NCC Digital Strategy and Roadmap

for the 2020s

Highlights for Corporate Select Committee - Jan 2021





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Executive Summary

This digital strategy and roadmap explains how we are going to build on our past and current success, as the Connected Britain Digital Council of the Year 2020.

Our corporate plan articulates a clear vision for Norfolk, via our priorities

- Focusing on inclusive growth and improved social mobility
- Encouraging housing, infrastructure, jobs and business growth across the County
- Developing our **workforce** to meet the needs of the sectors powering our local economy
- Work to reduce our impact on the environment
- This way we can help Norfolk have a growing economy, full of thriving people living in strong communities we are proud of

Our digital strategy and road map for the 2020s supports that corporate vision.

That support is not about technological change for the sake of change but is fundamentally driven by our ambition for our County to be a place where we put people first, a place of opportunity where we can fulfil our potential and live productive, healthy and independent lives, a place for economic growth and regeneration whilst protecting our environment and a place where we can access the education, skills and employment that we seek.

If we successfully deliver this strategy, during the 2020s then we will have achieved:

- A fundamentally better resident experience whenever and however they interact with us irrespective of what service they need
- A better understanding of our residents, their needs and future demand through a modern approach to data and insights that focuses on collaborative sharing of data with partners to continuously improve services and make better decisions

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 Significant contributions to achieving carbon neutrality by 2030 through the sustainability opportunities offered by new technology

Executive Summary

- A more cohesive and collaborative council, that builds partner networks, innovates through co-production with residents and becomes more transparent with its data and decision making
- A more sustainable financial model, where we can improve service delivery while maintaining or reducing costs
- A positive impact on our climate commitments to be carbon neutral by 2030, through a radical reduction in the use of paper, a move to digital record storage solutions, reduced postage, increased use of virtual communication systems and more intelligent travel choices that reduce carbon emissions.
- Residents and businesses with access to the internet and sufficient digital skills to achieve the financial, educational, social and health benefits that come with digital inclusion
- Elected members who have the technology and digital skills to support their whole community and have access to the most accurate, update data available to support key decision making and organisational scrutiny

- And happier, more efficient staff who have the technology and skills they need to do their jobs.
- And staff who will have had some of their time consuming, repetitive tasks automated to allow them to use their expertise to focus on adding value to the work we do with Norfolk residents.

The actions which this strategy outlines in more details were developed in collaboration with departments, our partners, key external digital suppliers and internationally recognized technology consultant specialists.

Specific case studies detail current, new activities that will establish how we work in the short to medium term.

Over the next year, the next set of key activities are being road mapped which will take us to the middle of the decade. We also discuss a formalized process of horizon scanning to spot potential new technological opportunities and determine when best to or if we should exploit them for the benefit of the organisation and the wider County.



Current activities, priorities and strategic context



Current strategic context

On 7 May 2019, Full Council formally adopted Norfolk County Council's plan, *Together, for Norfolk*, as part of its policy framework. The new whole-Council plan brings together the vision in *Caring for our County* and the Council values and principles and provides a clear view of the priorities and significant activity that the Council needs to deliver alone or with partners up to 2025.

Together, for Norfolk focuses on partnership working and collaboration, and aims to drive economic growth, improve social mobility, and lead to a better quality of life and outcomes for the people of Norfolk. The plan emerged directly from the needs assessment carried out as part of the County's deep analysis of social mobility, following the publication of the report by the Social Mobility Commission in 2018. The plan's outcomes framework has three overriding ambitions which drive the Council's priorities: A growing economy, thriving people, and strong communities. Our Plan also underpins and contributes to the delivery of the New Anglia Local Enterprise Partnership Norfolk and Suffolk Economic Strategy.

Our Caring for our County vision commits NCC to play a leading role in -

Building communities we can be proud of Installing infrastructure first Building **new homes** to help young people get on the housing ladder



Developing the skills of our people through training and apprenticeships

Nurturing our

growing digital

economy

Making the most of our heritage, culture and environment



Our Strategic Framework

Our Vision

is that technology should provide the platform to enable positive change

Our services are under pressure. So, we need to look at ways to:

- Manage demand
- Reshape what we offer
 - Secure investment

Digital technology offers significant opportunities to transform and innovate the way that we work and how we work with partners and the people of Norfolk

Our work is guided by four core principles



Offering our help early to prevent and reduce demand for specialist services



Joining up our work so that similar activities and services are easily accessible, done once and done well Being **business-like** and making the best use of **digital technology** to ensure value for money

Using evidence and data to target our work where it can make the most difference



How we are organised to deliver

A key element of Norfolk's Digital Success is the configuration and relationships between delivery groups. The NCC corporate technology service (IMT) exists to manage core infrastructure, platforms and enable services and projects to deliver.

- NCC Corporate IMT inc. Fire & Rescue
 - Approx. 200 staff (perm & project)
 - Infrastructure
 - Application Support & Development
 - Projects & Change
 - Data Services
 - ICT Solutions (Schools & Education)
- Business Transformation
 - Smarter Working
 - Oracle (ERP) Replacement
- ASTEC (Adults digital transformation programme)
- Childrens Transformation Programme
- Norfolk Office of Data Analytics (NODA)
- Highways & other services with digital exploitation project teams that build on the core infrastructure, platforms & capabilities.
- Major application support teams, Social Care, Finance etc, Intelligence & Analytics, Information Governance.



Partnership Working Arrangements

- Norfolk & Waveney STP Digital Team
- Norfolk LA IT Managers Group
- Norfolk Office of Data Analytics (NODA)
- New Anglia LEP
- Socitm (National & Regional)
- Cyber Security Groups C-TAG & EEWARP
- DCMS BDUK Team
- LGA Digital Groups
- MHCLG Digital
- Crown Commercial Services
- Supplier Partnerships such as:
 - Microsoft & Bytes
 - Gartner, Capita, Oracle, Sitecore,
 - Liquid Logic, RNS, Hitachi & More.

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Where we currently are

The previous digital strategy has already achieved significant progress across a range of priorities. Highlights include:

- Over 95% of Norfolk properties now have access to superfast broadband connections (>24mbps) rising to 97% by September 2022
- "Full Fibre" connections and upgrades to over 400 public sector sites including offices and schools by July 2021
- Significant improvements in mobile coverage with more to do and 5G in Norwich
- The largest free to use public sector LoRaWAN deployment in the UK

- Norfolk and Suffolk Innovation Network
- All 6,500+ staff able to work remotely and fast rollout and adoption of digital skills for remote working for over 1,500 Adults and Children's social workers.
- Agile development of Covid-19 systems allowed NCC to continue supporting some of our most vulnerable residents
- Digitisation of paper files at Scottow
- Better use of Data via Norfolk Office of Data Analytics, cloud-based data lakes, combined health & care data and analytics

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2021/2022 Priorities

Corporate initiatives

Progress Smarter Working & Digital Norfolk workstream

- Smarter Working enabled by technology, property & HR developments
 - Mobile & Flexible working, Wi-Fi, New Intranet, online selfservice, process redesign
- Paperchase (Digital Print, Post, Scan and Storage)
- Counter Fraud Hub (in partnership with district, borough & city councils)
- Robotic Process Automation
- Data Enabled Efficiencies

New Finance & HR Systems Replacement

Digital skills development for officers & members, citizens and businesses

Key Departmental Initiatives

- ASTEC (Adults Digital Programme)
- Childrens Digital Transformation
 Programme
- Highways Street Lighting, IoT Projects, electric vehicles
- Fire & Rescue Digital Programme (delivered through a new joint IMT service)

Partnership Working Initiatives

 Integration with NHS Partners, web and data projects with Districts and Norfolk Constabulary



What our departments said about where they want to get to in the next 5 years



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Adults Engagement Feedback

Data:

- Wider system data integration inc. System 1 & Liquid Logic
- AI/ Machine Learning
- Multiple internal systems and sources of data
- Better, more accurate data inputting with common universal indicators

Business Practices:

- Smarter working
- Accurate, real-time management information inc. commissioned services
- Effective contract management
- Wherever possible simplify processes to aid self serve

Key Service Issues:

- 2025 switch off of analogue phones - covers care lines etc how are we going to manage this and impact on providers etc
- Interfaces that support people and reduce inequalities of access

Digital Skills:

- Citizens to help themselves

 build capacity for
 independence
- Provider technology improved skills and connectivity
- Voice Bots to support citizen self-serve

Partner Networks:

- Integrating digital across the wider network of organisations operating within the care system
- Improving data flow between organisations

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Childrens Engagement Feedback

Data:

- Different organisations data changes are live to all organisations
- Multiple education databases need to join better
- Data ownership children and families decide how to share their data

Business Practices:

- A skills App suite to support staff
- Smarter working inc. RPA
- Removal of internal barriers dept/ org
- Voice to Text data entry into Liquid Logic

Key Service Issues:

- The family and/ or child has a virtual community around them, and all orgs data and tech are compatible
- Tech enable community connections

Digital Skills:

- Evidence becomes the default for decisionmaking
- Improving tech skills and teaching in schools
- Intuitive design of digital interactions inc. SEND offer and support selfserve
- Digital safe spaces

Partner Networks:

- Create permeable boundaries between organisations so appear to operate as one
- Collaboration that is not always in real-time to allow flexibility
- Build on Vulnerability Hub

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CES Engagement Feedback

Data:

- Smart cities initiatives – sensors, real time data and analysis
- Consumer behavior and predictability
- Better systems to store & manage information – early priority

Business Practices:

- NCC policies to reflect new and emerging social media platforms
- Cyber security
- Greater automation

Key Service Issues:

- Driverless Cars
- EV charging infrastructure
- Drones
- Emergency Service
 Network rollout
- Getting the balance between place and service right as we become more digital

Digital Skills:

- Use of different social media channels for harder to reach communities
- Accessibility and equality issues

Partner Networks:

- Removing barriers to data sharing – increased interoperability
- New versions of business support, not just Scottow & Hethel but access tech they need

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CES Engagement Feedback

Data:

- Integration of data to enable risk stratification and integrated partnership approaches
- Digital preservation of key County records (NRO)
- As a basic principle all information goes into the public domain – a culture of openness by default

Business Practices:

- One core digital system for all staff means turning off legacy systems and releasing resource & funding
- Too many ways to contact me – simplify channels, consistency of approach and ease of
 trieval

Key Service Issues:

- The future of public transport – automated vehicles and rural issues
- Technology, communication & planning schemes

Digital Skills:

- Exploitation of mobile technology
- Better use of digital channels for museums
- Ease of use for citizens & staff – less reliance on skills

Partner Networks:

- Simple, easy partnership working via technology
- Planning development management systems

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F&CS Engagement Feedback

Data:

- AI & Big Data lead to a process of continuous audit
- Information Management Governance

Business Practices:

- Seamless interface for public, suppliers & partners
- Deliver new tech systems

Key Service Issues:

- Digital signatures and paperless contracts
- Keeping creativity in video interactions

Digital Skills:

- Building Robotic Process
 - Automation tools
- Dashboards inc. sentiment analysis

Partner Networks:

- Build on success of Fraud Hubs with Districts
- Improve MS Teams interfaces with Districts i.e. passing of calls between call centres

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S&G Engagement Feedback

Data:

- Sentiment analysis of social media
- Self-service and automation for routine data tasks
- Data security
- User research leads to priorities, plans and delivery

Business Practices:

- Automated social media monitoring and other key support tasks
- Paper free systems
- Clearly defined career pathways

Key Service Issues:

- Right permissions & infrastructure to access, store & use data
- Transformation across systems not via silos

Digital Skills:

- Staff skills reflect new tech approaches re comms
- Highly skilled data analytics workforce
- System wide support for those unable to access digital service provision

Partner Networks:

- Digital engagement with citizens
- NODA
- Courts accepting electronic filing and bundling

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What comes next?

The emerging future of technology



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Future of technology

Norfolk is changing in rapid and profound ways. The County stands on an economic future dominated by new technologies and exciting new industries. We will be working in new ways and will need to develop different skills, many of us will be working into older age and we want to find new ways to live healthily and happily for longer than previous generations.

Norfolk in the future will alter the demand and type of services provided by Norfolk County Council, as well as how these will be delivered. It is therefore vital for us to understand these changes so that we can ensure the Council is fit for purpose in the future.

The "Together for our Future" report did this for Norfolk, at a macro level, and this section of the Digital Strategy & Road Map intends to focus in the potential futures of technology, with a specific emphasis on local government. This section draws on work by specialist consultancies such as Gartner and Deloittes as well as work by various think tanks and central government to detail potential technological change and impacts.



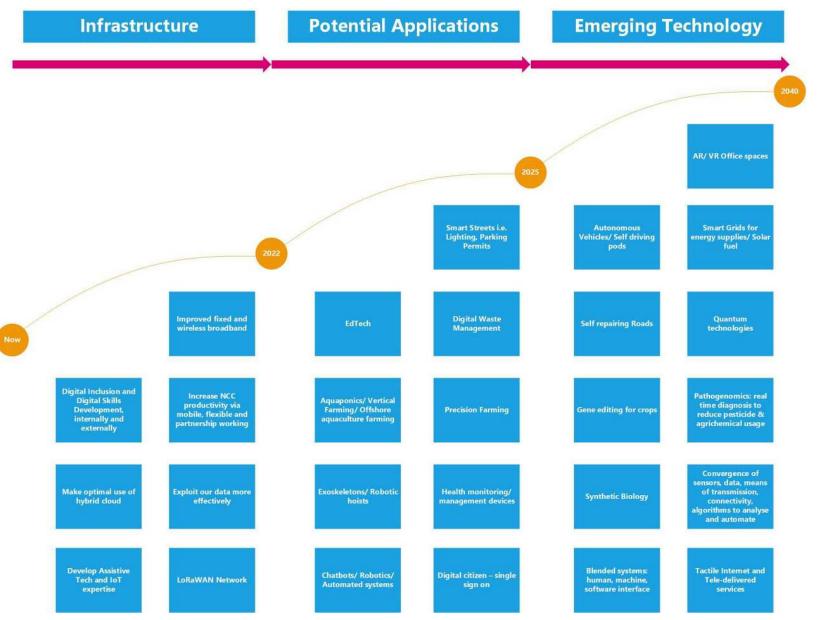
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Key Infrastructure to support change

	The Key Infrastructure Drivers					
No	folk Economic Infrastructure	NCC Digital Infrastructure				
•	Full Voice and Data Coverage (i.e. 2G, 3G, 4G & 5G)	•	Local Area Network – Software-defined networking (SDN) for estate, Inc. Wi-Fi.			
•	Broadband- Local Full Fibre Network	•	Wide Area Network (NCC & Schools)			
•	Wi-Fi	•	CRM, Web & Portals			
•	Assistive Technology	•	Public & Private Cloud			
•	LoRaWAN & IoT Networks	•	Devices: Laptops, tablets & Phones			
•	Power infrastructure – electricity charging points	•	Internal software systems i.e. Social Care, HR/Finance, Sitecore, Tribal, Highways Maintenance etc			
•	Small cell technology – via lamp-posts to boost rural wireless and urban 3G/4G/5G coverage	•	Robotic Process Automation			

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A timeline of emerging technologies





What comes next?

Has the pandemic changed anything?



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Technology Recovery Themes



Digital Infrastructure – Broadband, Satellite Broadband 5G, LoRaWAN (IoT), Wi-Fi, Li-Fi etc - this is the key underpinning for almost all the other tech enablers. Without a stable, robust, effective and fast digital infrastructure then how will we exploit other tech? Risks – Digital divide, access, digital skills and rural/ urban connectivity



Data – Interoperability across systems that bring public value. Data also underpins AI/ Machine Learning etc. Issues – data wrangling, level of computing power needed and only pattern recognition tools and not 'cognitive'. How to get data into a usable shape for other opportunities – data lakes and RPA. Risks – governance, privacy, legislation, time and practicality of getting it all to work.



How we work and learn? – where possible via remote working - digital provision of services – hybrid physical and virtual – role for RPA, Digital Signatures, Video Consultation/ Collaboration. Next gen remote working inc augmented/ enhanced/ virtual reality (vulnerable children), VR meetings, personal AI virtual assistants and chatbots. Risks of 1 and 2 not happening quick enough and slip back into old ways of working



Mobility – Electric micro mobility solutions – eBikes - £2bn cycle & walking plan – eScooters UK trials ongoing – other electric vehicles dependent on wider infrastructure, better battery cell tech and hydrogen storage to reduce weight. Risk – public transport and lack of policy, social and cultural innovation to support change



Norfolk economy, society.... – AgriTech, vertical/ urban farms, clean energy, supply chain security, energy storage, robotics, drones, renting tech (Cloud space, RPA etc), circular economy, 3D printing, the end of cash, virtual culture, cyber security, waste reduction

What are our partners doing ?



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Stakeholder & Partner Map

 County Land Owners Association Department for Digital, Culture, Media &Sport Ministry of Housing, Comand Local Government Department for 	 Citizens Norfolk MPs munities 	 NCC Tech Partners UEA Norwich Research Park John Innes Centre 		orking Group NALEP – what else covered ? Norfolk Leaders Norfolk NCEX Corporate Board Cabinet
 Department for Transport Department for Education Department for Health & Social Care 	 AgriTech East Cambridge Norwich Tech Corridor 	 Gartner Norfolk District Councils Cambridge and Suffolk Councils 	 Economic Development – T community Libraries/ Adult Ed – Digital Skills Priva 	ech Departments NorseCare te Sector Providers
Techphobic Citizens Colour Key:	 Renewable Clean Energy OFCOM OFSTED 	LGA	Health and Wellbeing Board	MuseumsSchools
 NCC People Public Sector Regulatory, Statutory and Trade Bodies Business & 	OFSTED	SOCITM	□ N(en	CC Comms – ngagement activities, ocial media, EDP etc 25
Research Community LOW	INTE	EREST		Norfolk County Council

IMPACT

HIGH

LOW

Key partners direction of travel

The NHS:

Prior to the Covid-19 pandemic the NHS had several key strategic documents which documented their planned technological development. The national focus is via the National NHS Long Term Plan and the local focus is provided by the Norfolk and Waveney STP Digital Strategy 2019-2024.

The local strategic directions are all driven by digital transformation, which is drawn from the Long-Term Plans emphasis on the central role that technology will play in transforming the NHS, as a supporter or enabler of success.

Strategic Objectives

Our strategy is made up of five strategic objectives which set out the goals of the strategy. Each strategic objective will have a detailed workplan created once the strategy is agreed.



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Other key partners direction of travel

Other key partner organisations include Norfolk District Council's and the Police. The potential scope for integrated technological solutions is less pronounced with these key partners than with the NHS. However, the potential does exist for instance by using Microsoft Teams as a standard tool and within key areas of shared responsibility such as the planning process where we are a key statutory consultee for the District Councils.

- Plantech offers the potential for new ways of combining and communicating place data and new forms of collaborative engagement on planning proposals.
- Augmented and virtual reality offer the potential for immersive visualisations and modelling tools for assessing impact that build on the current use of Google Street View.
- Post the Covid-19 pandemic there could be a wholesale reimagining of the planning process

Potential areas where we might benefit by joining up

- Data "golden record" & master data sets (people, properties businesses)
- Data warehousing (GRID), Analytics, intelligence and visualization (Power BI, GIS etc)
- Server & Data Centre capacity, current assets and those in development could be shared to reduce combined overheads and improve resilience. "Hybrid Cloud" (good on-premise capability and commodity cloud) gives best VFM, security, performance
- Health & Care, Housing & Assistive Technology we are working across the STP on networks, data & systems integration. What data integration would be mutually beneficial – related to Housing & Assistive Technology?
- Online transactions and better linkage between county and districts to route transactions, perhaps via a Norfolk Mobile App (like Love Lewisham/ Newham etc)
- Because residents and visitors don't always know who does ²⁷ what in 2 tier.

Technology is just one part of the change process



The acceptance and use of technology in organisations

Local government organisations operate within a complex environment of multiple lines of service with different characteristics, needs and outcomes, as well as staffing, governance and funding structures. Organisations which operate within this type of complex setting need to move beyond the notion that the adoption of new technology is a simple technology-driven change but rather a complex, iterative process of organisational change that interacts with wider societal changes.

Many organisations have failed to reap the benefits of new technology due to the problem of underutilisation.

The successful implementation of technology not only depends on the commissioning of this technology it is also dependant on the need to be accepted and used by our employees, partners and citizens. Therefore, as an organisation, how do we maximise the opportunities that are available to us via the implementation and acceptance of technology enablers?

One way to realise benefits from technology is to consider the implementation of technology through a theory of acceptance and use of technology framework. The framework on the next slide was adapted from a number of prominent models with roots in information systems, psychology, sociology and innovation theories and has been utilised in numerous research pieces to better understand and formulate technological change within organisations.

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A framework for considering the acceptance and use of technology

The successful use of digital technology depends not only on the commissioning of technology itself, but the fact that it must be accepted and used by employees in order to improve performance.

Multiple public and private organisations have attempted to take advantage of the advances in hardware and software capabilities by investing in digital technology. Many however, have failed to reap the benefits of these systems due to problems of underutilization.

To succeed in our ambitions to use the significant opportunities of digital technology to transform and innovate the way that we work and how we work with partners and the people of Norfolk, then we need to consider how we also change the way the organisation, partners and citizens accept the use of technology. Without this wider change it is unlikely that we will achieve the vision that we have set ourselves.

An independent assessment of the digital maturity of the organisation, conducted by SOCITM, has shown that we are already well placed to drive forward technological change

Customer experience	Vision & Leadership	Digital people, skills & culture		
**	**	**		
Methodologies & Standards	Service design	Delivering Digital		
金金公	金金公	金金公		
Digital systems	Data & analytics	Technology		
***	***	***		

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This assessment is confirmed by our recent success in being named 'Digital Council of the Year 2020@' at the Connected Britain awards

Building on our successes –

key priorities going forward



Our key priorities moving forward

Our work engaging with departments tells us that our focus should be on:

- Improving business practices: with a key focus on continuing to drive forward the smarter working agenda and developing accurate, realtime operational management information. The new HR and Finance system will be a key element of this, along with RPA, Power Apps and the wider Apps strategy
- Data: making sure that we get the best out of the data we own and make sure it integrates effectively with the wider system. Building on the success of the Vulnerability Hub, the Local Outbreak Management System and the Norfolk Office of Data Management
- Digital skills: the technology framework indicates how key this is to success and so the continued skills development of officer, members, citizens and business will remain a key focus. We will build on the success of our Teams rollout and bespoke training for social workers. The technology acceptance framework identifies this as a key activity to achieve success

- Partner Networks: will remain integral to our plans moving forward across all departments. Working in partnership to improve data flows and technological interoperability will support further integration with NHS partners, District Councils and Norfolk Constabulary. We can use our key convening powers to build system and network capabilities in Norfolk
- Key service issues: will remain at the forefront of our activities, making sure that the right skills and infrastructure are in place and that the right technological solutions are identified to support key service requirements. Already identified issues are:
 - the 2025 switch off of analogue phones
 - the need for a new pension administration and pension payroll system

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Our key priorities moving forward

Our framework for the acceptance and use of technology identifies several key priorities that will underpin any successful strategy implementation:

- **Reducing digital exclusion** to improve skills and opportunities and to increase the uptake of digitally provided services (see next slide for details).
- Improving digital skills to build confidence and acceptance of technological change. This is a driver for success and covers staff, members, citizens and businesses. It is also linked to reducing digital exclusion

A key action to achieve the above is developing our partnership with Microsoft to drawn as much resource as possible from their Get On 2021 programme to Norfolk (see the Digital Skills Learning Pathway slide below for full details of opportunities)

 Horizon scanning to identify new technology and fully understand potential opportunities to give realistic assessments of the benefits and use for NCC A key action will be to continue a rolling analysis of emerging technology via active engagement with technology consultants like Gartner, Microsoft and GO Sciences Emerging Technology Group to identify potential new opportunities at the earliest point and to assess when NCC should engage more actively with these technologies.

- Staff and citizen engagement to build a positive story around technology enabled change and to gain the most from social influence, the benefits of technology to enable good outcomes and to enthuse digital skills development
 Key actions will be driven by elected member and the executive leadership leading by example and embracing new technological solutions and smarter working practices. We will also look to develop an internal tech champion network building on the success of Adults ASTEC group, Children's Tech group and CES digital evangelists.
 - Digital infrastructure to support organisational change and the wider economy of Norfolk and the skills to exploit it – working with care providers to get the broadband and Wi-Fi strengths they need



Digital Exclusion



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Digital Inclusion:

This digital strategy and roadmap supports the organisations aim that every Norfolk resident should have the ability to take full advantage of the opportunities and benefits of accessing online services and harnessing internet technology. Key to this is the continued focus on improving digital infrastructure and skills.

Digital Assistants and Safe Havens

Are one of the ways that digital exclusion can be reduced by providing a network of locations that provide digital access, support and a safe environment to access services electronically.

This work will focus on developing the Assisted Digital offer in libraries to provide a private space for those without access to digital technology to access video call technology

Digital Engagement and Transparency

New technology offers an opportunity to engage with Norfolk residents in new and more inclusive ways. To offer a voice to a wider representation of our citizenship and develop better services that are more responsive to need.

To be a more transparent and open organisation that supports co-production, collaboration and democratic accountability. To be an organisation that supports a culture of openness by default



Digital Skills Learning Pathway

Digital Literacy	Literacy Microsoft 365 App Training			Master critical soft skills	Continuing your Learning	Cloud Fundamentals		
Learn how to effectively use devices, software, and the internet to collaborate with others and discover, use, and create information. Click <u>HERE</u> to visit the site.	Quick Start Get Work from	organisations get mo	ave Share & Collaborate rosoft 365 Features	Hone critical soft skills from building emotional intelligence to effective listening and the ability to persuade with Linked in Learning	Learn new skills and discover the power of Microsoft products. Click <u>HERE</u> to continue your learning journey.	your a	tart your career and demonstrate achievements through industry- gnised Microsoft certifications	
Work with Computers	Qutlook	Quick Start Manage email Calendar	Set Up & Customise Create and send email Organise your inbox	Developing Your Emotional Intelligence Building Resilience Embracing Unexpected Change	Introduction to Cloud for Everyone Cloud Concepts		Azure Fundamentals M365 Fundamentals	
Access Information Online	w	Quick Start Format Text	Welcome to Word Write & Edit	Critical Thinking for Better Judgment and Decision-Making Why Trust Matters	Accessibility Fundamentals Enabling Digital Transformation		Dynamics 365 Fundamentals	
Participate Safely and Responsibly Online		Layout Pages Quick Start	Save & Print Print & Share	Teamwork Foundations Communication Foundations Effective Listening	Al Business School Introduction to Power Bl		Power Platform Fundamentals	
Create Digital Content	Excel _	Enter & Format Data Troubleshooting Quick Start	Import & Analyse Data Formulas & Functions Collaborate & Share	Persuading Others Writing in Plain Language	Fundamentals of Network Security		Data Fundamentals Al Fundamentals	
Collaborate and Manage Content Digitally	PowerPoint	Slides and Text Print and Present	Slide Design Animations / Multimedia	Banish Your Inner Critic to Unleash Creativity	Fundamentals of Networking Guide to Sustainability			
		More Microsoft 365	Training		Learn more about: <u>Azure Microsoft 365</u> Dynamics 365 Power Platform		36	

More

Teams

SharePoint

One Drive

OneNote



Dynamics 365 Power Platform or <u>browse all</u>

Microsoft

Cyber security



Cyber Security

- The move to more digital provision of services and flexible ways of working are a cornerstone of the coming digital strategy and roadmap.
- The cyber threat to data and the services that we provide is real
- NCC is committed to having the appropriate cyber security measures in place to retain the trust of Norfolk citizens in our ability to provide robust and safe online public services. And in our ability to safeguard the data we hold on Norfolk and its citizens
- The digital strategy and roadmap supports this commitment by making sure that all new digital services have security built in by design and by moving to new digital systems and approaches we mitigate against the risks posed by unsupported old networks and legacy systems



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Developing technology specific road maps till 2025



Developing technology specific Road Maps

IMT has commissioned Gartner, an internationally renowned research and advisory firm to support the development of detailed roadmaps in **12 key technological areas** that are split into **4 key themes of Infrastructure & Operations, Cyber Security, Applications and Data & Analytics**

- Identity & Access Management
- Data Centre Infrastructure
- Data Management
- Collaboration & End User Technologies
- Cloud & Edge Computing
- CRM Strategy & Customer Experience
- IT Operations & Cloud Management
- Data Analytics & Artificial Intelligence
- Applications Platforms, Architecture & Integration
- Security Management Programmes
- Agile Software Development & DevOps
- Security Technology, Infrastructure & Operations

The timeline for developing these Road Maps is on the next slide



Developing technology specific road maps

This timeline shows the planned work cycle for developing these key strategic documents



Identity & Access Management	Data Centre Infrastructure	Cloud & Edge Computing	IT Operations & Cloud Management	Security Management Programmes	Security Technology, Infrastructure & Operations
	Data Management	CRM Strategy & Customer Experience	Data Analytics & Artificial Intelligence	Agile Software Development & DevOps	
	Collaboration & End User Technologies		Application Platforms, Architecture & Integration		

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Identity and Access Management (IDAM)

High Level Strategy

42 November 2020

version 1.2

HLS Template 1.0

Identity and Access Management (IDAM)

The county council needs to manage access to information and applications across a number of internal and external systems. We must provide controlled access for an increasing number of identities both internal and external to ensure both security and data integrity are maintained.

Therefore we need to ensure we manage four key components:

authentication	authorisation	user management	directory services (aka central user repository)
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Technology

Microsoft Active Directory Microsoft Azure Active Directory ADFS

Microsoft Business to Business (B2B) Microsoft Business to Customer (B2C) Sailpoint

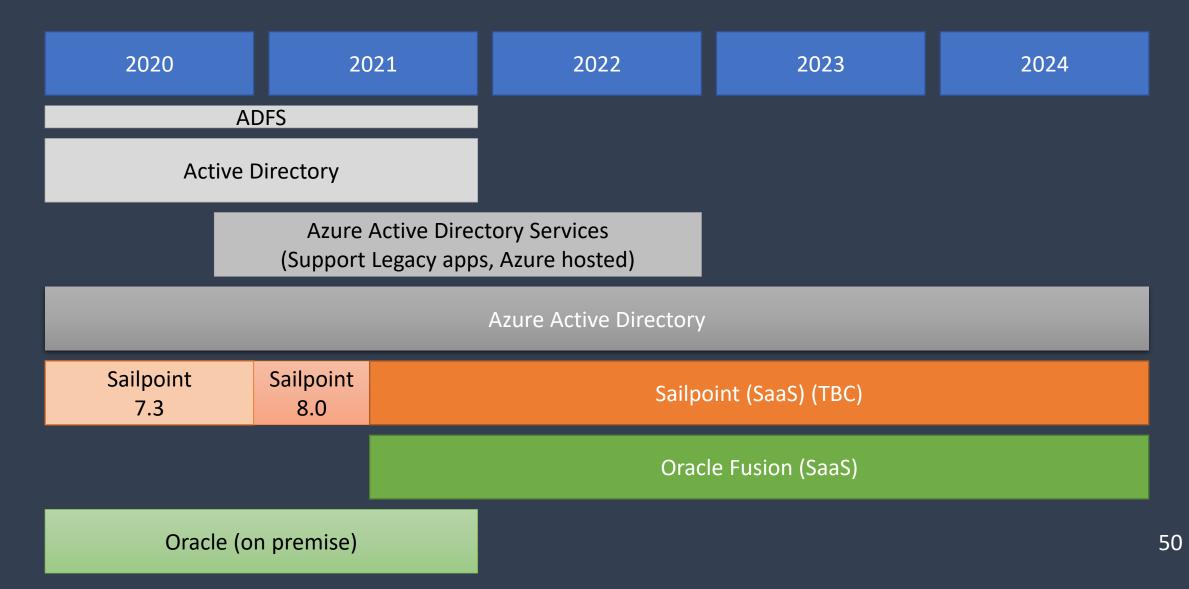
Target Systems

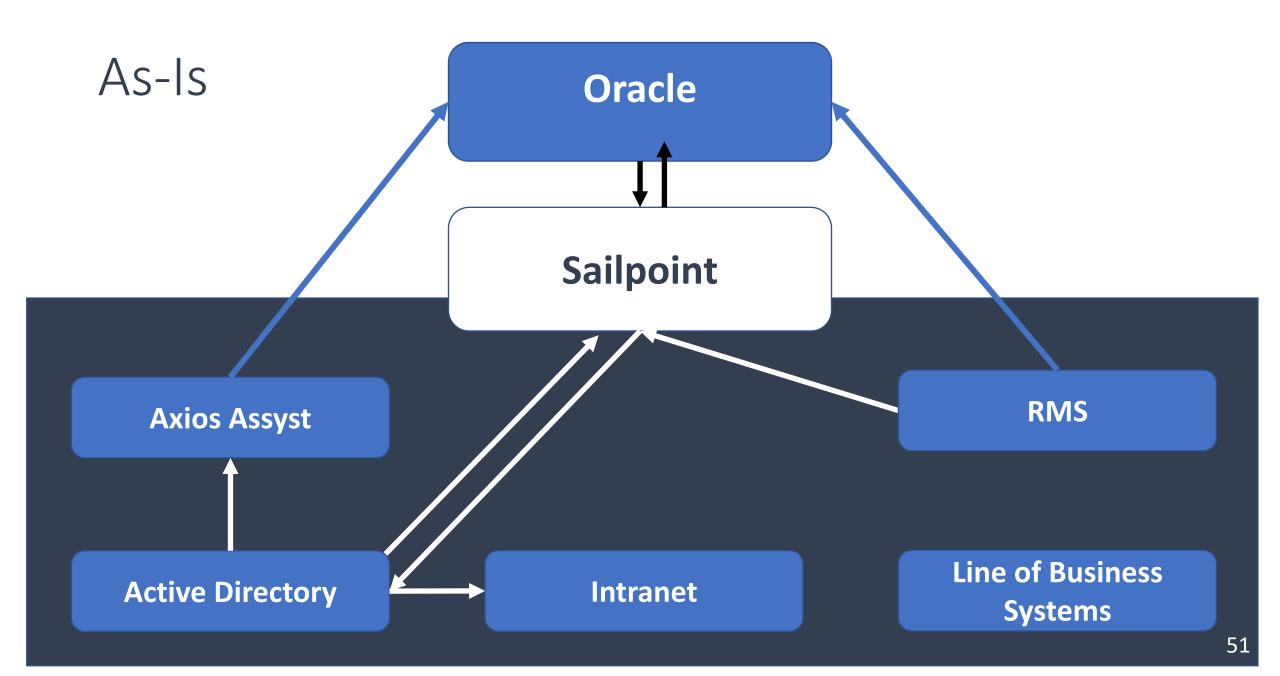
Customer and Partner Facing SystemsLine of Business (LOB) Applications e.g.Oracle FusionLiquidlogic CloudCRMAssystSitecore

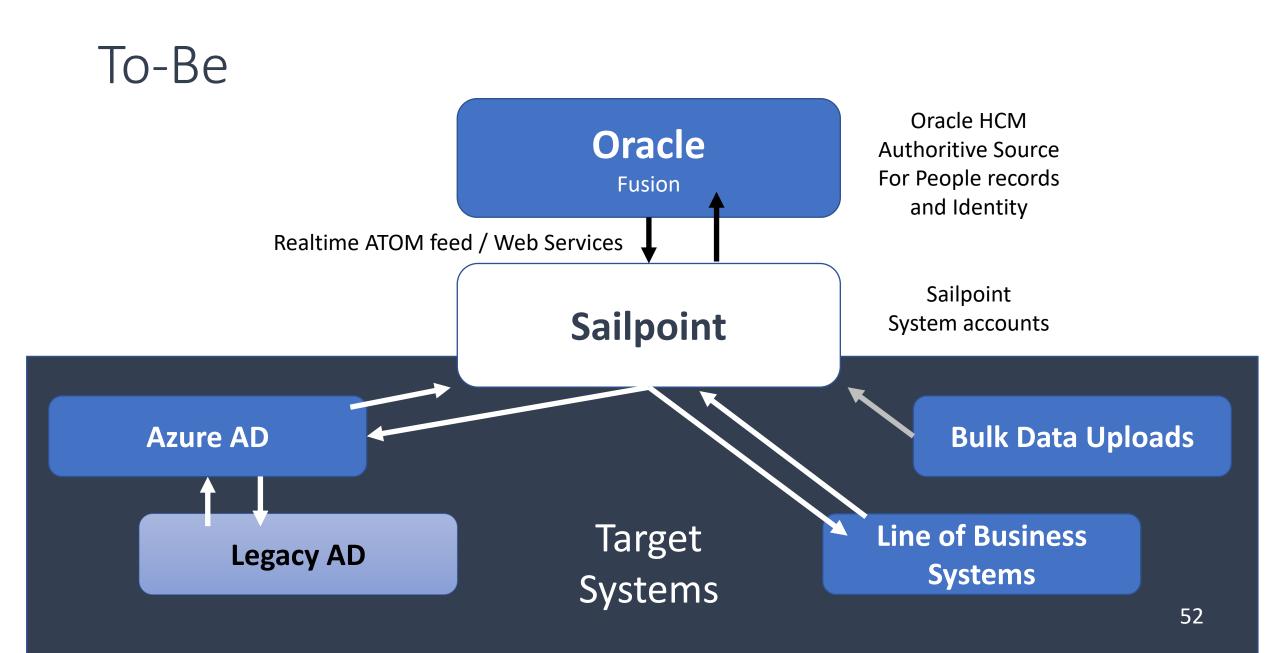
Processes

Joiner, Mover and Leavers Audit and compliance Internal and external identities Partnership working Authentication / Verification Authorisation / Validation Identity management Directory service

IDAM Roadmap







What this strategy means for you

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Staff and Managers

Key activities include:

- Digital Skills Training
- Bring Your Own Device Support
- Smarter Working Programme
- GRID & PowerBI for internal data analysis
- Norfolk Office of Data Analytics (multi-agency)
- Robotic Process Automation
- Power Apps development work
- STP Digital Programme (NHS & care integration)

Key benefits for you include:

- You will have the right kit and equipment to do your job
- Our workplaces will evolve to reflect new ways of working and focus on supporting collaborative and creative activities
- Systems that support you to provide a better service, in more flexible ways and the skills to use them
- Automated internal processes that are online, self serve and available at all times
- Better use of data to help inform the decisions you make and the tools to do this, such as Power BI
- Repetitive tasks will be automated to free up your time to do tasks that matter and add value to the people we serve
- Improved working with our partner organisations via data that can be accessed across organisations and technology that support collaboration rather than hinders it.

Elected members

Key activities include:

- Digital Skills Training
- The Digital Strategy and Road Map
- Horizon scanning for new opportunities
- Technological roadmaps that will support the organisation over the next 5 years.
- Development of a "bot" to help residents & businesses access improved connectivity.

Key benefits for you include:

- You will have the right kit and equipment to support your communities
- A digital skills offer that allows you to get the best out of your technology
- Improved access to data to improve decision making and scrutinise organisational activity
- A more effective organisation that exploits technology for the benefit of the organisation and the community we serve
- An organisation that is at the fore front of technological engagement and continually looking for new opportunities to enable the key changes that our organisations strategic vision requires to support inclusive growth and our four core principles
- An organisation that uses technology to enable innovation in practice and service delivery

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Citizens of Norfolk

Key activities include:

- The Citizen Experience Strategy
- Improving fixed and mobile network coverage
- Improving joint working across Norfolk Public Sector Organisations.
- Improving staff and community digital skills to get the best out of the technology available
- A clear focus on reducing digital exclusion

Key benefits for you include:

- You should expect a quality experience every time you interact with us
- More services, information and advice will be available for you to access online and at your convenience
- Our services will be more responsive and flexible as our staff move to smarter, more flexible and remote working models
- You will get better broadband and mobile
- You will be able to access our services in multiple ways that reflect busy, modern lives
- The delivery and development of services will be customer led
- We will endeavour to keep things as simple as possible
- We will work with our partners to better support the Norfolk community
- We will support disadvantaged, vulnerable and digitally excluded individuals and communities to access services and build support the development of digital skills

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Our partner organisations

Key activities include:

- Norfolk Office of Data Analytics
- Improving systems & data integration with the NHS, Districts, Police, voluntary & private sector
- Improving staff digital skills to get the best out of the technology available
- A clear focus on reducing digital exclusion

Key benefits for you include:

- Working closely together this strategy will focus on delivering systems and technology that support increased interoperability.
- A clear focus on improving digital skills within our organisation and an ability to support others to develop their skills
- Improving the digital infrastructure of Norfolk, broadband, mobile coverage and the LoRaWAN network so we can all benefit
- Have workspaces where people can meet to work collaboratively and creatively to support the Norfolk community
- Key resources, such as data, can be bought together in the simplest ways possible to drive cross-organisation initiatives and programmes.



Norfolk Business Community

Key activities include:

- Improving broadband, mobile and LoRaWAN IoT networks
- Promoting the Norfolk and Suffolk Innovation Network
- Working with Microsoft to develop digital skills
- Refining our economic development offer to support new technologies

Key benefits for you include:

- We will continue to work to improve broadband and mobile connectivity in Norfolk by building on the success we have already had in improving coverage and speeds to reflect our ambition to make Norfolk the best connected rural county
- Working with our key partners, including Microsoft, we will be improving the digital skills of school pupils and the wider Norfolk work force
- We will continue to promote the LoRaWAN network which is the largest free public sector deployment of this technology in the UK and support the work of the Norfolk and Suffolk Innovation Network to exploit this technology to open new market opportunities, allow entrepreneurs to trial new ideas, lead to efficiencies and improved productivity in the ICT sector and enable tech solutions where mobile phone networks are inadequate
- Innovative economic development support around accessing new technologies
- Look to develop County Farms as a showcase for the potential of Agritech to transform a key Norfolk economic sector

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Case Studies of current and new activities

See Appendix for full details

- 5-year Customer Experience Strategy
- Digital inclusion Healthy Libraries
- Digital inclusion Video Čare phones Pilot
- Data & Analytics- Corporate Strategic approach
- Data & Analytics for Finance & HR
- Norfolk Office of Data & Analytics (NODA)
- Digital Strategy for Care
- GO Digital free business support to become more digital
- LoRaWAN largest free public sector deployment in UK
- LoRaWAN case studies inc Highways, Museums and business applications
- Schools Digital Skills
- Innovation Network Assistive Technology & Sensors
- Integrating the Fire Service

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