

FINAL REPORT:

Current IT system costs

25th January 2019



IT costs: Manual processes, time and cost study

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Executive Summary

ES1 During the forensic review of the Repair and Maintenance service, a review of the current IT systems was carried out (H1757, Phase 1, Stage 1, Section 5). It was identified that there were a number of time consuming manual processes taking place as a result of the current IT systems not interfacing well and not being able to present information efficiently and effectively.

This report is following on from those observations to establish a time or opportunity cost and monetary cost of these manual processes or 'work arounds'.

ES2 Eight different job roles, some with multiple personnel are involved in these processes each week. The maintenance advisors spend the most time on these tasks and spend a combined total of 45.5 hours per week competing these processes. This is equivalent to more than one Full Time Employee (FTE).

ES3 In total across the 8 different jobs roles 110 hours per week are spent completing tasks that could be mitigated by improved or new systems.

This equates to approximately 440 hours per month, or almost 3 Full Time Employees.

Job Role	Hours/week
Asset Information and Support Officer	8.5
Contracts Assistant	2.25
Gas Scheduler	24
Head of Service	1.25
Maintenance Advisor	45.5
Senior Maintenance Advisor	20
Senior Scheduler	8
Service Area Managers	1.25
Total Hours per week	110.75

ES4 Brief description of activities, personnel involved, time spent and associated cost below:

Issue	Description	Job Role	Cost/ Year
Reports from Northgate	Utilising Business objects which not always up to date and difficult to use	Maint Advisor 1 day a week	£ 5,491.57
Work Programmes	Difficult to administer, and hard to undo any errors	Snr Maint Advisor 1.5 days a week	£ 12,187.19
Notes	No indicator if there are any notes or not - have to search	Maint Advisor 1/2 day a week	£ 2,745.79
Works Orders/Inspections raised on the incorrect address	If errors occur jobs cannot be transitioned to another address they are cancelled and started again	Maint Advisor 2 hours a week	£ 1,372.89
Disabilities	Detail about client disabilities/ needs is not available	Maint Advisor 1 hour a week	£ 686.45
Asbestos reports	There is no link to the asbestos reports - a separate search has to be conducted	Maint Advisor 2 hours a week x 4	£ 5,491.57
LGSRS	In hard copy and have to be scanned in	Gas Scheduler 1 day a week	£ 5,491.57
No Dynamic Scheduling Tool	Appointments are manually entered inot Klik, Keystone and Outlook	Gas Scheduler 2 days a week	£ 10,983.14
Support Interface between SDC and Contractors (Baris)	Repairs order through North gate and Baris require manual intervention to get to invoice stage	Maint Advisor 2.5 days a week	£ 13,728.93
Budgets	A manual spreadsheet is kept for Budget Monitoring - Northgate, Klik, Keystone and Unit 4 (Finance system) are not interfaced.	Service Area Managers 3 hours a month	£ 1,015.60
Budgets	As above	Head Of Service 3 hours a month	£ 1,616.08
Performance Report	Performance report is manually produced	Contracts Assistant 1 hour a month	£ 171.61
Performance Report	Performance report is manually produced	Service Area Managers 1 hour a month	£ 253.90
Performance Report	Performance report is manually produced	Head Of Service 1 hour a month	£ 404.02
KPI's	The SDC Kpi's are manually run from Business Objects . SDC are also reliant on the contractor sending accurate KPI's	Maint Advisor 1.5 hours a month	£ 343.22
Invoicing	Invoicing is currently reconciled manually on Northgate for non-Partnering Contractors. This results in SDC carrying out a Post Inspection to clarify works have been completed	Senior Scheduler 1 day a week	£ 8,124.77
Invoicing	Invoicing is currently reconciled manually on Northgate for non-Partnering Contractors. This results in SDC carrying out a Post Inspection to clarify works have been completed	Snr Maint Advisor 1 day a week	£ 5,491.57
Invoicing	Invoicing is currently reconciled manually on Northgate for non-Partnering Contractors. This results in SDC carrying out a Post Inspection to clarify works have been completed	Asset Information and Support Officer 1 day a week	£ 5,491.57
Dashboard for Repairs - No. of repairs against budgets etc	This information is not automatically available on Northgate. A report needs to be written in business objects	Maint Advisor 2 hours a week	£ 1,372.89
Elements replaced on Repairs	Run a report through Business Objects to pull the information from Northgate and Update Keystone with the New Component Install manually.	Asset Information and Support Officer 2 hours a month	£ 343.22
Keystone Stock Condition	When a SCS is scheduled onto the tablet the Team still required book appointments in Outlook. This is double entry as there is no scheduling element on Keystone.	Contracts Assistant 2 hours a week	£ 1,372.89

£ 84,180.46

ES5 The associated costs of the time spent by the given employees is £7,015 per month, or £84,160 per year.

ES6 A 2014 ITT review found that it would be more beneficial and cost effective to install new systems that link with existing Keystone Asset management systems (i.e. replace Northgate) than to try and upgrade existing systems.

- ES7** Since the 2014 report there has been some investment but these have been on 'add ons' such as BARIS and CLIK, rather than improving the systems in an holistic manner.
- ES8** The opportunity cost of the current systems is 440 hours per month. This is the amount of time utilised completing tasks due to the failings of the current system that could be used elsewhere in the business
- ES9** If systems were installed that automated and/or streamlined the processes outlined there would effectively be a monetary contribution of £84,160 through efficiencies achieved.

Recommendations

- R1** There are currently 440 hours per month of 'waste time' (i.e. time spent due manual processes required because of the systems in place). This is an inefficiency that cannot reasonably continue – Some action needs to be taken to break the status quo.
- R2** There are 2 options moving forward (as laid out in the 2014 IT analysis):
- Invest in current systems to achieve a desired standard
 - Invest in new systems to achieve a desired standard
- R3** A review of the 2014 report to take place to ensure that the basis of its findings, conclusions, and recommendations are still relevant. Including receiving up to date prices for upgrades and new systems from Acivica.
- R4** Establish whether existing systems can feasibly be upgraded to desired standard (it seems unlikely in that the 2014 report was 4 years ago) – if not rule this out as an option.
- R5** Calculate costs of installing new systems and subsequent subscription costs. Weigh these costs against current inefficiency cost per annum of £84,160.00.
- R6** Create an outline plan including stakeholders, systems affected, critical dates, and costs for feasibility.
- R7** Complete as soon as possible! Current systems are effectively costing £7,015.00 per month in labour alone.

1. Introduction

- 1.1. Impart links are currently working with Stroud District Council as consultant reviewing current R&M services and looking to the future with regard to different potential administrative models.
- 1.2. As part of this role a forensic review of current service was carried out in late 2018. This review highlighted that there were some issues with the current IT systems. Mainly that there are several different systems used for different parts of the business which do not interface, causing a requirement for manual processes.
- 1.3. Joe Gordon and the team were aware that manual processes have become part and parcel of the day to day running of the service, and with that being externally validated has requested that Impart links quantify the time spent by the team and the associated costs.
- 1.4. This report will seek to:
 - ⊕ List all 'extra over' processes that are currently completed by a manual, or long winded process, that could feasibly be streamlined or included within a system
 - ⊕ Identify job roles taken away from primary function to complete these processes
 - ⊕ Drill down time resources utilised each process
 - ⊕ Establish associated costs

2. Systems

1.1. Most of the issues found are due to the fact there are multiple systems used across the business that do not interface/ share information.



1.2. Northgate is the housing management system holding all tenancy and housing information. This system is utilised for:

- All rental information; payments due, overdue, balances
- Tenant information; Names, contact details, flags
- Repairs; Logging, status, inspection regime, variation flags, audit trail, payment scheduling/ approvals
- Contractor invoicing, logging
- Asbestos report link from Keystone



1.3. Keystone is the asset management database and is constantly updated through the surveys conducted through the Foundation based tablets. Keystone holds all asset detail including:

- All asset detail:
 - KAM, Keystone Asset Management; Address, age, archetype of building, estate data, component data; type quantity, replacement date, warranty information
 - KSI, Keystone Servicing Information Service programmes, compliance data (audit trail and certificates), EPCs
 - KPM, Keystone Planned Maintenance; Planned works data, programmes, live updates
 - KAR, Keystone Asbestos Register; Asbestos reports, audit trail
 - FOUNDATION, the surveying software for the tablets which feed information directly into Keystone
- Tenant details (Pulled from Northgate each night)
- Audit trail of communications with contractors through Contractor Access Portal (CAP)

CAP

1.4. Contractor Access Portal is the interface between the planned works contractor and Keystone. This enables:

- Contractor to view all allocated jobs
- Contractor to update at any given time straight to Keystone (audit trail)
- Contractor to complete jobs; live updates
- Convey any other relevant detail data (tenant info etc.)



1.5. Click is the scheduling tool is currently **only used by the Gas team** for SDC in-house gas services. Click holds all address information but no tenant information. Click is utilised for:

- Scheduling gas services
- Scheduling boiler/heating installs
- Scheduling gas repairs



1.6. Baris is the interface between Northgate and contractor IT systems.



1.7. Agresso is the accounting system used at SDC. This I used for:

- Processing rent payments
- Raising contractor invoices

1.8. The main issues are found when trying to share information between Northgate and Keystone, drawing reports from Northgate, and having to perform manual double entry procedures due to systems not sharing information.

3. *Process Time & Costs Study*

3.1. With information supplied by tara Skidmore and Jo White we have been able to tabulate a series of functions completed in the following table.

Issue	Subject matter or related area of business
Process	The given manual process
Job Role	The actual role of the person fulfilling this process (the job they should be doing)
Frequency	The amount of time spent on the process per week or month
Cost/ Month	The direct costs associated with fulfilling this task per month given the frequency and salary of the job role completing it
Cost/Year	As above extrapolated per year.

Issue	Process	Job Role	Time weekly	Cost/Month	Cost/ Year
Running reports - Running reports/writing reports from Northgate	Writing reports - Currently we use a sister programme (business Objects) to write and run reports for information off Northgate. You need to ensure you are selecting the correct elements to get the correct results. Business Objects is not always up to date and some of the elements are missing.	Maintenance Advisor	1 day a week	£ 457.63	£ 5,491.57
Work Programmes	If works orders are raised on the incorrect work Programme (linked to the budgets). You either have to cancel the job and reraise to the correct work programme or get the money transferred across to the correct budget in the Hierachy and with finance. These are both time consuming tasks	Senior Maintenance Advisor	1.5 days a week	£ 1,015.60	£ 12,187.19
Notes	When notes on are put on northgate there is no flag alerting that there is a note on the system. Ideally it would be good if there was alert flag on the main client view, to alert staff there are notes regarding the property etc. Currently you have to go through the property element and have a look if there is a note, this is very time consuming. RESULT TO BE: Notes (Y) or Notes (N) on key details screen. To pull thorough any current notes from property details.	Maintenance Advisor	1/2 day a week	£ 228.82	£ 2,745.79
Works Orders/Inspections raised on the incorrect address	When Works Orders are raised on the incorrect address, the original job has to be cancelled and it then has to be reraised to the correct address. If the status of the job is at ISS - Currently can move a works order to another property/admin unit within same contractor area ie NORTH/SOUTH but you cannot move from NORTH to SOUTH or visa versa. Unable to move an inspection to another property.	Maintenance Advisor	2 hours a week	£ 114.41	£ 1,372.89
Disabilities	When A tenant has disabilites, the Maintenance Advisors currently know that the tenant is disabled from Client view. However they dont know what the disability is, the Maintenance Advisors would find it useful if they had a link to click on the screen explaining the disability, so we can ensure this is catered for.	Maintenance Advisor	1 hour a week	£ 57.20	£ 686.45

Issue	Process	Job Role	Time weekly	Cost/Month	Cost/ Year
Asbestos reports	When a Asbestos report is required the Maintenance Advisors are required to go into Keystone and search for this. In Client View there is a Asbestos flag to say check Keystone. Previously there was a hyperlink to keystone which took you to that address and straight to the asbestos details. Following an update on keystone this facility has disappeared. It would be much quicker if there was a link in Northgate that takes you through to Keystone straight to the Asbestos report.	Maintenance Advisor	2 hours a week each (4 advisors)	£ 457.63	£ 5,491.57
LGSRS	Currently LGSRS are produced on site by the Gas Engineers. The paperwork is then brought into the office scanned onto to keystone, the information is then manually input	Gas Scheduler	1 day a week	£ 457.63	£ 5,491.57
No Dynamic Scheduling Tool	Northgate is only partially interfaced with Keystone as Northgate is used for Tenancy Management and Repairs and Keystone is used for the Assets. Clik our Scheduling system is not interfaced with either system. Every time a appointment is scheduled into Clik the Gas Scheduler is required to also schedule and put the information into keystone. This is resulting in high volumes of double entering and administration time.	Gas Scheduler	2 days a week	£ 915.26	£ 10,983.14
Support Interface between SDC and Contractors (Baris)	All works are sent from SDC to the Contractor through a Baris Interface. Reports are sent twice daily with any errors that may be occuring (the Asset Information and Support Officers will look at these). Responsive Repairs get raised on Northgate so that Works are recorded against the property, these are scheduled and completed by the contractors. Once the works are completed by the Contractors, SDC will manually run a invoice report (Business Objects will be used to provide this) which looks at all works orders at status COM, with no outstanding post inspection and has been internally invoiced with costs matching and forwarded this to the contractor to advise what works can be invoiced.	Maintenace Advisor	2.5 days a week	£ 1,144.08	£ 13,728.93

Issue	Process	Job Role	Time weekly	Cost/Month	Cost/ Year
Budgets	A manual spreadsheet is kept for Budget Monitoring - Northgate, Klik, Keysone and Unit 4 (Finance system) are not interfaced.	Service Area Managers	3 hours a month	£ 84.63	£ 1,015.60
Budgets	A manual spreadsheet is kept for Budget Monitoring - Northgate, Klik, Keysone and Unit 4 (Finance system) are not interfaced.	Head Of Service	3 hours a month	£ 134.67	£ 1,616.08
Performance Report	Performance report is manually produced	Contracts Assistant	1 hour a month	£ 14.30	£ 171.61
Performance Report	Performance report is manually produced	Service Area Managers	1 hour a month	£ 21.16	£ 253.90
Performance Report	Performance report is manually produced	Head Of Service	1 hour a month	£ 33.67	£ 404.02
KPI's	The SDC Kpi's are manually run from Business Objects, these are pulled from statistics on Northgate and are run on the 1st Monday of every month. SDC are also reliant on the contractor sending accurate KPI's to SDC Monthly.	Maintenance Advisor	1.5 hours a month	£ 28.60	£ 343.22
Invoicing	Invoicing is currently reconciled manually on Northgate for Contractors that are not SDCs Partnering Contractors. This results in SDC carrying out a Post Inspection to clarify works have been completed and closing the works on northgate. For Invoicing parts received and Works completed on Klik, we post inspect to ensure that the parts have been received and the works have been completed then the invoice is attached to the Parts on Klik.	Senior Scheduler	1 day a week	£ 677.06	£ 8,124.77
Invoicing	Invoicing is currently reconciled manually on Northgate for Contractors that are not SDCs Partnering Contractors. This results in SDC carrying out a Post Inspection to clarify works have been completed and closing the works on northgate. For Invoicing parts received and Works completed on Klik, we post inspect to ensure that the parts have been received and the works have been completed then the invoice is attached to the Parts on Klik.	Senior Maintenance Advisor	1 day a week	£ 457.63	£ 5,491.57

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Dashboard for Repairs	Currently to investigate figures for example:- How many repairs have been raised daily/monthly/yearly? How many repairs have been raised on what budgets/Work Programmes? This information is not automatically available on Northgate. A report needs to be written in business objects.	Maintenace Advisor	2 hours a week	£ 114.41	£ 1,372.89
Elements replaced on Repairs	When components e.g Shower/Smoke Alarms are replaced (If the Component is not due on the Planned Programme) these works are raised to our Responsive Contractors on Northgate. As Northgate and Keystone are not interfaced this information is not automatically updated on Keystone. Asset Data and Support Officer run a report through Business Objects to pull the information off Northgate and Update Keystone with the New Component Install manually.	Asset Information and Support Officer	2 hours a month	£ 28.60	£ 343.22
Keystone Stock Condition	When a Stock Condition Survey is booked on and scheduled into the tablet. The Asset Data Team are still required to book all appointments in the Officers Calendars. This is double entry as there is no scheduling element on Keystone.	Contracts Assistant	2 hours a week	£ 114.41	£ 1,372.89
				£ 7,015.04	£ 84,180.46

3.2. The associated costs are for staff at the given rate for their job role. These costs are directly associated with the process within this report as if there has been a cross charge, as the personnel have effectively had time taken away from the real focus of their role.

3.3. The frequencies and timeframes allotted are averages, and will be likely to fluctuate from week to week.

3.4. Total costs of labour to complete the manual 'work arounds':

£7,015.04 per month

£84,180.46 per year.

4. ***IT systems; moving forward***

4.1. It is ascertained that with investment in systems and interfaces that all of the above processes could be built directly into the systems and be automatic, or very much streamlined.

4.2. It may be possible to invest in current system to achieve this, but the systems have been in place with little or no improvement in these areas since an IT report commissioned in 2014, which suggest that there are issues completing these improvements or that it is not possible.

4.3. The more likely successful method is to invest in new systems that work along with the existing Keystone Asset management system.

4.4. In 2014 a ITT report was commissioned and the recommendation was that Northgate be replaced with a new system that can efficiently interface with Keystone:

Advantages	Disadvantages/Risks
<ol style="list-style-type: none"> 1. Keeping Keystone – staff are happy with Keystone and if we stick with it we can realise the benefits of existing investment 2. Future proofing – benefiting from the latest IT advancements on the market 3. Potentially leaner and more secure IT support – for example if we procure a cloud-based system it will be hosted 	<ol style="list-style-type: none"> 1. Investment of Time & Resources - The procurement process is time-consuming and costly, and implementing a new system will take time and effort 2. Impact of implementation and change on the service – staff will require training so there could be a period of adjustment before the benefits of the new system are realised; there may be a need for some down time (although this is likely to be minimal, can be phased

<p>externally which means we will be less at risk of loss of data. It will reduce demand on central IT to support the system</p> <ol style="list-style-type: none"> 4. “Compare, contrast and compete” - ensuring we have the best fit for TS from the current market 5. Efficiency savings through bulk buying - We can negotiate a better deal with a new provider through bulk buying solutions to all our current needs 6. User buy-in - staff are dissatisfied with the current system and involving them in choosing a new one would improve staff engagement thus boosting productivity and performance, and ultimately VfM 7. Potential for better customer service from the system provider - through peer research we have confirmed there are systems with positive reviews from existing users 8. Culture change - a new start to set up good working habits and replace inefficient processes with streamlined processes 9. Potential for improved service to our customers - implementing a new system will ensure valuable improvements to IT are made that previously have not been prioritised, and ultimately this will enable TS to provide a better and leaner service to customers 10. More cost effective – less expensive to procure a new system than to purchase the improvements Northgate has suggested we make 11. Long term financial sustainability – the average annual S&M costs for the new systems is about half the annual S&M costs of Northgate – and these would increase if we invest more in Northgate 	<p>and done out of hours)</p> <ol style="list-style-type: none"> 3. Risks associated with choosing a new system - There is no perfect system and there are bound to be unforeseen issues with any system 4. SDC IT may not have the skills or resources to support the new system (although some of the budget has been set aside to assist with this) 5. Delay to project completion due to procurement 6. Never realising the potential of our existing system - the timescales of the project do not allow for us to fully explore the improvements that could be made by staying with Northgate before choosing to go out to procurement 7. Costs of double running - resourcing the current systems during procurement and implementation - It will take at least a year and a half to procure and implement a new system and in this time we will have to not only maintain the current systems but also make certain essential improvements to enable TS to fulfil its duties as a housing provider
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4.5. By investing in new systems that automate the processes outlined above there will effectively be an £84,180 contribution per annum through more effective working practices.

5. Summary

5.1. Personnel are drawn away from their primary tasks to perform manual processes or 'work arounds' to complete tasks that are required because the current systems utilised do not effectively interface with one another.

5.2. Below shows the table of staff roles and their respective time required by the processes. This is time not spent on the specified job role in the left column

Job Role	Hours/week
Asset Information and Support Officer	8.5
Contracts Assistant	2.25
Gas Scheduler	24
Head of Service	1.25
Maintenance Advisor	45.5
Senior Maintenance Advisor	20
Senior Scheduler	8
Service Area Managers	1.25
Total Hours per week	110.75

5.3. The effective cost of the hours spent performing these tasks equates to:

Per Month	£ 7,015.04
Per Year	£84,180.46

5.4. There is a potential contribution of circa £84,000 per annum to any investment in new or improved systems that mitigate these processes by automating and/or streamlining the interfaces and accessibility of information.

5.5. This will also allow 110 hours per week of resource to concentrate on the day to day tasks central to their given job role.