integration Services (SSIS) and SQL Server Reporting Services (SSRS) are now established as default in-house development methodologies.
 - 2.6 The backend process for online balance enquiry has been revamped by Tariq Aziz (Business Analyst) and a more efficient SSIS package has been successfully set up. Also a new data extraction process has been set up by Tariq to allow Pest Control service to validate against Benefits records.
 - 2.7 Work is progressing on the migration of legacy Universe programs. Stuart Dalzell (Software Projects Manager) is assisting Finance with the acquisition of a new Cash Receipting and Bank Reconciliation system. The Mortgage system still needs a solution however due to the low volume (only four people remain with a mortgage) there is a potential to track the interest on spreadsheets and request payment through Sundry Debtors. The only remaining area that Universe is used is for data reformatting and exchange between systems. Matthew Haselden

(Business Analyst), with guidance from Geetha has programmed a solution using SSIS and has developed a proof of concept procedure for the BACS processes that are being run in parallel to test against the established procedures. This is working well and the plan is to expand into other areas.

2.8 The migration of servers from Windows Server 2003 software to newer operating systems continues. Throughout the process we have encountered a number of scenarios including;

- Suppliers not having software compatible with the new operating system
- Suppliers requiring consultancy days to perform the upgrades themselves
- Unsupported systems still in use for historic reasons at the council where a replacement system has already been provided
- Servers that are linked to other systems that cannot be easily or economically replaced
- Systems that we can upgrade ourselves
- Systems that can be decommissioned

For all of the systems (approx. 20) that are totally within our control (upgrade ourselves or decommission) we have now completed the migrations.

We are currently working with the suppliers that require consultancy to perform the upgrades and have recently order work from IDOX (for Uniform) and Capita (for Housing). Talks continue with our other suppliers. A project plan is being put together by Geetha to incorporate all logistics and minimal system downtime. Both IT teams (Technical and Business Applications) will be involved in migrating the servers.

For systems that are still in use for historic data or cannot easily be replaced due to another dependency we are having conversations with the departments concerned about alternative arrangements.

2.9 We are currently researching providers of training that can deliver online courses to cover digital awareness and competency training. The delivery of this is in the action plan for 2016/17 but we have already met with one supplier and provided a demonstration of the courses to Nicole Arthur for comment.

2.10 The replacement of network switches is in the action plan for 2016/17 but we have decided that this is an area that could potentially be brought forward to Q4 this year. We have conducted initial discussions with suppliers regarding the technical design and are setting out what improvements we would like to see in the new solution. These centre around providing more capacity for additional devices to be connected, and improving the speed of server and inter-floor connectivity to 10 gigabits (currently 1 gigabits).

2.11 Virtual Desktop Infrastructure (VDI) has significant potential for a number of reasons and we have decided to bring this forward as a priority from its original 2016/17 timeslot.

Benefits of VDI can include;

- Reduction in cost of desktop PC's
- Better security
- Greater flexibility for remote \ mobile \ homeworking
- Could be used as a springboard for shared IT infrastructure with another partner leading to greater shared working further down the line

2.12 We achieved the Public Service Network (PSN) Code of Connection compliance on 21/05/2015 and can continue to connect to the PSN network for the next 12 months. The Information Security posture mandated by the Cabinet Office remains a very important target to adhere to, but we must also be sure that what is being set down is appropriate and proportional for our requirements. Having set up and chaired the Kent Connects PSN group and establishing the Kent Warning and Reporting Point (WARP) to improve security at a local level, I am now sitting on the Local Government Association (LGA) PSN Programme Board to represent district councils interests at a national level.

2.13 Following Management Team agreeing to the recommendations in the Idox report submitted on 5th May 2015 significant progress has been made in implementing the recommendations.

- The Street Naming and Numbering (SNN) Officer and Planning System Administrator posts have been filled and the staff have started.
- A review of SNN is underway with some anticipated improvements in the coming months. This will also contribute to the address improvement programme managed by Geetha Hosakoti (Business Applications Manager).
- A draft SNN policy has been put together which will be finalised in the coming months.
- Idox module audits are currently taking place and have had very positive feedback from users. These are proving to be fruitful exercises.
- Next steps of the project are implementation of audit recommendation and training exercises with the rest of the project to progress thereafter.

3. Communications

3.1 We have assisted the Digital Team in their review of the use of Client Relationship Management and eForm software and have provided advice on the technical specification for the Single Customer Contact Platform project. Stuart Dalzell (Software Projects Manager) has been nominated as the IT representative to this project.

4. Self-Service

4.1 Grant funding of £7,000 was secured for compliance with the EU Inspire Directive. This was used to purchase a facility to publish and share data online, software for

xml format conversion, and a facility to produce Gemini 2 compliant metadata. Work conducted by Ian White (Geographic Information Systems Developer) has enabled us to meet our obligations for Phase 1 within the grant funding.

Phase 2 has some implications with regard to new datasets that we will need to publish and Ian will be developing a compliance plan for this. The deadline for Phase 2 compliance is October 2020.

5. Website

5.1 Alison Nailer (Local Land and Property Gazetteer Custodian) is continuing to work on critical address anomalies lists. 77% of properties marked as 'under construction' have been updated with their correct statuses. The accuracy levels of Basic Land Property Unit (BLPU) points has been improved to 98%. Work is underway to update addresses to indicate whether they are residential, commercials etc.

5.2 The Local Land and Property Gazetteer (LLPG) is now linked to certain online forms like Pest Control and Green Waste/Bulky Waste services.

Rachel Dellafera has been appointed as the new Street Naming and Numbering Officer and started on 10th Aug. We are looking to standardise Street Naming and Numbering (SNN) procedures and align them better with the LLPG processes which will result in timely resolution of address enquires and also improves the quality of the gazetteer.

5.3 The Council's e-form platform has been updated by Pawel Masloch (Web Developer) to use secure (https) encryption. Currently within the cryptography world there is a lot of activity with many previous forms of encryption being found vulnerable to compromise. Google (with the Chrome browser) and Firefox are now "naming and shaming" websites that use weak or ineffective cryptography on their pages. A great deal of thought and consideration has been put into ensuring the correct certificate signing protocols and encryption cipher suites have been used, which results in a "green" status in these browsers.

5.4 The Digital Team have provided a functional specification for the Pest Control Services and Green Waste and Bulky Waste collection services e-forms which have been developed by Pawel Masloch (Web Developer) into working forms on the website.

5.5 A web chat system has been installed, configured and integrated onto the website by Pawel Masloch (Web Developer) which has now been handed over to the Digital Team for testing and training with the Customer Services team.

5.6 A test server running the Squiz Content Management system has been installed by Pawel Masloch (Web Developer) replicating the setup of the main server at Tonbridge & Malling Borough Council, enabling it to be used for the development of the new website design prior to being available as a "beta" test site for access by the public. This has been a significant achievement as the Squiz system is notoriously tricky to deal with, often resulting in consultancy days being needed from Squiz themselves. However, by doing this in house we have both saved the cost of external consultancy and improved our technical knowledge of the overall platform.

6. Background Papers

6.1 None

IMPLICATIONS		APPENDIX 1	
Legal	None		
Finance and Value for Money	The capital schemes included in the strategy will be funded via existing budget provision or the IT Reserve fund (G007/70279). The strategy aims to reduce service overheads and improve efficiency therefore making a positive contribution to the Medium Term Financial Plan.		
Risk Assessment	None		
Equality Impact Assessment	Screening for Equality Impacts		
	Question	Answer	Explanation
	a. Does the decision being made or recommended through this paper have potential to cause adverse impact or discriminate against different groups in the community?	No	
	b. Does the decision being made or recommended through this paper make a positive contribution to promoting equality?	No	
	c. What steps are you taking to mitigate, reduce, avoid or minimise the impacts identified above?		
<i>In submitting this report, the Chief Officer doing so is confirming that they have given due regard to the equality impacts of the decision being considered, as noted in the table above</i>			
Corporate Business Plan	Strategic Objective 5 - Managing the council's business responsibly		
Crime and Disorder	There are no crime and disorder implications arising from this report.		