



Information & Communications Technology (ICT) Strategy 2023-28

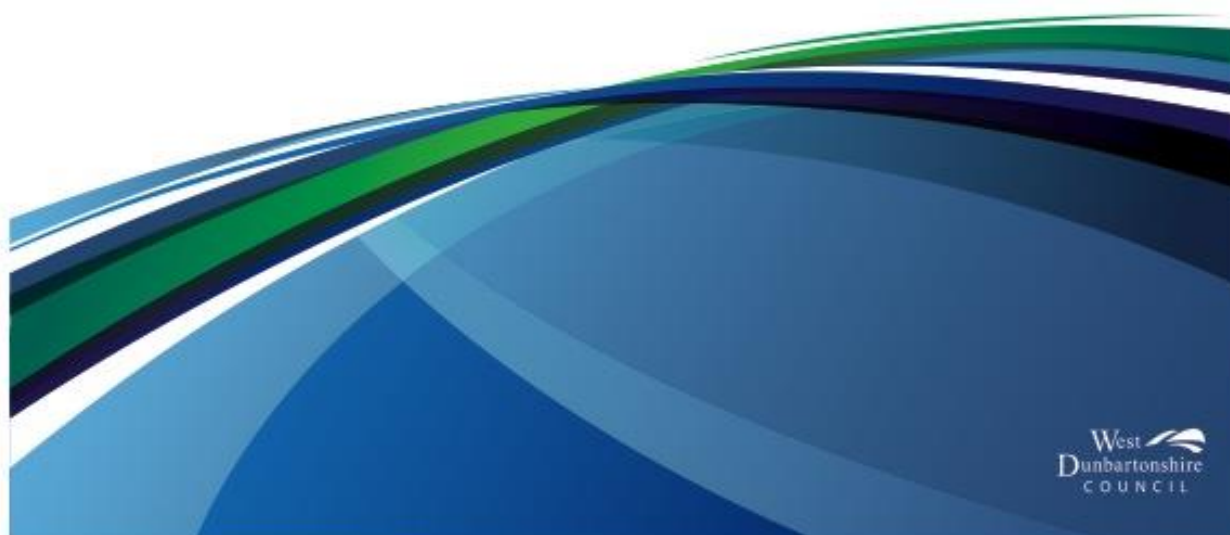


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1. Information & Communication Technology (ICT) Strategy

1.1. Introduction

There continues to be rapid and significant changes across the public sector. We live in a digital age where demand for council services and expectations of service levels continue to increase at a time the council is facing significant financial challenges.

The council needs to ensure we are fit for the future by leveraging the use of technology, to deliver affordable, efficient, sustainable, and digitally enabled services that meet residents and employees needs and expectations. To prepare for this, there has been sustained investment in ICT in recent years, building a strong foundation for the future and enabling delivery of services in new and innovative ways.

ICT is part of the People and Technology service, and this ICT strategy been developed in support of the Council's core strategic ambitions across business service areas as reflected in the Council Strategic 5-year plan 2022-27.

This Strategy will be a live document updated to respond to the changing and evolving business requirements and has been developed in recognition of:

- Increased demand for technology to support digital transformation and new hybrid ways of working.
- The continued rapid pace of significant technological change.
- New service delivery models for IT services and technologies focusing on cloud services funded from revenue budgets, rather than traditional capital funding.
- Increased need to prioritise compliance with data protection regulations, establishing secure data management practices, and protecting data the council store and use.
- Expectations around focusing on sustainability goals and reducing environmental impact while deploying ICT.
- The increased global threat to organisations from Cyber Security attacks; and
- Increasing financial challenges with wholesale under-funding resulting in reductions in capital and revenue budgets.

This strategy should be read alongside the Council's [People First Strategy](#), [People & Technology Annual Service Delivery plan](#) and [People & Technology Spend](#) which provides context for the ICT projects being delivered across the Council.

2. Principles and Ambitions

This ICT Strategy aligns to the values of the Council's Achieve Framework demonstrating an ambitious innovative plan, collaboration and empowering our residents and employees.

The strategy will ensure.

- Best use of technology to support service delivery and the everyday lives of residents.
- and
- Employees are provided with the technology needed to do their jobs effectively.

The ICT service will collaborate with all council services and partnerships to help achieve the above vision and will be underpinned by the principles and ambitions outlined below.

2.1 Modern Infrastructure to enable Digital Transformation

The infrastructure aspect of technology holds significant importance, highlighting the necessity of ensuring that the ICT architecture is future ready. This ensures the provision of an efficient, effective and customer focused ICT service that empowers an agile, flexible, and digital workforce.

A fundamental principle of this revolves around the critical importance of enhancing the management of technological changes and upgrades across the infrastructure estate.

The service delivery model arising from COVID-19 pandemic has required a review of the Council's ICT infrastructure architecture. Managing remote/hybrid technical environments involves redesign, investment in modern technologies in addition to upskilling ICT employees.

We will continually assess and upgrade our ICT infrastructure to support the growing demands of the organisation and explore cloud computing options for increased scalability, resilience, flexibility, cost-effectiveness and to maximise our current investment.

Ambitions

- Cloud appropriate
- Continuous research & development to explore and embrace innovative technologies.
- Provide state-of-the-art wireless access.
- Enable a streamlined remote access solution.
- Deliver fit for purpose bandwidth capacity at all council locations.
- Use the power of 5G to unlock new opportunities.

2.2 Manage risk, security, and compliance.

Risk and security controls should be balanced according to business objectives – security controls need to be proportionate to risk.

We will strive towards an ICT network that has a zero-trust security approach and prioritises continuous verification and strict access controls to protect against potential security threats in line with modern technologies.

We will continually review and assess our security posture to identify vulnerabilities and implement necessary controls.

We will ensure appropriate investment in modern technologies to improve cyber defences and further build the skillset within the relevant ICT teams to appropriate levels.

Ambitions

- Align information security approach to National Cyber Security Centre (NCSC) best practice.
- Work towards achieving Cyber Essentials +
- Continued PSN & PCI Compliance
- Deliver employee awareness programmes for Cyber Security to create a strong security culture.
- Robust and defined DR, Resilience, and recoverability processes
- Establish an incident response plan and conduct regular drills to ensure preparedness.
- Implement actions to respond to Scottish Government's Public Sector Action Plan Cyber Resilience Framework.

2.3 Provide Data to Support Decision-making

We will help services to share the right data securely and appropriately between the Council and our partners.

In accordance with the Council's records management policy and recommendations, we will encourage and use data analytics to:

- help services make informed decisions; and
- open data to give communities and businesses access to information we store.

The Council should provide a consistent experience regardless of the way residents and employees choose to contact us. This can be enabled by presenting easy to use, integrated and standard interfaces.

ICT Services will be delivered as “digital-by-default” and employees who can, will be enabled and encouraged to self-serve with other channels being available for urgent and emergency issues.

Ambitions

- We will design data architectures and infrastructure that allow seamless data exchange and integration across different platforms, databases, and applications.
- We will explore opportunities to proactively publish open datasets and to use this to empower communities.
- We will develop data warehouse type solutions to pull together service and customer data from various sources.
- We will promote and implement Business Intelligence solutions to enable meaningful data analysis across the council.
- We will support service areas to investigate opportunities for commercialisation of appropriate service data.
- We will maximise the use of existing data and systems to support Better Use of Data.

2.4 Delivering a Digital Workplace

As 'Smart Working' has become the default for most desk-based employees, we will ensure that the supporting ICT technology, systems, and support services are in place to deliver a fit for purpose Digital Workplace to council employees. This includes an enhanced onsite experience which provides access to the latest versions of Microsoft office suite with 365 functionality and integration, controlled and consistent access to business applications and state of the art Wi-Fi technology in all council sites to ensure a future proof, strong and robust wireless connection.

Our Digital Workplace vision is to provide a streamlined and smooth remote access facility to mirror the onsite office experience and deliver seamless and fast access to council applications from anywhere. This enables the council to continue to encourage working in a modern way using a mix of office, home, and remote working.

As the council changes, the demand for ICT support services continues to increase, we will review and align our service delivery model to ensure employee needs, satisfaction and expectations can be met.

Ambitions

- We will deploy portable devices such as laptops and tablets to all office workers on a one-to-one basis, removing the need for desktops and thin client devices.
- We will explore supplier zero touch services and use automated technologies to remove the need for ICT teams to manually configure and deploy devices.
- We will continue to use modern technologies to improve the process of updating council devices and reducing impact to council employees and service delivery.
- We will continuously review our approach to secure end user computing - this will consider advances in cloud technology and remote device management.
- We will ensure our communication is jargon free and efficient.
- We will continuously review our ICT support model to align with smarter ways of working.

2.5 Sustainability

While the council's current ICT systems provide efficient services, continuous improvement is crucial to support future changes in a timely and cost-effective manner.

ICT is committed to sustainable technology to lessen energy consumption, carbon emissions, enhance resource management, and decrease the amount of technology waste produced. We will ensure hardware is disposed of properly, recycled, or repurposed whenever possible, and sustainable disposal options, such buy-back programmes, are used.

To promote higher value, conserve energy, and lower heat production we virtualise hardware when it is practical and effective. We will continue to deliver collaboration technologies to support a Digital workforce and reduce travel, reduce our carbon footprint and greenhouse gas emissions whilst supporting the council's property rationalisation project.

In accordance with contract strategy development and the Scottish Government Sustainability toolkit, the council will explore sustainability opportunities in all tenders.

Ambitions

- Use cloud solutions where appropriate.
- Use technology to reduce printing.
- Reduce power consumption with effective power management policies and tools.
- Consider sustainable data management by considering data deduplication, compression, and tiered storage approaches to optimise resource utilisation and reducing energy consumption.
- Enable solutions that promotes electronic records keeping.
- Consider suppliers' Energy star rating programmes that certify their products for energy efficiency.
- Continue to encourage best practice regarding data storage and usage.

2.6 Automation

Automated Technology solutions facilitate new ways of analysing information to streamline processes and decision making.

ICT currently uses automation technology to improve services by automating repetitive tasks such as daily technical checks, ticketing workflows, reporting, data matching, scheduling, and performing maintenance tasks on our infrastructure environment. We have also recently implemented Artificial Intelligence (AI) technology to improve and enhance secure cloud analytics and improve network security. This is in addition the investment council had made in Robotics Process Automation (RPA) to optimise its processes.

As the automation programme matures, we will consider the possibility of using related technologies to provide direct services to employees. This may include the use of chat bots, virtual assistants, and collaborative apps to provide a speedy response to employees and allow them to interact with the ICT service across a range of platforms including social media.

Ambitions

- Support of service initiatives and advances in automation technologies to the benefit of wider council services.
- Continue automation of ICT services.
- Support pilot projects and proof of concepts to highlight the benefits of automation.
- Ensure opportunity for integration and interoperability between automation technologies and existing systems or platforms.

2.7 Digital Age – Research & Development

ICT will evolve in the adoption of innovative trends and technologies to support, advise, and encourage service areas with a key lens on promoting the vision for the future and delivering a council fit for the Digital Age.

We will continue to participate in national initiatives to share information and knowledge and explore opportunities similar to the Council's Internet of Things (IoT) Asset Tracking pilot which promoted collaborative working, business growth, problem solving and improve service delivery.

Researching the secure use of emerging trends and technologies such as Chat GPT, Blockchain and Machine Learning will continue to help the Council foster a culture of innovation and remain adaptable to emerging technologies and trends.

We also need to consider how current technology trends may develop and impact service delivery beyond the lifetime of this strategy.

Ambitions

- Continue partnership collaborating with council Digital Team, National Groups, and projects.
- Encourage the involvement in Tech Cluster initiatives.
- Explore options on attracting investment in digital connectivity and technologies.
- Explore Smart City innovations.

3. Conclusion

The People & Technology service is uniquely positioned to support the council's digital transformation journey. Council employees are more reliant than ever on technology, one of the key principles of this strategy is to ensure the Council's ICT infrastructure remains secure, available, and resilient to the risk of security breaches. The strategy provides direction and strategic priorities that will shape the Council technology environment whilst providing a stable and resilient infrastructure which facilitates the most efficient use of our resources.

The strategy will be delivered over the next 5 years and will be monitored via annual P&T service and spend plans and reported alongside same. The successful execution of this strategy will enable delivery of enhanced employee experiences, drive innovation, improve operational efficiency and maximise investment.

This ICT strategy document provides a roadmap to position ourselves as a fit for purpose and innovative technology service.