

Birmingham City Council

Report to Cabinet

14th November 2023



Subject: TECHNOLOGY ROADMAP – CRITICAL INVESTMENTS 2023-24

Report of: Richard Brooks, Director of Strategy, Equality and Partnerships

Relevant Cabinet Member: Councillor Saima Suleman, Digital, Culture, Heritage and Tourism

Relevant O &S Chair(s): Councillor Jack Deakin, Finance and Resources Overview & Scrutiny Committee

Report author: James Gregory, Head of Delivery, Digital & Technology Services
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Are specific wards affected?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No – All wards affected
If yes, name(s) of ward(s):		
Is this a key decision?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
If relevant, add Forward Plan Reference: 011810/2023		
Is the decision eligible for call-in?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does the report contain confidential or exempt information?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Exempt information – relates to discretion to exclude public: information falling within the categories outlined in 12A of the Local Government Act 1972 (as amended) Paragraph 3. Information relating to the financial or business affairs of any particular person (including the Council):		
Appendix A – Technology Roadmap Critical Investment 2023-24 Project Detail Proforma		
Appendix D – Technology Roadmap DTS Projects Paused and Deferred		

1 Purpose of Report

- 1.1 To inform Cabinet of critical investment that is required in the technology landscape to support the delivery of the Digital Strategy and to maintain the robustness and safety of our systems and people.
- 1.2 To seek Cabinet approval for the investment required to deliver the immediate critical needs.
- 1.3 To note the list of deferred items where it is believed short term risk can be taken in light of spend controls.
- 1.4 To inform Cabinet of further discovery work to be undertaken to further quantify the risks and opportunities around deferred items and to develop a further business case and cabinet report where risk cannot be further tolerated or where savings opportunities exist.
- 1.5 To seek Cabinet approval for the investment required to conduct discovery work outlined in 1.4 and any subsequent business case and cabinet report arising from that work.
- 1.6 To seek authority for the Chief Information Officer (CIO) to incur spend of up to the agreed value to progress the proposed projects.
- 1.7 To inform Cabinet how updates will be provided on progress of these projects.

2 Recommendations

That Cabinet approve the following:

- 2.1 Notes the investment rationale in light of the current spend control position across the Council, provided in section 4.
- 2.2 Notes the projects and investments that have been paused and/ or deferred, totalling £15.763M in **Appendix D** in light of current spend controls.
- 2.3 Approves the investment required to maintain our technology estate and deliver the Must Do Immediate Implementations priorities of £8.006M in section 4. Individual spend items will be required to go through spend control approval processes in place within the Council for further scrutiny and challenge before expenditure is committed.
- 2.4 Approves the investment case to develop a business case for secondary Must Do Discovery Activity of £0.789M in Section 4. The outcome of the discovery activities may provide a further report to Cabinet in early 2024 outlining any further investment driven from these activities. Individual spend items will be required to go through spend control approval processes in place within the Council for further scrutiny and challenge before expenditure is committed.

- 2.5 Approves the investment request for the items Digital and Technology Services (DTS) have identified as Should Do requirements of £1.87M in section 4. Individual spend items will be required to go through spend control approval processes in place within the Council for further scrutiny and challenge before expenditure is committed.
- 2.6 Delegates authority to the CIO to raise orders to the value approved (£10.664M) to implement the required changes once individual items have been through spend control and approval processes in place within the Council for further scrutiny and challenge.

3 Background

- 3.1 In 2016, in support of the ICT and Digital Strategy 2016-2021, Cabinet approved an investment programme to modernise the Council's technology estate. The programme was designed to update aging infrastructure and to enable the termination of the BCC/Capita joint venture. This series of projects and programmes delivered key components such as:
- The transition of the IT&D service back to BCC control.
 - The exit of the Capita data centres where our server estate was hosted.
 - Upgrade of the server estate to modern lower cost technology.
 - Introduction of Microsoft Azure cloud environments.
 - Upgrade of the underlying application operating systems and databases to bring the Council back onto supported platforms.
 - Upgrade of the Council's laptop operating systems to Windows 10 and wider laptop refresh.
 - Upgrade and refresh of Corporate Firewall Technology.
 - Upgrade of the Council's corporate telephony solution to Microsoft Teams.
- 3.2 This work was successfully undertaken, within budget and within a timescale that allowed the requisite savings to be achieved while also delivering a step change to the underlying infrastructure that supports the delivery of the majority of the Council's services.
- 3.3 Much of the work relating to the previous ICT and Digital Strategy was undertaken in 2018-2021 to facilitate the in-sourcing of the ICT service to the Council. The 2022-25 Digital Strategy submitted to cabinet in March 2022 set the next evolution the Digital Strategy focusing on:
- Theme A: Creating online services that are easy to use.
 - Theme B: Improving our data and evidence-based decision making.
 - Theme C: Giving our Council teams the right digital tools to do their jobs.
 - Theme D: Building the Council's digital and data skills.
 - Theme E: Building the best technology and infrastructure to support the Council services.

- 3.4 With the new DTS organisational structure in place through the “Shaping the Future” programme, the DTS team have been focusing on delivering the initial investment request to support these themes with the new structures.
- 3.5 However, with the spend controls introduced there has had to be a strong internal review and refocus on the level and type of investment required to help the Council meet its financial challenge.
- 3.6 As such at this stage many of the wider investments that were planned to support the Digital Strategy have been removed at this time or drastically scaled back to focus on areas that are:
- Technically reaching end of life and require refresh to address security, compliance and /or reliability concerns.
 - Investments required to support technical capacity constraints affecting service delivery.
 - Address areas that the Council has no option but to address (such as the Digital Switchover).
 - Address areas that are reaching key contractual end dates and require re-procurement.
 - Address areas that require investigation/ discovery exercises now to prevent reaching higher than necessary refresh or extension costs in the next 3 years.
- 3.7 **Appendix D** records the original scope that was being developed for the Digital Strategy and how this has been amended in the light of the spend controls with items deferred or paused to support the Council’s wider immediate objectives. This represents an estimated total deferred spend of £15.763. Further updates on progress against plan for the Digital Strategy 2022-25 will be provided through the Corporate Plan Monitoring process and through annual updates to Cabinet as well as regular engagement with the Cabinet Member for Digital, Culture, Heritage and Tourism.
- 3.8 All of the investments in the must do immediate investment or discovery category meet either one or both of two key themes on the Digital Strategy: Theme C: giving our Council teams the right tools to do their jobs or Theme E: Building the best technology to support Council services. Table 1 shows the detail on how each project will support those outcomes and how it will be measured. One investment in the should do discovery category relates to Theme A: Creating online services that are easy to use.
- 3.9 This report breaks down the investment needs into three categories:

- Category 1 – Must Do Immediate Implementation are the elements that require immediate investment and where the solution and costs are largely known. The investment is requested now in order to start replacing these critical items immediately.
- Category 2 – Must Do Immediate Discovery are a group of needs that are also of high importance, but which require further scoping work to ascertain options and costs. This report requests investment to fund the scoping work which may result in a follow-up report to Cabinet in early 2024 to request funding for delivery once the detailed solution and costs are known.
- Category 3 – Should Do represents the areas that that DTS strongly recommend the Council should invest in now to prevent future increased costs and provide wider efficiency benefits to support the Council but could potentially be deferred. It should be recognised DTS have already removed projects that can be deferred (see **Appendix D**).

4 Options Considered and Recommended Proposal

- 4.1 In relation to the immediate needs, DTS have ascertained that the ‘do nothing’ option presents a significant risk to the ability to maintain critical Council applications and infrastructure and to keep them safe and secure.
- 4.2 Outlined in table 1 below are the recommended projects for the Council to proceed with, split into the 3 categories of **Must Do** – Immediate Implementation, **Must Do Discovery** and **Should Do** (both implementation and discovery) along with a brief summary. More detailed pro-formas can be found in **Appendix A**.
- 4.3 In relation to the additional business cases, the discovery will ascertain the risk of not upgrading each element and the report will provide a balanced view of cost/risk for each element along with a recommendation.
- 4.4 Overall responsibility for the delivery of the projects to time and budget and delivering the benefits will sit with the Chief Information Officer, Cheryl Doran, with updates on the performance of the projects reported to cabinet via the annual updates on the Digital Strategy against the key outcomes specified against the projects. Quarterly updates will also be provided via the Corporate Plan monitoring process.

Table 1 – Recommended Projects Summary and their alignment to the Digital Strategy

No	Area	High Level Description	Is this essential spend and what are the key outcomes	High Level Resource plan	Owner of Costs and Benefits
	Must Do - Immediate Implementation				
1.1	3 Year DTS Hardware Contingency Fund	<p>DTS currently has no budgetary capacity to fund urgent hardware purchases or fixes (server capacity, switch capacity, peripherals etc) without seeking additional capital investment through lengthy process when immediate purchase is required.</p> <p>This has three main impacts:</p> <ol style="list-style-type: none"> 1) Hardware components (such as server capacity/ back up capacity) are over-procured from large original capital bids to mitigate impact of lengthy capital bid process. This results in assets that are not being used fully utilised and higher up front costs (and in many cases higher ongoing licence costs) for capacity that is not being effectively used 2) Hardware components (such as peripheral devices/ network switches) are bought and held in stock and so are not being utilised effectively to drive value for the organisation. In addition hardware components held in stock have shorter effective life once bought into service 3) This regularly has a delaying impact on projects and prevents DTS from being able to respond to business needs quickly for capacity requirements, associated licencing and peripherals. <p>It is recommended that a hardware contingency fund is allocated to the DTS budget of £1M over a three year period to allow future project costing to be more aggressive and to allow hardware to be 'slim provisioned' and 'run hotter'. This will enable growth risks to be quickly addressed without procuring potentially unused capacity up front. The fund should only be accessed with approval from the CIO and Finance business partner and reported annually in the Digital Strategy Update to cabinet.</p>	<p>Strategic Alignment: Supports Digital Strategy Theme E: Building the best technology and infrastructure to support the Council services, but is also required to maintain an operational safe and secure IT landscape</p> <p>Spend against this contingency fund would be by exception only for essential /critical items</p> <p>The key results that this contingency fund drives are:</p> <p>A) A medium to long term reduction in over provision of hardware at project delivery level. Infrastructure projects will demonstrate a saving against the provision of this fund by providing the comparative infrastructure cost should this not be in place.</p> <p>B) Reduction in historic or obsolete hardware</p> <p>Both A & B will be reported annually in the Digital Strategy updates along with an assessment on the adequacy of the fund for risk mitigation based on the previous years operational demands and pipeline of projects</p>	The delivery of items from this fund is targeted to form part of standard BAU operations. As such there should be no wider organisational capacity issues.	Deputy Chief Information Officer – Paul Busst
1.2	Mobile Phone Refresh, Contract Renewal and Reduction	The corporate mobile phone and data contract expires in February 2024 and must be re-procured. In addition a significant number of smart phone devices (circa 3600) will go out of formal support next year and be unable to have their operating system updated creating a security and compliance risk on the estate. A further set of devices are expected to be announced as out of support in 2025 (circa 3000) and will require	<p>Strategic Alignment: Supports Digital Strategy Theme C: Giving our Council teams the right digital tools to do their jobs and Theme E: Building the best technology and infrastructure to support the Council services, but is also required to maintain an operational safe and secure IT landscape</p> <p>This spend is deemed essential for:</p>	Costs have been included for additional resource to support the project and provide necessary short	Project Owner Head of Delivery: James Gregory

No	Area	High Level Description	Is this essential spend and what are the key outcomes	High Level Resource plan	Owner of Costs and Benefits
		<p>replacement as they will also represent a security risk. The remainder of the estate will be out of support within the life of the new contract.</p> <p>The renewal of the contract presents the opportunity to substantially reduce the mobile estate due to the successful roll out of MS Teams Telephony at the start of 2023. This new capability on the estate enables staff that are predominantly hybrid or office workers to utilise their laptop to make external calls and so reduces the need for the level of mobile phone usage across the business. It is forecast that current mobile phone usage across the estate can be reduced from 7,000 smart phones to a maximum of 5,000. This provides a reduction in annual revenue charges estimated at £325k per annum through a lower cost tariff and reduction in user base, in conjunction with a cost avoidance for the procurement of handsets of £766k</p> <p>A further reduction in the estate will be targeted by the project through migration to Teams Voice use and Bring Your Own Device policy to further reduce usage below 5000 as the project progresses through delivery.</p> <p>High Level Cost Estimate Breakdown (to be validated through procurement process): Device replacement over the life of the contract: £2.691M Delivery Costs (supplier/ internal): £0.345M Total: £2.937M</p>	<ul style="list-style-type: none"> • Security of the estate • Supporting the delivery of essential services • Reducing operational costs <p>Key results:</p> <ul style="list-style-type: none"> A) Reduction of Smart Phone Usage from circa 7000 users by a minimum of 30%, giving a cost avoidance of £766k B) Revenue Cost Reduction of £325k per annum for airtime and data through lower cost tariff and reduced number of users C) New contract procured to remain in compliance with corporate policy D) Mobile phone estate refreshed in line with device/ security end of life to remain compliant with security policies 	<p>term capacity. A full hand over and skills transfer to BCC staff has been factored in.</p>	<p>Operational Owner</p> <p>Head of Technology Practice – Colleague Experience: Phil Giann</p>
1.3	Analogue Line Replacement (Digital Switchover)	<p>The council has circa 1500 analogue phone lines under contract with DTS which will need to be replaced as a result of the Digital Switchover by 2025 to ensure that services continue to be supported. The timelines for switchover will be governed by the telco cessation of services.</p> <p>The existing analogue phone lines provide not only voice telephony services, but also support data/ alarm services such as some building management systems, sprinkler alarm systems and emergency lift alarms.</p> <p>It is expected that the analogue lines will be cut over to either utilise the new Microsoft Teams Corporate Telephony solution (circa 900) deployed at the start of 2023 or, where appropriate specialist digital SIM card boxes (circa 600).</p>	<p>Strategic Alignment: Supports Digital Strategy Theme E: Building the best technology and infrastructure to support the Council services, but is also required to maintain an operational safe and secure IT landscape</p> <p>This spend is deemed essential for:</p> <ul style="list-style-type: none"> • Supporting the delivery of essential services • Reducing operational costs <p>Key results:</p> <ul style="list-style-type: none"> A) DTS contracted analogue phone lines migrated to Digital Service to enable service continuity by 2025 	<p>Costs have been included for additional resource to support the project and provide necessary short term capacity. A full hand over and skills transfer to staff has been factored in.</p>	<p>Project Owner</p> <p>Head of Delivery: James Gregory</p> <p>Operational Owner</p> <p>Head of Technology Practice – Colleague Experience: Phil Giann</p>

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		<p>The project will also be looking to cease any lines that no longer provide business value as part of the process by reviewing their usage with the business.</p> <p>The current annual forecast for the service is £210k per annum and this is forecast to reduce £162k per annum.</p> <p>High Level Cost Estimate Breakdown 3rd Party Cabling & Hardware Components: £1.667M Delivery Costs (supplier/ internal): £0.431M Total: £2.098M</p>	<p>B) £48k per annum saving against current contractual arrangements</p> <p>C) Reduction in overall phone lines through review of usage</p>		
1.4	LAN Switch/ Router Replacement (Digital Switchover)	<p>There are two elements to this project</p> <ol style="list-style-type: none"> 1) Currently there are circa 60 key network switches across the BCC estate that are reaching end of life and will no longer be supported by the supplier. Continuing to use these devices presents a potential security risk and these must be replaced 2) There is a requirement to replace circa 180 small routers across the estate that will not support the Digital Switch Over by 2025. Without replacement the service to these sites will cease to work in 2025. The project will also work with the business areas to cease any circuits that are no longer providing business value <p>High Level Cost Estimate Breakdown Switch Hardware: £0.648M Router Hardware: £0.28M Delivery Costs (supplier/ internal): £0.220M Total: £0.896M</p>	<p>Strategic Alignment: Supports Digital Strategy Theme E: Building the best technology and infrastructure to support the Council services, but is also required to maintain an operational safe and secure IT landscape</p> <p>This spend is deemed essential for:</p> <ul style="list-style-type: none"> • Supporting the delivery of essential services • Maintaining a robust cyber security posture <p>Key results:</p> <ol style="list-style-type: none"> A) Hardware reaching end of life is replaced to maintain cyber security posture B) Replacement of routers to sites to enable digital cut over 	<p>Costs have been included for additional resource to support the project and provide necessary short term capacity. A full hand over and skills transfer to staff has been factored in.</p>	<p>Project Owner Head of Delivery: James Gregory</p> <p>Operational Owner Head of Technology Practice - Networks & Security: Bipin Parmar</p>
1.5	Firewall Capacity Remediation	<p>The corporate Firewalls were last refreshed during 2018/2019.</p> <p>Changes in working practices since 2020 have created a capacity constraint on the firewalls due to:</p> <ol style="list-style-type: none"> 1) A large number of staff accessing the corporate network from outside of core sites due to hybrid working practices 2) The application estate moving towards external/ cloud hosting <p>This capacity constraint has caused sporadic operational connectivity and performance disruption for BCC end users (staff and partners) and citizens.</p>	<p>Strategic Alignment: Supports Digital Strategy Theme E: Building the best technology and infrastructure to support the Council services, but is also required to maintain an operational safe and secure IT landscape</p> <p>This spend is deemed essential for:</p> <ul style="list-style-type: none"> • Supporting the delivery of essential services 	<p>Delivered by BAU resource</p>	<p>Operational Owner Head of Technology Practice - Networks & Security: Bipin Parmar</p>

No	Area	High Level Description	Is this essential spend and what are the key outcomes	High Level Resource plan	Owner of Costs and Benefits
		<p>While a wider network and security strategy is currently under production to deliver long term improvements and security enhancements, immediate tactical investment in the existing firewall solution is required to address the current issues.</p> <p>Estimated costs of £300k are required for services and licencing for the remediation activities.</p>	<ul style="list-style-type: none"> Maintaining a robust cyber security posture <p>Key results:</p> <p>A) Improvement in network uptime B) Maintain cyber security posture</p>		
1.6	PSN Audit Remediation Provision	<p>The Public Service Network (PSN) provides access to central government services (i.e. DWP). As part of being granted access to the network the Council have to be certified. The a response from PSNA is expected during in Q4 2023/ Q1 2024</p> <p>In order to remain connected to the PSN network any remediation actions required from the audit will have to be delivered in a timely fashion. As such a provision is required so that the work identified can begin immediately in order to rectify the audit recommendations and remain complaint.</p> <p>A provision of £250k has been made for remediation activities once we have received the response back from PSNA.</p>	<p>Strategic Alignment: Supports Digital Strategy Theme E: Building the best technology and infrastructure to support the Council services, but is also required to maintain an operational safe and secure IT landscape</p> <p>This spend is deemed essential for:</p> <ul style="list-style-type: none"> Supporting the delivery of essential services Maintaining a robust cyber security posture <p>Key results:</p> <p>A) Maintain connectivity to PSN network to run services B) Maintain / improve security posture</p>	Delivered by BAU resource	<p>Operational Owner</p> <p>Head of Technology Practice - Networks & Security: Bipin Parmar</p>
1.7	Minimum Laptop Refresh	<p>The Council runs a 5 year laptop refresh programme, after which time devices are re-purposed via the Birmingham Device Bank. In line with wider Council spend controls this full refresh policy has now been paused in order to sweat the existing assets with a view to moving to a 6 year / obsolete device policy.</p> <p>However there are circa 750 devices on the estate that are not of a sufficient specification to be upgraded to Windows 11 and must be replaced in order to facilitate the medium term upgrade of devices to Windows 11.</p> <p>The initiative will be supported by top-down communications and recycling/re-use of laptops across the organisation</p> <p>The cost of replacement of these devices is £0.524M</p>	<p>Strategic Alignment: Supports Digital Strategy Theme E: Building the best technology and infrastructure to support the Council services, but is also required to maintain an operational safe and secure IT landscape</p> <p>This spend is deemed essential for:</p> <ul style="list-style-type: none"> Supporting the delivery of essential services Maintaining a robust cyber security posture <p>Key results:</p> <p>A) Fewer new devices purchased B) High rates of reuse of devices</p>	Delivered by BAU resource	<p>Operational Owner</p> <p>Head of Technology Practice – Colleague Experience: Phil Giann</p>

No	Area	High Level Description	Is this essential spend and what are the key outcomes	High Level Resource plan	Owner of Costs and Benefits
			C) Take advantage of price breaks in the market		
	Must Do - Discovery				
2.1	Server Estate Road Map Discovery	<p>The server estate that hosts the Council's corporate and line of business applications was refreshed in 2020 will be reaching its natural technical refresh point in 2025/26. The future strategy for the estate and associated options and cost implications must be understood and planned in order to avoid potential stranded costs given the lead time on potential major refresh and migration works. This work will deliver the business case to provide:</p> <ul style="list-style-type: none"> • Short term options for sweating existing assets in line with spend controls vs accelerated move to cloud • Cost Comparison of Cloud (Azure) to on Premise including Cloud Readiness assessment • Enterprise Database options • SAAS Indicative costs for applications remaining on Premise • Legacy Application Discovery and recommendations • Write up of Business Case and cost modelling <p>High Level Cost Estimate Breakdown 3rd Party Supplier Support: £0.140 Delivery Resource (supplier/ internal): £0.254 Total: £0.394M</p>	<p>Strategic Alignment: Supports Digital Strategy Theme E: Building the best technology and infrastructure to support the Council services, but is also required to maintain an operational safe and secure IT landscape</p> <p>This spend is deemed essential for:</p> <ul style="list-style-type: none"> • Supporting the delivery of essential services • Maintaining a robust cyber security posture <p>Key Results:</p> <p>A) Roadmap for Infrastructure refresh B) Cost model to ensure agile but cost effective of running of core infrastructure through to 2030/31. C) Further savings identified for both short term and medium term implementation. Initial High level business case indicates a potential saving of £2M over a 5 year period which will be tested as part of the discovery exercise</p>	Costs have been included for additional resource to support the project and provide necessary short term capacity. A full hand over and skills transfer to staff has been factored in.	<p>Project Owner</p> <p>Head of Delivery: James Gregory</p> <p>Operational Owner</p> <p>Head of Function - Platform: David Moorcroft</p>
2.2	Internal DNS Discovery	<p>DNS (domain name service) is a core technology component for running Council services.</p> <p>The current DNS solution for the Council helps to route traffic across the network and has become highly fragmented through organic growth over the years, affecting wider end user experience and creating complications for day to day operational management and problem solving.</p> <p>A discovery exercise is required to identify a consolidated solution to simplify the current solution and drive wider technical efficiency.</p>	<p>Strategic Alignment: Supports Digital Strategy Theme E: Building the best technology and infrastructure to support the Council services, but is also required to maintain an operational safe and secure IT landscape</p> <p>This spend is deemed essential for:</p> <ul style="list-style-type: none"> • Supporting the delivery of essential services 	Costs have been included for additional resource to support the project and provide necessary short term capacity. A full hand over and skills transfer to staff	<p>Project Owner</p> <p>Head of Delivery: James Gregory</p> <p>Operational Owner</p>

No	Area	High Level Description	Is this essential spend and what are the key outcomes	High Level Resource plan	Owner of Costs and Benefits
		Delivery resource (supplier/ internal) is forecast at £0.089M to deliver the discovery.	<ul style="list-style-type: none"> Maintaining a robust cyber security posture <p>Key results:</p> <p>The discovery exercise will provide a costed solution for this core technology component for running Council services which will:</p> <ul style="list-style-type: none"> Provide more resilience for the delivery of technical services and reduced service interruption Provide an enabler for DTS workforce savings through less effort handling calls 	has been factored in.	Head of Function - Platform: David Moorcroft
2.3	Wi-Fi Refresh Discovery	<p>The majority of the wireless access points deployed across the estate reach end of support in 2024 and will not be able to be upgraded creating both:</p> <ol style="list-style-type: none"> A security risk Increased risk of hardware failure due to age <p>A discovery exercise is required to identify and provide indicative costs for a replacement solution that will also provide compatibility and performance improvements in addition to aligning with wider BCC property rationalisation objectives.</p> <p>Delivery resource (supplier/ internal) is forecast at £0.065M to deliver the discovery.</p>	<p>Strategic Alignment: Supports Digital Strategy Theme E: Building the best technology and infrastructure to support the Council services, but is also required to maintain an operational safe and secure IT landscape</p> <p>This spend is deemed essential for:</p> <ul style="list-style-type: none"> Supporting the delivery of essential services Maintaining a robust cyber security posture <p>Key results:</p> <p>The discovery exercise will provide a costed solution for the WiFi Refresh enabling.</p> <ol style="list-style-type: none"> More resilience for the delivery of services Enabler for workforce savings Enhance / maintain the Security posture 	Costs have been included for additional resource to support the project and provide necessary short term capacity. A full hand over and skills transfer to staff has been factored in.	<p>Project Owner</p> <p>Head of Delivery: James Gregory</p> <p>Operational Owner</p> <p>Head of Technology Practice - Networks & Security: Bipin Parmar</p>
2.4	Front Line Worker Discovery	Frontline Worker Discovery has been added to the request for funding to provide a provision to support wider projects that will be triggered across the council as part of spend controls and subsequent efficiency initiatives.	<p>Strategic Alignment: Supports Digital Strategy Theme C: Giving our Council teams the right digital tools to do their jobs</p> <p>This spend is deemed essential for:</p>	Costs have been included for additional resource to support the project and provide	Chief Information Officer – Cheryl Doran

No	Area	High Level Description	Is this essential spend and what are the key outcomes	High Level Resource plan	Owner of Costs and Benefits
		<p>This project will understand the needs of users who are not routinely given technology to complete their work.</p> <p>The resource (supplier/ internal) to deliver the discovery is estimated at £0.132M</p>	<ul style="list-style-type: none"> Supporting the wider Financial Recovery Plan <p>Key results:</p> <p>A) Enabling Council efficiency savings by enabling staff to do more through technology</p> <p>B) A user needs assessment for targeted solutions to improve productivity and communications with employees</p>	necessary short term capacity. A full hand over and skills transfer to staff has been factored in.	
2.5	Intranet Design	<p>A discovery undertaken in 2022 described the unsuitability of the Council's intranet for its intended purpose given advances in technology since its implementation. Serving as the main information hub for the staff, the Intranet's existing configuration hampers seamless access to information. This, in turn, diminishes its adoption rate within the system and leads to a rise in unorganised inquiries across the Council. By strategically investing in the enhancement of the Council Intranet, significant improvements in staff efficiencies could be achieved.</p> <p>The options exercise will assess solutions available to enhance users' experiences of the intranet and to make working life more efficient for those dependent on the intranet.</p> <p>The resource (supplier/ internal) to deliver the design is estimated at £0.109M</p>	<p>Strategic Alignment: Supports Digital Strategy Theme C: Giving our Council teams the right digital tools to do their jobs</p> <p>This spend is deemed essential for:</p> <ul style="list-style-type: none"> Supporting the wider Financial Recovery Plan Supporting the improvement in corporate services as a hub for information on policies and procedures <p>Key result</p> <ul style="list-style-type: none"> Intranet design options appraisal including potential for reduced 3rd party supplier and support costs 	Costs have been included for additional resource to support the project and provide necessary short term capacity.	<p>Operational Owner</p> <p>Head of Technology Practice – Strategy and Architecture: Robert Walker</p>
	Recommended by DTS as Should Do				
3.1	ITSM Procurement & Implementation	<p>The current contract for the IT Service Management (ITSM) solution comes to an end in June 2024 and a formal procurement needs to be undertaken to either replace the existing solution or continue with the current platform based on value for money.</p> <p>The ITSM platform with Software Asset Management (SAM) and workflow capability in order to support the delivery of key DTS functions such as:</p> <ul style="list-style-type: none"> IT Operations Management Incident Problem & Change Management Release management 	<p>Strategic Alignment: Supports Digital Strategy Theme C: Giving our Council teams the right digital tools to do their jobs</p> <p>This spend is deemed essential for:</p> <ul style="list-style-type: none"> Supporting the wider Financial Recovery Plan <p>Key results:</p>	Costs have been included for additional resource to support the project and provide necessary short term capacity. A full hand over and skills transfer to staff	<p>Project Owner Head of Delivery: James Gregory</p> <p>Operational Owner Head of Technology Practice – Colleague Experience: Phil Giann</p>

No	Area	High Level Description	Is this essential spend and what are the key outcomes	High Level Resource plan	Owner of Costs and Benefits
		<ul style="list-style-type: none"> - Wider IT Business processes such as starters, leavers and movers (SLAM) <p>Soft market testing indicates that the market can offer a solution that meets the Councils needs and also provide a saving against what we pay for the existing solution that will be formally tested as part of the procurement process</p> <p>The ITSM solution will also become more critical to be run in an efficient manner if the approach is taken to sweat assets across the estate which will result in an increase in issues reported to DTS for resolution as hardware and software is extended close to and beyond end of life.</p> <p>Savings are forecast of £562k from the DTS 3rd Party and staffing budget.</p> <p>Combined Internal and External Cost Estimate of: £1.770M</p>	<ul style="list-style-type: none"> A) Procurement completed to assess value for money for ITSM solution B) Implementation delivered to release £562k per annum of savings from DTS 3rd party and staffing budget C) Support of wider DTS workforce savings target D) Improved self-service options for IT service desk and higher take up of online access. 	has been factored in.	
3.2	Customer Experience Platform Discovery	<p>Discovery exercise to gain a solid understanding of the needs of Birmingham City Council and the priority programmes such as Early Intervention and Prevention and how these interlink with our digital strategy, as well as the citizens we serve.</p> <ul style="list-style-type: none"> • Collating data and information about the current online services and start to identify patterns, best practice and opportunities for redesign • Conducting research with government and commercial organisations to learn how the best organisations design and provide digital services that work, add value, and reduce waste and cost • Understanding BCC's cultural readiness for digital innovation and transformation and how service culture affects the successful implementation of service redesign • Design service patterns, prototypes, user experience design systems and technical principles that will become our blueprints for the design of BCC's future digital services • Identify common technical capabilities that we can use to enable us to create digital services and experiences that work for users <p>The resource (supplier/ internal) to deliver the discovery is estimated at £0.109M</p>	<p>Strategic Alignment: Theme A Creating online services that are easy to use.</p> <p>This spend is deemed essential for:</p> <ul style="list-style-type: none"> • Supporting the wider Financial Recovery Plan <p>Key results</p> <ul style="list-style-type: none"> A) BCC will have a clear and defined enabling technologies and enabling methodology to achieve our strategic aim of making our online services easy to use for customers B) We will understand the needs of our users - residents and staff and ensure that we define what an effective digital solution looks like, which may involve different technical solutions C) We will have clear designs, patterns and principles for our online estate, including transactional services which will improve our user experience and increase trust in our service 	Costs have been included for additional resource to support the project and provide necessary short term capacity. A full hand over and skills transfer to staff has been factored in.	<p>Operational Owner</p> <p>Head of Function - Products - Kat Sexton</p>

4.5 The overall requirement of this paper is for investment in critical infrastructure that does not directly generate savings. However, a subset of the projects do create a saving through their implementation. Based on current data, an indicative return on investment is shown in table 2 below. It will be the project teams aim to increase this return as the projects progress. In addition, the discovery activities (as outlined in table 1) are expected to provide opportunities for reductions in 3rd party budget and wider efficiency savings that will be quantified in their output.

Table 2 - Return on Investment

Area	Investment	Phased Saving						Total £m
		2023/24 £m	2024/25 £m	2025/26 £m	2026/27 £m	2027/28 £m	2028/29 £m	
ITSM Procurement & Implementation	1.770		0.281	0.562	0.562	0.562	0.562	2.529
Mobile Phone Refresh, Contract Renewal and Reduction - initial	2.937		0.325	0.325	0.325	0.325	0.325	2.625
Analogue Line Replacement (Digital Switchover)	2.098	0.008	0.025	0.048	0.048	0.048	0.048	0.218
Total	6.805	0.008	0.631	0.935	0.935	0.935	0.935	4.372

5 Consultation

- 5.1 Consultation has been undertaken with Finance, Procurement and HR colleagues.
- 5.2 All projects submitted have been under internal review by DTS to ensure that they are critical and recommend for investment in the light of spend control.
- 5.3 All proposals have gone through the necessary spend control process and been agreed at Financial Sustainability Board.
- 5.4 The proposals have been approved by the Capital Board.
- 5.5 The Cabinet Member for Digital, Culture, Heritage and Tourism and Chair of Resources Overview and Scrutiny have also been briefed.

6 Risk Management

- 6.1 While the technical delivery of the works represents a significant capital investment by the Council several steps have been taken to ensure the overall risk of the projects are managed as outlined below.
- 6.2 With the exception of the ITSM solution, all implementation projects are utilising existing technology and with lo/no business process change required, meaning DTS are familiar with successfully deploying and supporting it. This de-risks the

overall delivery when compared to the introduction of new technology and associated process change across large staff groups.

- 6.3 To mitigate this risk for ITSM delivery, provision has been made in the budgetary estimate and procurement requirements for the implementation partner to conduct the configuration of the solutions. A prudent approach has also been taken in the financial modelling of the solution.
- 6.4 The projects are separate entities with minimal dependencies and any delivery issues encountered on one project should not propagate into the other projects.
- 6.5 Cost estimates have been prudent and based on existing contracts where possible or supplier quotes.
- 6.6 There is minimal staffing savings attributed to these projects (estimated at between 1-3 FTE) we will engage with the Trade Unions throughout the projects affected and will consult with them wherever there is a change to staff conditions and structure that is identified from the output of Discovery and Design phases.

7 Compliance Issues

7.1 How are the recommended decisions consistent with the City Council's priorities, plans and strategies?

- It supports the delivery of the DTS Digital Strategy approved by Cabinet Committee March 2022
- Contributes towards Everyone's Battle Everyone's Business Equality Action Plan 2022-23:

Section 4.2 - Deliver responsive services and customer care that is accessible, inclusive to individual's needs and respects faith, beliefs, and cultural differences.

7.2 Legal Implications

- 7.2.1 The actions proposed in this report are within the Council's general power of competence as conferred on it by S.1 Localism Act 2012. The Council is under a duty to deliver Best Value under S.3 Local Government Act 1999 (as amended).

7.3 Financial Implications

- 7.3.1 As shown in table 2 the estimated costs of all recommended investment is £10.664M. This is broken down into:

7.3.1.1 Must Do - Immediate Implementation - £8.006M

7.3.1.2 Must Do – Discovery - £0.789M

7.3.1.3 Should Do - £1.870M

7.3.2 While the investment is to address critical hardware and software refresh requirements as part of the digital strategy, an annualised revenue saving of up to £0.935m per annum is expected once the projects complete. It should be noted that at this stage this savings is anticipated to help offset some of the inflationary pressure that is being applied to the DTS budget rather than contribute additional savings in to the MTFP.

Discovery activities of £0.889m will be funded from the medium-term financial plan as one-off spend of £0.492m in 2023/24 and £0.397m in 2024/25. The spend on the capital investment of £9.776m will be an addition to the existing Capital programme. It will need to be funded from prudential borrowing which will have revenue implications (Minimum Revenue Provision and interest payments) that will be funded from the medium-term financial plan. This unbudgeted pressure will add to the savings requirement in what is already an extremely difficult financial position. These are detailed below, and the impact will continue until 2030/31 based on the current profile of spend. The whole capital programme is being reviewed to identify offsetting savings. In addition, the IT service will need to make every effort to maximise revenue savings. We understand all investments detailed in this report have been assessed as essential spend at the minimum viable standard.

Table 3 - MTFP Impact

Year	MTFP impact £m
2024/25	1.15
2025/26	2.028
2026/27	2.27
2027/28	2.27
2028/29	2.27
2029/30	1.12
2030/31	0.242

7.3.3 Cabinet is recommended to approve the capital budget for this Investment. Individual items will be required to go through spend control approval processes in place within the Council for further scrutiny and challenge. If the spend control process concludes within the life of these projects, in the absence of spend control board, this scrutiny and challenge will be undertaken in consultation with the Cabinet Member for Digital, Culture, Heritage and Tourism

Table 4 - Investment Overview

No	Area	Investment Requirement £m	Annualised Revenue Saving £m	5 Year Saving (Excluding Investment) £m	Investment Type £m
Must Do - Immediate Implementation					
1.1	3 Year DTS Hardware Contingency Fund	1.000			Capital
1.2	Mobile Phone Refresh, Contract Renewal and Reduction - initial	2.937	0.325	1.625	Capital
1.3	Analogue Line Replacement (Digital Switchover)	2.098	0.048	0.219	Capital
1.4	LAN Switch/ Router Replacement (Digital Switchover) - Lan Switch	0.896			Capital
1.5	Firewall Capacity Remediation	0.300			Capital
1.6	PSN Audit Remediation Provision	0.250			Capital
1.7	Minimum Laptop Refresh	0.524			Capital
	Total Immediate Implementation	8.006	0.373	1.844	
Must Do - Discovery					
2.1	Server Estate Road Map Discovery	0.394			Revenue
2.2	Internal DNS Discovery	0.089			Revenue
2.3	Wi-Fi Refresh Discovery	0.065			Revenue
2.4	Front Line Worker Discovery	0.132			Revenue
2.5	Intranet Design	0.109			Revenue
	Total Must Do Discovery	0.789			
Should Do					
3.1	ITSM Procurement & Implementation	1.770	0.562	2.529	Capital
3.2	Customer Experience Platform Discovery	0.100			Revenue
	Total Should Do	1.870	0.562	2.529	
Overall Total		10.664	0.935	4.373	

Table 5 – Capital and Revenue Split By Year

No	Area	2023/24 £m	2024/25 £m	2025/26 £m	Total £m
Capital Investment					
1.1	3 Year DTS Hardware Contingency Fund	0.333	0.333	0.334	1.000
1.2	Mobile Phone Refresh, Contract Renewal and Reduction - initial	1.197	1.148	0.591	2.937
1.3	Analogue Line Replacement (Digital Switchover)	0.583	1.398	0.116	2.098
1.4	LAN Switch/ Router Replacement (Digital Switchover) - Lan Switch	0.768	0.128		0.896
1.5	Firewall Capacity Remediation	0.300			0.300
1.6	PSN Audit Remediation Provision	0.250			0.250
1.7	Minimum Laptop Refresh	0.250	0.274		0.524
3.1	ITSM Procurement & Implementation	1.270	0.500		1.770
	Total Capital Investment	4.951	3.782	1.042	9.776
Revenue Investment					
2.1	Server Estate Road Map Discovery	0.197	0.197		0.394
2.2	Internal DNS Discovery	0.060	0.030		0.089
2.3	Wi-Fi Refresh Discovery	0.065			0.065
2.4	Front Line Worker Discovery	0.066	0.066		0.132
2.5	Intranet Design	0.055	0.054		0.109
3.2	Customer Experience Platform Discovery	0.050	0.050		0.100
	Total Revenue Investment	0.492	0.397		0.889
	Overall Total	5.443	4.179	1.042	10.664

7.4 Procurement Implications

Outlined in table 6 are procurements that are anticipated to be required.

It should be noted that in the main existing contracts for hardware and software are already in place. If an unexpected procurement is required i.e., for compliance purposes due to headroom on current contract the necessary Planned Procurement Reports will be completed and submitted via the standard Council governance process.

Table 6 – Procurement activity

No	Area	Expected Procurement Route
	Must Do - Immediate Implementation	
1.1	3 Year DTS Hardware Contingency Fund	Existing hardware and software contracts
1.2	Mobile Phone Refresh, Contract Renewal and Reduction	PPAR to be submitted The route to market will be via a compliant national or regional framework
1.3	Analogue Line Replacement (Digital Switchover)	Existing hardware, software and service contracts
1.4	LAN Switch/ Router Replacement (Digital Switchover)	Existing hardware, software and service contracts
1.5	Firewall Capacity Remediation	Existing hardware, software and service contracts
1.6	PSN Audit Remediation Provision	Existing hardware, software and service contracts
1.7	Minimum Laptop Refresh	Existing hardware, software and service contracts
	Must Do - Discovery	
2.1	Server Estate Road Map Discovery	No procurements currently expected at this stage. PPAR will be submitted if this position changes
2.2	Internal DNS Discovery	No procurements currently expected at this stage. PPAR will be submitted if this position changes
2.3	Wi-Fi Refresh Discovery	No procurements currently expected at this stage. PPAR will be submitted if this position changes
2.4	Frontline Worker Discovery	No procurements currently expected at this stage. PPAR will be submitted if this position changes
2.5	Intranet Design	No procurements currently expected. PPAR will be submitted if this position changes
	Should Do	
3.1	ITSM Procurement & Implementation	PPAR Submitted and approved in July 2023 Cabinet The route to market will be via a compliant national or regional framework
3.2	Customer Experience Platform Discovery	No procurements currently expected. PPAR will be submitted if this position changes

7.5 Human Resources Implications (if required)

7.5.1 There is an estimate of between 1-3 FTE efficiency through the introduction of an updated ITSM solution. This will be validated in final product selection and subsequently during implementation.

7.5.2 We will engage with the Trade Unions throughout the project for ITSM and will consult with them where-ever there is a change to staff conditions and structure.

7.5.3 If redundancy is required the final funding required will be subject to:

- Anticipation of 10% natural wastage due to retirement/ resignation.
- The Council to offer training in the wider service areas as a whole providing upskilling and knowledge transfer opportunities.
- Use of effective succession planning.
- Offering any vacancies across the wider teams, to those at risk.

7.6 Public Sector Equality Duty

7.6.1 An initial screening for an Equality Analysis (EA) has been undertaken by the for the Roadmap Critical Investments, however given the differing nature of the projects, individual EA will be performed on a project-by-project basis on mobilisation where required to identify any adverse impacts on the protected groups and characteristics under the Equality Act 2010. The reference number of the overarching EA is EQUA1194.

7.7 Environmental and Sustainability Implications

7.7.1 The introduction of updated hardware to the estate may have a small impact on reducing power consumption to contribute toward the Council's wider Net Zero targets. Hardware being purchased will be assessed against the elements of this estate that it is replacing and recorded appropriately.

8 Appendices

A – Technology Roadmap Critical Investment 2023-24 Project Detail Proforma

B – Technology Roadmap Critical Investment 2023-24 Cost Model

C – Technology Roadmap Critical Investment 2023-24 Environmental & Sustainability Assessment

D – Technology Roadmap DTS Projects Paused and Deferred

9 Background Documents

- Report to Cabinet of March 2022: Digital Strategy 2022 – 2025
- Report to Council of February 2023 Budget 23/24
- Report to Cabinet of May 2023: Digital Strategy Year 1 Update & Review
- Report to Cabinet of July 2023 PPAR – ITSM Solution