

**Simplify,
Standardise
& Share**



Birmingham
City Council

Information Communication Technology & Digital Strategy 2016 - 2021

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1 Foreword

1.1 Council Vision¹

Birmingham, a City of Growth where every child, citizen and place matters.

1.2 Priority Outcomes

To deliver our vision we are focussing on the following priorities:

- **Children:** A great city to grow up
- **Housing:** A great city to live in
- **Jobs and Skills:** A great city to learn in
- **Health:** A great city to lead a healthy lifestyle and to grow old in

1.3 Creating the council of the future

In 2015 the Council created the Future Council programme as a way of harnessing and coordinating several key improvement programmes, which will:

- Create a foundation for longer term change
- Ensure we target our limited resources on those activities or significant projects that will help us achieve our purpose - the **'Big Moves'**
- Embed and share the **'Golden Thread'** - from our purpose to the things all of us do every day
- In an era of reduced and reducing resources - find new ways of achieving our purpose and helping Birmingham and the people who live and work here to thrive
- Deliver on agreed budget savings
- Change our culture - make the future council 'come to life' for us all - and change the way we 'do things'
- Find new ways of actively encouraging collaboration, change and innovation in all parts of the council and with our partners and stakeholders
- Collaborate – working with our partners to help shape the next and subsequent phases of the future council

We will make this happen by ensuring that everything we do – from the major change initiatives (the **'Big Moves'**) through to the enabling strategies (such as the ICT&D Strategy) are coordinated around a clear vision, priorities, outcomes, values and behaviours and guiding principles for decision making.

¹ The council of the future model, vision and priority outcomes, guiding principles and supporting information etc. are all currently in development and are subject to change

Making a positive difference every day to people's lives²

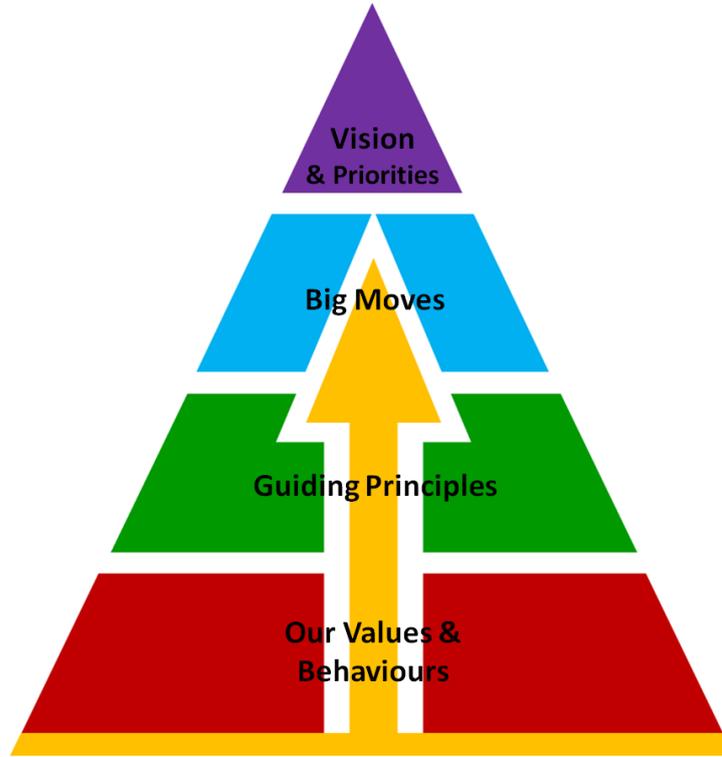


Figure 1 - Council of the future model

1.4 Council Guiding Principles

These are our 'rules of the game' and will help us to design and shape the future Council. We will understand them and 'own' them so that we can use them as part of our decision-making, they are:

- 

Work with partners to take a **whole system** approach, with citizens and neighbourhoods at the heart of our decision making
- 

Target our **resources** on our key priorities and outcomes using evidence to inform our decision making
- 

Promote the **independence** of service users and also enable them to step up and be part of designing solutions
- 

Operate as an **agile organisation**, through our workforce, commissioning, procurement and delivery models
- 

Use our **strategic assets** to leverage economic growth and investment across the city
- 

We will **work** in a way that aligns with our **values**

Figure 2 - Council Design Principles

² The council of the future model, vision and priority outcomes, guiding principles and supporting information etc. are all currently in development and are subject to change.

1.5 Council Values and Behaviours

We are a committed workforce, our value and behaviours define us as an organisation, and they are:



We put citizens first

We are empathetic and respectful in everything we do



We are true to our word

We make promises and we keep them



We act courageously

We lead, we manage and we tackle the difficult issues everyday, every one of us



We achieve excellence

We strive to get things right first time, every time

Figure 3 - Values and Behaviours

2 Introduction

Our future Council vision is built on values that demand we lead from the heart, with a passion to understand and know our citizens; putting their needs first with unerring dedication to be true to our word, it is unequivocal. Our future relies on how we use Information, Communication Technology (ICT) and Digital (D) services, in the pursuit of knowledge to enable better outcomes for our citizens, businesses, partners and 3rd sector organisations = **our stakeholders!**

Enabling and innovative Information, Communication Technology and Digital services (ICTD) will provide the Council with an effective, efficient and reliable set of services, in support of our Business Plan and future Council's vision.

Change in ICTD is rapid and growth in the uptake of technologies such as; internet; mobile devices, social media and high-speed broadband together with the use of data in all its forms present huge opportunities for the Council and its stakeholders.

To leverage the advances in technology, to meet the increasing expectation of citizens and to emulate and facilitate current trends in digital interaction, it is important that the Council has a clear approach to the improvement and delivery of ICTD.

This ICTD Strategy forms part of a wider portfolio of documents that collectively form our Governance and Assurance framework, for design and implementation of ICTD. A critical element accompanying the strategy is a set of technical roadmaps that will help to ensure that we have clarity and an evidenced based approach about the choice of technologies we are using and when they will be delivered, this includes short term (tactical) business

priorities.

This approach is critical and will ensure that any investment made in ICTD is maximised and aligned with the Council's ambition;

2.1 Opportunities

Driven by the ICTD Strategy

- ✓ **Transform - Simplify, Standardise & Share**; enable the business, deliver the successful outcomes of the ICTD and associated strategies (an 'Investment Plan') and move to a new 'Reference Architecture' or the future 'to-be' state.

2.2 Risks

Without the ICTD Strategy

- ❖ **Sweat The Assets** - or do nothing; defer investment, defer the realisation of benefits and bear the increased running costs as platforms go into extended support = non-transformational!
- ❖ **Maintain the Status Quo** - Business As Usual (BAU); Total Cost Ownership (TCO) and service resilience based decisions, maintaining service capabilities or the existing 'as is' ICTD = non-transformational!

Continuing with the current BCC approach to ICT is not a sustainable way forward!

2.3 Digital Agenda

Birmingham is starting from a position of strength, however there is still much to do to ensure that the take up of 'Digital Services' is widespread and the potential benefits are delivered.

Ensuring that our citizens, businesses and third sector partners can access and use digital services effectively has the potential to transform the way the city works - increase productivity, drive economic growth, create jobs, connect individuals and reshape how services are provided. We are committed to doing this in a fair and equitable way that puts citizens at the heart of how we design and deliver public services working in collaboration with our partners and communities to do things differently and revitalise how local services are delivered.

People who use digital services do so for reasons of speed and convenience.

In a Government survey* the most frequent reasons people gave for choosing to use digital transactions was:

- *It saved me a lot of time (85%)*
- *The site was clear and easy to use (62%)*
- *I could do it outside office hours (61%)*

*Central Government - Digital Landscape Research 2013

'Digital' is key to the Council's transformation and developing a smart city approach will enhance the quality and performance of urban services, encourage innovation, greater entrepreneurship and citizen participation.

Our Digital Agenda can deliver enormous benefits to the Council and its stakeholders, by enhancing our capabilities to:

- Co design services to deliver better outcomes
- Develop end-to-end digital services that enable citizens to take control of how they consume services
- Develop services based on citizen needs rather than around council processes
- Provide citizens and businesses with the confidence and skills to assess their needs and determine the rights solutions for themselves
- Deliver better 'Value for Money' (VFM) services and give citizens the tools to tell us when we are not
- Increase efficiencies and provide easier ways to access services that meet citizens expectations
- Create the right conditions to develop smart city activities and applications,
- Stimulate service transformation, through innovation and new ways of working in collaboration with partners
- Re-shape the relationship between the Council, stakeholders and partners
- Use 'the right digital channels' to improve communications and partnership working
- Release data in all its forms for reuse that increases the opportunities for citizens, civic tech entrepreneurs and businesses to gain insights and develop services

In order to leverage these benefits, the strategy will describe how the Council will maximise the opportunities of 'Digital Facilitation', reflecting the needs of our stakeholders, allowing for choice whilst balancing efficiency with the appropriate service quality.

2.4 Existing (as-is) - ICT Operating Model

Our current Operating Model is an ICT centric service with limited Digital Capabilities. The service is provisioned by Service Birmingham, a partnership formed between the Council and Capita. This partnership ends in March 2021 and is a Joint Venture 'Supplier Model'. Driven by the ICTD Strategy, the requirements for future Council services are being considered as the Council transforms to be a more intelligence driven, agile and leaner organisation.

2.4.1 Service Birmingham

Service Birmingham supports around 12,500 non-teaching staff at more than 250 Council buildings and 350 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 and the method of transition to a new ICTD service is a major aspect of the ICTD Strategy and associated Council planning.

2.4.2 Contract Transition - Programme

We are currently developing a plan and associated programme of work that will enable us to transition from our existing 'as-is' Operating Model to a new Operating Model and contract; or an Alternative Service Delivery Vehicle (ASDV) – the 'Contract Transition' - Programme³. The diagram below depicts the existing ICT Operating Model

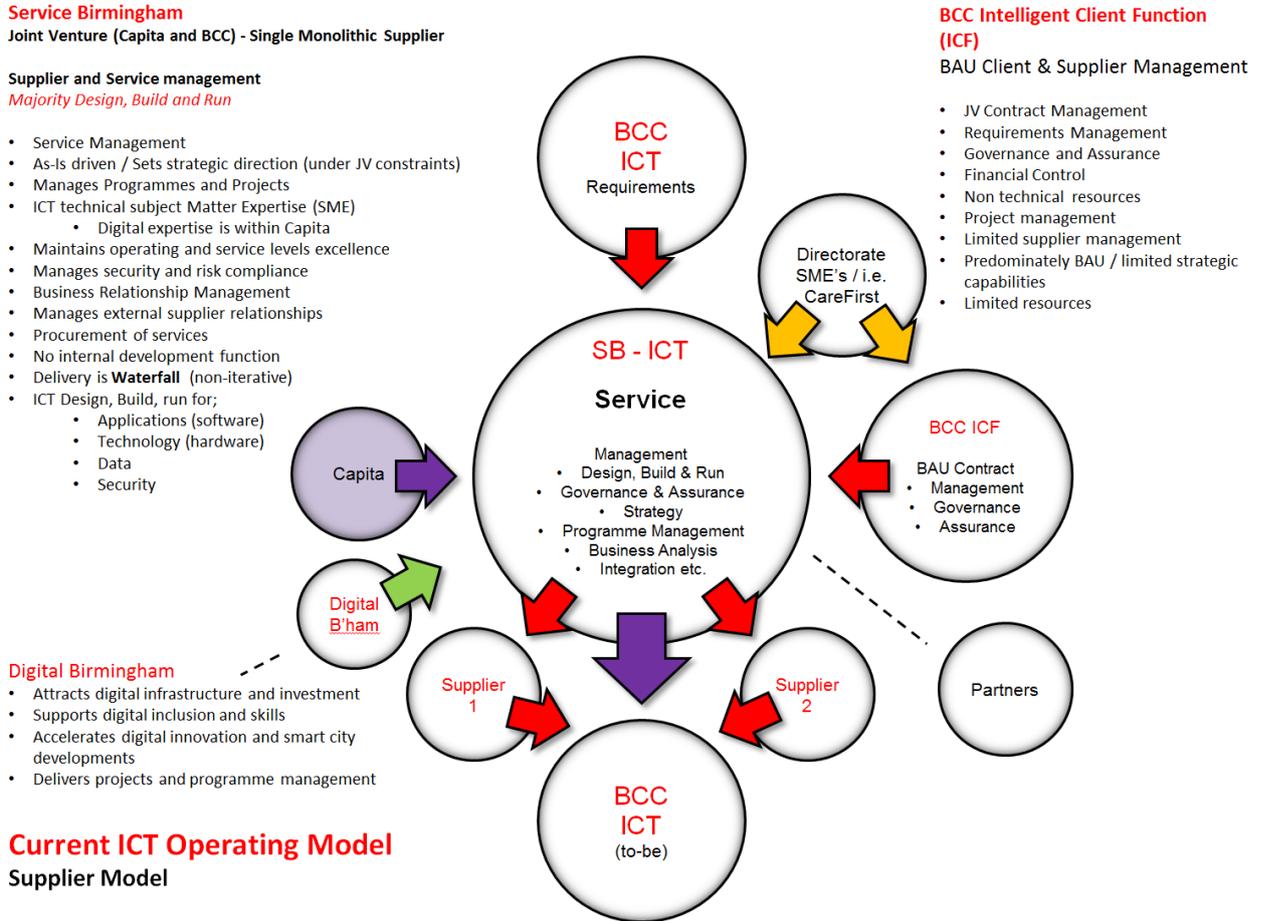


Figure 4 - Existing (as-is) ICT - Operating Model

³ For further details on the Contract Transition programme please refer to section 4.1.6

2.5 Purpose of the ICTD Strategy

Question - "Most Councils have separate ICT and Digital Strategies; why have a combined strategy?"

Every technology with transformation potential starts in isolation and digital is no exception; ICT, customer access, HR, waste and finance etc. each develop a strategy, which then blends into our Business Plan and future Council vision. Typically, an ICT Strategy defines the future use of Information and Communication Technology assets - a Digital strategy focuses on the Citizen experience which results in changes to organisational design, the culture, policies and priorities needed to embed new and emerging technologies.

2.5.1 Establishing ICTD Design Principles

The convergence to one ICTD transformation strategy and associated ICT and Digital Technology roadmaps will enable us to make 'strategic' investment decisions, based on agreed objectives and outcomes, as opposed to 'tactical' business priorities; this will embed the cultural change needed to embed the design principles given below:

- **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 inform⁴

Using the above 'Three S' approach; Aylesbury Vale District Council have already saved £4 million through reduced cost of staff, accommodation and phone calls⁵

2.5.2 Future (to-be) ICTD - Operating Model

The future of the Council's ICTD is at an enormously exciting point of evolution. During the last Parliament, the mechanisms for commissioning and delivery of ICTD services for central and local government authorities were radically transformed, in particular with respect to the relationship with large suppliers.

Major changes were implemented to enable authorities to take back control of the **Design, Build and Run** aspects of their key ICTD services, wherever appropriate.

Historically, incentive structures for our commercial relationship with Service Birmingham have been such that innovation has been low, and risk-aversion high. The net effect is that some of our infrastructure is now in need of refreshing and opportunities to leverage the potential of Digital Evolution are starting to be missed.

The planned end of the Service Birmingham contract has started to create a challenge, but also an opportunity in many cases for a radical reinvention of our Operating Model

⁴ Informed by the SOCITM publication - Local CIO Council: Simplify – Standardise – Share (July 2016) - For further details please refer to annexe - Section 4.5 Document Reference Table (Ref. 1)

⁵ Further information relating to Aylesbury Vale District Council please refer to annexe - Section 4.5 Document Reference Table (Ref. 9)

and ICTD landscape, transforming to a hugely more sophisticated and functionally-rich set of demand driven, agile, flexible and integrated services with the ability to **Simplify, Standardise & Share** - our future or 'to-be' ICTD.

Based on current development, consultation with other local government authorities and industry trends and analysis, the proposed, future ICTD Operating model is based around a Service Integration and Management (SIAM) model (or hybrid of). The final Operating Model will be further developed after additional consultation and advice.

2.5.3 ICTD Operating Model Attributes

The Operating Model describes 'how' we'll deliver our ICTD in order to empower Birmingham. The future Operating Model will be comprised of the following, minimum elements:

- Reference Architecture / Roadmaps
- Service Integration and Management Framework
 - Implementation
 - Methods
 - Capabilities
 - Monitoring & Reporting
- Design and Guiding Principles
- Business functions
- Commissioning Strategy
- Governance
- Quality and standards
- Continuous Investment and Innovation
- Adding value to our stakeholders
- Partnership working
- Saving Initiatives

2.5.4 Investment Plan - Programme

We are currently developing an 'Investment Plan' and associated programme of work that will enable us to design and implement the future 'to-be' Reference Architecture and Operating Model - the 'Investment Plan' - programme⁶. The diagram below depicts the proposed, future ICTD operating model.

⁶ For further details on the Investment Plan programme please to section 4.1.1

BCC Intelligent Client Function

Service Integration & Management Model (SIAM or hybrid of) / Enhanced ICF and multiple supplier and integration capabilities

Service Management (in house or with a key supplier);
More Design, Some Build and Some Run

- Enterprise Architecture (**Agile**) across the domains of:
 - Business
 - Application
 - Technology
 - Data
 - Security
 - Design and Build (**Agile**, design iteratively)
 - Strategy Framework (other strategies)
 - Governance and Assurance
 - Including Information Management
 - Technical Expertise
- Programme / Project (Agile)
- Business Analysis
- Cost / Budget control
- Change
- Risk
- Security
- Compliance
- Commissioning
- Integration (shared)
- Demand

Supplier Management;

Some Design, More Build and Run (shared)

- Delivery (**Agile**, design iteratively)
- Run for the domains of:
 - Business
 - Application
 - Technology
 - Security

Future ICTD Operating Model

SIAM (Hybrid of) Note** proposed

Alternative Service Delivery Vehicle

The future Operating Model design will be determined as part of the Contract Transition programme**

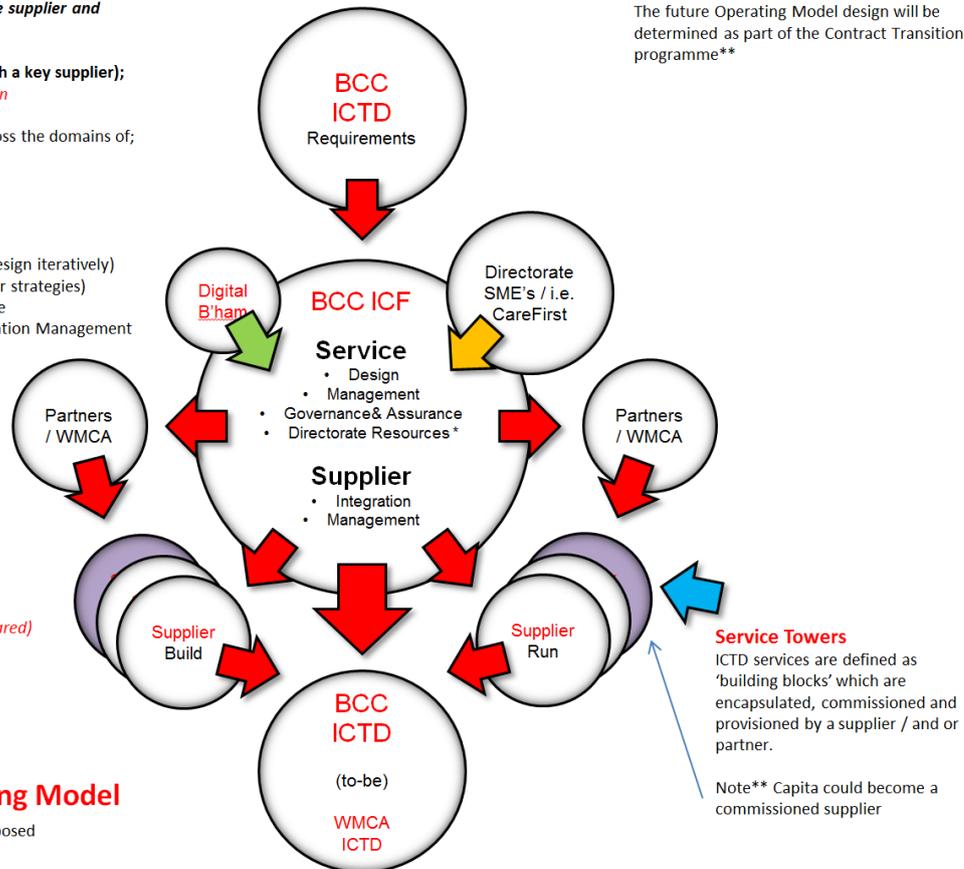


Figure 5 - ICTD Future (to-be) - Operating Model

2.5.5 Corporate and Directorate Subject Matter Experts (SME)

Any future Operating Model will take into account the need for Corporate and Directorate Subject Matter Expertise, specifically;

- The need for SME resources to stay close to services, in order to really understand and support our line of business applications and data
- The need for Corporate and Directorate roles and processes to be governed and deployed in a consistent and effective way – ensuring best practice and methodologies are adopted and promoted
- The “**Big Moves**” and the possible impact from the expected organisation change - we must retain and continue to skill-up our SME workforce.

2.6 Guiding Principles

Our ICTD guiding principles underpin our three ‘**Simplify, Standardise & Share**’ design principles and are used as the framework that governs the development of the strategy and the subsequent **Design, Build** and **Run** of ICTD. They are:

Table 1 - ICTD Guiding Principles

Principle	Description
ICTD GP1	Put the stakeholder at the heart of everything we do
ICTD GP2	Source solutions from the providers who deliver best 'Value for Money'
ICTD GP3	Design in flexibility - for demand and cost
ICTD GP4	Deliver leading edge business solutions - using experts to guide our skilled and motivated staff
ICTD GP5	Protect our ICTD service & data - balancing 'Value for Money' and risk
ICTD GP6	Benchmark against the best, emulate and then exceed it
ICTD GP7	Data is centric - leverage our Information Assets to facilitate our business
ICTD GP8	Partner, collaborate and integrate
ICTD GP9	Consolidate and rationalise
ICTD GP10	Insist on all things 'open' - standards, specifications & integration etc.

2.7 Method and Approach

The development of the strategy and the supporting analysis will provide stakeholders across the Council with greater transparency over the provision and delivery of ICTD. In seeking to define how best to develop a new approach to ICTD, it has been identified that the focus should not just be on technology, but on stakeholders.

Technology is nothing without the people who use it!

In addition to our stakeholder needs, our approach is being developed across the Council to align, support and enable the realisation of the wider City such as: Service Birmingham, Digital Birmingham, NHS (Clinical Commissioning Groups), West Midlands Police, Ambulance, Fire and Rescue, Educational Establishments, West Midlands Combined Authority (WMCA), 3rd and voluntary sectors etc. (One Public Sector). = **our partners!**

. To be effective, our ICTD Strategy needs to:

- Be continually developed, iteratively and over time
- Allow time for consultation and collaboration
- Allow time for training and development to support cultural change
- Viewed from our Citizens' perspective - not organisationally inward facing

2.7.1 Continued Development

The best strategies consult and involve stakeholders and partners on the strategy's planned outcomes as part of the Governance process. We'll make sure this happens continuously as we move forward, whilst we also: monitor, measure and report on how we're doing in meeting the outcomes. This will be achieved by implementing an Enterprise Architecture capability and associated Governance Framework (please refer to the Governance theme for further details).

A successful ICTD Strategy isn't just a document sat on a shelf; It's an ethos, a way of working!

It's important for us to be realistic about our objectives and timescales. This year's version of the ICTD Strategy will focus on the enablement of the Future Council model. As the Future Council Model develops further the ICTD strategy will iterate and the focus will start to shift towards sharing and collaboration between the Council, its stakeholders and partners.

We cannot and should not, implement this strategy in isolation - Collaboration is key!

The strategy has been developed iteratively over 3 levels, catering for specific audience views and viewpoints and adhering to a predefined delivery and approval timeframe.

There are short-term tactical initiatives and projects already in flight, guided by the developing Council strategies and collaborating with Service Birmingham, we have already identified future savings, new ways of working and have started the development of some of the described outcomes= ***we are already doing it!***⁷

2.8 Objectives

The key objectives of the ICTD Strategy are:

- To enable the Council to deliver its commitments to its stakeholders
- To position ICTD as a key business enabler in delivering the Council's strategic objectives
- To define the future 'minimum standard or baseline' ICTD - a 'Reference Architecture' together with how it will be implemented
- Define our 'Digital Agenda'
- Support the transition to a new ICTD Operating Model
- To ensure any spending on ICTD is driven by the Future Council's approved objectives

⁷ For further information relating to the Method and Approach and the iteration of the ICTD Strategy – 3 levels; please refer to annexe - Section 4.5 Document Reference Table (Ref. 2)

Based on our needs we are taking a planned approach to managing our existing 'as-is' ICTD landscape and capturing our future 'to-be' requirements. The planned transformation approach will be aligned to:

- Central Government Strategies and Initiatives
 - Such as Devolution - the handing down of powers and money from central government (Whitehall) to the Council so we can make decisions and spend money for the benefit of the region, as we see fit.
- Regional Drivers
 - One Public Sector
 - WMCA
- External strategies⁸
 - Partners
 - Suppliers
 - Consultancies and advisories
 - Expertise
- Industry Drivers and Consultations
 - Best practice
 - Innovation
 - Expertise
- The annual Business Plan
- The Future Council's '**Golden Thread**' and model
- Associated Council strategies
- Directorate business plans

2.9 Thematic Approach – 6 Key Themes

To support the City Council's core mission, objectives and business plan, a number of key cross-cutting themes have been identified. The vision and strategy for ICTD is influenced by many internal and external drivers. The themes have been developed from the needs of the Council, its stakeholders and partners, whom are tasked with delivery of services to the City. The themes have also been aligned with and recognise the Future Council model.

Our work with Council, stakeholders, partners, local and central Government agencies and industry specialists has identified '6 Key Themes' for the provision of ICTD, around which we've defined our objectives and grouped our outcomes and success factors.

Each theme is linked to the Future Council's model and supports the key aims of the Business Plan; the main features of the themes are:

- No theme is independent – all are interlaced
- Together they create a framework for change
- They will create a minimum, acceptable standard - a 'Reference Architecture'.
- They will be governed and assured centrally; informed and enabled with our stakeholders and partners.

⁸ For further information relating to informing External strategies please refer to annexe - Section 4.5 Document Reference Table (Ref.4)

- They are guided by the Future Council’s ‘Golden Thread’ and the ICTD design and guiding Principles. The diagram below depicts the ICTD Strategy development method, using a thematic approach.

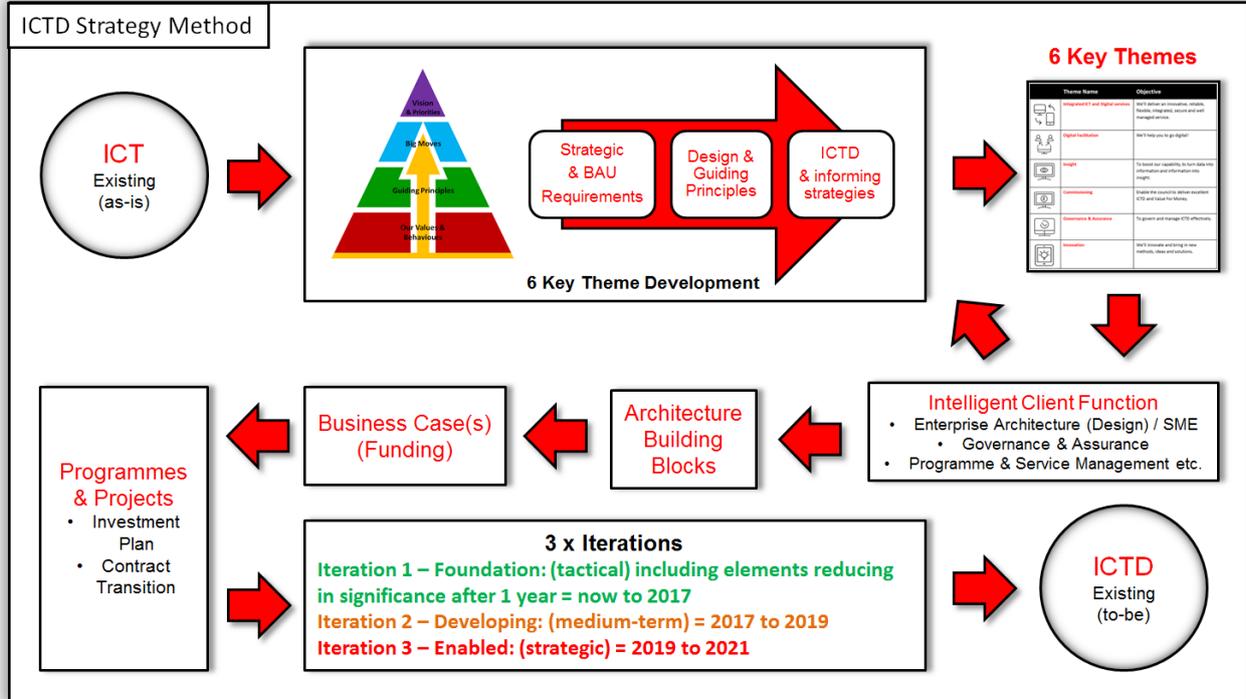


Figure 6 - ICTD Strategy Development Method⁹

⁹ For further information relating to the Method and Approach and the iteration of the ICTD Strategy – 3 levels please refer to annexe - Section 4.5 Document Reference Table (Ref. 2)

3 The 6 Key Themes

The 6 Key Themes are;

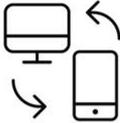
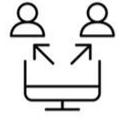
	Theme Name	Objective
	Integrated ICT and Digital services	To deliver a reliable, flexible, integrated, secure, accessible and well managed service.
	Digital Facilitation	To enable our stakeholders to participate and fully contribute to the growth of the Digital Economy and Digital Society and create a Digital Culture
	Insight	To become more data centric – so we can create the capability to turn information into insight
	Commissioning	To enable deliver Value For Money services through the commissioning of excellent ICTD
	Governance	To deliver the effective management of ICTD
	Innovation	To be innovative; to make changes to what's established, by introducing new methods, ideas and solutions.

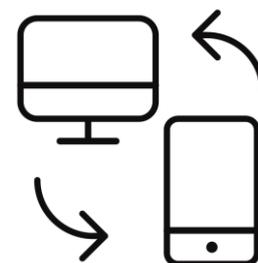
Figure 7 – The 6 Key Themes

The following sections detail the 6 Key Themes:

3.1 Integrated ICT and Digital Services

Objective: to deliver a reliable, flexible, integrated, secure, accessible and well managed service.

The ICTD service will enhance the efficiency and responsiveness of the Council's operations, supported by a highly skilled workforce that will make best use



of the latest and emerging technologies and opportunities as they arise. We will take a whole Council approach when implementing our ICTD, which will include core 'Enterprise' components such as; Information, email, voice and data networks, hosting and client devices. We will pursue sustainable and environmentally responsible choices in procurement, pursuing green options and more efficient use of resources to reduce energy usage.

The provision of such a level of capability requires a solid and dependable service that will be maintained and invested in on a regular basis. It will also have 'appropriate' level of resilience, measured against risk and driven by updated policies; the service will be scalable, delivering capacity to reflect organisation demand and change balancing this need with delivering VFM for our citizens.

3.1.1 Capital Investment V's Revenue

If we are to become a true 'Intelligence Led' organisation, then ICTD will need to be as flexible as our business functions, utilising capacity on demand methods and delivering 'Utility Based' or "Pay and Use" ICTD - designing our ICTD by using our Design and Guiding Principles to balance VFM against security and risk compliance.

To do so, we will need to re-balance capital investment (CAPEX) on bought and paid for ICTD technology with an operating expenditure (OPEX or Revenue) Pay and Use model removing the inevitable stranded investment in technology that rapidly becomes out-dated - this will need to be factored into future financial planning.

As an example; new servers run faster, use less energy and provide more computing power every year. It doesn't make sense to invest into equipment that's surpassed by the very next model.

The rapid rise of 'Cloud' computing, outsourcing and managed services shows that many things that were 'On-Premise' are now outsourced to Cloud based service providers such as; Amazon, Microsoft Azure and Google etc. By utilising 'Cloud' computing further it is anticipated we will reduce long term ICTD costs.

3.1.2 Hybrid Hosting Model (On-Premise / In the Cloud)

On-Premise Model

We will continue to invest in and host our Key Performance / Critical applications (KPI's) on the 'On-Premise' platform - seeking to share capacity and space with potential partners, thus reducing Total Cost Ownership (TCO) and delivering a Return on Investment (ROI)¹⁰.

Cloud Services Model

We will, where applicable, continue to provision platforms and applications in the Cloud (Public or Private / Partner provisioned).

Hybrid Hosting Model (On-Premise / In the Cloud)

¹⁰ where applicable the provision and hosting of all KPI applications will be assessed against our design and guiding principles

This model will be used for the development and implementation of our future or 'to-be' Reference Architecture.

3.1.3 Reference Architecture (RA)

Based on our Hybrid Hosting Model; we will set out our 'Reference Architecture' (RA), which will lay out the fundamental design of the Council's ICTD going forward. The RA will have three simple layers, each designed to play their own unique role in supporting the Council's objectives. It is not thought practical to source one solution that meets all the needs of the Council, therefore best of breed business solutions will be sourced and interfaced as required. The three layers are depicted in the diagram below.

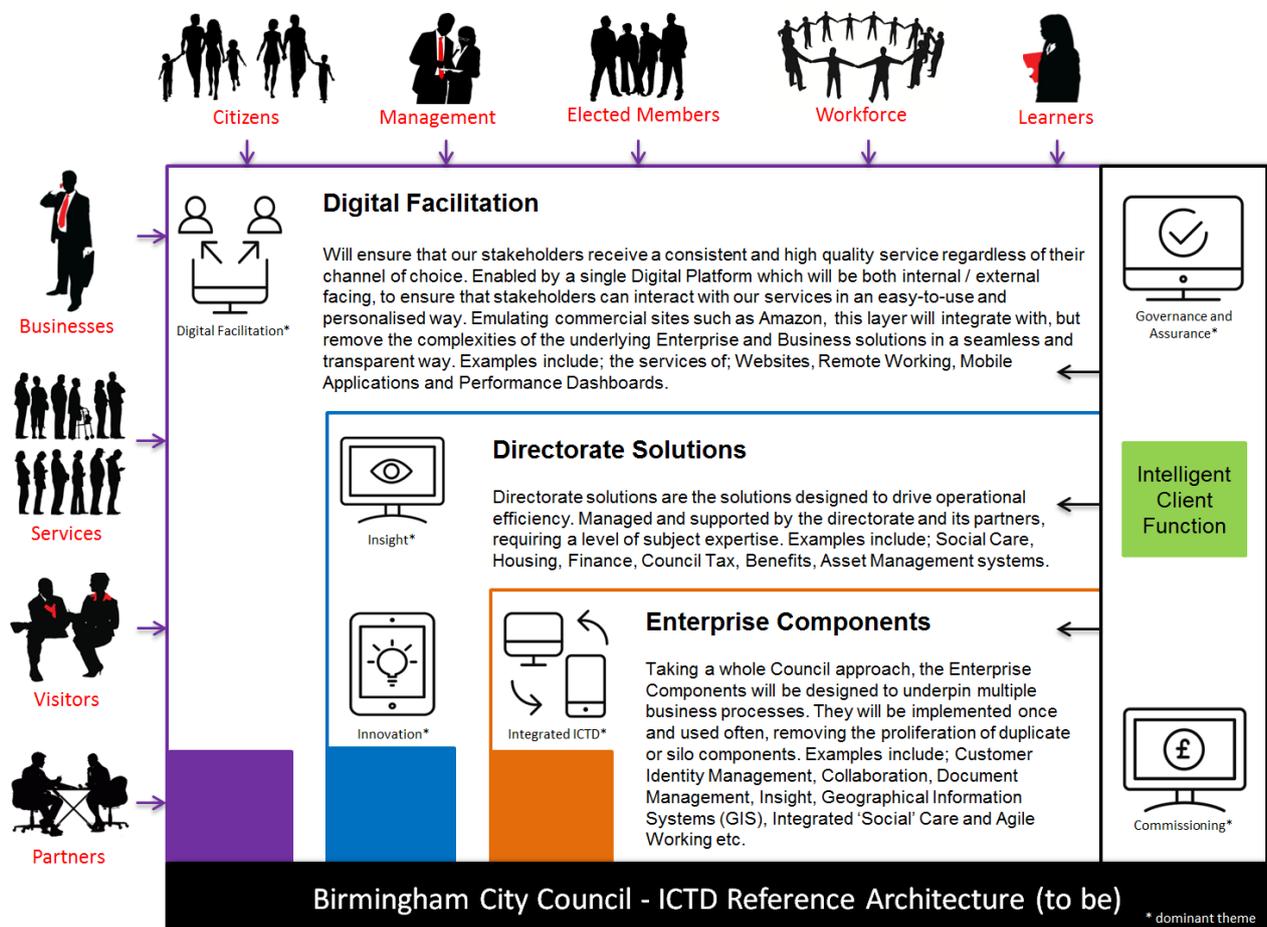


Figure 8 – Reference Architecture

3.1.4 Theme 1 - Success Factors / Outcomes

- **Consolidation and Rationalisation** - a reduction in the number of solutions and more joined up data, enabling services to share information resources and costs and co-ordinate actions more effectively. We will take a pragmatic approach to service provision, balancing the needs of agility, risk, VFM and user expectations.
- **Emerging Technologies** - innovative technologies, optimised to provide easily accessible, responsive and cost effective services across the City in ways that are

easy to understand, by delivering services that are tailored to meet stakeholder needs.

- **Value For Money** - leveraging 'Enterprise Agreement' licensing opportunities and the scale of the Council to drive competitive pricing and support from key partners. We will look to reduce capital investments (CAPEX), opting wherever possible to fund projects from operating expenditures (Revenue / OPEX) instead.
- **Service Agility** - users profiled into modern work styles, to ensure we provide them with the most appropriate devices and solutions needed - with secure access to corporate data and applications from a non-traditional office setting. Examples Include; Mobile Office, Collaboration, Voice, Video conferencing and screen sharing capabilities, accessible from any location etc. Service Agility will facilitate the drive towards a 'Paperless Office' (cabinet, workforce and potentially Council).
- **Service Catalogues** - to ensure users are aware of what capabilities exist to support their needs and are able to access and implement such solutions with minimum effort and administration. This will be enabled by an 'on-line shopping' experience for the provision of services, hardware and software assets.
- **Service Efficiency** - 'Capacity on Demand' - integration of solutions to manage and monitor demand, resource allocation and workflow and process automation, simplifying transactions for both manager and employee self-serve and back office processing functions.
- **Service Integration** - use of standard integration patterns and specification, to provide system integration and information exchange with new service delivery bodies, partners and suppliers. Where interfacing / integration is required between any elements of the architecture, the Council will require the solution provider to support a Service Orientated Architecture (SOA) / Application Programming Interface (API) design pattern approach, therefore minimizing the Council's TCO.
- **Standards and Specifications** - adopted, implemented and governed use of best practice and industry proven standards and specifications. Examples include; Public Services Network (PSN), The Local Government Association (LGA), Data (Beta) and Government Digital Service (GDS) - standards and specifications.

3.1.5 Theme 1 - Case study scenario

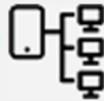
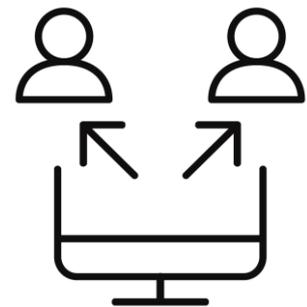
Improved monitoring of service performance	
Existing way of working	New way of working
 <p>Management information is obtained from different ICTD systems to create performance reports</p>	<p>Better joined up ICTD systems make it quicker and easier to obtain information and produce reports</p> 
 <p>Information may be duplicated and of varied standards of quality</p>	<p>Improved online self-service access provides better quality information from one source, minimising duplication</p> 
 <p>Too much time spent using complex ICTD systems leaves less time to focus on work priorities</p>	<p>Simplified systems are easier to use, enabling quicker access to information</p> 
 <p>Online advice can be hard to interpret leading to errors - reliability of advice via phone or email is variable</p>	<p>Self service access provides up to date and reliable online advice and support from a single source</p> 
<p>Improved access to more accurate management information results in improved service performance and ultimately better service to customers</p>	

Figure 9 - Theme 1 Case Study

3.2 Theme 2 - Digital Facilitation

Objective: to enable our stakeholders to participate and fully contribute to the growth of the Digital Economy and Digital Society and create a Digital Culture.

Our citizens, businesses and entrepreneurs must have the right infrastructure and skills to participate and accelerate the innovative opportunities that digital technologies offer.



The Digital Facilitation theme is far reaching and underpins many of the other themes; it will drive smart city applications, using digital technologies and data to enhance our services, working in collaboration with partners locally and across the region.

Birmingham is starting from a position of strength. It is one of the most digitally connected cities in the UK, with freely available Wi-Fi in public buildings and across the City Centre; it is pioneering numerous smart city applications and activities and is hosting an ever growing entrepreneurial tech sector. Already the City has seen the highest growth in the number of business “start-ups” outside London.

The City's population is not only the most culturally diverse in the UK; it is one of the youngest in Europe. These strengths provide us with the impetus to continue to create an environment that supports innovation, cutting edge digital services and the challenges to design services fit for 21st century city living.

Our approach will look to build on existing technologies such as next generation broadband and wireless capabilities as well as the tools and devices such as smart phones and social media platforms such as Facebook, Twitter, LinkedIn and GooglePlus+, to enable our stakeholders to fully engage, as consumers and producers of future digital services.

We will work with public and private partners to create a 'Digital Culture' that will enable collaboration in order to identify the right conditions to accelerate digital investment in the city.

We will also look to new emerging technologies such as Internet of the Things (IoT), 5G, robotics, autonomous vehicles and virtual reality by working with our partners to utilise these opportunities to ensure the city continues to be forward thinking, innovative and adaptable in sustaining Birmingham as one of the best places to live, work, learn, visit and play.

We will acquire a deep knowledge and understanding of the strengths and aspirations of our communities and use this to develop local, place-based and community specific services, complemented by digital and online services.

Digital Transformation; we will think big; start small – looking for quick wins to establish credibility!

We will commit to delivering all of our services in a fair and equitable manner so as to ensure individuals or groups are not unfairly disadvantaged by the 'Digital Divide' created by technology. Through the Council's Citizen Access Strategy, we are already responding to this challenge through the creation of a single 'Digital Platform' that will simplify and connect people to the services and support they need, far more effectively.

To maximise the opportunities this offers as well as the wider benefits of being online and using technology, we also recognise that we need to make sure that we deliver strong Digital Leadership to support our citizens, businesses and our own workforce to develop their skills and in turn design our services so that they better meet the needs of a digitally skilled population.

Digital Leadership is needed if we are to nurture a Digital Culture!

To enable us to do this we are adopting Government Digital Services (GDS) and Local Government Digital Service standards, which will ensure that we deliver and design high quality end-to-end digital services that use Open Standards and make data open by default, accessible and secure.

The Digital Facilitation theme offers the opportunity to deliver our Digital Agenda and establish a Digital City, open for experimentation and innovation, to create a Digital Culture supported by a digitally skilled workforce, a confident and empowered digital citizen, with a world class digital infrastructure that nurtures collaboration and innovation, which will accelerate the growth of the digital economy and of smart city applications and solutions.

Pilot, Refine, Repeat!

Our aim will be to align with the emerging digital strategies and capabilities being developed by the WMCA as well as the digital opportunities offered by HS2 investment – so that we can take advantage of the collective assets, knowledge and capabilities of the region.

3.2.1 Theme 2 Success Factors / Outcomes

- **Digital Inclusion** - we will work with partners to identify and target specifically those who are less digitally connected and more vulnerable and give them the extra support and confidence they need so that they can choose how, when and where they go online. In conjunction with partners we will build on existing digital champion programmes to increase digital capabilities of stakeholders. Our success will be monitored by measuring the percentage increase of residents accessing the internet at home and on the move: and those transacting online and accessing public services. We recognise that the digital divide is not only widening but deepening for those communities who struggle to understand and use technology to access services. In developing our services, we will cater for all ages, diversity of cultures and new migrants to ensure our services are fair, easily accessible and are inclusive.
- **Digital Citizen** - we want to make it easier for our stakeholders to access more of our services online, and to meet the growing demand. Our aim is to enhance the user experience, to improve the range of services offered through a variety of Digital Channels. This will mean building our technology platforms to deliver intuitive end to end public services that enable simple, swift, personalised and secure access using 'single sign on' and authentication solutions that remember and relate to users intelligently, so we interact as a single organisation. We will enable sharing of data across our business areas and those of providers to track service requests and deliver an enhanced service that over time will remove administrative inefficiencies that don't add value for stakeholders and partners. We will measure our success by the number of available online services and percentage increase in online services.
- **Digital Workforce and Digital Culture** - we will raise the digital capability of our workforce through a digital competency framework, empower them and foster the development of Digital Leaders at all levels of the organisation. Strong digital leadership led by Council staff and its Members will set the standard from hiring, induction, through to working with our partner service providers. We will measure our success through our staff progress on the digital competency framework and its adoption by our partners.
- **Digital City** - we will create the right environment for the region that promotes and encourages a wider adoption and application of smart and disruptive technologies

and data to address our city and region wide challenges. We will harness the power of citizens, business, academics and city assets to experiment, design and test new services in a low risk and agile way, using real life demonstrators, establishing the data platform for a Smart City. We will work with partners such as Innovation Birmingham, Impact Hub and others to exploit city facilities such as Icentrum - to create Digital Innovation for the Public Sector (DIPS) and work with innovators and entrepreneurial SMEs to source new solutions and applications to address public sector challenges.

- **Digital Economy** - we will continue to both support and develop initiatives like the successful GBSLEP Digital Academy and superfast broadband roll-out to help maximise the competitive potential of SMEs offered by the rapidly developing application of digital technologies. We will make sure that our businesses have access to a ready supply of digital skills and talent critical to supporting their future demand and growth. We will work with partners to train the workforce and support the talent of young people by addressing the current digital skills shortage and also ensure that new market segments that require digital skills can be exploited.
- **Digital Infrastructure** - digital connectivity is a key enabler for growth across all economic sectors and increasingly relevant to inward investment. Our starting point is to ensure that Birmingham has 100% access to superfast broadband connectivity and 4G / 5G wireless coverage and we will continue to work with telecommunications suppliers and other digital agencies to create the right conditions to accelerate digital investment through easier access to city assets and simpler planning permissions. However, our aspiration is to work more strategically with our regional partners and telecoms providers to attract ultrafast broadband connectivity across the region to rival the best in the world and whilst negotiating advantageous broadband deals for residents and businesses with network operators. We want to ensure that our City developments are future proofed, and we will work with developers and planners to embed digital masterplans within regeneration plans. Free Wi-Fi is already available across the City Centre and in over 200 public sector buildings and a range of connectivity solutions are being proposed to support more vulnerable citizens. Already there are a number of broadband infrastructure projects underway across the West Midlands. We will develop a series of strategic options with partners that will act as a catalyst to build world class infrastructure and wireless capabilities such as 5G, whitespace (and other emerging technologies) creating a platform to support the emerging Internet of Things (IoT) and other sensors to attract investment and support the future services.
- **Digital Collaboration** - we will adopt open standards and practices that will facilitate data and information sharing across partners and support and advocate system wide integration and interoperability to facilitate secure and safe networks for data exchange, in line with developing our IoT capabilities and network dependencies. We will support the use of collaboration tools to help transform how we work and communicate with our partners. Novel visualisation and interactive tools will be introduced to enable people to take part in shaping and influencing their environment.
- **Government Digital Services (GDS)** - the use of GDS GOV.UK; Verify, Notify & Pay are helping to make Government Services easier to use in a more secure and friendlier way. We will work with the GDS team to build on this and to look at how we can incorporate these systems within ICTD to improve how we operate and

enhance stakeholder experience. Government Platform (GaaP) and Open Source software / development could enable Council services. We will continue to engage with the GDS team and our partners in the potential development of these services

- HighSpeed2 Digital Strategy** - the benefits of HS2 investments will go well beyond the Curzon Street Station, tracks and trains. The National College for High Speed Rail in Birmingham is already set to become a Digital Centre of excellence in its application and use of technologies for learning, curriculum management and skills. Our aim is to accelerate the development of technology solutions, both transferable and scalable, to enable citizens and businesses to unlock additional benefits from the HS2 investments that will respond to the growth challenges of the region like congestion and poor health to drive economic growth and improve quality of life.

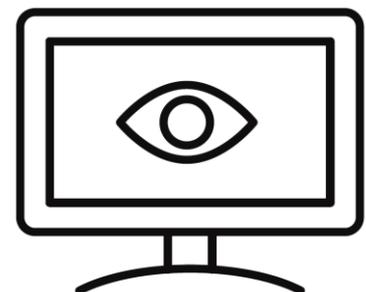
3.2.2 Theme 2 - Case study scenario

Improved new tenant applications for social housing	
Original method of applying	Digital self-service application
 Customer picks up paper form at office or phones to request form	Customer completes home application online 
 Customer returns completed form by post; Council inputs data to council management system	Council assesses online application form and sends online response 
 Council assesses eligibility and sends letter with ID for online lettings allocation system	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 bids online for preferred home - if bid successful, council send offer letter 
 Customer views home and accepts or refuses the offer	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	

Figure 10 - Theme 2 Case study scenario

3.3 Theme 3 – Insight

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



Our future Council vision is built on values that demand we lead from the heart, with a passion to understand and know our citizens, putting their needs first with unerring dedication to be true to our word. It is unequivocal; our future relies on how we use Information in the pursuit of knowledge.

Stakeholder Insight is about understanding and predicting behaviours of citizens, the services they use and how we will address their needs in the most effective way.

3.3.1 Data Assets

Like people, buildings, money or infrastructure, data has an intrinsic value that we need to exploit. We will start to design our future services to be enablers of our (and public) 'Data Assets'. We will recognise the value of knowledge by investing in proactive leadership in this area. There must be a presumption of permissiveness that underpins access to Information.

As a learning organisation we must foster and embed a culture that has the correct skills, to ask the right questions, values feedback and encourages a pull for knowledge by decision makers.

Data is seen as critical in understanding and delivering internal and external business functions. Currently our data is locked away in function, service or departmental silos and in many instances with the value only released for a primary and invariably narrow, reactive operational requirement. Data will be used to predict likely future citizen behaviour and offer alternative courses of action to the benefit of both the citizen and cost of council commissioned services.

We have started to recognise organisational data is a valuable asset for driving service delivery improvements. So in order to leverage its use we will continue to embed the cultural change needed, supporting stakeholder Insight by creating joined up thinking and developing our 'Intelligence Lead' decision making capabilities.

“We must create an environment where data and insight is a positive force for good!”¹¹

3.3.2 Open and Transparent Data

In line with Central Government policy and in collaboration with our partners, we will deliver the initiatives of 'Open Data' and 'Data Transparency'. More public data is being made available online, which includes publishing information about service costs, contracts and plans.

We will enable stakeholders to understand the reasons for the decisions we take, by making the evidence (Business Information) that supports such decisions more readily available, as well as improving trust in public services.

We are not alone in wanting to use our knowledge in a proactive way. Across the WMCA and regional agencies, we are certainly not the first. We must collaborate, share and align

¹¹ Angela Probert – strategic director for Change and Support service March 2016

with our partners in order expedite our delivery and deliver VFM. So this can be achieved, and driven by our ICTD and Information Management (IM) strategies - we must adopt and insist on the use of agreed 'Open' data, models, standards, specifications and architecture.

3.3.3 Geographic Information System (GIS)

The use of geographically referenced information is changing the face of the Internet and the way we interpret and view data. For our services to deliver a 'best of breed' Insight capability, we must start to exploit the use of GIS more effectively. The development of an integrated GIS Service will provide geographical Insight through the use of digital mapped information, based on location and demographics. For example; Transport, Planning, Licensing applications and Fly-tipping incident analysis can all be enhanced by mapping the transactions and relationships between the incidents and services.

3.3.4 Theme 3 - Success Factors / Outcomes

- **Information Management Strategy** - we will develop our IM Strategy to describe how 'Open Data' and 'Data Transparency' will be used to support the Future Council model and how we will work with community-based social media to open up decision making and policy debate. We will recognise a one Council, single version of the truth, for identity and address. The IM Strategy will be updated in parallel with the ICTD Strategy and will be governed and assured in a similar way.
- **Geographic Information System (GIS) Strategy** - we will describe how the Council will use GIS to enable digital access to information and data and how it will be used to improve service productivity and performance, enabling stakeholders to work more efficiently through the use of ICTD. The GIS Strategy will support the implementation of both the Council's ICTD and IM Strategies.
- **Information Management (IM)** - Insight will be at the heart of our decisions at both the strategic and individual level - in order to create the future Council we need the ability to respond strategically to financial pressures. This will require continued culture change within the respective areas of the Council that manage services and systems to recognise the corporate value created by data. However there is a cost to manage, move, store, protect and retain data - so we must only collect and manage the data we need. We will capture once and use many times, enabled by better sharing of information across service boundaries. As part of the Enterprise Architecture capability we will develop and implement Data Architecture, principles, policies, practices and procedures in order to manage our information lifecycle needs more effectively. This will drive and assure compliance and adherence to our data principles, policies and standards; as described in the Governance theme. We will build upon our existing Governance frameworks to create a new and centralised IM capability - steered by a strategic champion, the new Head of ICTD / Chief Information Officer.
- **Open Data** - we will make our data open, transparent and accessible by continuing to publish our data sets. We will become less resistant to unlocking and providing access to data, stemming either from data protection concerns or exposing the performance of the organisation or specific services. Public access to Council information will promote lively democracy, integrity and better decision making.
- **Data Transparency** - we will reduce the administrative burden of dealing with specific information requests and allow us to become more transparent. It will

make it easier to see how the spending of public funds is prioritised and help appraise the performance of the Council.

- **Insight Capabilities** - we will create an Insight Capability that will utilise our data assets, information and knowledge. Through the practices of Management Information (MI) and Business Intelligence (BI), we will enable our workforce to be proactive in meeting the needs of our citizens first.
- **IM - Skills and Expertise** - the development of our workforce will expand our Information Management, Data Architecture and Data Enablement capabilities, to realise the vision of what an integrated and intelligence lead approach can offer to support the future Council.
- **Data Quality** - we will create standards and rules, the use of which will be enforced via the IM Governance Framework. This is a key enabler for the creation of a usable “one version of the truth”. Examples include; data models, NHS ITK, Public Services Network (PSN), Local Government Authority (LGA) – [Beta Models] and Government Open Standards and Open Specifications.

3.3.5 Theme 3 - Case study scenario

Improved domestic waste collection service	
Original way of working	New way of working
 <p>GPS (Global Positioning System) data on routes of all wagons is produced in a complex, combined format</p>	<p>GPS data is presented and used more effectively to measure waste collection routes for every section of road</p> 
 <p>The crew plan their waste collection rounds on a paper copy of a map using marker pens</p>	<p>Digital data on road sections is used to form new routes for shorter collection rounds</p> 
 <p>The crew rely on their own experience and local knowledge to adapt their routes</p>	<p>The knowledge and experience of the crew is combined with digital data to further improve route plans</p> 
 <p>The waste collection wagons return to the depot when full</p>	<p>Data shows the best point for the wagon to return and be emptied, which reduces distance and minimises the number of trips</p> 
<p>Better route plans reduce wagon mileage by 20%, improve service performance and speed up domestic refuse collection for customers</p>	

Figure 11 - Theme 3 Case study scenario

3.4 Theme 4 – Commissioning



Objective: to deliver 'Value for Money' services through the commissioning of excellent ICTD.

We will commission the most suitable ICTD that provides flexibility of service, performance and cost that makes the best of our local market.

As previously mentioned; the current contract which is a partnership between the Council and Capita, forming Service Birmingham, ends in March 2021. The partnership was established in 2006 and has had a number of iterations during its life, albeit the requirements are dated and not necessarily suited to the changing requirements of the Council. The current contract provides most current aspects of ICT (with few exceptions) and has considerable exclusivity in the provision of new ICTD i.e. the Council are a 'captive audience'.

We will conform to our design and guiding principles to deliver clear and measured ICTD - we must avoid poor decision making around the choice of new systems, whilst supporting the future consolidation and rationalisation of our existing 'as-is' estate.

Agree it, Own it, Deliver it!

The Council is now in a position to determine its future ICTD requirements, which will be aligned to the services that the Council will deliver as it transforms into a more agile and leaner organisation. In evaluating different 'Alternative Service Delivery Vehicles' the Council will consider:

- Other comparative organisations
- Industry exemplars
- Lessons learnt from the current Strategic Partnership and other external and similar organisations / scenarios
- The need to have flexible contracts that are capable of changing to deliver the Council's objectives (without penalty) and include regular Value for Money market testing
- How best we can engage with local ICTD suppliers to benefit from their knowledge and expertise where appropriate. We will leverage the expertise and agile capabilities of local and national SME's
- How best we can engage with national and international suppliers to ensure best of breed, industry standard ICTD
- The need to retain and augment internal expertise; to effectively manage, govern and monitor the contract whether internally or externally provided
- The use of an ICTD Commissioning Framework and Methodology
- The use of Management and Business Information – utilising reporting dashboards effectively and regularly

3.4.1 Theme 4 - Success Factors / Outcomes

- **Commissioning Strategy** – as part of the new Operating Model; the development of a commissioning framework for Business As Usual /steady state ICTD. This will also include arrangements to ensure continued effective commissioning as the contract transition (below) is in progress. Involving minimised tactical purchases

(due to critically urgent business imperatives) along with strategic commissioning in line with the overall ICTD strategy.

- **ICTD SME Frameworks** - we will use compliant routes to market to source SME's by leveraging the use of government and sector frameworks such as the Governments Digital Market Place and 'GCloud' etc.
- **ICTD Contract Transition** – there will be a programme of work to design and transition to the new ICTD Operating Model determining the Council's ICTD business requirements, making market assessments, commissioning and procurement of ICTD applying a SIAM (or hybrid of) approach, implementation of a new, enhanced Intelligent Client Function (ICF) and associated activities; as described in Theme 5 – Governance. Interfacing with the 'Investment Plan' programme where required.
- **ICTD BAU** – there will be ongoing performance management of the existing SB contract informing the ICTD Contract Transition programme and its new projects, required to enable BAU activities from the current date to the end of contract. Interfacing with the 'Investment Plan' programme where required.
- **ICTD Funding Model** - the current ICTD funding model is complex. If clerical effort is being expended around the Council to check, decipher and potentially challenge ICTD expenditure then our model is not optimal. In some cases our stakeholders need better visibility of what they are paying for, why and what they can do to forecast and control costs. By default, our ICTD funding model will change - due to the future Operating Model and the commissioning of new suppliers. In the interim, and in line with the Future Council Design principles / ICTD Design & Guiding Principles, we will continue to develop an improved funding model to ensure clarity and transparency of cost
- **ICT Funding Governance** - ICTD spending cannot be done in silos. The governance of ICTD spending will be a crucial component of the Governance framework.

3.4.2 Theme 4 - Case study scenario

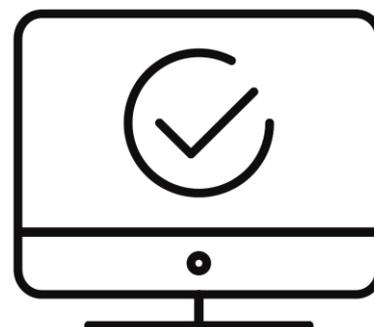
Improved purchasing process for ICTD projects	
Original way of working	New way of working
 <p>A council ICTD project proposal is developed jointly with Service Birmingham (the council's ICTD partnership)</p>	<p>A council ICTD project proposal is developed with the appropriate ICTD service to select and purchase the preferred ICTD product</p> 
 <p>As with all new ICTD, the preferred product is selected and then purchased by Service Birmingham</p>	<p>A new approach for prioritising and investing in ICTD projects ensures that funding is better allocated and meets the needs of the council</p> 
 <p>A contract with a single ICTD partner means that better value for money products and services from other suppliers cannot be explored</p>	<p>Having contracts with other ICTD suppliers enables a more flexible way to achieve value for money from products and services</p> 
<p>An improved method for buying new ICTD means greater council control of purchasing for the best solution and the best value for money</p>	

Figure 12 - Theme 4 Case study scenario

3.5 Theme 5 – Governance

Objective: to deliver the effective management of ICTD.

Since the formation of Service Birmingham, we have embarked on introducing new and exciting ICTD systems with the intention of automating business processes, gaining new efficiencies, lowering operating costs and simply striving for excellence.



These motivators are coupled with innovations in ICTD as well as a multitude of directorate-led, independent projects – the lack of Enterprise Architecture has incentivised a silo mentality to the design and delivery of ICTD. If we continue without proper coordination of ICTD activities architectural entropy will continue to occur.

Working in a disjointed and silo manner and without a Reference Architecture causes a cacophony of duplicate processes and technologies, architected in a distributed way. Because of this, projects have been taking longer to execute and returned poorer overall VFM and ROI.

We have run in this mode for some years and more so recently with a duplication of effort across the Council, specifically in the capabilities of Insight and Digital Facilitation. Using Insight as an example, there have been disjointed activities across Council functions, such as in; the Future Council programme, directorate Projects, Audit and Digital Birmingham.

Driven by business critical needs, there has been a propagation of directorate led ICTD resources across the Council, all working in differing ways, some more effective than others, but without a common Enterprise Architectural or managing framework for the design and implementation of ICTD. We need to take a disciplined approach to commissioning, driven by strategic concerns and managed via a staunch Business and ICTD aligned, Governance Framework.

ICT is not just a commoditised service - it is a key enabler for the Council!

This framework will be implemented by the creation of an Enterprise Architecture (EA)¹² capability, led by the new CIO, mandated and supported by senior leadership and resourced by the Council (as part of the BCC ICF), Service Birmingham and where required partner resources - when demand dictates we will commission additional Subject Matter Experts (SME) to support us.

3.5.1 Enterprise Architecture (EA)

Enterprise Architecture (EA) is - “a well-defined, industry best practice for conducting consistent enterprise wide Business and ICTD analysis, design, planning and implementation, using a pan-council approach at all times”.

EA is a comprehensive description of all of the key elements and relationships that make up an organisation. Working as part of the Council’s Intelligent Client Function (ICF) - Future Operating Model, this capability will become a pan-council Design Authority that will enable us to effectively govern the design and implementation of ICTD, enabling us to optimise delivery in our dynamically changing environment. The diagram below depicts how using governance, we will embed our ‘Reference Architecture’.



Figure 13 - Design Authority

The importance and value of EA is not only understood by the disciplines of ICTD, the numerous usage potentials for; Innovation, Organisational Design, process optimisation, planning, compliance, Business Continuity, Disaster Recovery, Risk Management and Service Integration etc. can be successively discovered and utilised by the Business.

3.5.2 Theme 5 - Success Factors / Outcomes

- **Intelligent Client Function (FOM)** - adding to our experienced and capable team, the ICF will become a highly skilled and proficient client side function, led by the new Head of ICTD / Chief Information Officer (senior Council Officer - JNC grade). The ICF will have sufficient: training, capabilities and tools to manage and govern the council's ICTD service, its design and change effectively. Capability examples include; Projects and Programmes, EA, Business Analysis, Governance, Contract Management, Information Management (and assurance), as well as Risk and Service Management. It will be a developing function to meet the current needs of the existing partnership and the iterative transition to a new ICTD Operating Model.
- **Enterprise Architecture** – will be a capability at the centre of the organisation, aligning the business and ICTD strategies, designing and delivering an Enterprise Architecture for the Council and partners, to maintain the existing 'as-is' architecture / BAU service and to create the future 'to-be' Reference Architecture.
- **Agile Governance** - led and championed by the CIO, this will build on the existing governance framework, developing a new agile and pragmatic framework, underpinned by organisational leadership, structures and processes, to regulate decision making for corporate and directorate solutions, enforcing the adherence to the policies, specification and standards.
- **ICTD Distributed Structure** - led by the ICF, this function will deliver holistic management and governance of the distributed ICTD resources across the Council, such as Directorate resources, Digital Birmingham, partnership and supplier resources

- **ICTD Investment Plan** - a programme of work to deliver ICTD improvements and savings. The 'Investment Plan' programme will design and deliver the new Reference Architecture and Operating Model design.

3.5.3 Theme 5 - Case study scenario

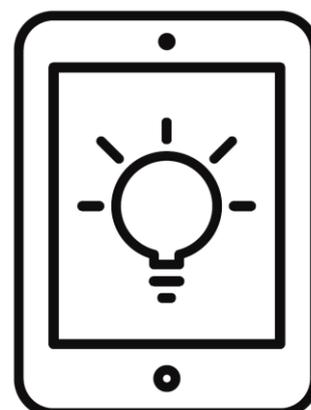
Improved control of technology projects	
Existing way of working	New way of working
 <p>New technology is needed to help improve the performance of a council service</p>	<p>New technology requests have a more coordinated process with a clearer council-wide view of all ICTD projects, existing technology and funding</p> 
 <p>A new ICTD system is purchased, designed and installed to meet the specific needs of the service</p>	<p>Where possible, new technology is purchased and designed around council-wide priorities rather than customised for one particular service</p> 
 <p>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</p>	<p>System duplication is prevented, saving on cost, time and effort. Technology used council-wide achieves better value for money</p> 
<p>Better coordination of the purchase, design and use of new technology brings benefits to the whole council</p>	

Figure 14 - Theme 5 Case study scenario

3.6 Theme 6 – Innovation

Objective: to be innovative; to make changes to what's established, by introducing new methods, ideas, and solutions.

Innovation is crucial to the continuing success of the Council. Within the context of Birmingham City Council, it is the introduction of a new product or solution to address either an existing business problem more effectively or to exploit the opportunity innovation brings to reduce cost, improve service or simply to demonstrate or take advantage of ICTD expertise.



Local government is undergoing major funding changes; the central government grant has reduced and is reducing further, while the local fundraising opportunity is increasing.

Dramatic rethinking of Council services is required. Organisations which have been seen traditionally as welfare providers will need to adjust to be local economic growth catalysts.

How can ICT and Digital services support such fundamental system changes?

It is vital that we seek to find strategic partners and allies in: developing, de-risking and delivering the key elements of our ICTD strategy. This could include: private sector providers, SMEs and major corporates with suitable capabilities. Our local Universities have especially extensive knowledge-exchange resources and strong scientific expertise in relevant areas.

The innovation theme is about how we will look at existing and new challenges, in a way that seeks to focus on how the ICTD Strategy can contribute to the delivery of such fundamental changes.

There will be a balance of consideration given to both supply side and demand side - supply side is about ensuring awareness of what local, national and global partners can contribute and demand side is about closer collaboration with local stakeholders, whether it's our workforce, citizens, local businesses or visitors of Birmingham.

“You are invited to submit an idea!”

We will provide a safe space to facilitate co-design, ideas and prototyping of solutions to address major challenges faced by Birmingham as a city and as a community.

3.6.1 Theme 6 - Success Factors / Outcomes

- **Innovation Lab** – we will collaborate with partners such as Innovation Birmingham, Impact Hub and others to enable the creation of an ‘Innovation lab’, with the capability to inspire and enable the people within, and connected to, the Council to: rethink the local government system, promote disruption, innovation and entrepreneurial advancement.
- **Innovation Portal** - to enable our stakeholders to submit innovative business and technological ideas and solutions that meet our key challenges. We will break down the barriers of implementing ‘a new idea’ by focusing on thoughts and inspirations and recognising and rewarding individual or group contributions.
- **Digital Innovation for Public Sector (DIPS) Centre** – that will work with city partners such as Innovation Birmingham and others, to promote greater innovation within and for Public Sector bodies, in collaboration with Birmingham City Council, whilst enabling others across the city to do the same, creating a stronger and more powerful coalition of those who would seek to innovate and experiment to make the lives of the people of the city region better.
- **Innovation Legal and Procurement Framework** – We will establish arrangements to enable rapid and effective innovation, by working with experts and suppliers.
- **Guided and Sustainable Innovation** - supported by the EA capability and associated Governance Framework, we will ensure environmental, social and

performance innovations are fully integrated with the Council and its partners, from idea generation through to Research and Development (R&D), into service delivery and beyond. We will support R&D and Proof of Concept (PoC) initiatives by supporting Innovation with the use of: pragmatic, agile and enabling ICTD - for example: the creation of a 'Cloud' based PoC development through to live platforms.

- **City as a Platform** - will explore the development of a connected data platform in order to provide a powerful environment that aggregates, normalises and analyses a wealth of community data from a myriad of intelligent sensors and city assets. App developers, investors, SMEs, social and tech entrepreneurs can use this resource to develop new urban service applications for our stakeholders.

3.6.2 Theme 6 - Case study scenario

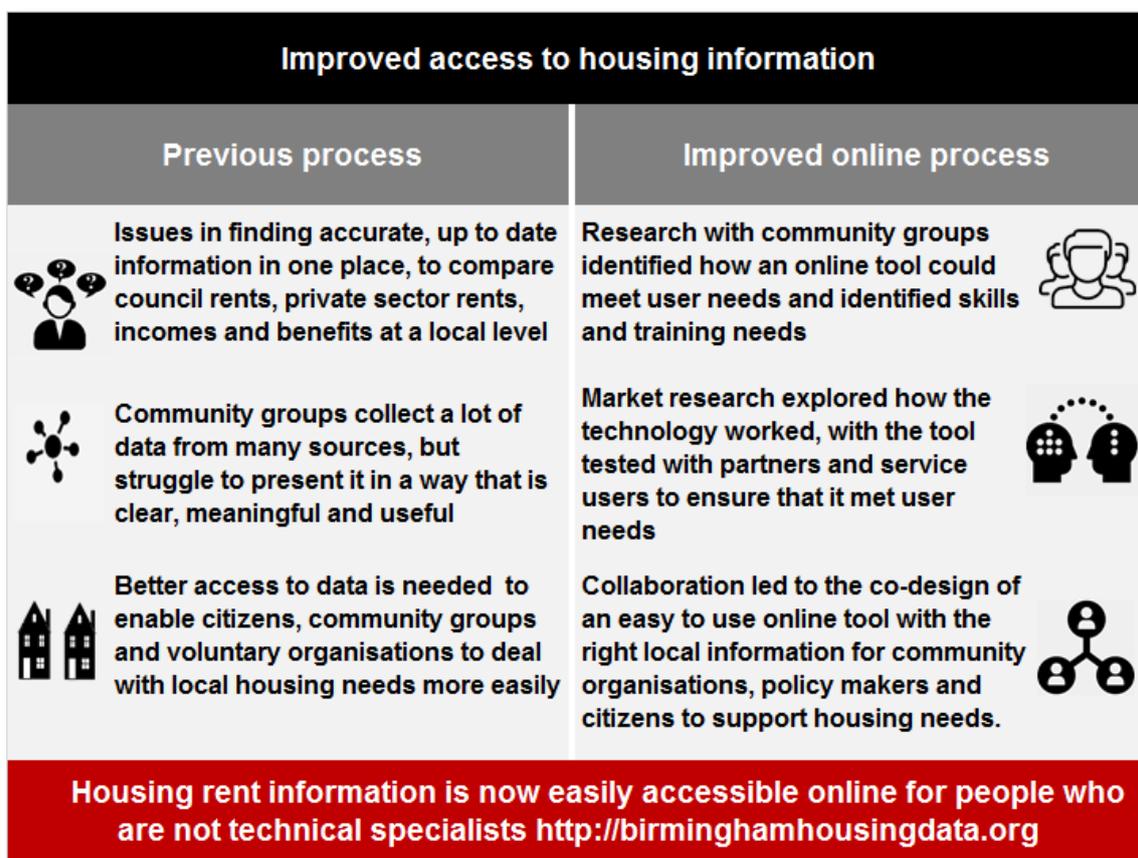


Figure 15 - Theme 6 Case study scenario

3.7 Theme to Future Council Mapping

The table below maps the ICTD Strategy Themes to the Future Council’s Design Principles¹³

Theme Mapping to Future Council Design Principles									
									
Number	ID	ID	Successful Outcome / Factors	Whole System	Enable independence	Uses Strategic Assets	Target Resources	Agile Organisation	Transparent
	1. Integrated ICT & Digital Services	1.1	Consolidation and Rationalisation	✓	✓	✓	✓	✓	✓
		1.2	Emerging Technologies	✓	✓	✓	✓	✓	✓
		1.3	Value For Money	✓	✓		✓	✓	✓
		1.4	Service Agility	✓	✓	✓	✓	✓	✓
		1.5	Service Catalogues	✓	✓	✓		✓	✓
		1.6	Service Integration	✓	✓	✓	✓	✓	✓
		1.7	Standards and Specifications		✓			✓	✓
	2. Digital Facilitation	2.1	Digital Inclusion	✓	✓	✓	✓	✓	✓
		2.2	Digital Citizen	✓	✓	✓	✓	✓	✓
		2.3	Digital Workforce	✓	✓	✓	✓	✓	✓
		2.4	Digital City	✓	✓	✓	✓	✓	✓
		2.5	Digital Economy	✓		✓	✓	✓	✓
		2.6	Digital Infrastructure	✓		✓	✓		✓
		2.7	Digital Collaboration	✓		✓	✓	✓	✓
		2.8	Government Digital Services	✓	✓	✓	✓	✓	✓
		2.9	HighSpeed2 Strategy	✓	✓	✓	✓	✓	✓
	3. Insight	3.1	Information Management Strategy	✓	✓	✓	✓	✓	✓
		3.2	GIS Strategy	✓	✓	✓	✓	✓	✓
		3.3	Information Management	✓	✓	✓	✓	✓	✓
		3.4	Open Data	✓	✓	✓	✓	✓	✓
		3.5	Data Transparency	✓	✓	✓	✓	✓	✓
		3.6	Insight Capabilities	✓	✓	✓	✓	✓	✓
		3.7	IM Skills and Experience	✓	✓		✓	✓	✓
		3.8	Data Quality	✓	✓	✓	✓	✓	✓
	4. Commissioning	4.1	Commissioning Strategy	✓	✓	✓	✓	✓	✓
		4.2	ICTD SME Framework	✓	✓	✓	✓	✓	✓
		4.3	ICTD Contract Transition	✓	✓	✓	✓	✓	✓
		4.4	ICTD BAU	✓	✓	✓	✓	✓	✓
		4.5	ICTD Funding Model			✓		✓	✓
		4.6	ICTD Funding Governance	✓	✓			✓	✓
	5. Governance	5.1	Intelligent Client Function (FCM)	✓	✓	✓	✓	✓	✓
		5.2	Enterprise Architecture	✓	✓	✓	✓	✓	✓
		5.3	Agile Governance and Assurance	✓	✓	✓	✓	✓	✓
		5.4	ICTD Distributed Structure	✓	✓	✓	✓	✓	✓
		5.5	ICTD Investment Plan	✓	✓	✓	✓	✓	✓
	6. Innovation	6.1	Innovation Lab	✓	✓	✓		✓	✓
		6.2	Innovation Portal	✓	✓	✓		✓	✓
		6.3	DIPS Centre	✓	✓	✓		✓	✓
		6.4	Innovation Legal and Commissioning Framework	✓	✓	✓		✓	✓
		6.5	Guided and Sustainable Innovation	✓	✓	✓		✓	✓
		6.5	City As A Platform	✓	✓	✓		✓	✓

Figure 16 – Themes to Future Council Design Principles

¹³ Table Screenshot taken from the ICTD Strategy Framework Document - please refer to annexe - Section 4.5 Document Reference Table (Ref. 10)

4 Annexe

4.1 Enabling Work streams

4.1.1 Investment Plan – Programme of work

Scope

- 'To-Be' Reference Architecture
- ICT Investment and end-of-contract transition activities
- Saving Initiatives
- Action plan and costing to describe a clear budgetary provision and path to where we want get to the 'to be' Reference Architecture

Funding Source

Programme funding will be via a blended model incorporating the allocated funding from the following initiatives;

- ICTD Capital Investment Budget 2016-2021¹⁴
- BAU / SB contract funding model

4.1.2 Programme Overview

The ICTD Service will support work 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' has been developed. This will include obtaining best value-for-money from the market (in line with our guiding principle (ICTD GP2) and the subsequent monitoring of the planned expenditure

As previously mentioned; this ICTD Strategy forms part of a wider portfolio of documents that collectively form our Governance framework for design and delivery of ICTD. A critical element accompanying the strategy is 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, including short-term (tactical) business priorities.

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

The Investment Plan exercise has identified the following delivery timeframes, or iterations (supported by Roadmaps detailing transitions and transition points). They are

¹⁴ A detailed budget breakdown and delivery plan has been created (Capital Investment Budget 2016-2021). This will be presented in a separate Cabinet report. For further information relating to the ICTD Strategy - Architecture Building Blocks, Roadmaps and Delivery Programme (Capital Investment Budget 2016-2021) please refer to annexe - Section 4.5 Document Reference Table (Ref. 4).

1. **Iteration 1 – Foundation: (tactical) including elements reducing in significance after 1 year = now to 2017**
2. **Iteration 2 – Developing: (medium-term) = 2017 to 2019**
3. **Iteration 3 – Enabled: (strategic) = 2019 to 2021**

Central to the ICTD Strategy vision is the development of more joined-up services that will be designed from a citizen's perspective alongside other initiatives such as Demand Management and reduction and sharing the investment burden with partners.

We will continue to work with Service Birmingham to drive and support cashable savings efficiencies within Council services.

Delivering the six key themes will help to consolidate and centralise our core, or Enterprise Components, whilst designing more efficient and cost-effective solutions; taking a pragmatic, risk-assessed approach to provision.

ICTD like all services across the Council has been tasked to achieve significant savings. To meet Council objectives, we are working with SB to balance the need for tactical, short-term saving, against the need for strategic long-term investment. Further project capacity is likely to be required to implement and embed changes and where this is the case, separate business cases will be developed as appropriate to support this. Cabinet will be asked to approve the quarterly Cabinet Capital Monitoring Report on progress against the activities outlined in future plans.

4.1.3 Implementation Plans

The intention is for iterations of work to be developed, each of which will be published with a corresponding implementation plan. The plan will then be submitted for approval in line with the governance for ICTD and the Council, culminating in an updated ICTD Strategy and associated supporting document being presented at Cabinet on an annual basis.

4.1.4 Implementation Roadmaps

The Council is also taking a longer term, strategic view of the development and deployment of ICTD. To support this it will produce a set of ICTD Strategy and accompanying directorate roadmaps. Further roadmaps will be produced to stimulate discussion about the longer term direction of travel. The first of these will be:

- **Directorate Business Priority** - directorate led ICTD project delivery roadmaps 2016-2017 = as part of the development of the strategy, we have highlighted a list of eight business critical and eight enabling projects to be delivered in **Iteration 1 – Foundation**
- **Foundation Architecture** - this is an 'all domains' roadmap for the period: 2016-2021, incorporating the Council's **Big Moves**, detailing the required Architecture Building Blocks (ABB's) for the creation of our future 'to-be' Reference Architecture and ICTD Operating model. It will ensure projects are aligned strategically, as part of the Enterprise Architecture.

Below is an example of our **Iteration 1 - Foundation** Roadmap to illustrate the key areas of work against its Implementation work stream, the Investment Programme.

4.1.5 Foundation Architecture Roadmap Example

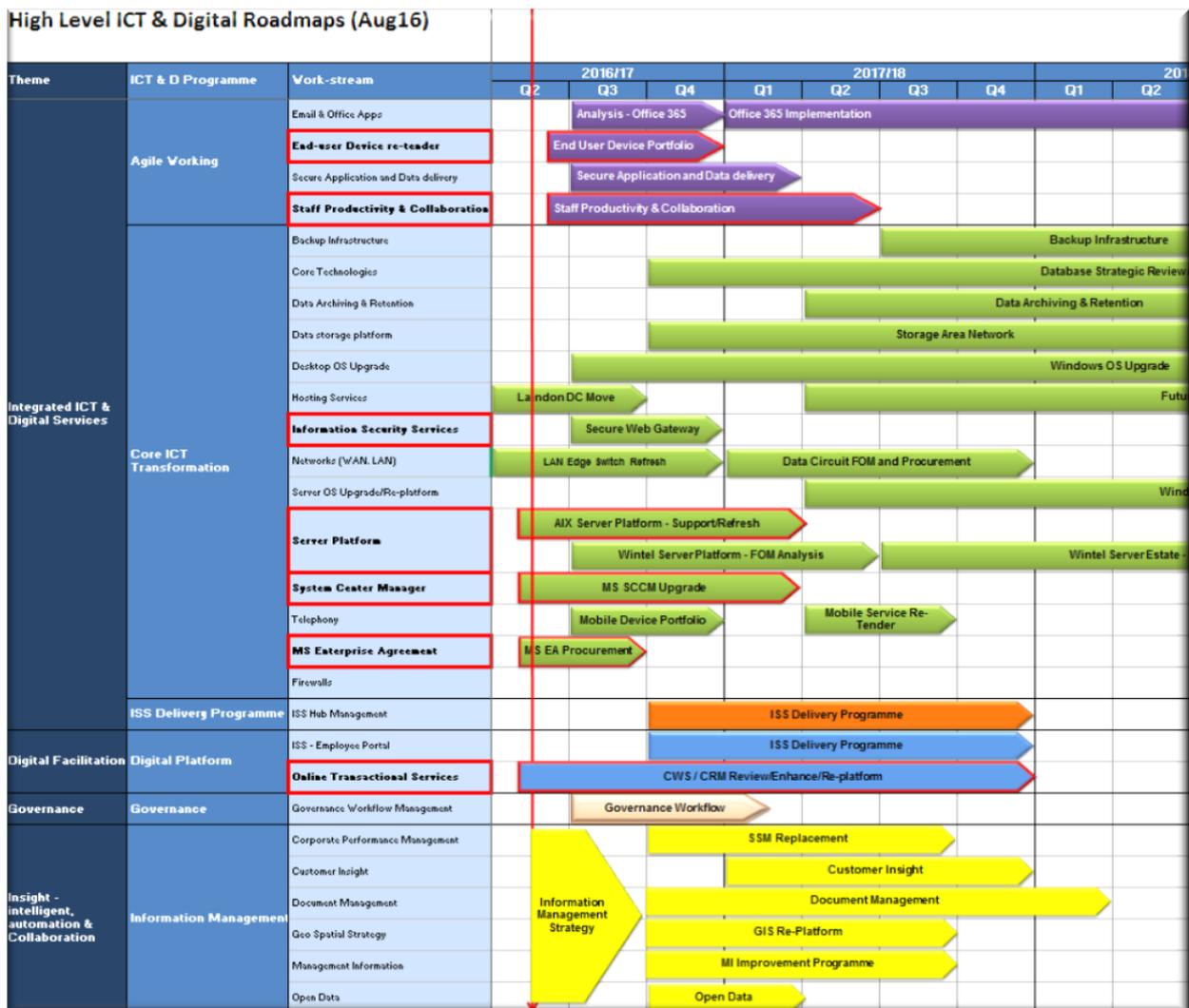


Figure 17 - Snapshot of developing ICTD Foundation Architecture Roadmap

4.1.6 Contract Transition – Programme of work

Scope

- The design and transition to a new ICTD Operating Model
- The replacement of the SB contract and transition to an Alternative Service Delivery Vehicle (ASDV)
- The Intelligent Client Function and any Directorate ICT - Future Operating Model¹⁵
 - Organisational Design
 - Organisation Funding

¹⁵ Further details describing the ICTD Intelligent Client Function - Future Operating Model please refer to annex - Section 4.5 Document Reference Table (Ref. 6)

Funding Source

Programme funding will be via a blended model incorporating the allocated funding from the following initiatives:

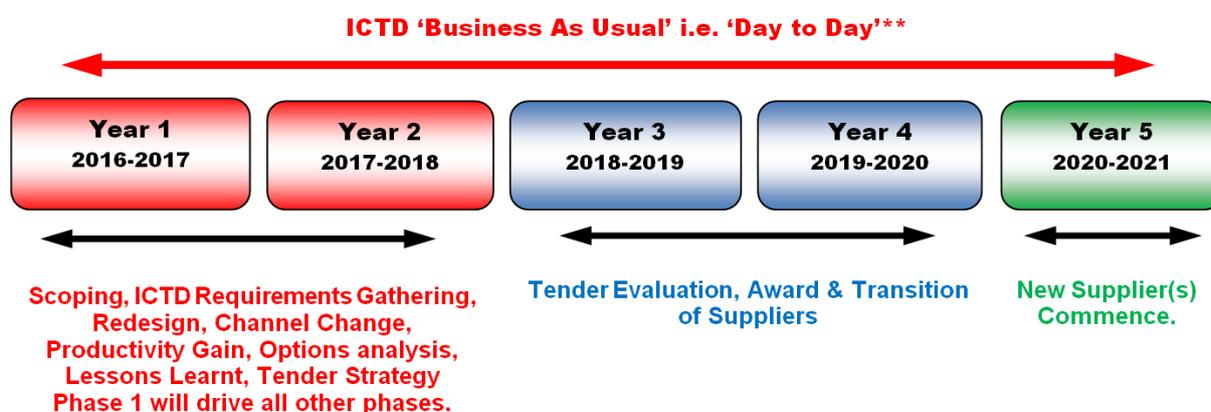
- Year 1 (2016-2017) funding has been agreed
- For the other phases - additional funding will be sought
- Shared 'Business As Usual' / SB Contract funding will also be used (where applicable)

4.1.7 Programme Overview

As previously described, our current ICTD service is provisioned by Service Birmingham, a Joint Venture formed between the Council and Capita. This ends in March 2021. This is based on a single, main 'Supplier Model', therefore the 'Contract Transition' programme is essential to the Council, as alternate service providers need to be sourced and transitioned to, whilst maintaining BAU and limiting business risk. It is envisaged that the Council will not have a 'like for like' replacement of ICTD, but look at the options relating to multiple suppliers and/or 'in-house' services.

The shape and objectives of the Council are changing and ICT needs to support and lead in achieving those objectives, whilst providing flexibility, added value having the ability to continue delivering a 'day-to-day' ICTD service whilst making this transition. However, based on: current development, consultation with other local government authorities and industry trends and analysis: the proposed, future ICTD Operating model is based around a Service Integration and Management (SIAM) model (or hybrid of). The final Operating Model will be further developed after additional consultation and advice.

The programme will deliver options appraisals for future ICTD delivery, which will be based on intelligence from: other local authorities such as Edinburgh (who have successfully undertaken a similar operation), 3rd party expertise such as Atos and their work with Enfield Council, industry best-practice approach - and advice from such parties as SOCITM. The ICTD Transition Programme will be divided into phases, with Phase 1 – Scoping, commencing October 2016.



** Note; there are many permutations to the above phases. This will depend on the design of the future Operation Model and Reference Architecture

Figure 18 - Contract Transition Programme - Phased Approach

4.2 ICTD Strategy Development - Method and Approach

4.2.1 Method

The development of the ICTD Strategy and the supporting analysis will provide stakeholders across the Council with greater transparency over the provision and delivery of ICTD. In seeking to define how best to develop a new approach to ICTD, it has been identified that the focus should not just be on technology, but on our stakeholders and partners. In addition to Citizen's needs, our ICTD approach is being developed across the Council to align, support and enable the realisation of the wider City, West Midlands Combined Authority and Central Government objectives etc.

To facilitate successful delivery of the ICTD Strategy, a new Council wide 'Strategic Framework' is being developed; this will ensure alignment of the Business Plan and the ICTD and associated strategies. In addition to Stakeholder and Citizen Requirements, in developing the ICTD Strategy we have also gathered requirements from the following linked initiatives;

- **Business As Usual** - existing business requirements and plans
- **The Future Council Programme** - the creation of the Future Council Operating Model that has defined the Future Council vision, key business objectives and enabling themes
- **The ISS Programme** - understanding which opportunities change the way internal stakeholders access services and providing the platform to accommodate and define how stakeholder information is shared, analysed and utilised to inform service design, delivery and to help citizens.
- **Partnership Collaboration** - the design and integration of shared services, to deliver Citizen Services with partners such as; NHS (Clinical Commissioning Groups), West Midlands Police. West Midlands Combined Authority and Voluntary sectors etc.
- **Devolution** - the handing down of powers and money from central government (Whitehall) to the Council so we can make decisions and spend money for the benefit of the region, as we see fit.

4.2.2 Approach

To be effective, a strategy needs to develop over time, allowing for consultation and training, developing support and embedding new practices. It is important for us to be realistic about our objectives and timescales. Before we develop: low-level requirements, financial forecasts and plans; the strategic vision needs to be agreed in principle (this document), being mindful that the details of how things will be done can come later. Using this approach, we will be able to gain buy-in and support from our stakeholders. Technology is nothing without the people who use it!

The strategy vision must become an ethos: embedded in the way we work, iterative, maturing and aligned to business needs. It should be continuously considering how stakeholders are involved. The best strategies consult and involve staff throughout the process of preparing the strategy; in order to achieve a depth and breadth across our stakeholders we have 3 Levels of abstractions for the strategy.

A successful ICTD Strategy cannot be just a document, or a set of plans sat on a shelf. It is imperative to bring the key players along the same journey. This will be achieved by measuring and reporting against key quality criteria as well as communicating clearly as part of the Governance Process. The approach criteria applied are:

- Tailored views and viewpoints i.e. for internal and technical audiences to be detailed and specific, for external audiences to be short and simple to understand
- Do not overload people with information, particularly technical information
- Be clear about what we want to do and why / clear about the benefits
- Not just internally focused - impact to citizens, workforce and partners, specifically working practices and/or efficiency
- What the strategy is linked to
- Without detail of the "how" – plans etc.
- Investment vs. Savings vs. Affordability

4.3 Strategy Levels

The ICTD Strategy has been iterated in 3 levels, catering for specific audience views and viewpoints and adhering to a predefined delivery and approval timeframe. The 3 Levels of the ICTD Strategy are described in the table below.

Table 2 - ICTD Strategy Levels

ICTD Strategy (Components)	Level 1 Method & Approach	Level 2 Developed Strategy	Level 3 Cabinet Report
Level of Detail	<ul style="list-style-type: none"> • Method and Approach • Key Theme Descriptions • High Level Information • Governance 	<ul style="list-style-type: none"> • Technically Focused • Directorate Development • Low Level Information • Delivery Mechanisms • Funding • Communication 	<ul style="list-style-type: none"> • Full Cabinet Report • External Consultation • Continuous Improvement
Audience	Internal Draft	Internal / External Draft	External / Internal Final
Approval process	Approved in principle CLT 10 th May 2016	Approved at CLT July 25 th 2016	Cabinet 18 th Oct. 2016
Strategy Sections	Included	Included	Included
Introduction and Aim	✓	✓	✓
Vision Statement	✓	✓	✓
Method and Approach	✓	✓	
Key Themes and Outcomes	✓	✓	✓
Guiding Principles	✓	✓	✓
Reference Architecture	✓	✓	✓
Encompassing Digital	✓	✓	✓

Sourcing and Partnerships	✓	✓	✓
Capabilities Diagrams		✓	✓
Delivery Roadmaps	✓	✓	
Governance	✓	✓	✓
Funding		✓	✓
Quality and Standards		✓	✓
Directorate Case Studies (Day in the life of)			✓
Supporting Business Information		✓	

4.4 ICTD Strategy Success Factors

The ways of measuring the success of the ICTD Strategy are:

- Most importantly, through the satisfaction of our stakeholders and partners
- Success through attainment levels of our workforce and business
- Annual review of the successful outcomes and maintaining a thorough review process for assessing the progress against our Business Plan and Future Council model objectives
- Through the Enterprise Architecture and Programme and Project methodologies as part of the Council's Strategic Framework (currently under development)
 - Projects measured against their Business Cases; delivery against time, quality and budget measures

4.5 Document Reference Table (Other related documents)

Table 3 - Document Reference

Number	Document Title	Version
1	SOCITM publication - Local CIO Council: Simplify – Standardise – Share	July 16
2	ICTD Strategy Method and Approach – Level 1	v1.0
3	ICTD Strategy - Architecture Building Blocks, Roadmaps and Delivery Programme (Capital Investment Budget 2016-2021)	Draft v0.25
4	<ul style="list-style-type: none"> • Government ICT Strategy • Government Cloud Strategy • Government Digital Strategy • Government Digital Inclusion Strategy • Local Government Digital Service Standards • Government e ACCESSIBILITY ACTION PLAN 	N/A
5	ICTD Contract Transition Programme - Terms of Reference	Draft v0.1
6	ICTD Intelligent Client Function - Future Operating Model document	Draft v0.11
7	ICTD Strategy Method and Approach – Level 2	Draft v0.3
8	ICTD Strategy 2016-2021 - External Reviewers Document	v1.0
9	Digital Transformation in the UK Public Sector - 2016 Survey and Analysis	v1.0
10	ICTD Strategy Framework Document	v16

4.6 Glossary

Table 4 - ICTD Strategy Glossary

ICT & Digital Strategy - Glossary of Terms		
Term / Acronym	Definition	Description
4G / 5G	Fourth and Fifth Generation	Major phases of improvement in mobile telecommunications standards e.g.5G will bring faster internet connection speeds than existing 4G (3G and E previously)
ABB	Architecture Building Block	An Architecture Building Block is a package of functionality defined to meet the business needs

Agile	An iterative design methodology / ASD	Used in software development - agile software development (ASD) is a methodology for the creative process that requires a flexible, incremental design approach.
API	Application Programming Interface	A set of programming instructions and standards for access to data or functionality of a software application / system or web tool.
BAU	Business as Usual	Business operations that happen every day in the normal way /standard daily work practice.
BI	Business Intelligence	A set of techniques and software reporting tools for accessing and transforming raw data into meaningful and useful information for business analysis and decision-making purposes.
CAPEX	Capital Expenditure	Money invested by a company to acquire or upgrade fixed, physical, non-consumable assets, such as buildings and equipment.
Change Academy	Change Academy	A learning and development centre of excellence that will give managers, key staff and future leaders the skills, techniques and tools they need to deliver change. This will include lean methodologies, demand management techniques, core management and leadership skills and innovative change tools.
CIO	Chief Information Officer	An Executive responsible for the development, implementation, and operation of an organisation's IT policy, providing the interface between the business and ICT
Cloud computing	Cloud refers to the Internet	A form of Internet-based computing that provides scalable , on-demand computer processing and data storage resources
CTO	Chief Technical/Technology Officer	A senior executive with responsibility for managing the technological requirements of an organisation
Digital by Default	Digital by Default Service Standard	Making services so easy to access online that it becomes natural for people to use. The aim is not to replace services with digital only options, but to encourage services that can become digital to do so.
Digital Platform	The software or hardware of a site	An organisation's staff and business partners are able to find and share business information more effectively on any device and from any location
EA	Enterprise Architecture	A conceptual blueprint that defines the structure and operation of an organisation to determine how it can most effectively achieve

		its current and future objectives
Enterprise Agreement	Enterprise License Agreement (ELA)	A volume licensing package offered by software companies, tailored to suit the needs of large organisation
FOM	Future Operating Model	The vision of how an organisation will work in the future across people, processes and technology – the "to be" state
GaaP	Government as a Platform	A new way of building digital services, with a set of shared components, service designs, platforms, data and hosting that every government service can use.
GDS	Government Digital Services	Helps the government to make digital services and information simpler, clearer and faster
GDS GOV.UK	Government Digital Services website	GOV.UK is the single website for government, designed to make information and services clear and accessible
GIS	Geographic Information System	A computer system for capturing, storing, checking, and displaying data related to positions on the earth's surface
ICF	Intelligent Client Function	An in-house function to support the organisation in the procurement and management of outsourced services provided by a third party
Ideas Forum	Ideas Forum	A forum for the workforce to pitch their ideas to improve a council service. We've put a small pot of money aside to help make the best suggestions happen
IM	Information Management	Covers the planning, organising, structuring, processing, controlling, evaluation and reporting of information activities, to support effective business performance
The improvement hub	The improvement hub	A place to give our workforce the support and capacity they need to make the changes happen.
Improvement Team	Improvement Team	A dedicated team of change and improvement specialists who will work with every service in the council over the next three years
Innovation Lab	Innovation Lab	Birmingham citizens, councillors and council staff can refer services that need improvement to the Innovation Lab. Rather than simply making changes to the current service, at the Innovation Lab staff will have the opportunity and support to redesign services from scratch and test innovative solutions.
IoT	Internet of Things	Connecting electronic devices over the internet and/or to each other, such as mobile phones, washing machines, headphones, lamps and

		wearable devices
JV	Joint Venture	A business entity created by two or more parties, generally characterised by shared ownership, shared returns and risks, and shared governance
KPI	Key Performance Indicators	A measurable value that demonstrates how effectively an organisation is achieving its main business objectives
LEP	Local Enterprise Partnerships	A voluntary partnership between local authorities and businesses to help determine local economic priorities and lead economic growth and job creation within the local area.
LEAN	LEAN	A method for driving out redundancy and waste from an organisation, by identifying and removing all non-value adding activity and associated cost.
LGA	Local Government Association	An organisation which comprises local authorities in England and Wales to promote better local government and develop best practice
LTFP	Long Term Financial Plan	A plan for the long term financial sustainability of an organisation
NHS ITK	NHS Interoperability Toolkit	A set of national standards, frameworks and implementation guides to support local organisations and local health communities to work together.
Open data	Data that anyone can access, use or share	The ethos that some data should be freely available to everyone to use and republish as they wish, without restrictions from copyright, patents or other control.
Open Source Software	Also known as OSS	Computer software with the source code made available by the copyright holder to provide the rights to study, change, and distribute the software to anyone and for any purpose.
OPEX	Operational Expenditure	Budget spent on an on-going, day-to-day basis in order to run a business or system.
Partners	Our Partners	Partners Organisations to include (but not limited to); Service Birmingham, Digital Birmingham, NHS (Clinical Commissioning Groups), West Midlands Police, Ambulance and Fire and Rescue services, Educational Establishments, West Midlands Combined Authority (WMCA), 3 rd and voluntary sectors etc. commonly described as One Public Sector
PoC	Proof of Concept	Evidence which establishes that an idea, invention, process, or business model is feasible.

PSN	Public Services Network	The government's high-performance network, which helps public sector organisations to work together, reduces duplication and share resources.
R&D	Research and Development	Investigation into the improvement of existing products and procedures or to lead to the development of new products and procedures.
RA	Reference Architecture	A reference architecture document can be used to select the best delivery method or template for particular technologies
ROI	Return on Investment	A measure of the gain or loss generated on an investment in relation to the amount of money invested
SBB	A Solution Building Block	A Solution Building Block is a package of components (normally a product or application) that delivers business functionality or elements of an ABB
Stakeholders	Stakeholders	Our stakeholders include (but are not limited to); citizens, businesses, partners and 3 rd sector organisations
Service Tower	Linked to SIAM model	Outsourcing ICT services based on the different elements that multiple suppliers deliver, rather than one service contract with a single supplier
SIAM model	Service Integration and Management	Also referred to as the Tower Model - an approach to managing multiple suppliers of services and integrating them to provide a single business-facing IT organisation
SME	Subject Matter Expert	Someone who is an authority in a particular area or topic. In ICT or Digital, the term domain expert is also used in expert systems software development
SMEs	Small Medium Enterprises	Small-to-Medium Enterprise is a convenient term for segmenting businesses and other organisations. The European Union definition is a legally independent company with no more than 500 employees
SOA	Service Orientated Architecture	An architectural pattern in computer software design where application components provide services to other components via a communications protocol, typically over a network
SocITM	Society of IT Management	A professional body based in the UK, representing those involved in the leadership and management of ICT and digitally enabled services delivered for public benefit

Strategic Partnership	Also known as a strategic alliance	A relationship between two commercial enterprises, formed with one or more business contracts – it is generally not a legal partnership, agency, or corporate affiliate relationship.
TCO	Total cost of ownership	A comprehensive assessment of ICT and end-user expenses over time, intended to help buyers and owners determine the direct and indirect costs of a product or system.
VFM	Value for Money	A term used to assess whether an organisation has gained the maximum benefit and best value from the goods and services it purchases and provides.
Waterfall delivery process	Also known as the waterfall model	A sequential (non-iterative) design process, used in software development processes, with progress made in phases flowing downwards through concept, initiation, analysis, design, construction, testing, implementation and maintenance.
WMCA	West Midlands Combined Authority	A legal body of 7 West-Midlands local authorities, with powers of decision making granted by parliament - a new way to work together on key functions across geographic council boundaries which could be delivered more effectively together, rather than separately. www.westmidlandscombinedauthority.org.uk

Ref.ASF 800813s