

Appendix A

Joint technology strategy

Embracing digital to deliver service excellence

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1.0 Executive summary

- 1.1 There can be no doubt the digital revolution and the COVID-19 pandemic has fundamentally changed our expectations and those of our residents and businesses in terms of how we need to deliver services now and in the future. Our technology environment will need to be able to support how we transform to meet those customer expectations in South Oxfordshire and the Vale of White Horse.
- 1.2 Within our councils we will need an IT environment that not only supports deep collaboration (software that enables teams to get things done together with minimal friction and with an absolute focus on a joint goal) and which continues to enable our staff to work flexibly but securely, anytime, anywhere and with colleagues from other organisations. Our IT delivery capability will need to support user centred service design from beginning to end in an environment that demands rapid development, implementation and change (Agile) but ensures provision is accessible, secure and robust. It also needs to be delivered in collaboration with and led by our business drivers.
- 1.3 We cannot do this in isolation. Many of the services we provide are part of a more holistic experience involving other providers: health; housing; welfare; crime prevention and reduction; transport; education; and environment. Collaboration across the technology and information landscapes will be essential if we are to make the transition from institutionally driven service provision to consumer driven digitally enabled provision.
- 1.4 The enablers to support this transition will require deep collaboration across:
- Information sharing and governance – providing access to data in a transparent and accessible way
 - Connectivity – enabling ease of access and connectivity across our domains
 - Identity management, authentication and security – to enhance our cyber security approach
 - Strategic asset utilisation and management – to deliver best value
 - Interoperability – to ensure the effective integration of our technology platforms and solutions to deliver for our customers and end users
- 1.5 The councils have some excellent foundations on which to build:
- Our longstanding shared service arrangement across the two councils, one of the most successful and sustainable in the UK.
 - Our successful partnerships for community support and economic growth with the public, not for profit and private sectors working together to attract significant inward investment and generate jobs growth.
 - The core IT platform built on Office 365 and the full deployment of mobile working capability as part of adapting to meet the COVID-19 pandemic, setting the scene for concluding the move to the Cloud and enabling multi-agency end user computing.

- A sharp focus on successful service delivery for our residents and businesses as part of the DNA of our organisations, reflected in our continued positive resident feedback.
- 1.6 But how we currently deliver services is not designed around the needs of our residents and businesses which means we do not have visibility of how or whether we are operating in the most effective or efficient way, by avoiding repeat activities, being proactive in tackling issues at source or by shaping places and the economy to improve people's lives and prospects and tackling climate change.
 - 1.7 This strategy describes the wider landscape in which we need to evolve and embrace the digital opportunities transforming how we and our residents and businesses live, work, learn and spend our leisure time. It then sets out where the councils' IT environment is today and updates the core technology principles the councils use and reshapes the roadmap for the next 4 years to enable South Oxfordshire and the Vale of White Horse District Councils to be at the forefront of digitally enabled public service delivery.
 - 1.8 Lastly, it sets out what we will do to establish a digitally capable workforce fit for the future. It will complement our customer transformation journey putting in place the building blocks to support a more fundamental shift to consumer centred service delivery which meets the expectations of businesses, residents and visitors to our Districts in the digital age.

2.0 Background

2.1 Our councils continue to work well, delivering high quality services to our residents and businesses:

- The councils' are on a journey to a new office environment following the fire of 2015, , continuing to place our services at the heart of our communities, whilst recognising the impact the advances in technology, and the changed behaviours that have evolved out of the COVID-19 pandemic
- The 5 Councils Partnership contract has been reshaped to better suit our needs, resulting in the return to the councils services including Human Resources, Payroll, Finance, Procurement and Customer Services with many of the related systems upgraded so they are fit for the future and Cloud based

2.2 The core technology services provision being delivered through the 5 Councils Partnership contract supports mobile and flexible working, based on the Microsoft 365 platform in the Cloud. It has allowed our councils to operate effectively throughout 2020 whilst our offices were closed, through working from home and connecting and engaging digitally with our delivery partners, residents and businesses.

2.3 We cannot stand still though, we must embed digital in our business plans for the future and that requires our technology strategy to be an enabler and not a blocker, releasing the potential that exists to deliver user centred services better, cheaper and faster than we do today, not constrained by physical assets and open to collaboration with others yet still secure.

2.4 We certainly have the ambition, capable workforce and political drive to move in this direction. Our revenues and benefits service is a long-standing high performer nationally, our community facilities have been essential to the work being done to combat Covid19 in terms of health and wellbeing at a time when our residents and businesses have been under tremendous pressure. Our regulatory and enforcement services are embracing mobile working and demanding greater flexibility to drive up performance and productivity and our economy continues to grow strongly through effective strategic planning and partnerships.

3.0 The IT landscape today and digital disruption

- 3.1 Our technology platforms are mainly made up of contracted out services across all levels of the enterprise environment, in common with most local authorities and a reflection of the markets from which we source our services. There has also been considerable consolidation across the local government technology marketplace over the last 3 years, coupled with a move to Cloud delivered Software as a Service model. Whilst this has reduced the number of products in the market, it has improved integration and interoperability as well as reducing the need for datacentre and application deployment as separate elements of IT service provision. The infrastructure-free end user experience is now a reality.
- 3.2 Digital disruption has changed service expectations of residents and businesses who now demand always-on provision, on-line, built around them and not the provider and matching the experience provided by the retail, entertainment and financial sectors.
- 3.3 Local government and the wider public sector will have to go through the type of whole systems transformation already experienced by other sectors, driven by:
- A very different workforce strategy approach, much more flexible and digitally competent to meet future service demands.
 - Service design and delivery built around the customer (and/or consumer) rather than structured service lines and across traditional public service structures, aligned to marketplaces (home based care, leisure, health, lifelong learning, work, lifestyle).
 - Connectivity that provides universal high-speed coverage for all residents and businesses.
 - Multi-modal (transport) and multi-environmental services (workplaces and home) designed to maximise space, minimise time and energy waste and simplify access.
 - Adoption of recognised best practice benchmarking to provide ongoing assurance of best value.
- 3.4 One reality of the digital age is radical, rapid and ongoing change in crime and exploitation. We need to keep pace with and counter those changes to ensure we continue to support and protect the most vulnerable in society as well as helping to keep our communities safe more generally. Cybercrime has also become much more corporate in terms of targeted attacks at the commercial and government levels, requiring a more dynamic and proactive approach to IT security as well as greater awareness in the workforce about the risks and pitfalls of cyber security.
- 3.5 Another reality of this age is the Climate Emergency and technology can either contribute to or mitigate against its causes. Mobile and flexible working reduces the need for dedicated office space and can also reduce travel needs, both in turn reducing the Councils' carbon footprint. The same goes for greater self-service, on-line and available as required, better meeting

customer expectations whilst reducing travel needs. On technology itself, the Cloud service providers are pursuing carbon neutral to carbon negative energy programmes, smart building management and asset utilisation for renewable energy generation and the move to intelligent street management all contribute to reducing the demand for carbon-based energy.

3.6 So, what does this mean for the councils' technology provision going forward? Putting services on-line based on how providers expect them to be used and operating proprietary IT systems are no longer sustainable and at odds with what our customers expect. Equally our staff and public services more generally need to be able to take advantage of what digital solutions can provide to meet those expectations and deliver right first time, safely, transparently and when they are needed. The measures for the future are:

- **Delivery** - based on user need and fulfilled on a “once and done” or “right first time” basis
- **Productivity** - A workforce that delivers those services designed around user need, made possible by end user technology that works everywhere, all the time and with the minimum manual involvement
- **Trust** - transparent service delivery with informed consent for the data required and how it's used
- **Access** – services available where and when they are needed by those who need them
- **Energy efficient** – managing our technology and physical estates effectively and driving carbon neutral/negative adoption for our services and Districts.

3.7 Best value will be delivered through these measures, by minimising the failure demand of repeated customer contact, maximising workforce capability and service reach and ensuring effective community and business engagement through trust.

4.0 The councils' IT environment and latest activity

- 4.1 Our technology platforms today have moved away from our physical corporate estate and those of our delivery partners, although we are still reliant on dedicated network connections in places. Annex A shows the current enterprise architecture and the state of our technology assets in terms of delivery platform, customer systems, corporate systems and people and place-oriented systems.
- 4.2 Over the last 2 years, there has been a lot of progress in upgrading or retiring the legacy systems across the delivery platform and corporate systems. People and place-based systems however remain largely where we were 5 years ago, having evolved independently from wider technology developments and more in line with specific service delivery plans. We also have several systems being delivered through rolling contracts. These need to be tested in the market to ensure we are securing best value.
- 4.3 The recent implementation of the new finance IT system has also highlighted the technology deficit we have around customer-based IT systems. This has driven the creation of several bespoke solutions using the finance system as a delivery vehicle. In parallel, the in-sourcing of some place-based services have exposed duplication of some systems and a wider need to consolidate property and place-based data and systems to provide a more complete view of our assets. The current position with all these is not sustainable in the short term and requires urgent action:
- Acquisition and implementation of a customer relationship management solution
 - Consolidation of place and asset-based systems
 - Consolidation of housing related services into the main housing and rents management system
- 4.4 In the medium term, the platform, corporate systems, customer systems and people and place roadmaps will review our current systems against future business need in line with the Councils' Corporate Plans and with that identify the future technology demand.
- 4.5 Together these will inform the establishment of the four delivery programmes needed to realise this strategy.
- a) IT Platform (end user computing, networks and unified communications)
 - b) Customer services platform
 - c) Corporate systems delivery
 - d) People and place systems delivery

5.0 Technology principles and roadmap to support our business strategy to 2025

5.1 Our drive towards resident centric service provision requires a fundamentally different technology approach to the one we have today, underpinned by the following six principles for technology investment, design, delivery and use:

	Principle	Why	Benefits
1	Cloud first for new and cloud migration for legacy	<p>The marketplace for the provision of secure, resilient and legally compliant cloud services is mature and gathering pace as the standard platform for IT services as they are renewed across public services. Affordability and value for money over the life of a service is also tipping in favour of cloud thanks to increased competition.</p> <p>Suppliers are also withdrawing legacy on site services and only offering cloud models and newer entrants only offer cloud. As legacy proprietary platforms diminish, they become more expensive and there is a point at which it becomes financially viable to accelerate migration to the cloud.</p>	<p>Cost efficiencies will be realised through cloud based collaborative systems rather than organisation specific localised systems, especially across multiple agencies.</p> <p>Cloud will avoid the need for future capital investment in on-site technology provision.</p> <p>Cloud will support tackling the Climate emergency through energy reduction</p>
2	Ubiquitous connectivity, superfast as a minimum	<p>Proprietary network provision remains a significant blocker and cost for individual organisations, yet the technology, infrastructure and security required has evolved to allow ubiquitous connectivity whilst retaining security through role and device-based security models.</p> <p>On network speeds and coverage, the investments in superfast broadband for non-commercially viable geographies and the growth in fibre provision and competition means connectivity is much more widely available and we are not so dependent on corporate site provision.</p>	<p>Significant cost efficiencies through economies of scale on provision in terms of coverage and delivery method (voice, video, data, wired, wireless and mobile).</p> <p>More efficient estate use by removing limitations on buildings driven by the ability (or not) to connect to IT systems so staff can work anywhere.</p>
3	Lightweight devices, always on and work anywhere	<p>The end user computing (EUC) experience continues to be one of the greatest opportunities for increased productivity by supporting the ability to work anywhere and at any time.</p> <p>Superfast connectivity spans geographies meaning the need for dedicated office locations will diminish.</p>	<p>Speed and ease of access in an "always on" environment where people need to complete tasks drives out lost time through travel, waiting for technology to respond.</p>
4	Role based security, works with partners and meets UK govt standards	<p>Multi-agency working is a reality now and is only set to grow in future years. Role based security and federation with corporate environments offer the potential to make this experience seamless, especially as systems become more interoperable and data sharing matures into business intelligence around places and people.</p>	<p>Staff will be able to carry out their work across agency boundaries securely and legally.</p> <p>Information integrity and access will not be compromised when</p>

	Principle	Why	Benefits
		UK government standards are progressing well across these areas and we must adopt them rather than duplicate or compete with them.	sharing, supporting GDPR compliance.
5	Line of business systems designed around the user, interoperable and compliant with recognised standards	<p>Housing, transport, health, spatial development and social care integration will drive this agenda aggressively over the next 3 years as NHS digital and Sustainability and Transformation Plans (STPs) move into delivery and the ongoing financial pressures on local government services continue to bite. Again, we must adopt agreed international and national standards and not look to create proprietary solutions.</p> <p>In the economic and environmental arenas Internet of Things based technologies are establishing new standards for interoperability for new data sources to turn the ambitions around smart places into reality.</p> <p>On systems design and build, we will use the Agile project methodology and strengthen our digital skillsets around centres of excellence in IT, business intelligence and communications, following the Government Digital Service principles for service design and digital delivery.</p>	<p>Integrated services for vulnerable people will be developed across agencies, improving quality of provision and safeguarding.</p> <p>Whole systems solutions will be applied to spatial and economic development around geographies, working across delivery partners in all market sectors (private, public, not for profit).</p> <p>User centred design of services will make effective use of the potential that digital offers in delivering services faster, better and cheaper whilst reducing the need for carbon-based energy</p>
6	Information governance across partners through cross agency governance structures	<p>Information governance through strong partnership will be a powerful enabler for advanced analytics supporting better decision making.</p> <p>We must develop a focal point for multi-agency information sharing and to be the first point for developing joint analytics projects.</p>	<p>Provides a single repository for information sharing protocols across agencies, supporting compliance with legislation.</p> <p>Offers a platform for multi-agency analytics services to support better decision making and more fundamental service design based on places and people.</p>

5.2 To turn these principles into practice, we will establish a four-year roadmap (**Annex A**) to be delivered through four programmes with a high-level assessment of investment needs (existing and new), priorities, dependencies and risks:

- a) IT Platform (end user computing, networks and unified communications) (1 to 4)
- b) Customer services platform (5)
- c) Corporate systems delivery (5 and 6)
- d) People and place systems delivery (5 and 6)

- 5.3 **Annex B** comprises the four programme plans and the component projects to ensure their success. **Annex C** sets out the target enterprise architecture for our technology platforms following completion of the programmes. These will be used as a reference point for programme progress and support the development of collaboration opportunities with our public service delivery partners.

6.0 Supporting democratic engagement in a digital world

- 6.1 Technology has fundamentally reshaped democratic accountability and engagement in recent years through the demands for transparency around decision making, the use of social media to discuss and debate the issues of the day and access to democratic meetings via video and other web-based delivery methods. The Covid19 pandemic has accelerated the change journey and there is considerable resistance to returning to the “old” ways of democratic engagement.
- 6.2 Our technology and digital services programme will unlock the potential it has to offer in enabling greater engagement with our residents and businesses:
- Our IT platform will continue to enable councillors to engage with their residents and conduct council business virtually, enhanced by improved end user computing capabilities and connectivity
 - The customer services programme will deliver a customer relationship management solution which enables residents and businesses to access multiple services digitally and based around their profile, also allowing the council to view them at the centre of services (with consent)
 - Corporate systems delivery will increase transparency around our finances as well as how decisions are made as well as automating much of the financial processing work between the councils and their residents, suppliers and businesses
 - People and places delivery will enable the councils to engage through digital consultation, virtual access to meetings and other democratic activities, increasing community involvement and again increasing transparency around how we do business
- 6.3 We will ensure our technology solutions are fit for the digital age and will support councillors and our staff in ensuring they are able to maximise their potential through training and effective user centred design of the solutions provided.

7.0 A capable and empowered workforce for the digital age

- 7.1 Technology is an integral part of our lives and work, impacting on every employee, resident and business in our districts. It is our responsibility to ensure there are sufficient resources, skills and knowledge to meet business needs driven by our communities. We expect staff to have a minimum level of competence in using technology, through end user devices, web based and mobile applications and specialist operational equipment to be able to do their jobs effectively and productively. Training for technology is often delivered on-line interactively in the working environment. This expectation reflects the impact of digital on our personal lives and the expectations it sets for business systems to be as easy to use as consumer-based services.
- 7.2 Historically corporate technology has lagged consumer provision and usability, often due to the cost of replacing or changing legacy systems and design principles focussed on processing times, closed infrastructure and security and operational models rather than end user experience and interoperability based on open standards. The roadmaps for our IT going forward will tackle the legacy and with it we need to ensure our workforce and our service users take full advantage of the opportunities they'll unlock. They will be part of the transformation from concept right through to live operations: user centred design, build, testing and implementation as a flexible (Agile) delivery model.
- 7.3 Our technology services will not be working in isolation but as part of whole systems project delivery led by our Corporate Plan, with digital as an integral part of them. Whilst delivery is mainly outsourced, our strong intelligent client function will ensure our:
- a) Core technology platforms are run by effective, well trained and competent technical teams covering connectivity, data storage, security and integrity including "always on".
 - b) End user computing experience is customer centric, responsive and minimises staff downtime through technology faults.
 - c) Digital services are designed around the end user and meet the expectations of our residents and businesses, deployed through applications that operate seamlessly across services within and outside our organisation.
 - d) Analytics capabilities support better decision making and service fulfilment by maximising the potential digital offers to exploit our information assets and those we share with others.
- 7.4 We will unlock the digital capability of the rest of our workforce through:
- a) Establishing an effective Digital intelligent client function, including Systems Administration, to manage the multiple commercial and technical relationships across the IT Enterprise
 - b) Establishment of super user networks designed to include people in technology projects and digital development.

- c) Embedding digital by default into our service and business plans, working with teams to ensure user centred digital design is applied to how services should be delivered.
- d) The use of recognised project methodologies as part of whole systems change.
- e) Provision of high quality digitally enabled and deployed learning platforms to allow our staff to learn when and where they choose (e-learning).
- f) An enhanced and interactive social media environment for staff to collaborate and develop thinking and opportunities on how we can do things better, faster and cheaper.
- g) Active inclusion of staff and professionals who will challenge and validate that what we build and run is a positive force for tackling inequality rather than creating a digital divide.

7.5 To bring user centred design and build to life we will engage with our service delivery partners and users from the outset of a project and include them throughout the process.

7.6 Digital needs to be an integral part of the way our organisation works in the future. It is not something you do to services nor is just about technology. The reality is that most of our society is already digitally capable and that continues to grow, it is all too often our organisational structures that hold us back from unlocking its potential.