IT Strategy 2017-2019

Contents

1. Foreword

In 2015, South Kesteven District Council embarked on a major review of its IT capabilities, recognising that the effective operation of IT was fundamental to the effective operation of the Council as a whole in delivering its services.

Now in 2017 with a new business transformation agenda established for the Council, the role of IT as a key enabler to achieving success becomes even stronger.

This strategy lays down a framework, a roadmap, for how IT will continue to shape itself to best support the organisation going forward. It is an ambitious programme which delivers new and flexible working capabilities, services and solutions fit for the 21st century.

At a time when service budgets continue to be tightened, the need to innovate to provide services not just internally, but also externally in supporting local business, creating new customer experiences and extending the delivery model to other local authorities has never been greater. In this respect, IT remains as a key enabler for the achievement of the councils business goals.

Cllr Kelham Cooke
Deputy Leader and Cabinet member for Business Transformation and Commissioning

2. Executive Summary

This document is the South Kesteven District Council (SKDC) IT Strategy for 2017 – 2019.

The strategy builds on, and flows from, the work and analysis carried out during the period September 2016 to February 2017.

However, in recognition of changes to the organisation's business and strategic needs, this strategy delivers a programme of digital transformation that will see a radically different IT services landscape by 2019.

Through the outcomes of the analysis that has taken place, particularly the Detailed Options Report, the IT Strategy for 2017-2019 sets out the 'roadmap' for investment in IT. The proposed approach will, we believe, enable SKDC to seize opportunities and become a leader in its field, while being measured and 'conservative'.

Ultimately this strategy shows how SKDC can use modern technology to support its goals of being a modern, flexible organisation and 'fit for the future', while shifting these services from being seen principally as a cost, to a revenue-generating 'hub'.

In making this shift, SKDC has an opportunity to become an exemplar council in the eyes of residents, officers, elected members and other stakeholders.

3. Introduction

3.1 BACKGROUND

This strategy is being produced at a time of significant change across the public sector, with challenges over funding and the nature of the services we provide.

At the same time, stakeholders' expectations regarding the way in which they are able to interact with the IT department are changing radically; an issue that is covered in detail in our Corporate Strategy.

The key consideration is how we position ourselves in order to seize the opportunities that are being created by the changing dynamics of our market.

This strategy replaces the IT strategy 2015/17, which made some significant progress and laid down the foundations on which this strategy can build:

- A framework of new processes and procedures aligned with a Service Agreement
- Baseline 'thin client' and remote working capabilities to support flexible working
- New telephony solutions
- Public service network (PSN) compliance
- Establishment of a disaster recovery capability
- Improved supplier management
- Adoption of SKDC's project management methodology
- The introduction of the first cloud-based IT services.

3.2 APPROACH

An interactive approach will continue to be taken to ensure that the organisation is engaged with the creation and delivery of this strategy.

The primary inputs to this strategy were:

1. The results of an IT audit/gap analysis, which was carried out in late 2016. The analysis also examined the progress that had been made against the previous IT Strategy
2. The commissioning report for the strategy, as approved by the senior management team
3. A detailed options report, which provided three costed proposals for how this strategy could be taken forward
4. The results from a series of workshops involving participants from across the organisation. These included live demonstrations of the new technology that was being considered, as well as interactive

business analysis sessions. External subject matter experts were used to support and inform the sessions

5. In the area of service delivery quality, Lloyds Register Quality Assurance (LRQA) was commissioned to produce a gap analysis against ISO 9001: TickIT Plus/ ISO20000, with elements of ISO27001. The results from the analysis have been used as inputs to the quality improvement and remedial strands of the strategy under objective 2 (page 14).

Based on the actions agreed from the presentation and review of the above deliverables, a set of principles were agreed. Namely:

1. The agreement to follow the 'middle' roadmap of the detailed costing report
2. The objectives, as discussed further in the following section
3. The implementation methodology for the strategy, based on the concept of 'building blocks' aimed at reducing risk, controlling and managing cost, and ensuring successful delivery.

3.3 OBJECTIVES

In delivering a digital transformation roadmap, a set of underlying principles/objectives have been defined. Many of these subsume or build on those for the preceding strategy, as follows:

1. The strategy will produce a three-year framework, which will ensure the required outcomes are delivered
2. An integrated set of architectures (the 'enterprise architecture') that moves SKDC away from the historical model, which is considered to be 'siloed' and inflexible, to a 'platform- based' model that supports:
   a. Seamless integration with modern technology
   b. Prioritises use on mobile devices
   c. Can leverage new internet-based technologies as they emerge
   d. Wherever possible, uses open standards to facilitate collaboration and partnerships with other authorities and customers.
3. The strategy recognises that the model must be flexible, scalable, agile and integrated. It must also be globally available and customer–centric, enabling access to online transactional services
4. The strategy will see a move towards a digital, service-based culture

5. SKDC aims to be recognised as an exemplar in the delivery of IT services; providing SKDC with an opportunity to promote partnerships and explore revenue earning opportunities
6. The strategy will deliver the required training and communication materials to equip staff with the new skills and knowledge necessary and to understand the benefits that they and their customers will gain from the strategy
7. In determining the new platforms, the strategy will integrate with the customer access strategy and people strategy, for which it is a key enabler
8. The strategy will recognise and ensure that existing work streams, e.g. GIS modelling, are brought into the new business platform's architecture as a service ('Platform as a Service' (PaaS))
9. The strategy must complete the flexible organisation requirements
10. There will be an updated governance model to oversee and maintain the new IT solution, using internationally-recognised standards i.e. ITIL, ISO27001, ISO9001/TickIT Plus, etc.

These principles have been consolidated to produce the key objectives, which are discussed in more detail in Section 5 (page 11).

4. IT and organisational challenges 2017/19

4.1 CHANGES IN COUNCIL LEADERSHIP AND MANAGEMENT

With new leaders, a new cabinet and changes within the Senior Management Team (SMT), with an interim Chief Executive in post during the early implementation stages of this strategy, the council faces a period of considerable change, new challenges and with them new opportunities as the new team brings its vision to life.

This strategy is designed to cope with the changing needs of the organisation as it continues to develop as a result of the flexibility and implementation approach it contains.

4.2 DEMANDS ON IT SERVICES AND CULTURAL CHANGE

Under this strategy, IT Services faces several demands where conflicts in priorities need to be managed carefully.

The significance of this change programme should not be underestimated, particularly with what remains a small IT team that has to balance the day-to-day challenges of basic 'keeping the lights on' activity with the cultural change that will be required as it morphs into the new delivery function.

While the team has already changed under the work programme laid down by the preceding strategy, the pace of change will increase.

There will need to be a re-alignment of skills and structure while continuing to improve in the quality and professionalism of the services it delivers. We will also need to look at bringing in skills for specific aspects of the strategic roadmap to meet the delivery commitments of this strategy.

At the same time, the challenge identified in the strategy for 2015/17 remains, i.e. that the current 'drop-in' service being provided by the IT support team is difficult to resource and disrupts the team's focus on wider strategic priorities.

The continued emergence of a 'rounded' service desk as an essential component of the service hub will help to manage expectations in this area and reduce the need for this style of interaction.

4.3 SOFTWARE DEVELOPMENT

While some software development has been taking place within SKDC, primarily in support of the Civica Customer Relationship Management (CRM) programme, this strategy and the 'white space app' are very different challenges in terms of their nature and scale.

The skill sets required by both are different and the timescales necessary for successful delivery mean that SKDC will need to bring in external skills during the early stages of the project. This has already been costed into the models.

Aligned with the above is the need to implement a rounded development methodology which compliments the nature of modern 'app-based' software development and support. This does not exist at this stage.

4.4 MOVING TO THE CLOUD VS APPLICATION VENDORS' CAPABILITIES

This strategy lays down a progressive but achievable roadmap for migrating, where appropriate, from traditional on-site hosted solutions to cloud-based services.

As applications come to the end of their life, contract renewal, or subject to major upgrade(s), then the cloud-based options will be considered. This is discussed fully later in the strategy (see page 20).

Early work in this space has already identified a number of challenges, including the availability of true cloud-based solutions, even when they have been marketed as such. There have already been a couple of examples where solutions being sold as 'Software as a Service' (SaaS) were, at best, really Infrastructure as a Service (IaaS).

A clear set of criteria and a sound understanding of these new technologies, will therefore be required when assessing solutions and roadmaps for our application portfolio.

4.5 DATA/INFORMATION MANAGEMENT

Data/information management becomes critical at this stage in the maturing of our IT delivery model. However, this is a discipline that does not appear to have been an area of focus for SKDC to date.

Data and information management underlies many of the issues identified by the IT gap analysis and was further highlighted as a theme within the report by the LRQA. This strategy picks this up within several 'building blocks', including from the perspective of skills, physical manifestations in areas like document management, enterprise application integration (EAI) and shared working environments.

Strategically, establishing this function enables SKDC to look at knowledge management capabilities in the medium to long-term where, as an organisation, the true value of the information assets we own can be realised. This should be seen alongside the cultural and skill changes that will also be required.

5. Themes/objectives

In preparing this strategy, an approach has been developed to break the larger programme of work into smaller projects that are quantifiable, measurable and attainable.

These 'building blocks' are subject to their own business cases, each of which require approval before being progressed. The methodology and process for doing this has already been rehearsed for aspects of the GIS programme and is complementary to the SKDC project management methodology.

This approach is best shown in the Figure 1 (below), which illustrates how the different main themes or objectives of the strategy relate to each other.

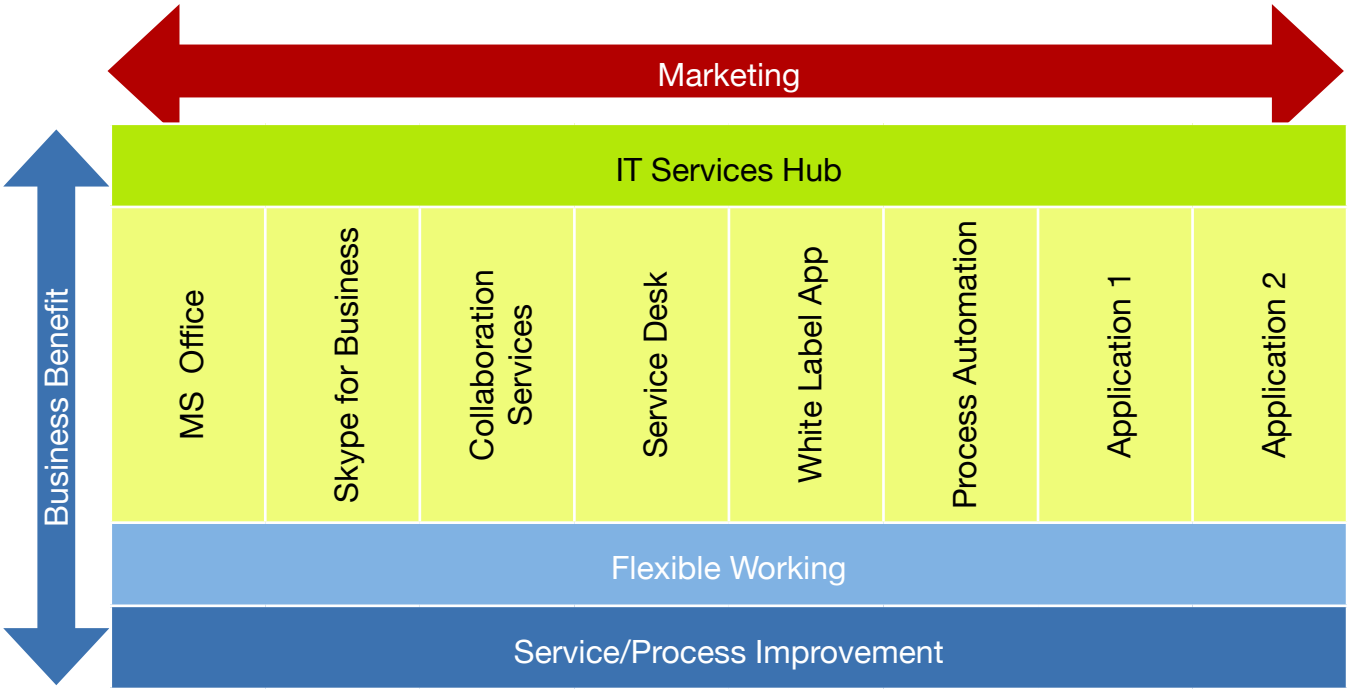


Figure 1 - Strategic Objectives and Building Blocks

This approach addresses a number of the challenges facing the programme:

1. It manages the risk
2. Financial commitments are broken down and measurable against defined criteria
3. The process is flexible enabling the work plan to be tuned to the changing organisations requirements, economic drivers and technical solutions as they continue to emerge and mature.

The following sections now take these objectives and map out the building blocks that support their achievement. The resulting strategic-level delivery roadmap is shown in Appendix C (page 32).

6. Objective 1 – definition of the enterprise architecture

An underlying principle of this strategy is the need for, and creation of, a new enterprise architecture for the organisation.

The need was identified in the 2015/17 IT strategy. This now becomes a fundamental and essential deliverable in the new strategy as we change the structure and architecture of our services and service delivery models. An enterprise architecture framework enables organisations to address critical business needs effectively by:

- Ensuring that everyone 'speaks the same language'
- Avoiding being 'locked in' to proprietary solutions by standardising on open methods for enterprise architecture
- Saving time and money, and using resources more effectively
- Achieving demonstrable return on investment (ROI).

Our enterprise architecture therefore forms the blueprint and roadmap for how the components of the new IT strategy are delivered.

The framework it provides acts as a 'gate' to ensure that the individual components/building blocks integrate, meeting a set of common pre-requisites and standards. New solutions, applications and services must meet the criteria set out by the architecture before they can progress.

For a more detailed explanation of enterprise architectures, please see Appendix A – enterprise architecture artefacts on page 29, which also describes the methodology we are using which is based on an updated and cut-down version of The Open Group Architecture Framework (TOGAF).

[1] *The Open Group*

7 Objective 2 – transforming IT Services from an internal provider to a service delivery capability

This objective covers the pre-requisites that need to be established in order for SKDC to realistically succeed as a services hub; a fundamental theme for this strategy, which flows into the service hub objective (page 26).

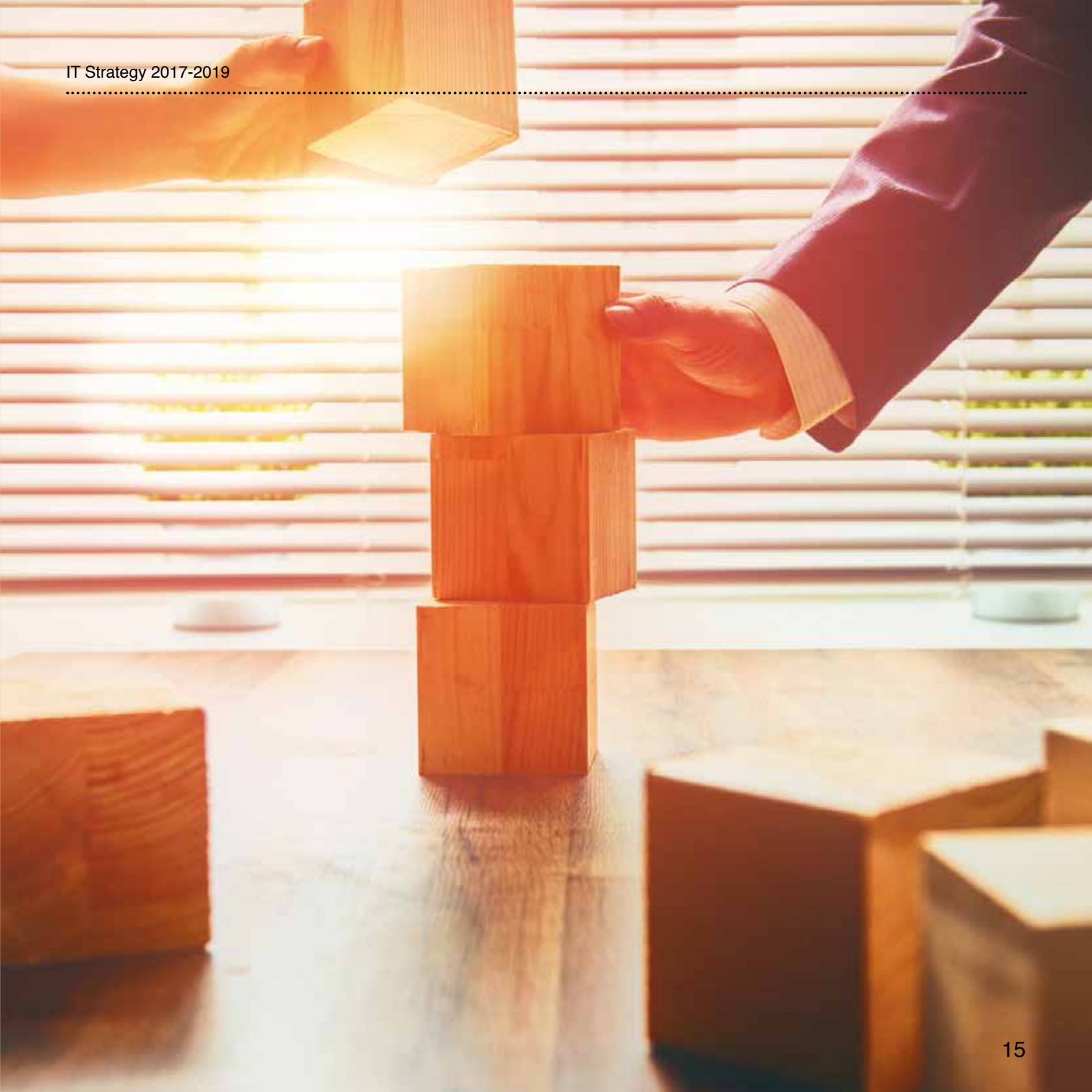
7.1 CONTINUED PROCESS IMPROVEMENT

Flowing from the objective of the 2015/17 strategy, this building block seeks to firmly embed the culture of process improvement within the team, close any remaining gaps in the processes and procedures and maintain a programme of review for them.

The report produced by LRQA identifies several areas within IT and beyond that need to be closed.

This provides for a set of quantifiable success criteria/ objectives:

1. Establishment of an integrated management system (IMS) to bring together the current fragmented nature of what is in place
2. Embed reporting and review
3. Establish policy and processes for improvement;
4. Establish increased customer-focused procedures (which are essential in supporting the development of a services hub at SKDC)
5. Improvements in risk management and the documentation of risk
6. Refine the service desk (discussed separately)
7. Continue to tighten change control
8. Review access control and information management standards in parallel with service hub requirements.



Achievement of this will bring SKDC in line with Information Technology Infrastructure Library (ITIL) requirements and capable of being assessed externally against ISO20000.

Once an understanding of the market requirements is defined, entry to the services market may require formal accreditation to recognised standards such as the above.

7.2 SERVICE DESK

The current service desk will need to transform from an inward to outward-facing function, serving both the internal and external customer.
To achieve this, some re-organisation will be required with roles being modified in line with the procedural changes flowing from Para. 7.1 (above).

Our goal is to have a service desk that reflects best practice in the IT industry and positions SKDC in a way that enables it to differentiate itself as a public sector-based service provider against its counterparts, i.e. the more traditional private service providers.

7.3 SKILL SETS

To achieve the strategic goals, we must recognise that as part of the investment in IT, a review of the skill requirements is conducted and development/skill acquisition plans implemented accordingly.

8. Objective 3 – delivering the flexible organisation

This objective builds on the progress that has already been made in this area, but goes further to ensure IT has the capabilities it requires to deliver SKDC's vision and strategic goals. It is delivered via a series of building blocks.

8.1 END USER COMPUTING – MOBILE WORKING STRATEGY

As part of the approach to a modern workforce with a 'work anywhere at any time' culture, there will be a move away from desk-based 'thin client' PCs to laptops, gradually refreshing the client hardware under the current three-year life cycle used.

This process has already begun.

The transition to a 'fat' client across SKDC will enable the removal of the Quest system and allow users to work much more flexibly than they do now.

In line with the platform objective, applications will be increasingly delivered via web browsers as 'Software as a Service'. Until this point, applications will be loaded locally onto the clients' devices, which will eradicate time spent waiting for the virtual desktop client to boot and become accessible.

In support of the above, an end-point management system such as Barramundi will need to be implemented.

8.2 MICROSOFT OFFICE – OFFICE 365

Our standard build is currently based on Office 2007, which Microsoft took off its support list in October 2017.

In line with its platform strategy, SKDC will move towards a platform-based service orientated architecture, where MS Office is provided as Software as a Service.
The solution here is to transition to the cloud-based Office 365.

8.3 MEETING AND TELEPHONY SERVICES – SKYPE FOR BUSINESS

Building on the recent investment in internet protocol (IP) telephony, the existing pilot implementation of Lync will be replaced by a full Skype for Business solution. Transitioning to a cloud-based SaaS solution, Skype for Business, as a component of the Microsoft automation and productivity suite, revolutionises the way in which our workforce can interact.

It removes the need for desk phones and, in many cases, mobile phones. Our flexible workforce will be enabled through one device - their standard-build laptop.
The on-premise telephony servers (and disaster recovery services) are therefore no longer required. All the functionality of our current phone exchange moves to the cloud under this approach.

The successful implementation of Skype for Business then provides the platform on which to provide the external services discussed as part of our new service hub offer (objective 6).

8.4 COLLABORATION SERVICES - SHAREPOINT ONLINE

In a distributed, highly flexible and mobile work environment you must be able to collaborate easily and effectively.

A collaborative environment is built on a combination of tools which includes Office 365 and Skype for Business. The 'glue ware' that provides the integration for all of this is SharePoint.

SharePoint is an integral component of Microsoft's Office automation and productivity suites. It has benefitted from considerable development and investment since the earlier versions and updates going back to 2003.

This building block also encompasses the formalisation of Civica as our enterprise document management solution (EDMS) and the integration of our productivity solutions and shared work environments (SWEs) to it.

The building block will also define the roadmap for the retirement of our legacy document management solutions and the data cleansing and migration of data from them to Civica.

8.5 COLLABORATION SERVICES – EXTERNAL COLLABORATION

The ability to be able to work seamlessly with our stakeholders is an important one.
In a sense SKDC already achieves this through some of the government portals, for example ModernGov. However, the need identified here is the capability that SKDC has itself and extends externally whether it be local businesses, other local authorities, our citizens etc. Based on our own collaborative toolsets discussed in Para 8.4 (above) and accessed through a secure shared working environment, this is a building block for the medium to long term.

As a capability though, it sits well alongside the portfolio of solutions we can offer as a service hub and can act as a differentiator.

9. Objective 4 - completion of the GIS programme

This is an existing and well-defined programme of work that was initiated as part of the 2015/17 IT strategy.

Having already completed the initial requirements and, in essence, design phases, this programme is now 'sponsoring' delivery projects under the watch of an established steering group within SKDC.

The focal areas for this programme are now:

- Data cleansing and migration of GIS data to the 'core GIS solution'
- Replacement of the existing and unsupported PlanWeb application to sit alongside MapInfo to form the core solution referred to above
- Implementation projects to realise the efficiency/ cost savings identified in the earlier stages of the programme and committed to the management at SKDC.

10. Objective 5 – migrating to platform-based provision – 'The Cloud'

10.1 APPLICATION DELIVERY

The way in which IT applications are delivered is key to all businesses, regardless of the vertical market in which they operate.

The future for applications is to be delivered through Software as a Service (SaaS); a software licensing and delivery model in which software is hosted centrally and licensed on a subscription basis.

It is predicted that 95% of software will be hosted directly by software providers by 2030, i.e. users will access 'software as a web service', typically via a web browser. This means that software will not be hosted on premise-based servers.

Although 2030 may seem far away, the trend towards SaaS for business and consumers is already present in many commonly-used applications, such as Office 365, Dropbox, WhatsApp and Facebook. Furthermore, systems in the business world that are typically run from on-premise servers, such as finance and customer relationship marketing (CRM), are now increasingly accessed via a web browser.

Agile, modern businesses use SaaS to enable teams to work from anywhere, while improving collaboration and productivity. SaaS is achieved without any upfront investment in hardware or software and is costed on a per-user basis, so investment in technology can easily flex - expand and contract - with the business.

This aligns with and supports SKDC's ambition to become an agile organisation with a flexible working approach and improved team collaboration.

As an organisation running solely from SaaS, SKDC will

be lighter and able to harness the power of technology to greater effect as it benefits from software that is always on the latest version, without the need to manage updates internally or invest in its own core infrastructure.

Space in SKDC's server rooms can be freed up to provide additional space for desks and/or collaboration, and staff will no longer need to login via a virtual private network (VPN) connection.

Communications between teams will be enhanced and simplified by the use of unified communications (voice, video, instant message, contacts, screen share, etc), delivered as a service (UCaaS). Access to information and systems will become simplified, increasing staff effectiveness and morale.

Finally, this will allow for digital processes to be integrated using web-based application programme interfaces (APIs), so that modern workflows can be designed and implemented, and duplication of work be all but eradicated.

The benefits of SaaS to SKDC are therefore significant, as this will serve to:

- Remove the need for capital investment in server hardware
- Ensure software is always up to date
- Switch to a subscription-based, per-user/per month licensing model, which allows for highly flexible and predicable technology financial planning that scales with business needs
- Reduce administration/maintenance overheads through re-training of internal IT staff to develop solutions that deliver innovation and improve business outcomes as opposed to simply 'keeping the lights on'
- Support flexible working – thereby enabling the consolidation of office space and helping to attract staff and boost morale

The recommendation is therefore that SKDC works with one or more technology partners to design a SaaS solution stack based on software and processes that are integrated through workflows, application interfaces and databases that will underpin a highly efficient cloud-based council operation.

10.2 THE SAAS ROADMAP - ESTABLISHING A FLEXIBLE, SCALE-DOWN INFRASTRUCTURE STRATEGY WITH IAAS IN READINESS FOR SAAS

Fundamental to this digital transformation strategy is how SKDC moves from its current 'stove-piped' basis to a platform-based one, supporting the process discussed earlier of moving from on-premise to the cloud.

Like any other organisation, SKDC relies on a core set of applications to be able to deliver services to internal staff and its customers. We therefore need to set out a 'Software as a Service' roadmap over the next 4-5 years, which will allow for existing software contracts to run their course and to be gradually switched via IaaS (Infrastructure as a Service) to a SaaS subscription model.

By adopting an intermediate IaaS approach, SKDC will be able to move away gradually from hosting its own infrastructure at a pace and cost that suits budgets and wider strategies. This approach needs to be aligned with SKDC's existing hardware refresh cycle, meaning that no investment will be required until existing servers have come to the end of their life and need to be refreshed. Instead of refreshing these servers and investing in new on-premise servers, SKDC can at this point move its virtual machines into IaaS. At this point, virtual machines will be managed by an external provider rather than SKDC IT services.

The key benefit this brings is that SKDC will be in a position to simply switch across from IaaS to SaaS as this becomes available, and to stop renting servers from the chosen IaaS provider at that point. This will in effect avoid the council effectively paying twice, i.e. for the SaaS and the server hardware that has been purchased already. This is a proven strategic approach that has seen success elsewhere and is made possible because IaaS is typically paid for monthly, without long-term contracts, providing the financial flexibility that is at the core of this strategy.

While each case needs to be looked at in its own right, this approach will allow us to migrate at our own pace and to learn the lessons as we work towards embracing cloud-based technology and moving SKDC to a total Software-as-a-Service (SaaS) environment.

The table at Appendix D (page 41) shows the expected refresh cycle of SKDC's existing IT server and core infrastructure hardware. An estimated cost to rent these servers through Infrastructure as a Service (IaaS) is provided for reference.

10.3 DATA AND INFORMATION FLOWS IN A PLATFORM-BASED ENVIRONMENT

As we move towards a platform-based architecture, one of the challenges that will be faced by the organisation is the way that information flows between SKDC's various applications and solutions can be maintained.

There is, however, the opportunity to simplify and optimise existing interfaces, data flows and processes. The enterprise architecture, as one of its deliverables, will map out the requirements for enterprise application integration (EAI), which is the building block that defines the architecture in this space.

The following figure illustrates where EAI sits in this equation:

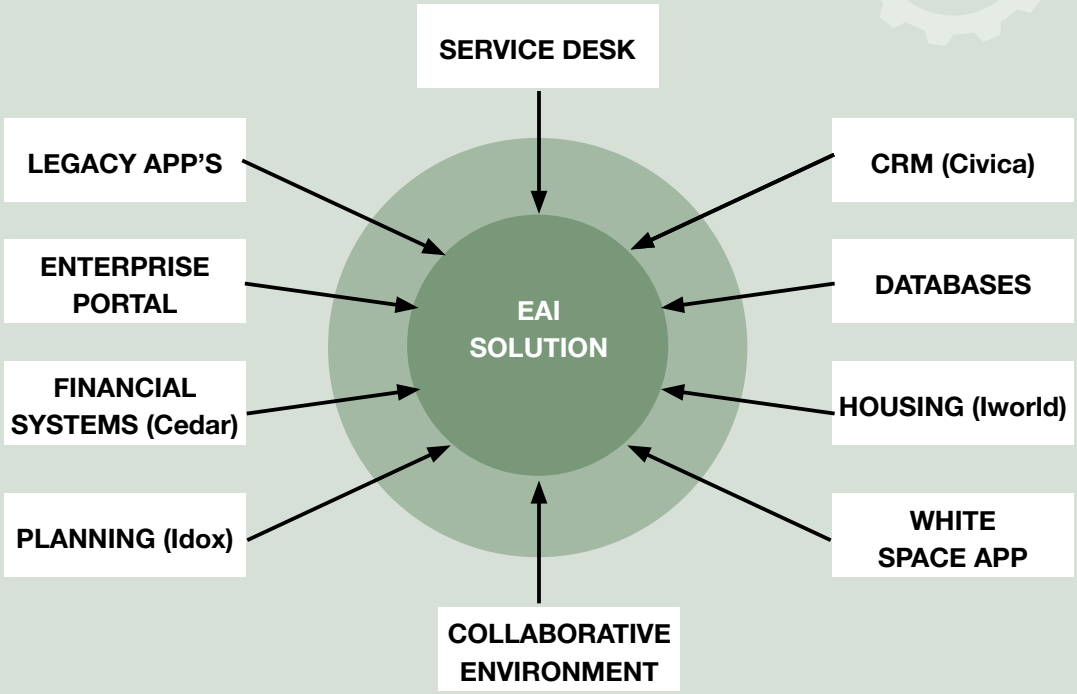


Figure 2 - The Role of EAI

There are products in the market place that will serve to help to automate this, and we will need to research and market test in order to identify the most appropriate.

This is a complex area, however. The overall solution should therefore be regarded as a combination of solutions comprising software tools, processes, and more efficient interfacing based on APIs.

11. Objective 6 – development of an IT services hub

11.1 THE RATIONALE AND OPPORTUNITY FOR AN IT SERVICES HUB

The critical success measure behind this objective is that IT services will transform from being a cost centre to a profit centre, reducing – potentially significantly – the financial overheads of the organisation.

The principle behind our IT Services hub is that by leveraging our newly acquired, leading-edge technologies, together with the skills and capabilities developed and honed during the implementation and subsequent running of these systems, SKDC will have a marketable offer that will be attractive to other local authorities.

Due to cuts in funding from central government, councils throughout the UK find themselves in a very similar position to SKDC. Many, if not all, will also be turning to technology to help generate increased income and reduce costs. The challenges faced are extremely similar and therefore solutions to these challenges, once found, can often be applied across other councils.

Efficiencies have been achieved in the public sector through the emergence of various 'shared services' models, which have seen organisations collectively identify areas where the same services are required and then build a single platform to deliver them, thus avoiding the duplication of investment in these areas. Investment in software and technology is a good example of where high implementation costs can often be a barrier to the adoption of new and more efficient, innovative technologies. However, once this investment has been made the solution can be marketed to, and accessed by, multiple entities/users.

The recommendation is to exploit the current market demand and commercialise the significant value that will exist within SKDC once it has successfully achieved its own digital transformation.

11.2 PROFESSIONAL AND MANAGED SERVICES

Through SKDC's investment in IT, and the approach and technologies chosen, it will be able to establish a shared services platform and a service portfolio of intelligently integrated applications and associated services.

These can then in turn be commercialised (productised) to suit other district, borough and city councils. As 'early adopters', the opportunity is there for SKDC to look to establish a modern, regional council 'blueprint' as it adapts to a self-financing model.

This will see it launch a set of best practice processes and workflows borne out of our own experience of implementation, but also drawing on how most modern businesses in the private sector assure success in today's competitive and fast-changing market environment.

There are three ways that this knowledge can be commercialised:

1. Offering professional services in solution architecture and project implementation
2. Income from reselling software services, such as the Skype for Business Platform
3. Offering a range of managed services.

Examples of the above would be rolling out staff intranets or customer extranet portals using SharePoint Online, setting up users on the district council Skype for Business platform. The council could also develop a branded 'council customer app', based on a 'white label' app, which could have the same code and database structure, but be easily modified to create a newly branded front-end for each council.

11.3 SERVICE DESK

In developing a capability to meet our own needs, SKDC should expand upon this to offer help-desk services to internal IT teams at other councils, or directly with their users.

This will be structured through a framework of service agreements tailored to meet the needs of each council's operational needs. Depending on speed of uptake of these services by other councils, it is recommended that two to three existing IT staff at SKDC be trained to take service desk calls for the new services and technologies being introduced as identified within this strategy.

This is an opportunity cost, redeploying staff who will be freed from their current duties on the back of the new technologies deployed. The service desk would then

be a platform (and pre-requisite) for the other value add services we will be providing via the service hub.

11.4 BUSINESS PROCESS AUTOMATION

As an emerging technology, process automation represents both an opportunity and challenge for SKDC. A recent Gartner[2] report, published in 2016, indicated that the use of automation and artificial intelligence will reduce employee numbers in shared service/service organisations by 65% by 2020.

However, it also found that "by 2019, process automation will have limited impact on top-line growth for 50% of organisations that will erroneously focus on labour reduction, not on improving service incomes." Very few local authorities have yet ventured into this space, and as potential 'early adopters', this strategy needs to lay down a roadmap that both manages the risk and assures the business case.

The opportunity is that by getting this right, SKDC can derive significant benefit internally and can also build the provision of process automation into its service hub portfolio, thus creating a further revenue stream for the authority.

The objectives/deliverables for this building block are therefore as follows:

1. Internally: to produce a roadmap as a supporting deliverable to this strategy which:
   a. Shows the processes both suitable and selected for automation
   b. Analyses the resources (both internal and external) required to support the automation
   c. Maps out the automation options in support of the above (See Figure 3, below)
   d. Includes a risk management plan
   e. Includes a communication plan

2. Externally, and in parallel with the creation of the internal roadmap above, a further deliverable will be to look at those component areas of automation that can be productised and used as revenue generating products/services for the services hub.

[2] *SKDC Customer Access Strategy 2017-2019, V1 Released April 2017*

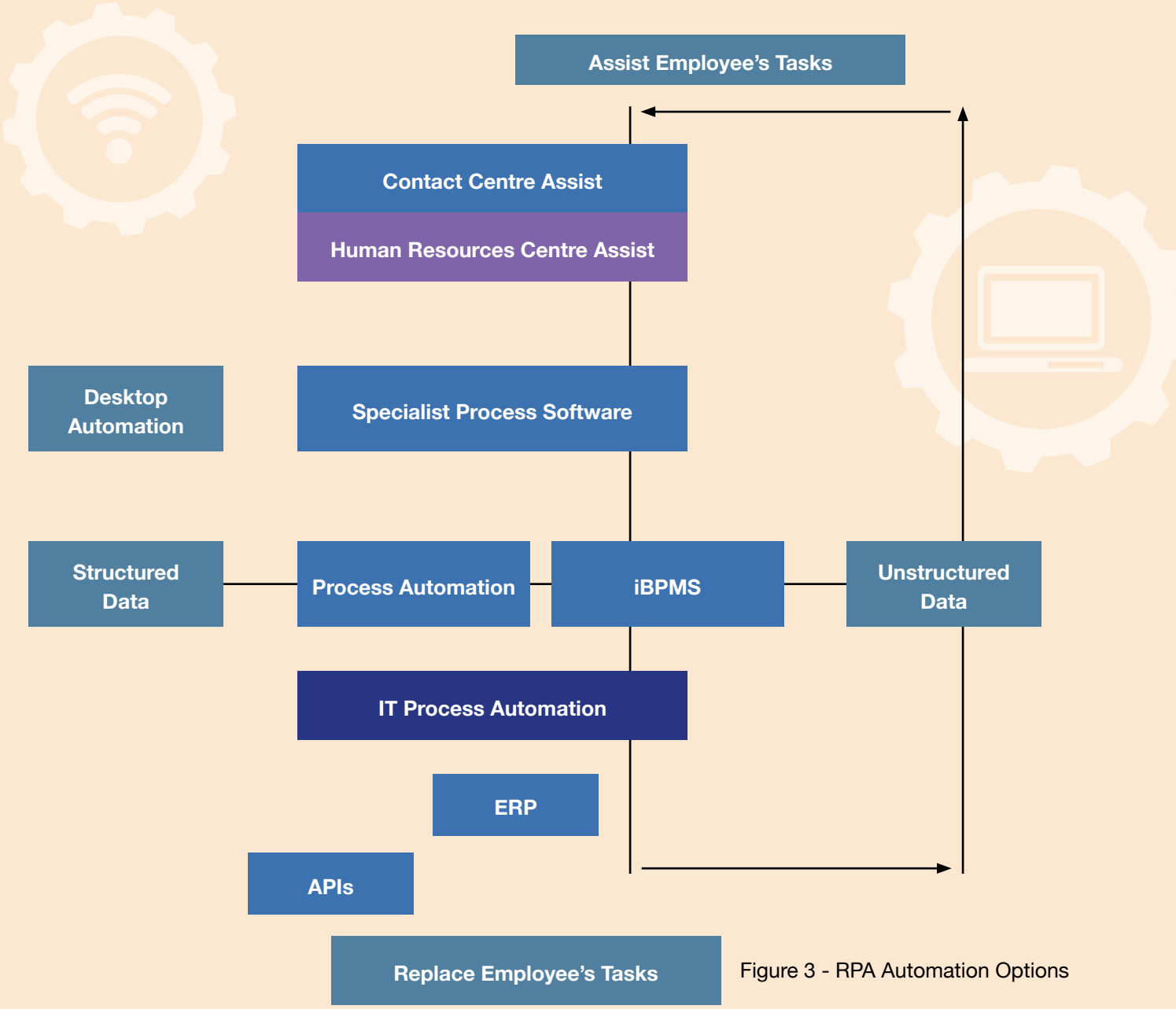


Figure 3 - RPA Automation Options

11.5 THE "MY SKDC" WHITE SPACE APP

An outline business case has already been produced for developing an SKDC mobile application to offer a more modern experience to SKDC customers.

The self-service mobile app will include a personalised timeline/newsfeed-style interface to provide a single account portal login for all customers to interact with all council services, including reminders/prompts, tailored marketing content, broadcast notifications, application form submissions, setting up of alerts, view billing for all services, calendar, all received correspondence messages/emails/letters digitally accessible, online chat (IM) with each department and executing card payments, Paypal and setting up online direct debits. It also includes hosting and maintenance.

This app will be integrated into back-office council systems and trigger efficient, digital workflows.
The strategy will further evaluate the opportunity and then develop a generic SKDC solution that can be 'white labelled' for other councils. The initial analysis has shown that once SKDC has invested in developers to build its own app, it will be both cost effective and a very real revenue opportunity for SKDC to then replicate a re-branded version of this in the market for other councils.

11.6 THE INTERNET OF THINGS (IOT)

Gartner estimates that by the end of 2016, there were 3.8 billion 'things' (devices) connected to the internet – not only phones and TVs, but smart cars, smoke detectors, door locks, robots, street lights, heart monitors, trains, wind turbines, even tennis racquets and toasters.

By 2020, Gartner estimates there will be 25 billion of these smart devices, transmitting data to us, to the cloud and to each other. Cisco's outgoing CEO, John Chambers, has proclaimed that there will be 50 billion devices online within five years, with a total market worth USD$19 trillion.

Another leader in this sphere, Siemens, has said these smart things are starting to power a 'fourth industrial revolution', after steam, electricity and wired computers. Adoption by local and national government in the UK has been patchy to date, with activity being focused in the south of the country, most notably by Southampton City Council (SCC) and Eastleigh Borough Council, both of whom are benefitting from the R&D hub at Southampton University.

SCC is seeing some significant results around the management of its housing stock where it has already achieved cost savings in the order of £100K, based on the automation and efficiency gains it has realised.
In terms of this strategy, the opportunities need to be

further assessed both in terms of cost savings and revenue generation. Initial dialogues have indicated that there are providers who would be keen to work with us in developing a portfolio of services/ solutions here.

Target areas would be:

- Housing maintenance and repairs
- Monitoring of citizens with special needs or at risk
- Car park monitoring, i.e. sensors can inform the SKDC white space app, where to direct motorists for parking availability
- General traffic management, i.e. how to avoid congestion
- Provision of an infrastructure for businesses to monitor their own facilities.

This strategy will deliver an assessment, roadmap and implementation plan for how SKDC embraces this aspect of digital transformation.

11.7 THE CUSTOMER EXPERIENCE AND EFFECTIVE MARKETING

In order to empower and inform its new strategy, SKDC will need to implement a range of modern marketing techniques that focus on software and automation processes.

This includes the adoption of software that helps to proactively monitor social media activity and the integration of inbound and outbound marketing technology with back-office systems.

Underpinning this is the development of new commercial and customer care skills that have not been required before to support the delivery model that the new services hub will have.

12 Appendices

12.1 Appendix A – enterprise architecture artefacts

The following is included for reference for those wanting a greater understanding of the enterprise architecture discussed in Section 4 (page 10).

1. Principles (sometimes also called maxims) describe high-level policy statements having significant impact on both business and IT, for instance, that all provided services should be available to customers via single sign-on

2. Technology reference models (TRMs) (can be called technology standards or split into infrastructure, applications and other more specific reference models) provide standardised sets of available technologies to be used in all IT projects

3. Guidelines (often also called standards) define low-level IT-specific prescriptions or best practices to be followed in all IT projects grouped by their technology domains

4. Business capability models (BCMs) (sometimes also called business capability maps) provide structured views ('maps') of all organisational business capabilities on a single page

5. Roadmaps (which can also be called investment roadmaps, divisional roadmaps, capability roadmaps, technology roadmaps, etc.) provide structured views of planned future IT investments with their tentative timelines aligned to different capabilities or business areas

6. Landscape diagrams (including system interaction diagrams, relational diagrams, platform architectures, one-page diagrams, integration contexts, etc.)

describe high-level connections between various applications, databases, platforms, systems and sometimes business processes covering large parts of the corporate IT landscape

7. Solution overviews (can be called conceptual architectures, solution outlines, conceptual designs, preliminary solution architectures, solution briefs, etc.) describe specific IT projects in a brief business-oriented manner

8. Solution designs (can be called high-level designs, solution definitions, detailed designs, full solution architectures, project-start architectures, etc.) describe specific IT projects in a highly technical manner with all the necessary details required to implement these projects.

12.2 Appendix B – glossary

The following definitions are included to aid the understanding of this strategy

API – An application program interface is a set of routines, protocols, and tools for building software applications. An API specifies how software components should interact

B2B - Over the internet, B2B (business-to-business), also known as e-biz, is the exchange of products, services or information (e-commerce) between businesses, rather than between businesses and consumers (B2C)

CRM - Customer relationship management is a term that refers to practices, strategies and technologies that organisations use to manage and analyse customer interactions and data throughout the customer lifecycle, with the goal of improving business relationships with customers

GIS – A geographic information system is a system designed to capture, store, manipulate, analyse, manage, and present spatial or geographic data

IMS - An integrated management system integrates all of an organisation's systems and processes in to one complete framework, enabling an organisation to work as a single unit with unified objectives

IT – Information technology; sometimes also referred to as information communication technology (ICT). The two terms are synonymous

ITIL – ITIL, or Information Technology Infrastructure Library, is a set of detailed practices for IT service management (ITSM) that focuses on aligning IT services with the needs of business. This has now been recognised and encapsulated under the ISO 20000 standard

LRQA – Lloyds Register Quality Assurance; an external and accredited organisation for the assessment against recognised international standards i.e. ISO 27001 for security systems

ROI – Return on investment; measures the gain or loss generated on an investment relative to the amount of money invested. ROI is usually expressed as a percentage and is typically used for personal financial decisions, to compare a company's profitability or to compare the efficiency of different investments

RPA – Robotic process automation; the application of technology that allows employees in a company to configure computer software or a 'robot' to capture and interpret existing applications for processing a transaction, manipulating data, triggering responses and communicating with other digital systems

TOGAF® - The Open Group Architecture Forum, comprised of more than 200 enterprises, develops and maintains the TOGAF® standard and publishes successive versions at regular intervals. The TOGAF® framework is the de facto global standard for enterprise architecture

VPN - A virtual private network is a network that is constructed using public wires — usually the internet — to connect to a private network, such as a company's internal network.

12.3 Appendix C – IT strategy work plan

The following table lays out the timeframes for the delivery of the various components to the IT Strategy. These will feed down into the tactical planning for the IT services area.

Theme/ Key Objective Area	Building Block	Action/ Deliverable	Date
Enterprise Architecture	Enterprise Architecture	Develop and refine the Job Description for and recruit an Enterprise Architect	Jan 2018 – End June 2018
	Enterprise Architecture	Definition and implementation of a new Architecture Framework	July 2018 – End Dec 2018
	Enterprise Architecture	Development of new/revised policy and procedures aligned with the Framework	Sept 2018 – End March 2019
Transforming IT Services – Services Hub	Continued Process Improve-ment	Review LRQA review recommendations and assess impacts in terms of process improvement plan and business case for the adoption of specific standards i.e ITIL, QMS, Security Management that are pre-requisites into the Services Market Place	End Dec 2017
	Continued Process Improvement	Develop Process Improvement Plan and action. This will see deployment of the IMS (Integrated Management System)	Jan 2018 – End Jul 2018
	Continued Process Improvement	Implement Regime of external accredit-ation where business case exists	May 2018 =>
	Service Desk	Recruit a new IT Service Desk Manager and re-organise the team to be able to support internal and external customers	April 2018 – End May 2018
	Service Desk	Implement requirements of the Process Improvement Plan as they pertain to the Service Desk function	June 2018 – End Aug 2018

Theme/ Key Objective Area	Building Block	Action/ Deliverable	Date
	Service Desk	Examine opportunities for interoperability with the Customer Services Service desk and implement findings	June 2018 – End Oct 2018
	Skill Sets	Complete a skill and competency review for IT Services against the requirements of the IT Strategy and update individual training and development plans accordingly	December 2017
Delivering The Flexible Organisation	Mobile Working	Down-select Implementation "Tiger Team" partner	November 2017
	Mobile Working	Create new Mobile Working Build based on Windows 10, Office 365, and Skype for Business. Retire desk based phones as a standard offering	Nov 2017 – End Jan 2018
	Mobile Working	Ensure that all users are trained in the use of the new build and flexible working capability	Dec 2017 – End Jan 2018
	Collaboration Services (Internal)	With the "Tiger Team" Partner create a new set of collaboration services based on the MS SharePoint toolset. Integrating this with the mobile working capabilities and the enterprise document management solution	December 2017
	Collaboration Services (External)	Further refine and extend the collaboration services through a secure DMZ to be available to external customers	May 2018 – End Dec 2018

Theme/ Key Objective Area	Building Block	Action/ Deliverable	Date
	Collaboration Services (External)	Productise the collaboration services so that they can be sold and marketed as part of the Services Hub portfolio	Sept 2018 – End Dec 2018
GIS Programme Completion	Data Cleansing	See programme of work under Data Management	-
	PlanWeb Replacement	Refine the existing Statement of Requirements and use to establish a RFQ on which to set up a competitive procurement for the PlanWeb Replacement	End Jan 2018
	PlanWeb Replacement	Implement the down selected solution	Feb 2018 – End Mar 2018
	Implementation Projects	Launch identified implementation projects from the GIS Programme to realise projected savings (Sponsored by the GIS Steering Group)	April 2018 =>
Migration to “the Cloud”	SaaS Roadmap	Update the Architecture Framework to integrate the SaaS solution stack	August 2018
	SaaS Roadmap	Produce an infrastructure strategy to define the approach and ruleset for the implementation of IaaS and SaaS based solutions	Sept 2018 – End Oct 2018
	SaaS Roadmap	Using the outcomes of the above, review the implementation plans for all new solutions, major upgrades and as hardware comes end of life	November 2018
	Data and Information Flows (EAI)	Using the Architecture Framework as a basis, assess the suitability and applicability of EAI based solutions to improve access to information for both inward and outward facing solutions. Establish the business case.	Nov 2018 – End Jan 2019
	Data and Information Flows (EAI)	Finalise the Statement of Requirements, produce RFQ and source the required solution	February 2019

Theme/ Key Objective Area	Building Block	Action/ Deliverable	Date
	Data and Information Flows (EAI)	Implement the EAI Platform and integrate with our services and solutions	April 2019 – End Nov 2019
Development of the IT Services Hub	Professional and Managed Services	Develop a catalogue of products and services supported by Marketing Plans and materials this to include pricing and costing material	Feb 2018 – End Mar 2018
	Professional and Managed Services	Develop the new framework of processes necessary to "run" a services hub Review existing processes for any impacts/ changes required (particularly around financial accounting and management reporting).	Mar 2018 – End Apr 2018
	Service Desk	Extend the "reformed" IT Service Desk solution to be available to external organisations i.e. other local authorities or local businesses	May 2018 – End Oct 2018
	Business Process Automation	This initiative is being driven through the Business Transformation Programme. This will produce a set of both internal and externally marketable solutions. The date reflects the target date for the availability of the external solution(s)	To be Detailed under Business Transformation Programme Starts Nov 2017
	The "My SKDC" White Space App	This initiative is being driven through the Business Transformation Programme. This will produce a set of both internal and externally marketable solutions. The date reflects the target date for the availability of the external solution(s)	To be Detailed under Business Transformation Programme Starts Nov 2017
	Internet of Things	This initiative is being driven through the Business Transformation Programme. This will produce a set of both internal and externally marketable solutions. The date reflects the target date for the availability of the external solution(s)	To be Detailed under Business Transformation Programme Starts Nov 2017

Theme/ Key Objective Area	Building Block	Action/Deliverable	Date
	Software Development	Develop the programme of work necessary for IT Services to assume control and responsibility for the software development related activity within SKDC. The date shown is a placeholder for when agreement is in place for the schedule of work/tasks required	Nov 2017 – End Jan 2018
	Customer Experience and Effective Marketing	Working with the Communications Team Identify and assess new and enhanced monitoring tools to cover social media and other channels.	January 2018 =>
	Customer Experience and Effective Marketing	Develop a portfolio of training and staff development tools to raise customer care and commercial skills awareness for staff involved with the services hub and other customer facing services	June 2018 – End Oct 2018
Data/ Information Management (Not Captured Elsewhere)	Data Management	Develop the job description for and then recruit a data manager. This individual will also likely assume the Data Protection Officer role as part of their duties	Feb 2018 – End April 2018
	Data Cleansing	Review the Data Retention Policy; implement tightened rules around quotas and enforcement of the policy. Delete or archive “unwanted” data	Nov 2017 – End Dec 2017
	Document Scanning Project	Ensure that all paper based records are scanned and digitised for uplift to the enterprise document management solution (EDMS). This will require the sourcing of a service provider to do the actual physical scanning of the documents	Nov 2017 – End Jan 2018
	Document Management Solution	Conduct a data/ document audit to identify the baseline document sets for uplift to the EDMS (this includes the scanned documents from above)	Dec 2017 – End Jan 2018
	Document Management Solution	Retire the legacy document management solutions no longer required	Feb 2018 – End June 2018

Theme/ Key Objective Area	Building Block	Action/ Deliverable	Date
	GDPR	Ensure that SKDC is compliant with the new GDPR legislation that comes into force in May 2018. This programme is being managed under the SKDC GDPR Steering Group	Nov 2017 – 25th May 2018

12.4 Appendix D – SKDC's Hardware Refresh Cycle and Associated Costs

								SKDC Host Applications on SKDC-owned Servers (On-Premise)			SKDC Host Applications on rented Cloud-based Virtual Machines (IaaS)			SKDC do not Host Applications - Apps Hosted directly by Provider (SaaS)		
Server	Description	Operating System	RAM	IT Model	Sockets	Purchased	Refresh Date (based on 3yr Refresh	FY18 Cost	FY19 Cost	FY20 Cost	FY18 Cost	FY19 Cost	FY20 Cost	FY18 Cost	FY19 Cost	FY20 Cost
Ajax	DR Fax Server	Win 2003 R2	1.5	PowerVault 725N	1	30/03/2003	30/03/2006	£ 1,600.00	£ 160.00	£ 160.00	£ 380.44	£ 380.44	£ 380.44	£ -	£ -	£ -
Anite-housing	Housing Server	Win 2008 R2	32	PowerEdge R610	2	02/09/2011	02/09/2014	£ 2,800.00	£ 280.00	£ 280.00	£ 3,886.10	£ 3,886.10	£ 3,886.10	£ -	£ -	£ -
Anite-test	Test Housing	Win 2008 R2	16	PowerEdge R530	1	20/04/2016	20/04/2019	£ 200.00	£ 200.00	£ 2,000.00	£ 1,740.30	£ 1,740.30	£ 1,740.30	£ -	£ -	£ -
Archivemanager	Email Archive	Win 2008 R2	32	PowerEdge R410	2	14/12/2011	14/12/2014	£ 2,800.00	£ 280.00	£ 280.00	£ 3,886.08	£ 3,886.08	£ 3,886.08	£ -	£ -	£ -
Ignx	IP Telephony	Win 2008	3	ProLiant DL380 G	1	19/12/2005	19/12/2008	£ 1,600.00	£ 160.00	£ 160.00	£ 438.00	£ 438.00	£ 438.00	£ -	£ -	£ -
Kondor	Domain Controller	Win 2012 R2	8	PowerEdge R630	1	17/05/2016	17/05/2016	£ 200.00	£ 200.00	£ 2,000.00	£ 794.76	£ 794.76	£ 794.76	£ -	£ -	£ -
Oracle	Planning EBOX	Win 2008 R2	48	PowerEdge R510	2	10/04/2015	10/04/2018	£ 280.00	£ 280.00	£ 2,000.00	£ 5,200.00	£ 5,200.00	£ 5,200.00	£ -	£ -	£ -
Recovery	Backup server	Win 2008 R2	16	PowerEdge R515	2	20/09/2012	20/09/2015	£ 2,000.00	£ 200.00	£ 200.00	£ 1,970.42	£ 1,970.42	£ 1,970.42	£ -	£ -	£ -
Ridgeline	Extreme Monitoring	Win 2008 R2	4	ProLiant DL320 G5	1	18/12/2008	18/12/2011	£ 1,600.00	£ 160.00	£ 160.00	£ 438.00	£ 438.00	£ 438.00	£ -	£ -	£ -
Seagull	SQL database serv	Win 2008 R2	16	PowerEdge R410	1	03/03/2011	03/03/2014	£ 2,800.00	£ 200.00	£ 200.00	£ 1,740.94	£ 1,740.94	£ 1,740.94	£ -	£ -	£ -
Tireless	SQL database serv	Win 2003 R2	8	ProLiant DL380 G5	4	23/03/2007	23/03/2010	£ 1,600.00	£ 160.00	£ 160.00	£ 672.12	£ 672.12	£ 672.12	£ -	£ -	£ -
Vanquisher	Backup server	Win 2012	128	PowerEdge R620	2	17/10/2013	17/10/2016	£ 5,600.00	£ 560.00	£ 560.00	£ 15,840.00	£ 15,840.00	£ 15,840.00	£ -	£ -	£ -
Victory	PRTV Server	Win 2003	4	PowerEdge 2800	4	19/02/2006	19/02/2009	£ 1,600.00	£ 160.00	£ 160.00	£ 560.00	£ 560.00	£ 560.00	£ -	£ -	£ -
Osprey	krorld - Res's and B	Uno Solaris		Sun Sparc M3000		01/12/2011	01/12/2014	£ 2,000.00	£ 200.00	£ 200.00	£ 3,800.60	£ 3,800.60	£ 3,800.60	£ -	£ -	£ -
Vulcan	Financials	Win 2008 R2	32	PowerEdge R520	2	16/05/2012	16/05/2015	£ 2,000.00	£ 200.00	£ 200.00	£ 3,886.08	£ 3,886.08	£ 3,886.08	£ -	£ -	£ -
Vmwarehost2	Vmware host	ESXi	256	Poweredge R630	2	26/09/2016	26/09/2019	£ 700.00	£ 7,000.00	£ 700.00	£ -	£ 22,969.00	£ 22,969.00	£ -	£ -	£ -
Vmwarehost3	Vmware host	ESXi	256	Poweredge R620	2	16/07/2014	16/07/2017	£ 7,000.00	£ 700.00	£ 700.00	£ 22,968.00	£ 22,968.00	£ 22,968.00	£ -	£ -	£ -
Vmwarehost4	Vmware host	ESXi	256	Poweredge R620	2	16/07/2014	16/07/2017	£ 7,000.00	£ 700.00	£ 700.00	£ 22,968.00	£ 22,968.00	£ 22,968.00	£ -	£ -	£ -
Vmwarehost5	Vmware host	ESXi	256	Poweredge R620	2	16/07/2014	16/07/2017	£ 7,000.00	£ 700.00	£ 700.00	£ 22,968.00	£ 22,968.00	£ 22,968.00	£ -	£ -	£ -
Vmwarehost7	Vmware host	ESXi	256	Poweredge R620	2	16/07/2014	16/07/2017	£ 7,000.00	£ 700.00	£ 700.00	£ 22,968.00	£ 22,968.00	£ 22,968.00	£ -	£ -	£ -
VmwarehostQuar	Vmware host	ESXi	128	Poweredge R620	2	01/07/2015	01/07/2018	£ -	£ 5,600.00	£ 700.00	£ -	£ -	£ -	£ -	£ -	£ -
VmwarehostQuar	Vmware host	ESXi	128	Poweredge R620	2	01/07/2015	01/07/2018	£ -	£ 5,600.00	£ 700.00	£ -	£ -	£ -	£ -	£ -	£ -
VmwarehostQuar	Vmware host	ESXi	128	Poweredge R620	2	01/07/2015	01/07/2018	£ -	£ 4,600.00	£ 560.00	£ -	£ -	£ -	£ -	£ -	£ -
VmwarehostQuar	Vmware host	ESXi	128	Poweredge R620	2	01/07/2015	01/07/2018	£ -	£ 5,600.00	£ 560.00	£ -	£ -	£ -	£ -	£ -	£ -
DRvmwarehost1	Vmware host	ESXi	256	Poweredge R630	2	01/07/2016	01/07/2019	£ 700.00	£ 700.00	£ 7,000.00	£ -	£ -	£ -	£ -	£ -	£ -
DRvmwarehost2	Vmware host	ESXi	256	Poweredge R630	2	01/07/2016	01/07/2019	£ 700.00	£ 700.00	£ 7,000.00	£ -	£ -	£ -	£ -	£ -	£ -
STZvmwarehost	Vmware host	ESXi	64	Poweredge R630	2	01/08/2014	01/08/2017	£ 4,186.00	£ 418.60	£ 418.60	£ 7,772.16	£ 7,772.16	£ 7,772.16	£ -	£ -	£ -
UTZvmwarehost	Vmware host	ESXi	64	Poweredge R610	2	01/08/2014	01/08/2017	£ 3,755.00	£ 375.50	£ 375.50	£ 7,772.16	£ 7,772.16	£ 7,772.16	£ -	£ -	£ -
StamfordView.ex	Vmware host	ESXi	64	Poweredge R610	2	01/08/2014	01/08/2017	£ 3,755.00	£ 375.50	£ 375.50	£ 5,393.46	£ 5,393.46	£ 5,393.46	£ -	£ -	£ -
								£ 65,676.00	£ 36,169.60	£ 30,709.60	£ 156,644.22	£ 181,613.22	£ 181,613.22			
								£ -	£ -	£ -	£ -	£ -	£ -			
							/CONVERT TO MILLIONS FIGURE?	-£ 65,676.00	-£ 36,169.60	-£ 30,709.60	-£ 156,644.22	-£ 181,613.22	-£ 181,613.22			
SAN (Primary)								-£ 8,000.00	-£ 8,000.00	-£ 80,000.00						
SAN (Secondary / DR)								-£ 5,000.00	-£ 5,000.00	-£ 50,000.00						
SAN Total								-£ 13,000.00	-£ 13,000.00	-£ 130,000.00						
UPS's								-£ 500.00	-£ 500.00	-£ 5,000.00						
Fabric Switches								-£ 3,000.00	-£ 3,000.00	-£ 30,000.00						

* 40:1 Compute Rationalisation has been assumed. Typically we find on-premise servers are over-provisioned by upto 90:1. When migrating to the cloud, we work on a 40:1 Compute Rationalisation Rate. This excludes any further consolidation of the Applications themselves.

12.5 Appendix E – IT Strategy Investment/ Returns Profile

Medium Investment Plan	FY18 (Includes any One-off Costs)	FY19	FY20	FY21	FY22
Business Applications delivered via IaaS - *Cost of delivering including all costs associated with hosting:-*	£ 378,099.23	£ 406,705.23	£ 406,705.23	£ 406,705.23	£ 406,705.23
» Virtual Machine Cloud Hosting Subscription Costs (Includes Physical to Virtual Cloud Migration)	£ 158,644.23	£ 183,833.23	£ 183,833.23	£ 183,833.23	£ 183,833.23
» Estimated Annual Cost of Business Application Software Maintenance to provide Software Updates and Support for Perpetual Licensing of Core Business Applications	£ 87,363.00	£ 200,000.00	£ 200,000.00	£ 200,000.00	£ 200,000.00
» Administration overheads for Managing Cloud-based Software Services. "DevOps" costs for maintaining API integrations, Data Management and Business Outcomes	£ 25,000.00	£ 25,000.00	£ 25,000.00	£ 25,000.00	£ 25,000.00
» Administration overheads for maintaining Server Windows Operating Systems, Databases and Application Performance	£ 30,000.00	£ 30,000.00	£ 30,000.00	£ 30,000.00	£ 30,000.00
» DR Cloud-based Managed Service (includes Yearly Tests for invocation of a 1 Week DR Scenario)	£ 39,000.00	£ 39,000.00	£ 39,000.00	£ 39,000.00	£ 39,000.00
»Cloud Backup Service - Includes Veeam licensing and backup storage (30 days of retention with backups set to run every 4 hours, plus 13 monthly)	£ 34,092.00	£ 34,092.00	£ 34,092.00	£ 34,092.00	£ 34,092.00
Annual Revenues from Predicted Gross Profit of Managed Services Provider for Local Authority Vertical Market (201 district councils, and 125 unitary councils): Integrated Technology Solution for the Modern Council Blueprint inc. Via/Skype, Sharefront, District Council Customer App, Workflow and API Developed Platforms (Pricing based Market Share Assumptions: 2% Year 2, 5% Year 3, 10% Year 4, 15% Year 5)	£ -	£ 117,360.00	£ 293,400.00	£ 586,800.00	£ 880,200.00
Annual Investment in Customer Self-Service Mobile App - Timeline/Newsfeed style interface to provide a single account portal login for all customers to interact with all Council services inc. reminders/prompts, tailored marketing content, broadcast notifications, application form submissions, setting up of alerts, view billing for all services, calendar, all received correspondence messages/emails/letters digitally accessible, Online Chat (IM) with each dept. and executing payment's inc. Credit Card payments, Paypal and setting up online Direct Debits.	£ 30,000.00	£ 30,000.00	£ 6,000.00	£ 6,000.00	£ 6,000.00
Annual Investment in Unified Communications as-a-Service (UCaaS) - Skype For Business Via Platform (Pricing based on 266 Office users on the Via L2 Skype For Business Bolt-On Enterprise Voice Package plus Call Charges)	£ 45,258.00	£ 45,258.00	£ 45,258.00	£ 45,258.00	£ 45,257.89
» Via L2 Skype For Business Enterprise Voice Bolt-On Package and Skype conferencing at £11.96 per user per month, £20 One-off User Setup Charge and 2 Days of Onsite Training	£ 43,404.00	£ 43,404.00	£ 43,404.00	£ 43,404.00	£ 43,403.89
» Predicted Call Charges to UK Mobiles at 60.03/min (based on industry average of 100 minutes per month)	£ 1,795.00	£ 1,795.00	£ 1,795.00	£ 1,795.00	£ 1,795.00
» Predicted Outbound Call Charges to Overseas numbers (based on forecast of 5 minutes per month at £0.23/min)	£ 59.00	£ 59.00	£ 59.00	£ 59.00	£ 59.00
Devices refresh - Based on the 300 thin clients and 125 PCs within SHDC we would advise paying another £55K per device to move to Laptops spread over a three year refresh process.	£ 35,150.00	£ 35,150.00	£ 35,150.00	£ 35,150.00	£ 35,150.00
SharePoint Collaboration Services	£ -	£ 25,000.00	£ -	£ -	£ -
SharePoint Extranet – Building Control for Fire saftey external access	£ -	£ 8,000.00	£ -	£ -	£ -
SharePoint Complex Process Application such as Change Request Management	£ -	£ 15,000.00	£ -	£ -	£ -
SharePoint Project Management	£ -	£ 20,000.00	£ -	£ -	£ -
Health Check (Desktops and Servers) 4 days	£ 5,100.00	£ -	£ -	£ -	£ -
PCI Compliancy Audit	£ 1,500.00	£ -	£ -	£ -	£ -
Reception Self Service Kiosk	£ 5,000.00	£ -	£ -	£ -	£ -
Data Cleansing 4 weeks on-site	£ 5,000.00	£ -	£ -	£ -	£ -
OFFSET BY PROJECTED ADJUSTMENTS TO EXISTING IT BUDGETS:					
814/A100 - Gross Pay - Staff Costs included above	£ -	£ 64,820.43	£ 86,160.57	£ 86,160.57	£ 86,160.57
814/A101 - National Insurance	£ -	£ 6,224.57	£ 8,299.43	£ 8,299.43	£ 8,299.43
814/A102 - Pensions	£ -	£ 11,021.57	£ 14,695.43	£ 14,695.43	£ 14,695.43
814/D654 - Software Licenses	£ 20,000.00	£ 50,000.00	£ 20,000.00	£ 20,000.00	£ 20,000.00
814/D656 - Telephone Equipment	£ -	£ 2,000.00	£ 1,000.00	£ 1,000.00	£ 1,000.00
814/D658 - Computer Equipment	£ -	£ 10,000.00	£ 50,000.00	£ 50,000.00	£ 50,000.00
814/D657 - Disaster Recovery	£ -	£ 2,000.00	£ 1,000.00	£ 1,000.00	£ 1,000.00
814/D657 - Current Hardware Maintenance	£ -	£ 2,000.00	£ 5,000.00	£ 5,000.00	£ 5,000.00
814/D657 - Telephone Maintenance	£ -	£ 20,000.00	£ 20,000.00	£ 20,000.00	£ 20,000.00
814/D664 - Mobiles/ Pagers	£ 1,596.00	£ 2,000.00	£ 2,500.00	£ 2,500.00	£ 2,500.00
579/D654 - IT Software Licenses	£ -	£ 10,000.00	£ 20,000.00	£ 20,000.00	£ 20,000.00
579/ S108 - ICT Recharge	£ -	£ 5,000.00	£ 2,000.00	£ 2,000.00	£ 2,000.00
	-£ 453,515.12	-£ 271,888.55	£ 100,940.31	£ 594,341.31	£687,742.31