Information and Communications Technology Strategy 2017-2020

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Introduction

Nottingham City Homes strives to be a top ten housing organisation. To enable staff to deliver top quality services, the support that enables them to deliver must also be top quality. Information and Communications Technology (ICT) is at the heart of that support.

This strategy will ensure the ICT service is fit for purpose, helps us to achieve our corporate goals, and delivers solutions that meet the needs of staff and customers. It will ensure we have a robust approach to ICT overall, and that we maintain a specific focus on improving our mobile working for staff, and improving customer care including our self-service offer.

Through business transformation, we will then review and remap the organisation's processes to ensure that technology, where required, is at the core of service efficiency, and facilitates the delivery of excellent services directly to our tenants and leaseholders.

The information that our systems hold on our properties and our tenants, coupled with information held by partner organisations, provides a wealth of knowledge that we need to use more fully, to provide better, customer focussed and more efficient services.

The delivery of the strategy however, is not just about the technology we employ. Critical to the delivery of this strategy is the people behind its delivery. Our ICT team, our partners in Nottingham City Council ICT team and suppliers and NCH colleagues need to have the skills, knowledge and drive to achieve our strategic aims.

Context

NCH provides services in a rapidly changing world, where one of the key drivers for change is technological advancement. In recent years ICT has transformed the way we lead our lives, and the pace of change is increasing not slowing. ICT has led to new ways of working, and new ways that services can be accessed and delivered. It has created the demand for change, and it has also enabled change. It changes the expectations that staff and customers have about the services they use and the services that they expect to find at their disposal.

National Context

The Government have sought to ensure that the UK is a world leader in digital services to citizens. *"The tools, techniques, technology and approaches of the internet age give us greater opportunities than ever before to improve services. They will give us all more choice, control and information on how and when public services are accessed[1]."* Government policy builds on the Government's Digital Strategy of 2013[2] which sought to ensure that where possible services can be 'digital by default'.

Government recognises that digital services are often desired by customers as their preference, but also hold the key to delivering major efficiencies in service delivery. The Digital Strategy suggests that transactions online can be 20 times cheaper than by phone,

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[1] HM Government Policy Paper, 1 March 2017. Digital government, maintaining the UK government as a world leader in serving its citizens online.
[2] https://www.gov.uk/government/publications/government-digital-strategy/government-digital-strategy

30 times cheaper than by post and as much as 50 times cheaper than face-to-face . Not all services can be delivered in this way, and it will always be important to provide services for users for whom digital service delivery does not work for them or the service they need. However, there will almost always be an ICT component behind the services provided, even when they are face to face and in customers' own homes.

Reduced budgets as a consequence of government policy (for example the current 1% rent reduction policy), create additional drivers for the efficiency savings that digital service provision seeks to achieve.

Our customers will increasingly experience high quality digital services in many other aspects of their lives, whether those are public or private services, such as those provided in the retail sector for example. NCH seeks to ensure that the on line services it provides match the quality of experience that citizens will find elsewhere.

Local Context

NCH delivers services in partnership with a range of other organisations in Nottingham. All of these service providers are also embracing the same ambitions to provide better services, and increasingly more accessible services, through online portals. The challenges of budget reductions are also shared across service providers.

The City Council, working with partners through One Nottingham, the Strategic Partnership for the City of Nottingham, developed The Nottingham Plan - The Strategic Plan for the City to 2020 (www.onenottingham.org.uk/?page_id=4198) and this includes ambitious targets for improving services and the quality of life for local residents.

Nottingham also seeks to reduce the 'digital divide' – those citizens who are unable to access computer or internet based services – to ensure that everyone who wishes to can access services on line, a city with digital inclusion at its heart. The focus of Digital Inclusion activities is a key complementary but separate area of work and does not form part of our ICT Strategy.

It must be acknowledged that previous investment in ICT has not always delivered the transformation in service provision that staff and customers might expect. This has frustrated enthusiasm for service delivery changes, and held back elements of business and service transformation.

The new Business Transformation team within NCH brings together our ICT, business improvement and corporate project management resource to improve the effectiveness of our continuous improvement activities, including successful delivery of ICT projects. This team is supported by our partnership with NCC ICT team who provide technical and infrastructure support.

Vision

NCH's vision is to create homes and places where people want to live.

Our Corporate Plan 2015-18 sets out our direction as a company, our plans and our priorities.

The plan is ambitious - our aim is to be a 'top 10' performing housing organisation by 2018 and a similarly ambitious aim will be stated in our next Corporate Plan.

NCH's Corporate Goals

- **To be a first class housing organisation in the eyes of our tenants and leaseholders**

- **To be a major player in transforming the quality of life in our neighbourhoods**

- **To be a great place to work, widely respected as an efficient and professional organisation**

- **To generate new business, securing additional income to reinvest in Nottingham and our communities**

The achievement of many of our Corporate Plan objectives and performance targets rely on support from current and future technology. Information Technology is one of the key enablers working cohesively with other organisational strategies. ICT works in conjunction with our processes, our people and work locations to shape the overall working environment we provide to enable us to deliver our services for our tenants.
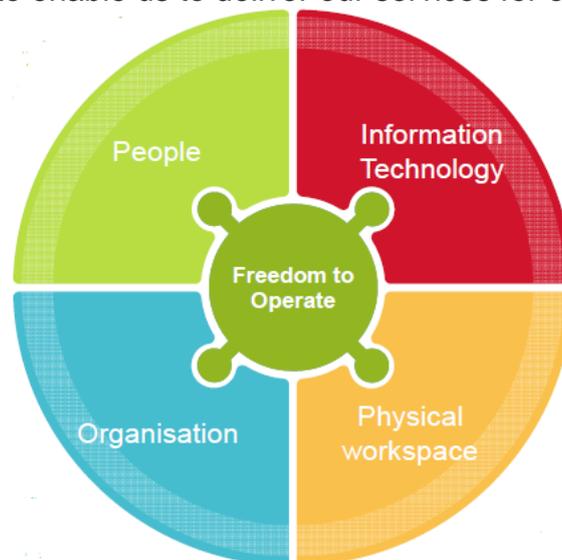
ICT systems play a key part in supporting the NCH group to deliver its vision and goals at every level of the company. ICT must help support a culture of continuous improvement, supporting new ways of working and always helping to deliver better services. How this will happen is set out in more detail in the section 'Delivering the Strategy'.

Our vision for ICT is to:

- provide an excellent, customer-focused ICT service, supporting all staff to have the ICT functionality they need to deliver services as efficiently as possible

- enable our customers to access the information they want, and to interact with us simply and effectively

- ensure ICT is used as a strategic enabling tool to improve services and deliver business efficiency

- have robust security measures which protects NCH systems and the personal data we hold.

NCH needs more than ever before to take a joined up view of its services, underlying processes, systems and data. This is required by modern expectations from customers and staff of 24/7 real-time data services. **Only one version of the truth will do.** Siloed thinking, application proliferation, data duplication – 'one application per team or department' will not work anymore. A designed approach based on delivery of customer facing services is needed with ICT services complementing other aspects of organisational development and customer service.

Our strategic direction of travel for our ICT services is:

- Our interactions with customers, where desired, will follow a 'digital by default' approach, both to increase satisfaction and to reduce transactional costs. Self-service options will be actively promoted
- We will use technology to deliver personalised, relevant services via, or linked to our Customer Relationship Management (CRM) platform and use 'customer insight' data to realise better customer engagement
- Our customers will be provided with appropriate options to access our services how and when they prefer
- We will maintain and deliver high levels of service availability, ensuring that self-service systems are available 24 hours a day
- We will engage with teams across NCH to ensure that employees are supported to make the most of digital transformation
- Our approach will enable employees to work productively, have access to the information that they need, where they need it
- We will move away from the provision of desktop PCs replacing these with mobile devices and docking stations in our workplaces
- We will design processes, systems and data to provide the ability for staff to resolve customers' issues at the first point of contact – 'right first time'
- We will develop one source of the truth - data of our customers and properties, securely held, and managed - supporting self-service for staff and customers, fully compliant with data protection obligations
- ICT will maintain a strong focus on value for money, fit for purpose technology that maximises return on investment
- We will review the systems we are currently using and rationalise where possible so as to concentrate on optimising use of core systems.

- We will move from server based to cloud based where this is the most appropriate solution for our systems
- We will keep all systems current with latest releases
- We will hold personal data securely, ensure high levels of security and business resilience in our ICT systems

NCH has rich sets of data about our services, processes, customers and stakeholders. This information will be complete, accurate, secured and maintained properly throughout its planned lifecycle. Where different applications are used by staff, data duplication, discrepancies, errors and omissions will be reconciled between systems and choices made whereby each type of data is held definitively by one system only and 'mastered' there for consistent access and use by all. The sum total of data held by all 'master' systems will then present a 'Single view of the truth' for staff working operationally and also, critically, to our customers.

Role of NCC ICT

Nottingham City Council provides services to NCH over a range of areas including ICT infrastructure, applications, security, networks and hosting. Our partnership with NCC is strategic and the Council will play a critical role in supporting NCH and this strategy:

- NCC ICT will be the first partner of choice in supporting our ICT needs where it meets both quality and cost considerations
- We will utilise the wider skills and capabilities of NCC ICT to deliver outcomes including procurement frameworks
- A service level agreement (SLA) will set out working and partnership arrangements and provision of services.

The ICT team will manage and monitor the delivery of NCC ICT services against the SLA and work as part of the joint governance arrangements contained to undertake continuous improvements and performance.

As part of the partnership arrangements with NCC we will continue to work on the provision of financial and HR systems jointly through East Midlands Shared Services.

Delivering the strategy

The priority areas of work to be delivered by the strategy are described below. Monitoring the delivery of these priorities will be via the action plan and by existing project management reporting methods.

Priority	Actions to deliver
1 Ensure our ICT service is fit for purpose	• Recruit resources for the ICT and Business Transformation team.

	• Develop a team of motivated, inspirational and effective ICT professionals who understand the business
2. Ensure our core ICT systems and architecture are right	• Assess a structured process for linking systems and data and plan for moving progressively to this more flexible, efficient and capable approach • Keep core systems, hardware and, platforms current and use of up to date office applications such as MS Office 365 • Audit and review core systems (e.g. Oracle, Northgate, etc.) • Clearly document all systems' changes • Maintain register of current configuration and network
3. Deliver reliable mobile working across NCH	• ensure IT architecture provides reliable mobile working across the company • maximise reliability of mobile connectivity across the city • ensure all NCH workplaces have connectivity which facilitates mobile working, including replacing desktop PCs with docking stations • implement ICT solutions which best enable home working • determine the most appropriate mobile devices for colleagues dependent on their role, • review business processes to maximise the benefits of mobile working
4. Customer Relationship Management	• Upgrade to Cisco VoIP telephone system • CRM Software – development and integration with other key systems • Develop customer self service functionality
5. Maintain security of personal data, systems and business resilience	• ensure access to our systems and data is only provided to authorised personnel • security protection of our network is given paramount importance and systems are upgraded and patched to enhance this protection • data and systems are regularly backed up and kept secure • ICT business continuity plan is in place to ensure service delivery is not disrupted

Technology Infrastructure

A robust technology infrastructure is needed to deliver this strategy and achieving Nottingham City Homes' ambitious target of being one of the top 10 best performers in the industry.

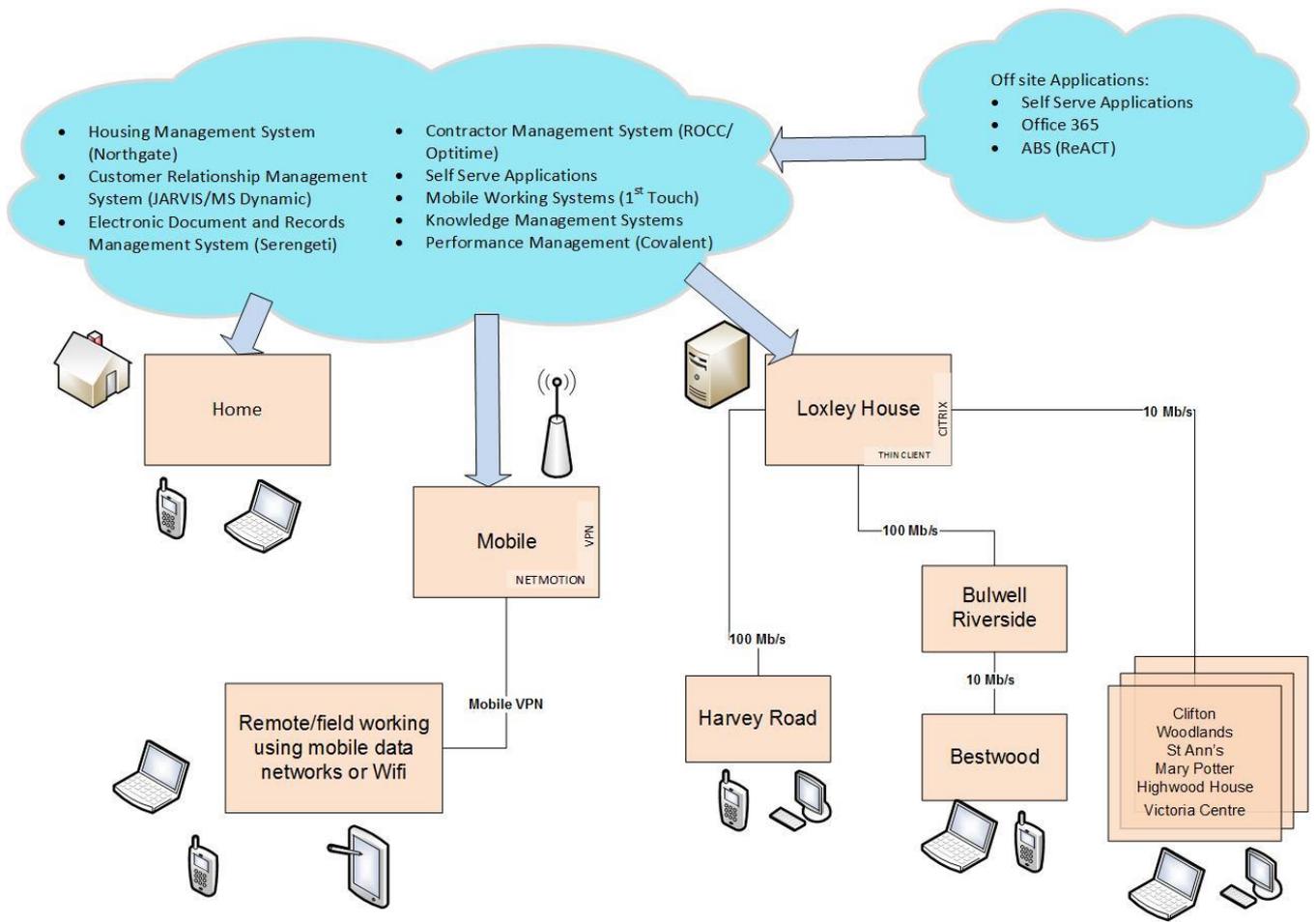The infrastructure is to be based on evolving as well as proven technology.

User Access – Provide a range of devices to meet user needs using consistent and flexible management tools to ensure effective control of all ICT assets.

Network – All sites to have a robust and resilient connectivity with never a single point of failure. Working with NCC and external providers to deliver a converged fixed and mobile phone networks.

Security – Cyber threats are becoming more prevalent. The security of our network and our data has to be paramount. Working with NCC, we will ensure that access to our network is limited to authorised users; and tools and processes to prevent any breaches are prioritised.

Virtualisation – Working with NCC infrastructure standards, we will look to virtualisation of our applications. Use of cloud and hosted applications, accessed by appropriate devices, will generate substantial savings in replacement and maintenance of PC population. The security and integrity of systems will be enhanced as will be support calls.

Applications Rationalisation – Over the lifetime of this strategy a review will be undertaken of the existing portfolio of applications being used by the business. A rationalisation and consolidation exercise will ensure that we will maximise use of core applications and modules and discontinuing duplication and overlap where possible. We will re-engineer processes where needed to conform more to the industry standards rather than having to utilise bespoke software. Bespoke work will be by exception rather than default to speed up delivery and to minimise business risk by use of industry accepted processes.

Off site Applications:
- Self Serve Applications
- Office 365
- ABS (ReACT)

- Housing Management System (Northgate)
- Customer Relationship Management System (JARVIS/MS Dynamic)
- Electronic Document and Records Management System (Serengeti)
- Contractor Management System (ROCC/ Optitime)
- Self Serve Applications
- Mobile Working Systems (1st Touch)
- Knowledge Management Systems
- Performance Management (Covalent)

Home

Mobile

VPN

NETMOTION

Remote/field working using mobile data networks or Wifi

Mobile VPN

Loxley House

CITRIX

THIN CLIENT

10 Mb/s

100 Mb/s

100 Mb/s

Harvey Road

Bulwell Riverside

10 Mb/s

Bestwood

Clifton
Woodlands
St Ann's
Mary Potter
Highwood House
Victoria Centre

ICT Management Structure

The governance of this strategy will be managed and owned by the ICT Programme Board. The Head of Business Transformation will be the senior management lead for the strategy. The ICT Manager will lead the ICT activities in the action plan which will link the strategy, architecture, governance and delivery, whereas the systems and infrastructure services will be sourced through an agreed SLA with NCC. ICT projects and innovation will be driven alongside other corporate project by the BT Portfolio Manager, within the Business Transformation team.

Head of Business Transformation

Responsible for
- ICT Strategy and Policies
- ICT Budget, Assets and Resources
- NCC SLA

ICT Manager

- Core systems & applications Support, Training and Development
- ICT Standards & Compliance,
- Systems specifications
- Major upgrades

Business Transformation Portfolio Manager

- Review of Core applications
- ICT solutions and Projects
- Re-engineering and Innovation

NCC ICT Services

- Service Desk
- Infrastructure & Network
- Hardware
- Joint working/initiatives

Existing ICT Budget

The total annual ICT revenue budget is £2.1m. This consists of a planned annual maintenance and support budget of £400k per year with an additional £1.2m per year for services from NCC. The remaining annual revenue budget is for internal staffing costs for application support and infrastructure at £500k per year.

There is an allocation of £800k within capital reserve identified to invest in new projects, upgrades and innovation.

In order to achieve the ambitious programme of step changes being proposed in this ICT Strategy in future years an additional £500k capital investment will be required. This additional investment will be funded by business savings and efficiencies from the introduction of technology solutions, and will be self-financing.

Monitoring and reviewing the strategy

Progress against the strategy will be reviewed using the Action Plan. This will allow us to monitor achievements and performance against specific targets where applicable.

The action plan will be updated regularly by the action leads.

Most of the work described in the strategy will be project-managed as part of the overall ICT programme and reported to the appropriate Board(s), as per the Project Management Framework.

This strategy shall be refreshed regularly to ensure that it continues to meet the changing needs of the business, stakeholders and customers.

Key risks

Inadequate ICT staffing resources are a major risk that will prevent the development of new projects.

Outcomes of ICT projects are not realised.

Pressure for siloed / piecemeal developments can lead to a disjointed data and systems architecture hampering overall effectiveness in terms of processes, business intelligence and value for money.

Action Plan

In consultation with business and NCC, an action plan will be developed and will be kept updated with progress monitored and reviewed quarterly. Indicative milestones are shown in the attached appendix 'Milestones', and managed through the ICT Programme Board and EMT.

Appendix: Milestones

ICT Strategy Milestones (indictive)

	2017	2018	2019 / 20
Customer Interaction	Jan - July New CSC Telephony; May - Aug CRM Phase 2; Aug - Mar CRM Phase 3	CRM Phase 4	CSC Telephony Review/Upgrade; CRM Phase 5; CRM Review
Technology	Apr - May New ROCC Server; Mobile Devices – Construction Repairs and Maintenance	Server/Infrastructure Review; Mobile Devices – wider deployment	Next Generation Mobile Technology
Applications	Feb – April Northgate Upgrade To v6.15; Feb – Dec Mobile Working – Construction Repairs and Maintenance; June – Dec Nottingham on Call Replacement System; August – April EDRMS Phase 3 – Construction Repairs and Maintenance	Northgate Rents Module Configuration; Feb – April Northgate Upgrade To v6.16/8; EDRMS Independent Living; Northgate Voids Module Configurations; Mobile Working – Phase 2	Core Applications Review; Mobile Working – review and upgrades

Appendix: Glossary of terms

Back-office system

An ICT system that is used or intended for purposes other than facilitation of direct customer service – e.g. Northgate Housing or our Finance System. Front-office systems by contrast are used in such circumstances and a good example

Bonitasoft workflow

Used by Serengeti to handle document-related workflows. A standalone application which can be used to provide a means of overseeing company-wide / process-wide business workflows.

Cloud

This is the term used to describe externally hosted systems accessible normally through a secure web access. Encourages mobile working, and removes reliance on internally hosted hardware and infrastructure.

Cisco VoIP

NCH uses a digital telephone system that carries calls internally over the same data network that our computers use. Voice over IP = VoIP. This is efficient and flexible in that separate wiring to every desk is not required for telephones. It also allows for easier integration between software applications and the telephone system.

CRM

Customer Relationship Management – places the customer as central rather than the company's services or products. Customer information is held and presented in such a way that staff can access it easily and in structured form. Our CRM system is Microsoft Dynamics

CRM Portal

Web based access for CRM.

Digital by default

An approach (directed by Government for the public sector) whereby the default position is to develop new and existing services to be available for self-service on-line by customers, rather than building such services to be accessible only via face-to-face, telephone or email interactions with staff. The intention is to offer greater convenience and faster turnaround for customers and lower costs/higher performance for organisations.

DRS

Refers to OptiTime, a scheduling engine that is currently integrated with ROCC/Northgate to enable efficient appointing of Repairs visits.

First Touch

This is a product used to present data on to our operatives hand held devices and laptops. It is an interface and forms system that allows greater mobile working.

Interfaces

An interface is a means by which an ICT system allows access to its data or to processing functions.

MDM

Master Data Model. Northgate is our master system for Property and Tenant records.

Northgate

This is the main housing management system. This keeps records of our tenants, tenancies and properties and the processes to manage them. It is used to support everything from managing the tenants' waiting list to former tenant arrears.

Office 365

This is Microsoft's newest offering to update its office based programmes like Word, Excel. It differs from the old suite of programmes as it is "cloud" based and encourages greater collaborative working.

Optitime

This is the job scheduling system used with construction, repairs and maintenance.

Oracle

There are two products delivered by Oracle. Oracle is a proprietary database format that is used by many of our core systems (e.g. Northgate). In addition Oracle is the main software that is used to run the finance and human resources systems. This is shared between NCH, NCC, EMSS and Leicestershire County Council (LCC). EMMS is a shares services organisation (jointly run by NCC and LCC) that processes our payroll and supplier invoices.

Platform

A technology choice upon which solutions are developed. For example, PCs: MS Windows, databases: Oracle and SQL, mobile phones: Android, Networking: ethernet and TCP-IP, telephony: Cisco Voice over IP (VoIP) etc.

ROCC

Main system used by construction, repairs and maintenance which tracks repairs job costing and materials.

SaaS

'Software as a service' – the provision of software functionality / applications to companies/staff where the hosting of the application, licensing, maintenance, development, backup etc. is handled by a 3rd party service provider. Office 365 is an example of a SaaS product.

Serengeti

This is our Document Management System (EDRMS). Tenant and property files are scanned and stored using his software. In addition, this provides a structure for keeping, sharing and accessing our corporate documents.

SOA

Service Orientated Architecture – this is an approach to structuring the integration of data between systems, ensuring that the correct information is held in the correct place and available to the correct user/service.