

REPORT OF HEAD OF TECHNOLOGY AND DIGITAL

ICT STRATEGY 2022-2025

Purpose of the Report

- 1) To seek approval of the ICT Strategy 2022 – 2025

Information and Advice

- 2) The ICT Strategy has been drawn up with a view to linking to the 13 themes of the council plan. While ICT does not necessarily have a direct impact on some of those themes it will underpin all of them. This will be either by supporting the people working in the areas covered by those themes or, providing the applications upon which data is collected and processes performed to enable the business areas to function.
- 3) To ensure that consideration was given to all areas there has also been consultation with CLT plus departments, with workshops undertaken with nominated representatives. This was undertaken to agree the areas to focus on and the approach to developing an adaptive strategy which, will be reviewed regularly with departments. This will mean that a yearly action plan will be produced to reflect the priorities of the council within the overall intent of the strategy.
- 4) The ICT Strategy 2021-2024 will replace the previous plan for 2017-2020. The overall emphasis of the 2017-2020 strategy was on several key themes. They included the following:
 - A. Smarter working; included the delivery of Office 365 functionality such as MS Teams in conjunction with flexible office working and delivered a 7 to 10 desk to staff ratio. In addition to this, live broadcasting of Council meetings was achieved during the first Covid lockdown period which provided a baseline for further use of these technologies. We have provided the public with virtual access during the year to various meetings, including committees, the mineral plan, and fostering and school admission appeals, based around on our Office 365 products. This platform also supported Homeworking.

- B. Health and Social Care integration; a large amount of collaboration with the Health Authorities has delivered collaborative technologies where significant savings for both Nottinghamshire County Council and the Health Authorities have been achieved, e.g. through streamlining hospital discharging.
- C. Business Intelligence; by utilising technology, data analysis and interpretation was achieved in ways it had never been feasible before. An example of this were the rapid actions which were possible during the Covid 2020 lockdown where capacity of many different types of resources was visualised. This aided the Authority in many ways ranging from PPE management to Social Care delivery. Our use of Agile product deployment was used to deliver a quick and adaptive community support platform to further enhance collaboration with Health agencies.
- D. Cloud Services; the migration out of the County Hall data centre is likely to be completed during 2021. Many deliverables which have been achieved during the previous 4 year period could not have been done without the utilisation of Cloud technologies. Whilst migration to Cloud services is still ongoing in 2021 many benefits have been reaped already. One recurring problem relates to the legacy of older systems that were bespoke or customised to fit within the Council: whilst these have been successful in their own right, helping to run services for departments for many years, there are difficulties now transitioning them to a modern cloud based infrastructure.

The Key Themes & Business Drivers

- 5) The Key Themes & Business Drivers over the next 3-4 years will build on the work already outlined above.
 - A. Speed of change; In addition to that work it is recognised that the Covid19 pandemic has had a significant impact on Technology and Digital. Some have been positive, such as the speedy adoption of Teams functionality. The associated benefits of enabling people to work from anywhere plus, supporting the estates strategy, would not have occurred at the speed it did had it not been for the situation that faced the Council. While that “critical emergency” pace could not be maintained, there is a desire to build on that level of acceptance of change, to support our citizens in the most effective and efficient manner, while recognising the balance to be made against risk of service outage.
 - B. Technical Debt; There has also been some impact which, relate to the delay in technological upgrades, as ICT focused on maintaining service delivery for front line services. This has meant the technical debt that would have been addressed over the course of the pandemic has built up to a level that is impeding the speed and progress of the council in deploying new technologies to improve services.

- C. Council Plan; The strategy has been constructed following consultation with all business areas of the council looking to underpin the improvements in services that those areas are working to achieve. In addition, the Council plan's thirteen themes have been used to determine how the activity of ICT will support them. So, while some of the ICT themes sound technical, they are constructed from the perspective of supporting the Council plan which includes, reuse and integration to support digital ways of working, and putting the user at the heart of developing services and associated systems.
- D. Sustainability; Most of the areas will be familiar from the previous strategy as this strategy builds on that. The areas that are new relates to the carbon footprint of ICT plus, the potential to enable departments to undertake low or, no code development. The areas that have accelerated in size due to Covid-19 are Technical Debt plus, the level of project-based activity.
- E. Common Strategic Areas; The response to the Council Plan gave a set of deliverables and dates in the form of matrices for each council theme. The common areas from those matrices can be categorised in the following way:-



These can be grouped further into the following categories and direction of travel:-

- 1) **Cloud based technologies**, to support a location agnostic workforce and make systems evergreen in relation to upgrades and support.

- a) Move to cloud-based technologies when upgrading or replacing line of business applications onto Software as a Service (SaaS) e.g. Microsoft Office 365 which includes Teams. This will keep the applications up to date, performant and in support so allowing resources to concentrate on developing services.
 - b) Scalable services which can be provisioned through Cloud based technologies such that; if demand peaks the services can expand to meet that demand and equally, if services reduce, they can match that reduction so saving on processing power and cost. Also referred to as composability.
 - c) A change in cost profile from spikey capital spend every 4/5 years to an increase in revenue to reflect the continuous improvement and support.
- 2) **Technical Debt**, which makes systems difficult to use, unsupported or, vulnerable to cyber-attack.
- a) Cloud based technologies can also alleviate a significant proportion of technical debt however, there will also be a need to reduce the number of systems where they carry out common functions or, have fallen out of use.
 - b) Upgrade elements of the infrastructure that cannot be virtualised currently.
 - c) Train staff in the new technologies to ensure that the environment is sustainable.
 - d) Building Roadmaps for all systems to enable the management of systems and when they will need any significant upgrades, patching or, development.
 - e) By deploying no or low code solutions, the level of knowledge that needs to be retained by specialist skilled staff can be reduced.
- 3) **Safe** and **ethical use** of systems and **data (Integration)** to improve services to citizens
- a) Review the options to enable the Authority to become an integration layer between systems in the Cloud and its partners so enabling the linking of systems and data in an ethical manner and providing better services to citizens e.g. The Brokerage for Adults exiting NHS care.
 - b) Establish how to provide an Identity and Access Management System (IdAMS) to enable the transparent passing of citizens to the correct service provider.
- 4) The development and continuous improvement of **Digital Services** to put the user at the centre of what we do.

- a) Develop systems in conjunction with service users to support Digital ways of working and introduce automation to reduce the burden on citizens and staff.
 - b) Improve the workflow of systems and processes e.g. automation for the starters and leavers process.
 - c) One electronic citizen identity to interact with the Authority and its partners (IdAMS).
 - d) Develop systems to reduce their overall costs of maintaining and servicing systems.
- 5) **Reducing ICTs environmental impact** and look to move to reduce our carbon impact to zero by 2030.
- a) The Authorities Cloud provision is in Microsoft Azure who have committed to being carbon negative by 2030.
 - b) The Council's disposal contract reuses equipment that can be recycled and that pays for the ethical disposal of equipment that cannot be reused.
 - c) Deploy hybrid working equipment to reduce the need for travel.
 - d) Ensure carbon neutral clauses are in all new contracts for ICT supplies and services.
 - e) Scalable infrastructure to reduce energy consumption.
- 6) **Accessible services** e.g. Hybrid meetings, plus using assistive technology to support both citizens and staff in their interactions with the council.
- a) Provide multiple channels of access to facilitate access to council services.
 - b) Hybrid meetings to enable citizens to access services remotely where necessary.
 - c) Ensure staff have the software and equipment to do their job and have the skills to exploit the technology to their best advantage.
- 7) **Transparency and Governance** to enable focus on the council's key priorities and not diluting resources in a manner that obstructs delivery.
- a) Create one Digital Board for projects with a supporting Design Authority.
 - b) Create a combined set of business priorities for ICT and allocate resources accordingly working across the Council.

- c) Identify any gaps and associated funding sources to bridge those gaps.
- d) Review the ICT Strategy each year considering the business demands as they arise over the next 3 years.

Other Considerations

- 6) There are other elements that are important but capacity dictates that they cannot be undertaken immediately. These are as follows:
 - a. The ICT restructure was delivered in 2021 and has resulted in a need to move to digital ways of working supported by Agile methods. This has meant a move to a DevOps way of working and amending the ITIL processes to reflect that change. This will continue to evolve as we work through the challenges of working in this manner while looking to protect services from unplanned outages.
 - b. Customer Relationship Management (CRM) – while deploying a CRM would be helpful, currently there is not enough clarity on who would own this and how it would be deployed. Once that becomes clear then this can be revisited.
 - c. There are some Line of Business applications that will need replacing over the next 4 years due to their age, functionality and, multiple support issues. The replacement will be driven by business requirements and will conform to the strategy.
 - d. Recognising that the Council's current financial position will also limit the amount of investment that we can make in any financial year.

Reason for Recommendation

- 7) To align the output of the ICT Service with the Council's and therefore Departmental priorities.
- 8) To support the workforce in the move to new technologies and Digital ways of working.
- 9) To ensure that the council's systems are kept secure and performant.
- 10) To move to infrastructure that can support continuous development and improvement without having to continually invest in upgrades and patching of software and hardware.
- 11) To address the issues created by the response to Covid-19 relating to technical debt and prioritisation of project activity.

Statutory and Policy Implications

- 12) With security threats becoming forever more advanced the Authority needs to ensure that this is addressed first and foremost to prevent serious outages which have been highlighted in the press in recent times with such issues as hospitals being held hostage with ransomware attacks. Staying on top of security patching of software and hardware is a complex necessity. The introduction of patching windows of key systems is therefore important as staff can focus on these at the right time. This means that some customers are likely to experience some planned outages. This will be in exchange for up to date security of systems and services with fewer unplanned (and therefore costly) outages.
- 13) Given central governments push to promote digital and joined up ways of working the strategy will look to build on and adopt common digital standards given the Authority has committed to the Digital declaration.

Implications for Service Users

- Staff – The move to continuous upgrades will mean that an increased need for training which will, as much as possible, be provisioned online. However, it is recognised that for accessibility purposes there will be a need to provide a mix of appropriate training materials. In addition, we will work to include in the workforce strategy the advantages of digitalisation in relation to inefficient processes.
- Citizens – The development of services will be undertaken in a Digital manner and as such will be undertaken from a user perspective, making services user focused for Citizens to use plus, improve the interaction with partners. We will also take into consideration the equipment that has been distributed to citizens as a response to digitisation or Covid-19.
- Partners – The development of an integration platform is being specifically undertaken to enable the passing of relevant data between systems and partners to enable better, joined up services where that is appropriate.

Timescales

- 14) A one year, delivery or action plan will be delivered as part of adaptive strategy. The first of those plans to be produced before the end of March 2022 for the financial year 22/23. A new delivery plan will be delivered for each subsequent year.

Financial Implications

- 15) As the financial implications of this report are identified through each annual workplan and will be incorporated within the regular annual budget planning process.

- 16) Any additional demands that are identified as a result of service improvement or transformational activity, will follow the normal business planning process with any additional funding coming through a business case being submitted to Finance Committee in the normal manner.

RECOMMENDATION

That the ICT Strategy as outlined in this report be approved and an annual workplan be produced for each financial year from March 2022, once budgets have been agreed.

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Constitutional Comments (KK - 12/11/21)

The proposals in this report are in the remit of the Finance Committee.

Financial Comments (KRP - 12/11/21)

As set out in the report, any additional financial implications will be dealt with through normal processes if required.

Background Papers and Published Documents

- Draft ICT Strategy Spreadsheet - Confidential

Electoral Division(s) and Member(s) Affected

- All