Digital Strategy

2022 - 2025

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Executive Summary

The previous Digital Strategy was set in 2019 and provided clear guidance to help shape the development of technology to better meet the business needs over a 3-year period. The period has seen much turbulence in the provision of digital services to support the urgent change in working practices during the COVID pandemic. As a Service, we were well placed to cope with the initial pressures of mandated home-working and have built on these capabilities over the last two years to ensure the use of technology has enabled work to continue, often in improved ways. The pandemic has expediated change in the digital arena, enabling new ways of working to be adopted quickly.

There have, however, been a number of challenges to digital transformation. Due to the worldwide demand for technology to support businesses during the pandemic, many items have been in short supply, and costs have escalated as a result. Additionally, many third-party suppliers have struggled to provide the necessary support for projects. This has resulted in the elongation of some projects and Service priorities have changed as a result of changes in ways of working.

The strategy for 2022-2025 aims to build upon the recent improvements to ensure digital services continue to be exploited to their full potential in a sustainable way.

Technology continues to play an essential role in the delivery of efficient and cost-effective services and the strategy recognises that while the environment within which Cambridgeshire Fire and Rescue Service (CFRS) operates has changed the challenges and demands on departments with responsibility for digital provision has increased. The reliance on technology means that continual investment is essential to ensure CFRS remains well placed to deliver the required services to staff and the community.

Introduction

Background

The last Digital Strategy ran from April 2019-March 2022.

This strategy has served CFRS well providing clear guidance and helping shape the relationship between digital teams and the business. The availability of reliable and resilient digital systems is an expectation of all staff and much work has been completed during the previous period to improve the infrastructure, user experience, software applications and support provision.

The strategy has either driven or enabled the following successes in relation to the previously identified opportunities:

- Maximise Value for Money in the Provision of Digital Services

    - Move from the previous document management system to SharePoint online.

    - Implementation of Microsoft Teams to replace Skype for Business, providing good video conferencing facilities to accommodate the change in working practices during COVID.

    - Exit from partnership for Wide Area Network (WAN) provision.

- Technology Management

    - Replacement of the Wi-Fi solution across all sites.
    - Implementation of new WAN contract.
    - Replacement of Station End Equipment (SEE), used for the mobilisation of resources to emergency incidents.
    - Introduction of laptops for those able to work from alternative locations, and introduction of iPads for a number of teams to assist with accessing information in the community.
    - The start of overdue upgrades to the STEP environment and the start of migration of processes to the cloud.
    - Continued use of business process and integration technology (STEP) to enable system integrations to increase efficiency and to improve data consistency.

- Intelligent Data Gathering and reporting

    - Data analysts upskilled to enhance reporting capabilities.
    - Continued to use data effectively to assist with corporate decision making.
    - Upgraded the Microsoft SQL Server Reporting Services (SSRS) environment.

- Excellence in Communications

- Moved from Workplace to Yammer for the Services internal social media channel.
- Implementation of video conferencing solutions to improve the experience of meetings during hybrid working.

- Working with Partners
    - Extensive collaborations on ICT projects with Bedfordshire Fire and Rescue Service (BFRS) have ensured a common infrastructure and enhanced support provision by the ICT Shared Service.
    - Introduction of Gov Wi-Fi at all sites to enable easy partner access whilst using our premises.
    - Introduction of collaboration tools as part of the Microsoft 365 (M365) package to improve joint working with partners.

Technology continues to play an important role in the delivery of efficient and cost effective services. Therefore, the strategy has been revised to take account of the change in environment within which CFRS operates and the increased challenge for ICT to support the organisation.

This digital strategy encompasses all areas of the Service involved in the delivery and support of technological solutions, including the ICT Shared Service, the Application Support Group (ASG), the Service Transformation and Efficiency Programme (STEP) and Business Intelligence and Reporting (BI&P) teams.

Each of these teams has a distinct role in the delivery of technology solutions and therefore the requirements of this strategy:

ICT Shared Service – responsible for all infrastructure and first line user support. Also responsible for database administration.

ASG – responsible for supporting 'best of breed' applications in conjunction with the ICT Shared Service and suppliers.

STEP – responsible for system integrations and process automation.

BI&P – responsible for data retrieval, reporting, data analysis and scenario modelling as well as statutory returns.

Approach

The following input has been taken into account in developing the strategy:

- Review of the Integrated Risk Management Plan (IRMP)

- Review of the previous strategy. In particular,

    o What has been completed

    o What is still relevant

- Discussions within the Digital Strategy Board.

From the above process, a number of business opportunities have been identified and for each of these opportunities, key business drivers, benefits and related digital development opportunities have been documented.

Technology moves quickly and the revised strategy needs to take account of developments that would add benefit to the Service, both in terms of efficiency and cost savings. It is realised that not all opportunities highlighted in the previous strategy have been fully realised and where further work is still required these elements have been incorporated in this revised strategy.

The revised Digital Strategy has been presented to the Digital Strategy Board for sign-off and ownership.

Business Opportunities

Outlined below are the business opportunities that have been identified. These high-level themes have not changed since the last strategy was produced, and the aim now is to exploit technology further to ensure we continue to meet the future needs of the Service.

Opportunity 1:

Maximise Value for Money in the Provision of Digital Services

With public sector finances ever reducing, the use of digital services can assist in providing more efficient ways of working. Utilising digital services to their full potential maximises the return on investment and therefore improved ways of working using existing technology should be explored to ensure the Service is getting value for money (VfM). Changes to working practices as a result of the pandemic have shown the value in technology exploitation, and the aim is to further improve facilities to enable good working practice implemented during the last two years to improve further.

The challenge we have is ensuring that digital teams are suitably resourced to provide the capacity required to take on the ever growing demand. It is recognised that demands will always outstrip capacity in a data/digital driven Service, and this needs to be carefully managed to ensure that resources are concentrated on those areas that will provide the greatest return of investment and therefore value for money.

Business Drivers

- With the ever increasing cost of software licencing and support, the full exploitation of software must be sought to ensure appropriate return on investment.

- With the change in ways of working, a more flexible working environment and mobility of staff, the accessibility to ICT resources while away from CFRS property increases both productivity and efficiency of staff.

Development Opportunities

- Look at opportunities to rationalise software, in particular maximising the return on investment of Microsoft licencing. This should include the roll-out of additional M365 toolsets to increase functionality available to staff, which in turn will provide improved ways of working.

- Anytime, anywhere, any device. Significant improvements in this area have already been made for many staff groups. Areas that will need to be considered include community working, partnership working and the information available on the incident ground.

- Enhanced video conferencing facilities which will reduce time and costs associated with travelling to meetings throughout the County.

- The education of staff is essential to improve awareness of ICT security requirements.

- With increasing pressure to reduce costs across the public sector, appropriate use of Business Process Automation and integration cloud technology can assist in the delivery of more efficient services across all areas of the Service.

- Existing partnerships and collaborations must be evaluated on a regular basis to ensure they continue to deliver the expected VfM. Alternative arrangements should be sought where VfM can no longer be demonstrated.

Opportunity 2:

Technology Management

ICT is the key enabler to driving business process change by providing technology to allow the efficient use of resources. Effective technology management is essential to ensure that CFRS maintains its infrastructure to the standard required to cope with future demands of the service. Ensuring infrastructure is well maintained also assists in the prevention of cyber attacks.

With the introduction of M365 during the last period, work is now ongoing to fully understand how this product can be exploited in conjunction with the Business Process Automation and Integration platform to provide the most effective solutions.

Business Drivers & Benefits

- Outdated infrastructure and applications require greater maintenance effort and reduce the productivity of staff. They also lead to an increased risk of cyber attacks.

- There is an expectation that ICT systems (software and hardware) should remain up to date to enable effective and efficient working.

- In line with our guiding principles, the Service should look to implement 'best of breed' off-the shelf (OTS) solutions rather than commissioning bespoke software solutions to ensure the implementation of proven and supportable applications.

- With increasing pressure to reduce costs across the public sector, appropriate use of technology can assist in the delivery of more efficient services.

- With the retirement of the Public Switched Telephone Network (PSTN) in Dec 2025, work is required to move to an Internet based telephony system for both emergency calls and general office telephony.

- To ensure the service realises the maximum benefit from the Business Process automation and Integration platform, new applications must provide a comprehensive application programming interface (API).

- To ensure that all data held within our systems is accessible to our reporting services all systems must be SSRS compatible.

- To ensure the future sustainability of reporting technologies, monitoring Microsoft retirement profiles for SSRS and ensuring that plans are in place for replacement technologies when appropriate.

- To ensure that the 'Green' agenda is considered when implementing any new technology, ensuring equipment operates efficiently and has minimal impact on the environment.

- Opportunities to utilise cloud services should be explored where the efficiencies and effectiveness can be clearly demonstrated.

- With an ever-increasing risk of cyber security incidents, appropriate investment in security and maintenance of systems is essential to ensure the Service is well placed when and incident occurs. The Service must maintain security in line with government recommendations and the requirements of the Service's ISO 27001 accreditation.

Development Opportunities

- Replacement of the existing Local Area Network (LAN) infrastructure to enhance the resilience of provision while also future proofing.

- Maximise the benefits realisation from the Business Process Automation and Integration investment by:

  - Implementing effective business processes to eliminate administration tasks that add little value.

  - Extensive system integration eliminating information silos and to improve data consistency and quality.

- Take opportunities to improve the security of CFRS systems to reduce the risk of successful cyber incidents, while maintaining our ISO 27001 Information Security Management certification.

- Implementation of a Voice over Internet Protocol (VoIP) solution for telephony across the Service (for not emergency and non-emergency telephony).

- Ensure that technology provision enables staff to have the same experience of system and information access regardless of where they are working from.

- With further delays of the Emergency Services Mobile Communications Programme (ESMCP) being managed by the Home Office we have been unable to move from the current Airwave radio system to the Emergency Services Network (ESN) and exploit the opportunities that this new programme is set to deliver. As a Service, we will continue to monitor progress so that we are well placed once the programme starts to deliver its objectives. We have however commenced our migration to the DCS gateway from the SAN H to ensure that we continue to have access to the Airwave communications network whilst the ESMCP programme is delayed.

Opportunity 3:

Intelligent Data Gathering and Reporting

The service needs to ensure the availability of and access to accurate and complete organisational data in a timely manner to enable affective decision making.

Although introduction of M365 in the last period has enabled staff to proactively develop solutions to their own problems, this brings the challenge that data is less controlled and corporate reporting becomes more challenging. There is a need to ensure that the needs of the Service continue to be met without detriment to corporate reporting which is essential to support business decision making.

Business Drivers & Benefits

- Accurate, consistent, secure and timely information will be available throughout the Service.

- The availability of high quality information will support effective decision-making, creating an environment where resources can be rationalised and efficiencies maximised.

- The ability to easily share data with partner agencies to enhance the provision of services to the public.

Development Opportunities

- Automation of data collection and use of APIs where possible to minimise manual updating of reference tables.

- Dissemination of information in "real-time" to enhance responsiveness and dynamic planning and decision-making.

- Increased use of STEP and integration to ensure master data is consistently used throughout the application portfolio.

- Work with staff groups to determine low risk areas where M365 tools can be used in place of STEP for rapid implementation of solutions. These instances must not contribute to corporate data feeds due to the isolated pockets of data created.

Opportunity 4:

Excellence in Communication

The provision of reliable communication facilities is paramount to the day to day business of CFRS. The enhancement and expansion of communication capabilities will ensure CFRS excels in this area and benefits from efficiencies and improved information exchange that technology can bring.

Business Drivers & Benefits

- Delay of National ESMCP programme.

- Aging telephony system in use by CFRS which requires replacing to enable new technology to offer additional features to further enhance and modernise communications.

- Increased communications and sharing of information with partner agencies requires technology to enable secure data exchange.

- With an increase in the number of communication tools available for internal communications, there is a need to give staff a common platform and consistent communication channels regardless of how and when they are accessing corporate systems.
- The increased mobility of staff requires enhanced communication channels to ensure information is received in a timely manner to assist in decision making.
- Requirement to adhere to government legislation and guidance (e.g. Data Protection Act and Government Protective Marking guidance).

Development Opportunities

- Completion of the replacement of the mobilising system to improve usability and make the mobilisation of resources more efficient.
- Implement a VoIP telephony solution in advance of the termination of the PSTN.
- Improve the accessibility to information from any device and any location by ensuring that the remote access solution remains available and easy to use.
- Building on the success of video conferencing during the pandemic, enhance video conferencing facilities at key locations across the Service.
- Replace the aging pager technology used for mobilisation of on-call staff.
- Reviewing the provision of incident ground data

Opportunity 5:

Working with Partners

Business Drivers & Benefits

The Service has previously developed partnerships in a range of areas including Combined Fire Control (CFC) and the ICT Shared Service. The Service should look for further opportunities for partnership working and ensure that the provision of digital services assists the benefits arising from these partnerships.

Capacity of digital teams within the Service are stretched as demand increases. Opportunities for working with partners should be explored where this can be seen to increase digital capacity in a cost-effective manner.

Development Opportunities

- Continue to maximise the benefit of the ICT Shared Service by:
    - Collaboration on ICT projects with BFRS which will ensure common infrastructure and enhance support provision by the ICT Shared Service. Collaboration on ICT projects will enable cost effective procurements for both Services.
- Provision of shared network links to premises operated jointly with the Police, resulting in value for money.

- Provision of additional software tools to enable better collaboration with partner agencies, regardless of location.

Digital Guiding Principles

An important part of the strategy is the definition of some guiding principles through which we will strive to deliver an excellent service.

Technology must be an enabler not a barrier

Technology should not have a negative impact on productivity. In particular we will ensure there is sufficient capacity built into systems ahead of any business demand and that systems are simple to operate and reliable.

Customer focused

Not only will this be the reality but it will also be widely recognised as such. Particularly important areas include 1st line support, training and process development and we will strive to excel in these areas.

Professional service management

CFRS will continue to maintain the ISO 27001 certification and to build on these substantial foundations.

In addition we will look to a pragmatic implementation of ITIL components as a tool to help us deliver a more professional service in all areas of the ICT function.

Seek new and innovative ways of delivering

Externally we will:

- Identify and promote collaborative opportunities with other FRS and partners, especially local government within the county.
- Review our relationships with suppliers to ensure we are deriving maximum benefit.
- Ensure lessons learnt on collaborative projects are applied to future ventures.

Internally we will:

- Explore appropriate opportunities to exploit cloud services where they provide VfM and the required levels of service and security.
- Look to implement 'best of breed' off-the shelf (OTS) solutions rather than commissioning bespoke software solutions to ensure the implementation of proven and supportable applications.

Adopt an environmentally sound approach to full life cycle technology investment

This will apply to all aspects of technology investment including, selection of suppliers and equipment, the effective day to day operations and eventual disposal of assets.

Conclusion

This document sets out the Digital Strategy for CFRS for the period 2022-2025. From this strategy the ICT Shared Service, ASG, STEP and BI&P will develop action plans and technical responses to assist in the delivery of the highlighted business opportunities.

The Digital Strategy Board will be responsible for reviewing progress and adherence to this strategy document.