



Information, Communication Technology & Digital Strategy 2016-2021

Empowered citizens and colleagues,
enabled by technology

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Background

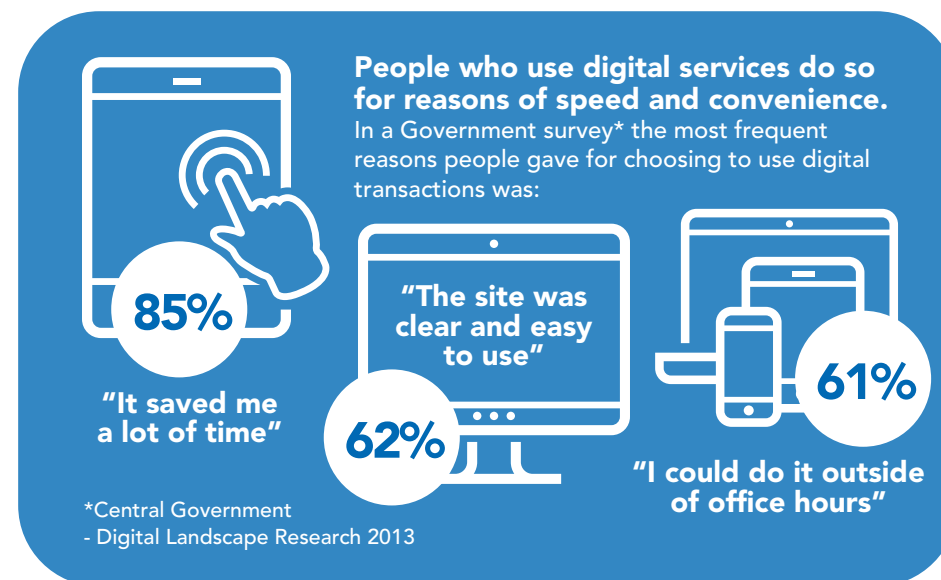
We all want to see a future council built on a shared commitment to understanding people's needs and putting them first. We can use ICT and the latest digital technology as powerful tools for understanding what people need and making their lives better and easier.

Smart use of ICTD services can help us provide effective, efficient and reliable services and the rapid growth of online shopping, mobile device use, social media and high-speed broadband all present huge opportunities. So it's vital that the council has a clear approach to managing existing ICTD work and is also ready to meet rapidly changing future needs. This means a clear fit between the council's business plan, future operating model and ICTD strategy.

The digital agenda

This 'digital revolution' is transforming the way that many people live their lives, from the way we purchase goods and services to the way we communicate with others.

There is still much to do to ensure that the use of digital services by citizens and partners is widespread and that the potential benefits are achieved.



ICTD can deliver enormous benefits for citizens, the council and its partners, including:

- Reduced costs and better value for money services.
- Greater efficiencies and better outcomes.
- Stimulating and enabling innovation and new ways of working.
- Re-shaping the relationship between the council, its citizens and its partners.
- Using social media to improve communications and partnership working.
- Accessing and exploiting a wealth of 'open data'.

Introduction

Council of the Future

The Council of the Future will be built on a shared commitment to understanding people's needs and putting them first. A major change programme across the council will be undertaken over the next four years. This programme will make it easier for citizens to access our services and the information we hold. Our future relies on how we use technology, in the pursuit of knowledge to enable better outcomes for all.



The ICTD strategy and its associated projects and programmes therefore play a key role as 'enablers', supporting the way in which the council will provide services in the future, balancing the need to deliver short term savings alongside strategic long- term investment in technology.

Collaboration is key

The development of the ICTD strategy and supporting analysis will make the way that ICTD is provided across the council more transparent. The focus shouldn't just be technology used within the council, but also on people, communities and businesses.

As well as linking the ICTD strategy to our council business plan, we'll also link it to:

- **Work with partners** – such as the National Health Service (NHS), Fire and Rescue, Police, other central and local government authorities, suppliers and voluntary groups.
- **Devolution** – the handing down of powers to the council from central government, so we can make decisions and spend money for the benefit of citizens.
- **Other strategies** – from within the council, from partners, suppliers, areas of expertise and those from central government.

Ultimately, the redesigned ICTD strategy will provide an effective, efficient and reliable set of services, in support of the council's business plan and future vision.

Aims of the strategy

Our ICTD Strategy will help us to:

- Position ICTD as a vital support for achieving council objectives.
- Define the future 'minimum standard' for ICTD.
- Gain approval for ICTD investment and improvement.
- Support the move to a new ICTD operating model and contract.
- Balance the need for savings against investing in service enablers.
- Develop robust governance and assurance.
- Enable collaboration with partners, both citywide and regionally.
- Encourage local and national companies to invest in Birmingham.
- Realise our vision for ICTD of the future.

A combined ICTD strategy

Every technology with potential to transform starts in isolation and digital is no exception. ICT, citizen access, HR, waste and finance etc. each develop a strategy, which then blends into our business plan and future vision.

Why combine ICT and Digital strategies?

Typically, an ICT strategy defines the future use of information and communication technology as-sets whilst a digital strategy focuses on the organisational design, the culture, policies and priorities needed to introduce new and emerging technologies.

Both strategies focus on enabling and optimising the business, so by combining the two strategies we can deliver cutting edge 'best of breed' and integrated ICTD services (with partners and suppliers).

We can embed the cultural change needed to:

- Use best practice.
- Improve the performance of our workforce.
- Manage demand effectively.

An independent review carried out by Socitm (Society of Information Technology Management), revealed a number of positive findings, including:

"The only combined ICT & D Strategy that we have seen produced in all the strategy work that Socitm have completed. The most robust, complete and logical ICT & D Strategy Socitm have seen (even if we take other ICT and Digital strategies separately)".

ICT and Digital design principles

The combined ICT and Digital approach will enable us to make better, more 'strategic' investment decisions in technology, based on the '**simplify, standardise, share**' design principles of the Local CIO Council (LCIOC).

These principles set out its vision to speed up better outcomes and savings for local public services through redesign and digital transformation.

The principles are:

- **Simplify** – the way we operate, in order to add value and drive up efficiency.
- **Standardise** – the way we operate, emulating the best and enabling agility.
- **Share** – collaborate, innovate and inform.

Six key themes

Our vision for ICTD services has been influenced by many factors, both internally from each of the council's directorates and from consulting with several external organisations and suppliers. This work has led to the development of six key themes through which the council's ICTD will be provided.

Using this method has enabled us to define the required theme objectives and successful outcomes. Each theme is linked to the core values of the council and supports the key aims of its business plan and future vision.

The main features of these themes are:

- No theme is independent; all are inter-connected.
- Together they create a framework for change.
- Together they define a minimum acceptable standard known as 'reference architecture'.
- They will be managed and coordinated internally and will be informed and supported both internally and externally.

The themes are aligned to:

- Our guiding principles.
- The aims of our partners and other stakeholders.
- Industry best practice.

The six key themes are:

Integrated ICT and digital services

Deliver a reliable, flexible, integrated, secure, accessible and well-managed service.

Digital facilitation

Enable growth of the digital economy and digital society and create a digital culture.

Insight

Become more data centric – so we can create the capability to turn information into insight.

Commissioning

Deliver 'value for money' services through the commissioning of excellent IT and digital technology.

Governance

Govern and manage the council's IT and digital technologies effectively.

Innovation

Be innovative. Make changes to what's established by introducing new methods, ideas, and solutions.

Theme One

Integrated ICT and Digital services



Objective: We'll deliver an innovative, reliable, flexible, integrated, secure and well managed service.

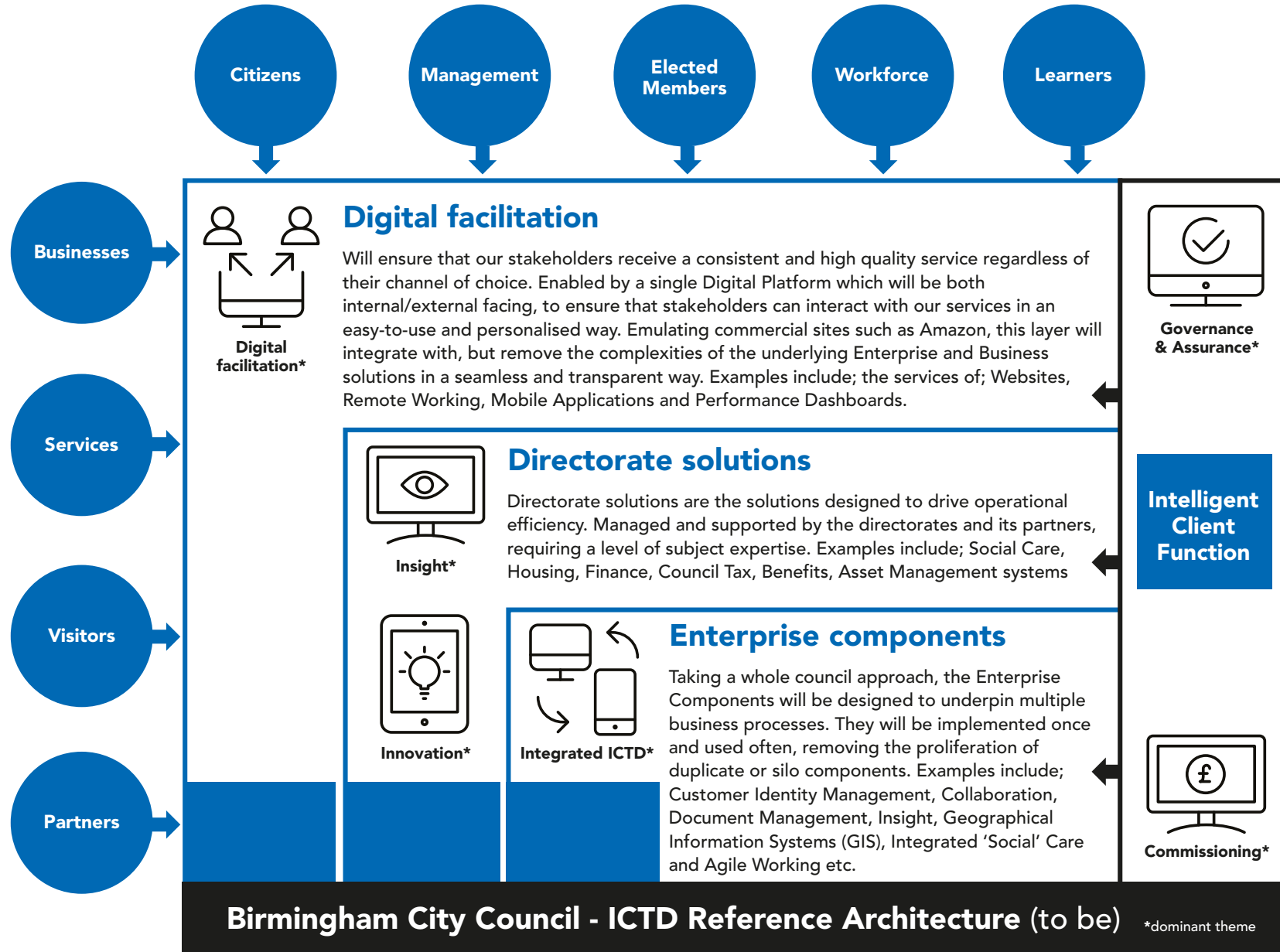
Technology underpins every area of the council's work; without it we cannot sustain or improve our business. We need to enhance the efficiency and responsiveness of the council's operations, supported by a highly skilled workforce that will take advantage of the latest technologies and opportunities. We'll take a 'whole council' approach, which will include basics such as email, voice, data networks and end user devices. We'll also choose greener options and cut energy use wherever possible. The goal is for an ICTD service that we will keep up-to-date and invest in, a service that can be scaled up or down as needs change. At the heart of the service will be a 'reference architecture' that will set out the fundamental design of the council's ICTD moving forwards.

This will have three simple layers:

1. **Digital facilitation:** a single digital platform (or website) that is both inward and outward facing will ensure that customers can use our services easily.
2. **Directorate solutions:** designed to drive operational efficiency. These will be managed and supported by internal expertise.
3. **Enterprise components (big, key systems):** taking a 'whole council' approach, these will be designed to underpin multiple business processes. They will be put in place once then used often, saving waste and duplication.

We will meet our objective by achieving the following successful outcomes:

- **Consolidation and rationalisation** – a reduction in the number of ICT systems, balancing the need for agility, value for money, risk and customer expectations.
- **Emerging technologies** – these will be harnessed to provide easily accessible, responsive and cost-effective, city-wide services, that are easy to understand and tailored to meet customer needs.
- **VFM (value for money)** – we will use 'enterprise agreement' licensing opportunities and the large scale of the council to secure good deals on price and support from key partners. Our evolving 'reference architecture' has already started to define our future ICTD operating model, governance and assurance framework and supplier requirements, all of which is informing how we will commission and procure our ICTD in the future.
- **Service agility** – promoting modern and agile working, by providing the right devices and ICTD solutions, with secure access to corporate data and applications from non-traditional office settings.
- **Service integration** – to include and share work with partners such as the West Midlands Combined Authority (WMCA), regional health organisations and emergency services.



Improved monitoring of service performance

Existing way of working

- Management information is obtained from different ICTD systems to create performance reports.
- Information may be duplicated and of varying levels of quality.
- Too much time spent using complex ICTD systems leaves less time to focus on work priorities.
- Online advice can be hard to interpret leading to errors - reliability of advice via phone or email is variable.

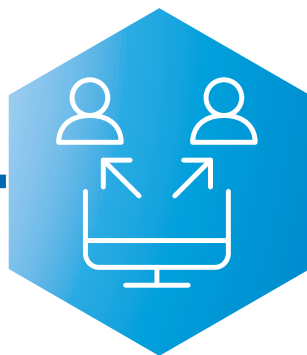
New way of working

- Better joined up ICTD systems make it quicker and easier to obtain information and produce reports.
- Improved online self-service access provides better quality information from one source, minimising duplication.
- Simplified systems are easier to use, enabling quicker access to information.
- Self-service access provides up to date and reliable online advice and support from a single source.

Improved access to more accurate management information results in improved service performance and ultimately better service to customers

Theme Two

Digital facilitation



Objective: We'll help you to go digital.

We want as many of you as possible to benefit from the 'digital economy'. Smarter use of technology can bring fantastic opportunities for local people, business, the council and our partners.

New technology has become part of our everyday lives. Many citizens have broadband at home and can access the internet on phones, tablets and laptops for shopping and using social media such as Facebook, Twitter and LinkedIn.

For the council this means using digital technology to improve the way services are designed and delivered. It also means we can connect with you in the way you expect us to. We have a real opportunity to make a difference, making sure what's on offer digitally is not only bang up-to-date, but makes the most of the devices and technologies that young and older people enjoy using in their everyday lives.

We will meet our objective by achieving the following successful outcomes:

- **Digital inclusion** - we're working with partners to make sure as many of you as possible (especially from the poorest communities) get access to online services. This will mean more easily available access, training and support to our customers.
- **Digital citizens** - when you use the internet, we'll make sure the online service you get is user-friendly, efficient, designed with you and based on your expectations for using council services.
- **A digital workforce** - our workforce will get the right training to use the right digital tools so that they can provide the right online services in a way that we can all be proud of.
- **A digital city** - we will work with our partners to help equip communities and businesses with the technology they need to enhance their lives. We'll help you get connected and help you learn how to use it, whether you're at school, an older resident, or need our assistance in any other way.
- **Digital collaboration** - we are working much more closely with partner organisations to deliver joined up services. This means our digital systems will change to allow this to happen and we'll continue to talk and work with existing and new partners.

Improved new tenant applications for social housing

Existing way of working

- Citizen picks up a paper form at an office or requests the form by telephone.
- Citizen returns completed form by post.
- Council inputs data to council management system.
- Council assesses eligibility and sends letter with ID for online lettings allocation system.
- Citizen bids online for preferred home - if bid successful, council send offer letter.
- Citizen views home and accepts or refuses the offer.

New way of working

- Citizen completes home application online.
- Council assesses online application form and sends online response.
- If assessed as eligible, customer sets up online account for lettings system
- Customer bids online for preferred home - if bid successful, council send offer letter.
- Customer views home and accepts or refuses the offer

Application processing time significantly reduced, all tenancy information is in one place and online, with 24/7 access

Theme Three



Insight

Objective: To boost our capability, to turn data into information and information into insight.

Our future council vision is built on values that demand we lead from the heart, with a desire to know what citizens want and need, always putting their needs first and being true to our word. So our future relies on how we use information in the pursuit of knowledge and customer insight.

Customer insight means understanding the behaviours of citizens, the services they use and how we can meet their needs in the best way. Better customer insight means better service and better value for money. Using our insight capability we will make the most of our data assets, information and knowledge, enabling us to be more proactive in meeting our customer's needs.

Data assets

Like people, buildings, money or infrastructure, data has a value that we can exploit.

We will maximise the value of data and knowledge by investing in proactive leadership in this area. We must be willing to make the availability of information as open as possible. Data is seen as critical for understanding and carrying out business internally and externally, so we'll continue to embed the cultural change needed, supporting customer insight by creating joined-up thinking and developing our 'intelligence-led' decision-making.

Open and transparent data

In line with central government policy and alongside our partners, we'll support and encourage 'open data' and 'data transparency'. More public data is already being made available online; including information about service costs, contracts and plans.

We'll help people understand the reasons for the decisions we take by making the evidence that supports them more readily available; this in turn can improve trust in public services.

We will meet our objective by achieving the following successful outcomes:

- **Geographic Information Systems (GIS)** - geographically referenced information is already changing the face of the internet and the way we interpret and view data. We must start to exploit it too. Everything from transport to planning and licensing applications can be enhanced.
- **Information management** - insight will be at the heart of our decisions. To create the future council we need the ability to respond strategically to financial pressures. This will require an ongoing culture change across council services, to maximise the value that data provides.
- **Data quality** - we will continue to create first-rate standards and rules, making sure they are enforced.
- **Skills and expertise** - we will skill-up our workforce using an integrated and intelligence-led approach to support the future council.

Improved domestic waste collection service

Existing way of working

- GPS (Global Positioning System) data on routes of all wagons is produced in a complex, combined format.
- The crew plan their waste collection rounds on a paper copy of a map using marker pens.
- The crew rely on their own experience and local knowledge to adapt their routes.
- The waste collection wagons return to the depot when full.

New way of working

- Digital data on road sections is used to form new routes for shorter collection rounds.
- The knowledge and experience of the crew is combined with digital data to further improve route plans.
- The knowledge and experience of the crew is combined with digital data to further improve route plans
- Data shows the best point for the wagon to return and be emptied, which reduces distance and minimises the number of trips.

Better route plans reduce wagon mileage by 20%, improves service performance and speed up domestic refuse collection for customers

Theme Four

Commissioning



Objective: Enable the council to provide excellent ICTD and value for money.

This involves making the most of our local ICTD suppliers to commission and purchase a flexible, high-performing service at a reasonable cost. The current ICTD contract is provided by Service Birmingham, a partnership formed between the council and Capita, which ends in March 2021. Driven by the ICTD Strategy the ICTD requirements to support future services are being considered as the council transforms to be a more agile and leaner organisation.

Service Birmingham

Service Birmingham supports around 12,500 non-teaching staff at more than 250 council buildings and 400 schools and plays an integral part in all council services. The ICTD it delivers touches every person in the city and beyond. However there is less than five years remaining of the contract and the alternative options for delivering our ICTD service is a major aspect of the ICTD strategy and future council planning.

In evaluating alternative options, we'll take into account:

- Lessons learnt from the current Service Birmingham partnership and other similar organisations.
- The need to have future contracts that are flexible and capable of changing, in-line with the council and without penalty.
- The need to include regular 'value-for-money' market-testing.

- How we can best engage with local ICTD suppliers, to benefit from their knowledge, expertise and skills.
- The need to maintain internal expertise to manage, govern and monitor all new contracts, whether internally or externally provided.

We will meet our objective by achieving the following successful outcomes:

- **ICTD transition** – to a new operating model, that meets the council's business needs, with the best ICTD on the market, that's managed and governed effectively.
- **ICTD investment** – acknowledging that you sometimes need to invest in order to save money.
- **ICTD sustainable procurement** - promote responsible and sustainable procurement that balances and supports the council's local economic, social, and environmental priorities.
- **ICTD commissioning, decommissioning and procurement** – a strategic planning process to decide how to use and prioritise the total resources available, to deliver better outcomes in the most efficient, effective, equitable and sustainable way.

Improved purchasing process for ICTD projects

Existing way of working

- A council ICTD project proposal is developed jointly with Service Birmingham (the council's ICTD partnership).
- As with all new ICTD, the preferred product is selected and then purchased by Service Birmingham.
- A contract with a single ICTD partner means that better value for money products and services from other suppliers cannot be explored.

New way of working

- A council ICTD project proposal is developed with the appropriate ICTD service to select and purchase the preferred ICTD product.
- A new approach for prioritising and investing in ICTD projects ensures that funding is better allocated and meets the needs of the council.
- Having contracts with other ICTD suppliers enables a more flexible way to achieve value for money from products and services.

An improved method for buying new ICTD means greater council control of purchasing for the best solution and the best value for money.

Theme Five

Governance



Objective: To govern and manage ICTD effectively.

ICTD is not just a commodity that's something we buy in - strategic ICTD is a key enabler for the council. Since the start of Service Birmingham, wherever possible we've tried to introduce new ICTD, automate business processes, make new efficiencies, lower operating costs and strive for excellence where we can. As we move to a new leaner, more agile council which is supported by the best ICTD, robust governance, assurance and planning is needed to ensure that the planned investments are fit for purpose and meet the needs of the council. We will work to recognise and ensure that the ICTD supports our needs, helping to identify requirements by working in partnership with clients and helping to develop and deliver solutions. Investment decisions will deliver business priorities; achieve best value and economies of scale, whilst avoiding duplication.

ICTD will support the council in working to address the financial challenges we face as an authority. Driven by the ICTD strategy and its six key themes, a five year investment plan, identifying enabling projects is currently being developed. This will include monitoring the planned expenditure of the ICTD service. An 'invest to save' approach is one of our guiding principles in the review of any proposed spend on ICTD. This ICTD strategy forms part of a wider portfolio of documents that collectively form our governance framework for ICTD. The final version will contain a technical roadmap that will help to ensure that we have absolute clarity about the choice of technologies we are using and when they will be delivered.

This approach is critical; to avoid poor decision making around the choice of new systems, whilst supporting the future consolidation and rationalisation of existing ICTD. Collectively this helps to ensure that any investment made in ICTD is maximised and aligned with the council's ambition.

We will meet our objective by achieving the following successful outcomes:

- **ICTD Intelligent Client Function (ICF)** - monitoring how the council's ICTD contract is run and performs. Our highly skilled team will expand to become a 'centre of excellence' led by a new senior head of ICTD. This team will make sure we get the agreed levels of service from our current and future suppliers.
- **Aligning business and ICTD strategies** - ensuring we provide ICTD that is innovative, reliable, flexible, integrated, secure and well managed.
- **Robust governance and assurance** - building on existing governance to ensure everyone, from colleagues to suppliers, comply with corporate policies and standards.
- **Maintaining compliance** - maintaining excellence by managing and monitoring compliance across business, systems, technology, data, security, the Public Service Network (PSN) etc.

Improved control of technology projects

Existing way of working

- New technology is needed to help improve the performance of a council service.
- A new ICTD system is purchased, designed and installed to meet the specific needs of the service.
- A lack of a joined up view of all ICTD systems and projects may lead to the duplication of technology used elsewhere in the council.

New way of working

- New technology requests have a more coordinated process with a clearer council-wide view of all ICTD projects, existing technology and funding.
- Where possible, new technology is purchased and designed around council-wide priorities rather than customised for one particular service.
- System duplication is prevented saving on cost, time and effort.
- Technology used council-wide achieves better value for money.

Better coordination of the purchase, design and use of new technology brings benefits to the whole council.

Theme Six

Innovation



Objective: We will innovate and bring in new methods, ideas and solutions.

Innovation is crucial to the continuing success of the council; we must be able to introduce new products or solutions to either address existing business problems more effectively or maximise new opportunities to cut costs and improve services.

Local government is undergoing major changes; money from central government continues to be cut, whilst local fundraising opportunities are increasing. This has led to a major rethinking of how we can deliver future council services. As an organisation seen traditionally as a welfare provider, the council now needs to adjust to a role in boosting economic growth and ICTD will need to support this.

The Innovation theme is about how we look at existing and new challenges and identify how ICTD can support such major changes in the supply and demand of services. The supply side is about gaining awareness of what local, national and global partners can contribute. The demand side is about closer collaboration with stakeholders (workforce, citizens, businesses and visitors etc.) to understand what they need.

We will meet our objective by achieving the following successful outcomes:

- **An innovation lab** - (as part of a wider city Innovation Hub) will be created, to inspire and enable people both within and those connected to the council. It will help us rethink our systems, promote new ways of working and encourage entrepreneurship.
- **An innovation portal** - will be developed so that our customers can put forward innovative business and technological ideas and solutions that meet our key challenges. We'll break down the barriers to putting new ideas in place by focusing on thoughts and inspirations and recognising and rewarding individual or group contributions.
- **Guided and sustainable innovation** - we'll ensure that the environmental, social and financial impacts of innovations are always fully taken into account, right from first idea, through to research and development and eventual service delivery. We'll support research and development via innovative and agile services, such as the creation of a 'cloud'-based platform to enable a fast response to a great idea.

Improved access to housing information

Existing way of working

- Issues in finding accurate, up to date information in one place, to compare council rents, private sector rents, incomes and benefits at a local level.
- Community groups collect a lot of data from many sources, but struggle to present it in a way that is clear, meaningful and useful.
- Better access to data is needed to enable citizens, community groups and voluntary organisations to deal with local housing needs more easily.

New way of working

- Research with community groups identified how an online tool could meet user needs and identified skills and training needed.
- Market research explored how the technology worked, with the tool tested with partners and service users to ensure that it met user needs.
- Collaboration led to the co-design of an easy to use online tool with the right local information for community organisations, policy makers and citizens to support housing needs.

Housing rent information is now easily accessible online for people who are not technical specialists: <http://birminghamhousingdata.org>

Delivering the strategy

ICTD, like all services across the council must achieve significant savings, balancing the need for tactical, short-term savings, against the need for strategic long-term investment in technology. To support the council's objectives and those of the ICTD strategy and its six key themes, the redesign of ICTD services will provide innovative, reliable and flexible systems for the council. Efficiencies will also be achieved from improved control of ICTD projects and a more strategic approach to investment in technologies that deliver savings to the council. As well as improving and maintaining the efficient, day-to-day running of the council's ICTD service, two major programmes of work will focus on designing and putting in place a new ICTD operating model to support the council as it undergoes radical change to meet its financial challenges.

Programme 1 – Investment

Aligned with the ICTD strategy and its six key themes, a five-year 'Investment Plan' and associated programme of work has been developed.

The five-year programme includes several projects that will enable us to design and implement the future ICTD service:

- A number of ICTD systems have been identified that are nearing, or at the end of their lives and investment in these systems is part of the council's Long-Term-Financial Plan (LTFP).
- The priority of projects has been based on dependencies on other projects and the level of risk to the council from not replacing systems, or a failure of the systems themselves.
- The immediate benefit of these priority projects is that the council can continue to run its main ICTD services, as well as gaining greater flexibility and lower cost, by taking advantage of newer and cheaper technologies.

- These projects will put in place the technical foundation for improved digital public services in the city and region.
- The programme will also include ICTD projects that provide new technical solutions to support wider council benefits.

This planned approach will help to maintain a cost effective, fit-for-purpose ICT service that will be best placed to support the new ways of working needed for the delivery of future council services. It will also avoid a lack of ICTD investment becoming a barrier that prevents the council from meeting its future budget and service delivery challenges.

Programme 2 – Contract transition

The existing ICTD service is run by Service Birmingham, a partnership, formed in 2006, between the council and Capita. This joint venture arrangement is a partnership based on a single supplier model, the contract for which ends in March 2021 and cannot be renewed. Therefore, the aim of the 'contract transition' programme is to develop and put in place an alternative ICTD service by 2021, as well as maintaining the day-to-day running of ICTD systems and limiting risk to the council's business functions.

The design and move to a new ICTD operating model must also:

- Align new ICTD services to the council's objectives.
- Deliver ICTD services in line with the six themes of the ICTD strategy.
- Enable service flexibility and demonstrate value for money.
- Replace the Service Birmingham contract.

The council is not seek to recreate the existing single supplier ICTD model, but will look at options for having several suppliers and/or 'in-house' services. From consultation with other councils and an analysis of industry trends, the future service will have features of a Service Integration and Management (SIAM) model or a hybrid of this approach. The move to a new service model will also need the right ICTD foundations in place, including contracts with new suppliers. Therefore, projects within the Investment Programme will run alongside those of the Contract Transition Programme, ensuring that the essential upgrade of the ICTD foundations supports the change and makes best use of new and emerging technology, rather than having 'like-for-like' replacements.

ICTD strategy success factors

The success of the ICTD strategy will be measured in a number of ways, including:

- The satisfaction levels of our workforce, citizens, businesses and partners.
- The levels of achievement of our workforce and the services they provide.
- A review of actual progress measured against the objectives of the ICTD strategy, the council's business plan and the council's future vision.
- The successful outcome of ICTD projects and the savings and other benefits they achieve.

Continued development

Birmingham recognises that a successful strategy should continue to develop and not become a document just sat on a shelf. This flexible approach will ensure that the strategic objectives for ICTD continue to be reviewed and developed over time, (with partners and suppliers) taking into account the evolving council's requirements and the fast moving nature of technology.



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