The Vision for Chorley Council ICT

ICT Strategy for 2017-2020

Introduction

The council is on a digitally enabled journey aiming to deliver improved and efficient digital services and increase customer engagement with the council via these channels. This journey also depends upon the commitment and engagement of employees to the changes to the way we work and access information. This is happening against the backdrop of the changing landscape of local government with increasing expectations of improved service delivery and reducing budgets. Additional challenges are an increase in the population and age of residents as well as changing consumer behaviour and on-going channel-shift.

The Council's relationship with its customers is changing. The way in which our customers want to transact with us is being transformed by their experiences of using increasingly innovative technology and devices. They want to be able consume services whenever and wherever they need to from whichever device they have.

The council's relationship with its employees is also changing. Employees need to be able to work smarter and access all their information and systems whenever and from wherever they need to from whichever device they have. The workforce of the future will not be confined to a location, but will be able to work anywhere and connect to council systems in a secure and protected environment.

This significant shift in how ICT is consumed requires strategic confidence in a digital infrastructure which is always available with no disruption. Services need to be easy to use, designed for use across all devices and need to be available when they are needed. There will also be a greater reliance on and expectations for improved access speeds and access to the internet. Therefore, it is essential that the Council has a resilient and flexible ICT infrastructure. It needs to be scalable in line with demand as more digital working will result in a greater storage requirement.

We need to continue with the progress made since 2010 to modernise the infrastructure to meet the new challenges faced by the Council as it moves forward over the next 3 years.

The ICT Strategy will support the Digital Strategy 2017-2020 which is to be delivered over the same period and will facilitate its four objectives of increasing digital take up, increasing digital inclusion, putting customers first and working smarter. A number of ICT-led projects within the Digital Strategy will support the council's digital aspirations.

ICT Strategy and Vision

The new strategy will deliver a hybrid cloud model providing some degree of infrastructure for the next 3 year period but will also deliver significant projects using both public and private cloud services.

The short term plan will see a refresh of the data centre hardware including the storage area network (SAN), network and servers as these are the key building blocks on which the rest of the strategy can be delivered. This infrastructure will be designed to take account of the emerging business landscape with potential partners and providers and align for opportunities to share services which will seek to connect, combine and consolidate ICT services over the period of the strategy. This phase will also see work to improve the disaster recovery and business continuity arrangements through the implementation of cloud services, implementation of a new Wi-Fi system and an upgrade of all users' desktop hardware.

This will be built on over the medium term to provide software upgrades, the first implementations of public cloud functionality through Microsoft 365 for email and telephony, and an extension to the corporate network through the installation of additional dark network fibre. Wi-Fi provision across the town centre will be rolled out to provide corporate and public access.

All of these elements contribute to the long term objectives which are to:

1. Ensure a modernised ICT infrastructure is at the core
2. Deliver resilient and flexible ICT
3. Facilitate the Digital Strategy

Technology platform for the future

The Council's last major infrastructure upgrade was in 2010 at which point the first storage area network was implemented, the network upgraded and the server estate virtualised. The last ICT Strategy (2014-2017) focussed on delivering services on top of this infrastructure. Investment is now essential to replace the ageing and outdated environment that is presently ineffective, expensive to maintain and coming to the end of its life. The environment is becoming increasingly unreliable and time consuming to manage, impacting on productivity.

This strategy is about putting new infrastructure at the very core of the Council. It is important that the key building blocks are in place to facilitate the delivery of the digital agenda and enable us to respond to the changing needs of the council over the period of this strategy. These building blocks include the data centre hardware, the network, Wi-Fi infrastructure, printers, disaster recovery and business continuity arrangements and the provision of client hardware for the corporate users. A number of other areas will also be considered; namely scalability and flexibility of ICT and the journey to consume cloud services.

It is likely that the shape of the organisation will change over the period of this strategy and it is essential that the ICT infrastructure is agile and able to respond to these changing requirements without needing expensive, disruptive and full scale replacement. Business improvements more frequently rely on technology and therefore the infrastructure must be able to respond to the changing demands of the Council as it continues to deliver more effective and efficient services. Any new infrastructure will be implemented with this in mind to ensure that it can grow, scale and flex as the council demands.

The implemented infrastructure will also provide the platform to facilitate the Council's migration to cloud services. The vision for the future is to take on more cloud based services in turn reducing the requirement for on premise infrastructure and facilitating the long term aim of reducing the ICT footprint. However this will take time as applications need to be cloud ready before they can be migrated and relationships with software suppliers need to change and evolve. There will be a knock on impact on budgets as consuming cloud services will result in increased operational costs rather than capital investments in the longer term. Implementing a hybrid cloud model is the first stage to migrating ICT services into the cloud.

It is essential that infrastructure is at the core to provide the foundation on which all systems can be built and developed. This will ensure that the people who need to can access systems from where they need to, when they need to.
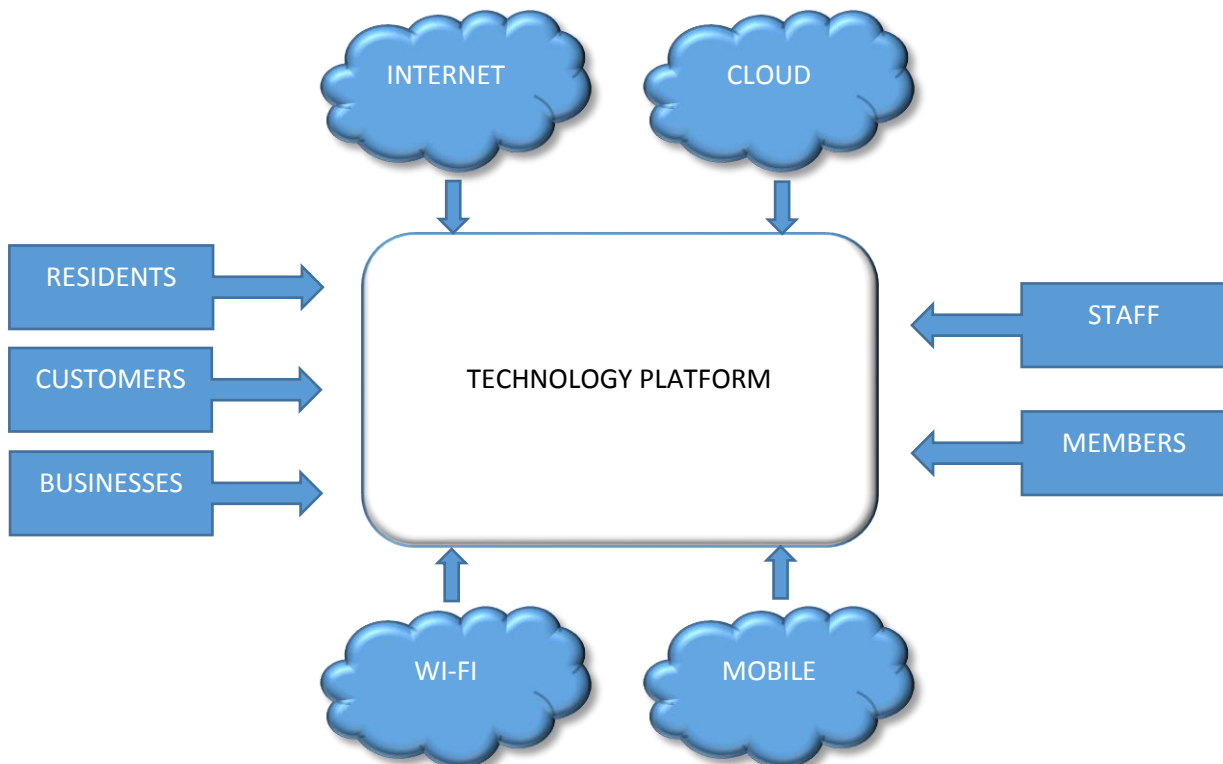

Figure 1 – technology platform

ICT as an Enabler

ICT is a key element to the strategic direction of the organisation. It underpins the very workings of the Council and it is key to the delivery of the Corporate Strategy such as improving access to council services by making services more efficient. Effective ICT is also essential to the sucessful delivery of the Digital Strategy 2017-2020. ICT is at the core of everything that the council is striving to achieve. It is at the foundation of each service area and will facilitate the delivery of digital systems by presenting innovative solutions which will in turn enable services to be more efficient and effective. The proliferation of mobile devices (smartphone and tablet) will be a key feature of the Council's technology platform. As more and more people are consuming content and engaging with the Council through mobile devices, the Councils mobile platform will be as important, if not more important than the web.

It is essential that ICT continues to be an enabler of business transformation that supports the council as it evolves over the next few years. Technology in turn enables innovation and opens the door to new ways of working and differnet ways of interacting with our customers. More efficient and productive virtual desktops will enable our staff to work in different ways and embrace the concept of an agile workforce. As technology becomes more ingrained in the core function of what we do, it must also be reliable and robust not only to ensure that work can be achieved in line with expectations, but to promote confidence in systems and also to ensure that data is secure and reliable.
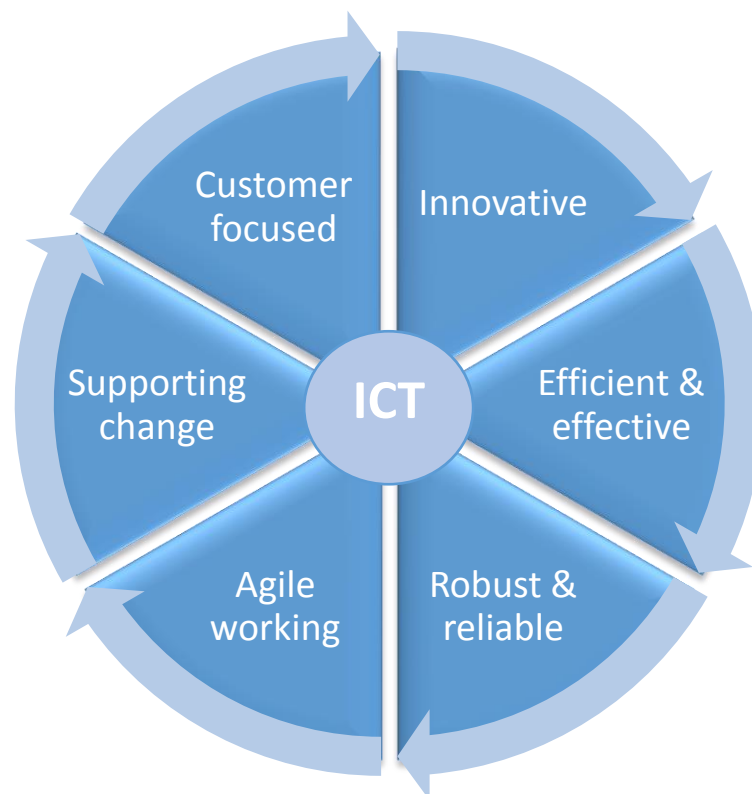

Figure 2 – ICT as an enabler

Long Term Objectives

There are three objectives that form the basis of the Council's ICT Strategy 2017-2020.

1.   Ensure a modernised ICT infrastructure is at the core

This will ensure that a modern infrastructure is in place at the Council using the latest technology. This environment will be future proofed to facilitate the delivery of the Council's ambitions. It is important that the network is designed correctly to ensure that sufficient speeds can be delivered and the appropriate level of connectivity is available. The key aim is to deliver a robust platform to support the increasing digital systems and requirement for mobile working. A modern infrastructure will also add more value to the business by removing the need to continually firefight an out of date and aging environment, in turn helping to focus on projects that deliver real business value. The new infrastructure will be simple to monitor and easy to manage and deliver.

2.   Deliver resilient and flexible ICT

The combination of a migration to cloud based services and effective disaster recovery and business continuity solutions will ensure that the Council is able to provide a resilient ICT infrastructure. As more digital solutions are implemented, so the reliance on the underlying infrastructure increases and it is essential that services are always available when needed and all Council data is adequately protected. Disaster recovery and business continuity will be delivered through a cloud hosted solution.

The infrastructure must also be flexible and agile to allow it to respond to the changing needs of the Council throughout the period of the strategy. This will be delivered through the implementation of a scalable ICT infrastructure which will allow year-on-year anticipated growth without the need to replace any major components and rapid expansion of the infrastructure due to possible changes in the operating models of the Council. This will provide the Council with predictable expansion costs rather than expensive infrastructure replacement.

3.   Facilitate the Digital Strategy 2017-2020

The objectives of the Digital Strategy 2017-2020 all rely on the provision of a solid ICT platform. This strategy will provide the essential building blocks over which all digital services of the future can be delivered and consumed.

Short Term Plan (2017/2018)

A number of infrastructure project are planned to take place over the next 12 months.

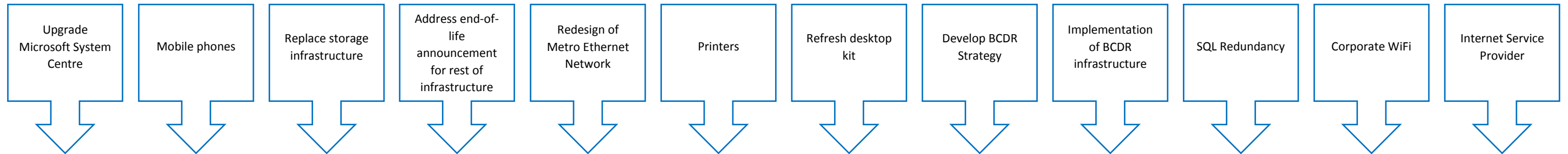| No	Project	Detail	Prerequisite	Timescale
1	Upgrade Microsoft System Centre	Upgrade to the latest version to support the implementation of the mobile device management software	None	Q1
2	Mobile phones	Implement a new mobile device management solution and roll out new handsets	Upgrade Microsoft System Centre	Q1
3	Replace storage infrastructure	Full data centre replacement including SAN and servers and split production and VDI workloads to improve productivity	None	Q3
4	Address end-of-life announcement for rest of infrastructure	Production and VDI workloads will improve productivity	None	Q3
5	Redesign of Metro Ethernet Network	Will provide high speed converged corporate network	None	Q3
6	Printers	Replace current MFDs and increase scanning facilities	None	Q3
7	Refresh desktop kit	Replace Wyse terminals to facilitate the support of VOIP and agile working	None	Q3
8	Develop BCDR strategy	Will provide clear business strategy for business continuity and disaster recovery arrangements and retention plan for archived data	Replace storage infrastructure	Q4
9	Implementation of BCDR infrastructure	Will strengthen Business Continuity and DR arrangements and corporate digital risk management	Develop BCDR strategy	Q4
10	SQL redundancy	Provide redundant Microsoft SQL solution for resilience	Replace storage infrastructure	Q4
11	Corporate Wi-Fi	Replace the existing corporate Wi-Fi to provide a faster, more flexible and converged Wi-Fi platform	Redesign of Metro Ethernet Network	Q4
12	Internet Service Provider	Consider future provision of service	Redesign of Metro Ethernet Network	Q4

Medium Term Plan (2018/2020)

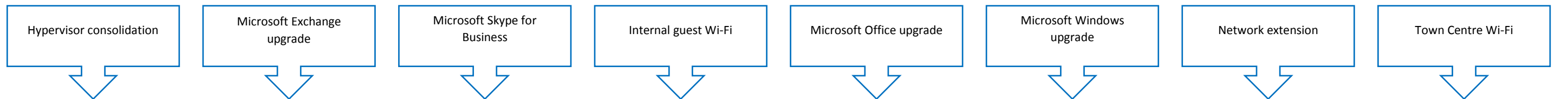The following infrastructure projects are planned for the next three years.

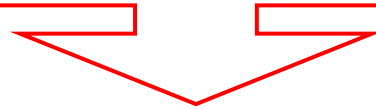| No	Project	Detail	Prerequisite	Timescale
1	Hypervisor consolidation	Migrate Citrix VDI estate to VMware to unify virtualisation platform	Replace storage infrastructure	2017 – Q3
2	Microsoft Exchange upgrade	Migrate Microsoft Exchange to online cloud service	None	2018 – Q1
3	Microsoft Skype for Business	Deploy Microsoft Skype for Business to replace ageing analogue phone system and provide telephony for contact centre	Replace storage infrastructure & refresh desktop kit	2018 – Q1
4	Internal guest Wi-Fi	Implement additional wireless network for guest access within Council buildings	Replace corporate Wi-Fi	2018 – Q1
5	Microsoft Office upgrade	Upgrade all users to the latest version of Office, implementing Office 365 where appropriate	Replace storage infrastructure	2018 – Q2
6	Microsoft Windows upgrade	Upgrade all VDI users from Microsoft Windows 7 to 10	Replace storage infrastructure	2018 – Q2
7	Network extension	Roll-out Metro Ethernet Network to additional buildings within the town, utilising existing and new ducting and dark fibre	Redesign of Metro Ethernet Network	2018 – Q2
8	Town Centre Wi-Fi	Implement additional wireless network infrastructure across Chorley town centre for public and corporate access	Redesign of Metro Ethernet Network & replace corporate Wi-Fi	2018 – Q3

1 YEAR

| Upgrade Microsoft System Centre | Mobile phones | Replace storage infrastructure | Address end-of-life announcement for rest of infrastructure | Redesign of Metro Ethernet Network | Printers | Refresh desktop kit | Develop BCDR Strategy | Implementation of BCDR infrastructure | SQL Redundancy | Corporate WiFi | Internet Service Provider |

2 - 3 YEARS

| Hypervisor consolidation | Microsoft Exchange upgrade | Microsoft Skype for Business | Internal guest Wi-Fi | Microsoft Office upgrade | Microsoft Windows upgrade | Network extension | Town Centre Wi-Fi |

LONG TERM OBJECTIVES

Ensure a modernised ICT infrastructure is at the core

Deliver resilient and flexible ICT

Facilitate the Digital and Customer Strategy