

Digital, Data and Technology Strategy 2024-2029

Appendix of supporting materials

Version control: final draft v1.1



DOCUMENT CONTROL

Version history

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1.0	Michelle Lord/Dominic Burrows	Restructured contents/layout	Project sponsor	05/03/24
1.1	Dominic Burrows	Case studies added (IEG4, Region of Learning)	Project sponsor	05/04/24

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Appendix A:

Methodology for developing the Digital, Data and Technology Strategy

Appendix A: Methodology for developing the Digital, Data and Technology Strategy

The formulation of CCC's Digital, Data and Technology (DDaT) Strategy combined semi-structured, one-to-one interviews and collaborative workshops with staff members at every level of the Council; site visits to Mandela House to better understand the workflow of the customer services centre and the experience of citizens interacting directly with the Council; IT system and database reviews; and benchmarking surveys that contextualise CCC's experience with that of other councils across the country. This multifaceted methodology was designed to ensure a comprehensive understanding of the current digital landscape and to identify strategic pathways for technological advancement and digital maturity.

Data collection and stakeholder engagement

We understand that prior attempts to develop a DDaT Strategy for CCC did not engage with enough stakeholders at the Council to be able to tailor a strategy to the context of the organisation. To avoid this problem, over 40 individual individuals from across the Council were engaged with in a variety of ways to help us develop our recommendations: one-to-one interviews (29 people), workshops (4 workshops with 25 total people), site visits (4 people), and surveys (7 people); many people were engaged with in multiple formats, providing deep insights into the as-is state of CCC, and employee's desires for the future.

Interviews were conducted with a cross-section of the Council, representing a broad range of roles from the Director level to frontline customer service teams, along with key stakeholders

from 3C ICT, our outsourced IT supplier. While the participant selection began with a client-provided list, it ultimately relied on self-selection as respondents chose to engage with us.

Workshops with key Council stakeholders as well as with the Digital Board and the Transformation Board facilitated through Miro encouraged real-time, collaborative discussion and allowed participants to directly contribute to the strategic development process. Through these workshops we also conducted prioritisation exercises using the MoSCoW method, allowing the members of the Digital Board and the Transformation Board to prioritise the missions more relevant to the Council. The insights gleaned from these sessions were synthesised with interview data ensuring a cohesive integration of diverse perspectives.

We also synthesised and analysed the results from the "DLUHC Survey" (see appendix B below) to benchmark CCC's maturity against other councils.

System analysis and benchmarking

To assess the current state of IT systems and data handling, we relied on the most recent information available. The benchmark DLUHC survey, with its focus on digital maturity, provided a comparative lens through which we contextualised CCC's practices against those of other local governments in the UK. This comparative understanding was instrumental in shaping tailored strategic recommendations.

Appendix A: Methodology for developing the Digital, Data and Technology Strategy

Insight integration and formulation

Utilising analytical practices such as the clustering of themes both within and across interviews; the identification of barriers, tension points, and workarounds for employees and customers of CCC, benchmarking against other councils, and participatory workshops, as well as analytical frameworks such as 'jobs to be done', we distilled our research into a set of strategic insights that directly informed our recommendations. At every stage of the development of the content in the report, from the diagnosis of the as-is and target states of the organisation through to the formulation of missions and their detail, both the project team at PUBLIC and CCC and a broad array of CCC employees and PUBLIC subject matter experts were consulted in one-on-one interviews and workshops.

As we move forward, we recommend the establishment of regular evaluation mechanisms for the Council's IT systems and data practices as part of the work of the Technical Design Authority (TDA) (please see Mission 2.1 for details including cadence of evaluation). This includes the routine execution of the DLUHC survey to monitor and measure the Council's progress against the objectives set forth in the DDaT strategy.

Appendix B:

Diagnosing the as-is state of the Council

Appendix B: Diagnosing the as-is state of the Council

Based on the methodology described in Appendix A, we learned the following about the current, or as-is, state of DDaT at CCC. The insights below are organised into the three strands of the DDaT Strategy:

Strand 1: Data and information management

CCC's data and information management landscape is characterised by limited system interoperability, varying digital skills among staff, complex and decentralised data management, and a lack of sufficient training in data usage and digital tools. Staff members often resort to manual data handling and individual initiatives for digital and data upskilling, which, while commendable, highlight the broader organisational challenges in this area.

Quotes from user research:

"We need a better understanding of what the Council can do with data across the board."

"Data across the Council is being held in too many systems that don't talk to each other."

"[Customer services] don't know if a customer they're communicating with has multiple live requests that could be resolved in the same action."

Data interoperability and management

CCC is currently grappling with considerable challenges in data interoperability and integration among its key systems like Orchard, Storm, Tascomi, Alloy, and AccuServe, despite multiple of these products being from MRI. This scenario has led to inefficient and fragmented data handling, characterised by manual interventions, data duplication, and inconsistencies. The lack of seamless integration between these systems has been a significant barrier to effective data management and is due in part to the lack of requirements setting at the procurement stage around data interoperability for these systems.

Data sharing and dashboard capabilities

The absence of efficient tools like APIs affects the swift access to vital information, which is crucial for customer service agents. The lack of detailed dashboards providing insights into customer interactions further impedes the Council's ability to improve service delivery.

Customer service enhancement

The Council's customer service team currently faces challenges in effectively utilising data, which impacts the quality and resolution of customer service requests. To address this, there's a recognised need to expand and enhance self-service platforms for Council services, enabling easier information access and self-resolution of issues by customers.

Appendix B: Diagnosing the as-is state of the Council

Strand 2: Technology and innovation

Procurement process and contract management challenges

CCC is currently grappling with procurement processes and contract management practices that do not optimise for flexibility, user-centricity, and interoperability, which limits CCC's ability to enact change and better respond to customer needs.

Quotes from user research:

"Every department has gone digital and bought new systems independently."

"AccuServe was implemented in Covid and has never effectively been set up."

Training and role clarity deficiencies in procurement

A significant issue within CCC's procurement framework is the fact that there is a lack of ownership over requirements setting for the IT systems used by CCC as defined by the contract with 3CICT. The fact that ownership over this critical function is not clarified means that within CCC there is no clear policy related to requirements setting and thus insufficient training of staff to address this, particularly in areas of business analysis, digital product management, and the spotting of emerging technology trends. This deficiency hinders the procurement team's ability to make informed decisions about technology purchases that

accurately reflect user needs and technical specifications. The current scenario highlights a critical need for comprehensive staff training and clearer definition of roles and responsibilities, aligned with the Council's Digital Target Operating Model (DTOM).

Outsourced IT service management shortcomings

The existing model of 3CICT outsourcing is not an adequate framework for fostering successful digital transformation. The current arrangement contains contractual ambiguities around business analysis and requirement setting for procurements. This situation underscores the need for CCC to reassume certain responsibilities, particularly those related to translating business requirements into technical solutions and ensuring robust communication of these requirements to external partners. Without this, CCC does not have the clarity it needs to define requirements from IT service providers in contracts, adversely affecting the delivery management and the quality of services provided.

Another way this manifest is the absence of a systematic approach to technology horizon scanning. Without a dedicated team or mechanism to continually assess and integrate emerging technologies and market trends, the Council lags in staying current with technological advancements.

Gaps in IT system ownership and expertise

System owners often lack the necessary experience in utilising the IT systems they oversee, and in formulating effective business

Appendix B: Diagnosing the as-is state of the Council

and product requirements, both for upgrades of existing systems and for altogether new systems. This gap highlights the need for more strategic and skilled management of IT resources at CCC (described below in missions).

Strand 3: Digital Customer Journey

Fragmented digital services

CCC currently offers a variety of digital services to residents. However, these services are fragmented and not integrated. While creating a single portal for all customer services is not the main focus of the missions and activities outlined in this strand, the strategy does provide a list of actionable steps that can be taken to create a more unified user experience for customers. It sets the groundwork for a future programme of work targeted at developing a system with a single, unified interface that is both citizen-facing and for internal use.

Quotes from user research:

“Digital customer services are not designed in relation to a single approach centrally defined.”

Limited resident feedback mechanisms

At present, CCC does not have a robust system to gather and utilise resident feedback effectively for the continuous improvement of both digital and non-digital services. This means

that services might not adequately meet user needs or expectations. Establishing effective feedback mechanisms (such as public consultations, online surveys, user testing panels, focus groups or community workshops) is vital to ensure that digital services are developed and evolved in line with resident preferences and requirements.

Simplification of digital self-service

CCC's existing digital self-service options are not as simplified or user-friendly as they could be, placing an undue burden on customer service teams who are then required to address high-priority or complex cases. Making digital self-service more intuitive and accessible will not only improve the resident experience but also alleviate the workload on customer service staff.

Digital customer journey challenges

Cambridge residents, particularly vulnerable groups such as the elderly and non-native English speakers, encounter barriers in accessing digital services. Many of the Council's digital offerings are not designed for this group. Staff often find themselves spending significant time troubleshooting Council digital services with residents, pointing to a need for improved digital service design and clearer communication strategies. This approach should focus on balancing the demands of digital transformation with the imperatives of inclusive and accessible service provision for all residents.

Appendix B: Diagnosing the as-is state of the Council

Strand 4: Skills development in DDaT

CCC employees recognise the pressing need for upskilling to meet the demands of a modern organisation. Current capabilities in using digital tools, adopting agile methodologies, and making data-informed decisions are unevenly spread and underdeveloped among staff members. The absence of continuous support and learning opportunities, such as regular workshops and accessible resources, underscores the need for a structured approach to skill development in DDaT. This structured approach needs to include an understanding that regular learning in the form of reviews and workshops is a good use of employee time which is protected and encouraged.

Appendix C:

DLUHC local government digitalisation survey results

Appendix C: DLUHC local government digitalisation survey

PUBLIC were commissioned by DLUHC to create a simple, user-friendly survey to measure the performance of councils across the UK on a number of important digital, cyber and data metrics.

The survey is intended to be short, accessible and user-friendly, so does not give a detailed appraisal of Council performance, but instead provides a snapshot that Councils can use to benchmark their maturity with other Councils across the country.

It covers self-reported performance in a number of key digital metrics, including leadership, strategy and ways of working. It gives Councils the opportunity to report quantitative metrics around the scale of investment into digital services, cloud transition and innovation projects. This will act as a useful tool for CCC to appraise its performance and measure changes over time, especially as more Councils across the country take this survey (currently c.90), supported by DLUHC.

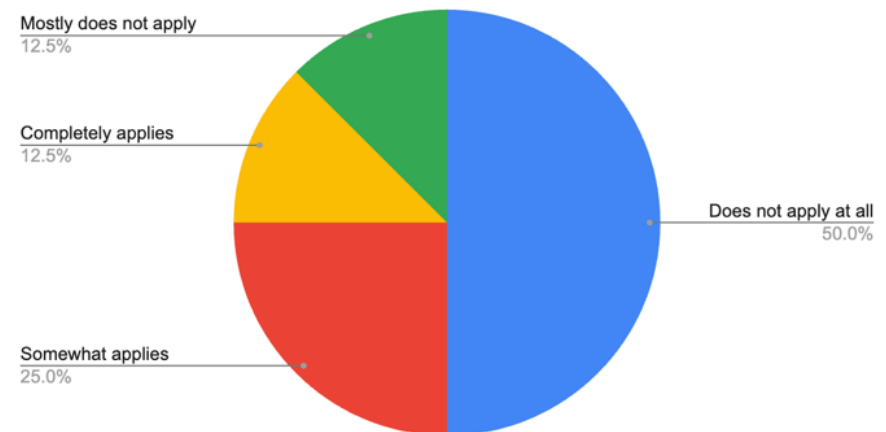
The survey responses help us to understand how relevant this DDaT strategy is for advancing CCC's digital agenda across all 3 strands of the DDaT strategy. Below is a brief analysis of the responses received by CCC participants and how those responses compare to the more than 100 responses received from different Councils.

CCC employees perceive less of a clear digital strategy on average than employees at other councils

Compared to respondents from other councils, more than 60% of CCC respondents stated that the Council lacks an *"internally or externally published digital strategy that lays out the Council's plan for digital transformation over at least a 24-month period"*. More than 50% of respondents from other councils responded with "completely applies" or "mostly applies" statements to the same question.

Why is this important to CCC?

Cambridge City Council: My council has an internally or externally published digital strategy that lays out the council's...

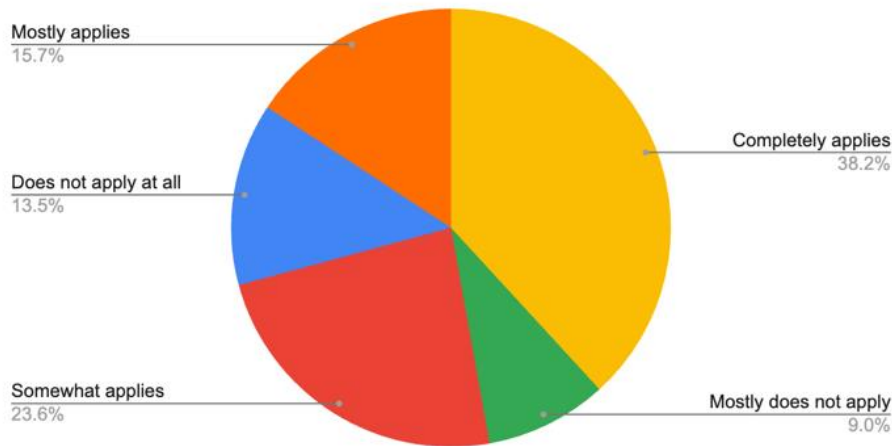


Undoubtedly, the responses to this question show that this is the right moment for CCC to catch up with the trend we see across the country of local councils developing and publishing digital

Appendix C: DLUHC local government digitalisation survey

strategies to lay out the plans and roadmaps for the Council's digital transformation priorities.

Average: My council has an internally or externally published digital strategy that lays out the council's plan for digital trans...



Survey reveals a need for enhanced data practices compared to UK Councils

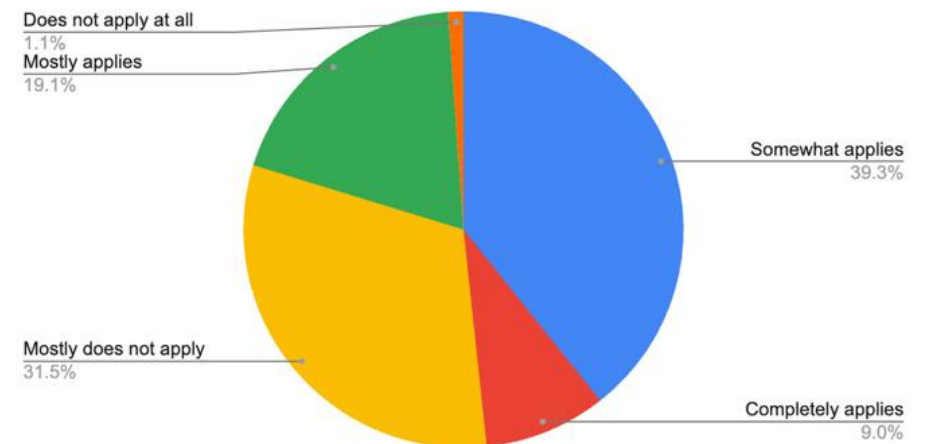
When asked whether the Council *has a mature approach to using and managing data, including data tooling, governance and ethics*, more than 35% of respondents believe the statement "mostly does not apply" and 12.5% believe the statement "does not apply at all" compared to 31.5% and 1.1% respectively across all councils.

Why is this important to CCC?

Considering the importance of data availability, management, and ethical use of data for the provision of better services to citizens and for the more efficient use of the Council's resources, it is

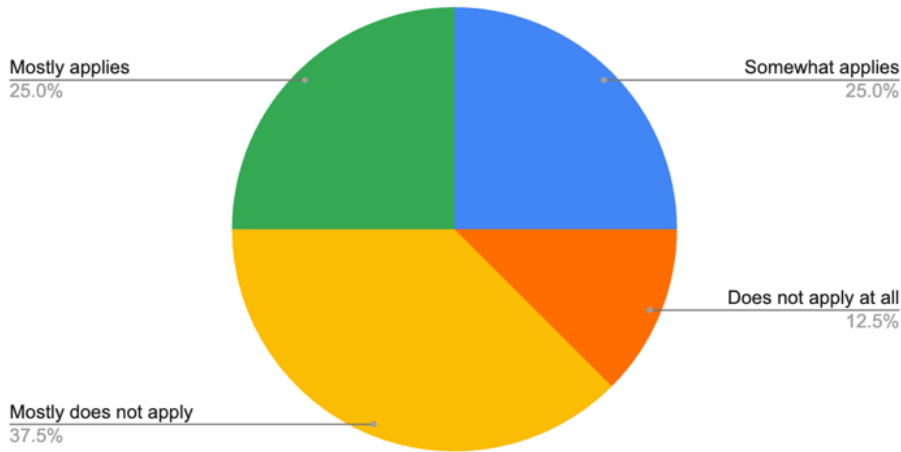
critical that CCC's DDaT strategy makes data and information management a priority for implementation. Elements of the DDaT strategy such as data integration, data governance and better use of data are key for advancing the Council's service delivery and closing the gap when it comes to data.

Average: My council has a mature approach to using and managing data, including data tooling, governance and ethics

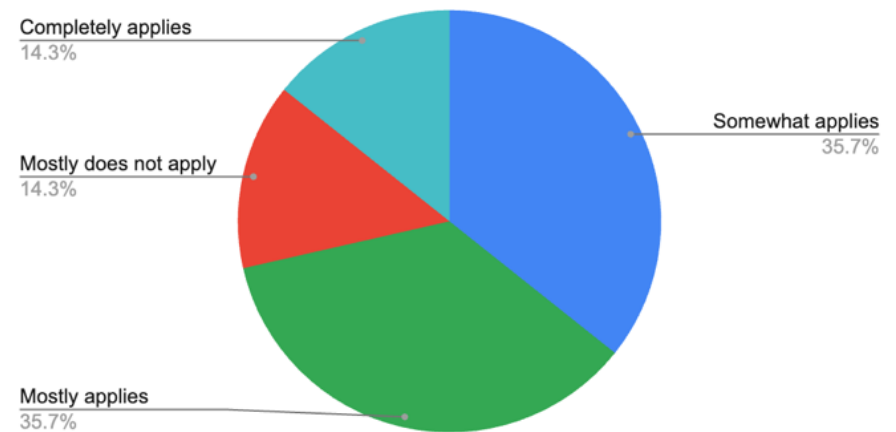


Appendix C: DLUHC local government digitalisation survey

Cambridge City Council: My council has a mature approach to using and managing data, including data tooling, governance...



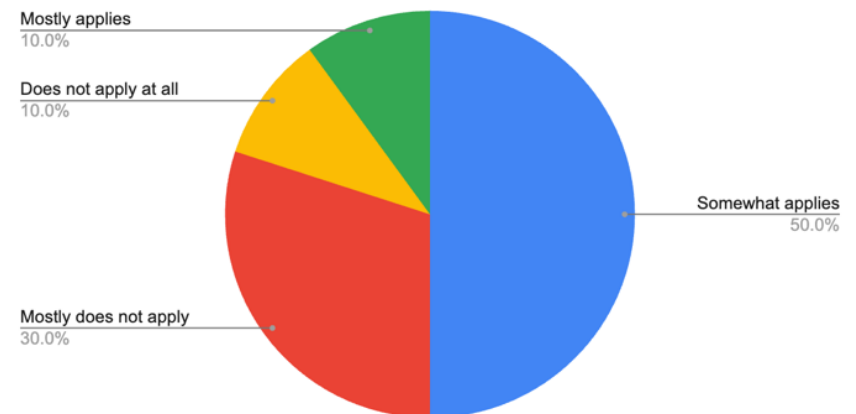
Average: My council equips staff with the digital and technical skills they require to successfully complete a...



CCC staff notably more likely to report a deficiency in essential digital skills compared to national council average

When asked if the Council equips staff with the digital and technical skills, they require to successfully complete and deliver their responsibilities, 40% of participants responded with the statements "does not apply at all" or "mostly doesn't apply", which is way above the average of 14% of similar responses across the rest of councils.

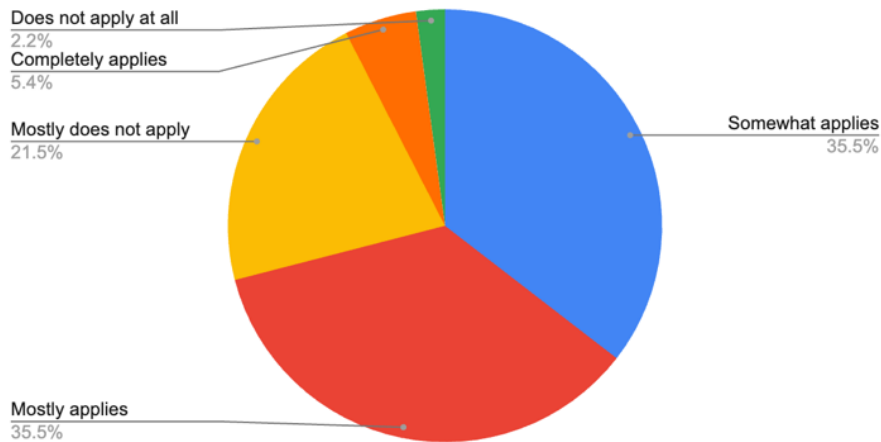
Cambridge City Council: My council equips staff with the digital and technical skills they require to successfully complete and...



Appendix C: DLUHC local government digitalisation survey

CCC staff report lower application of agile methods in digital projects than national council average. Similarly, when asked if the Council “*applied agile methods to digital projects, including testing what we have built and iterating our work based on regular feedback with users and other useful data*” 60% of respondents in CCC responded with the statements “does not apply at all” or “mostly doesn’t apply”, below the average of 23.7% for the rest of councils.

Average: My council always applies agile methods to digital projects, including testing what we have built and iterating out...



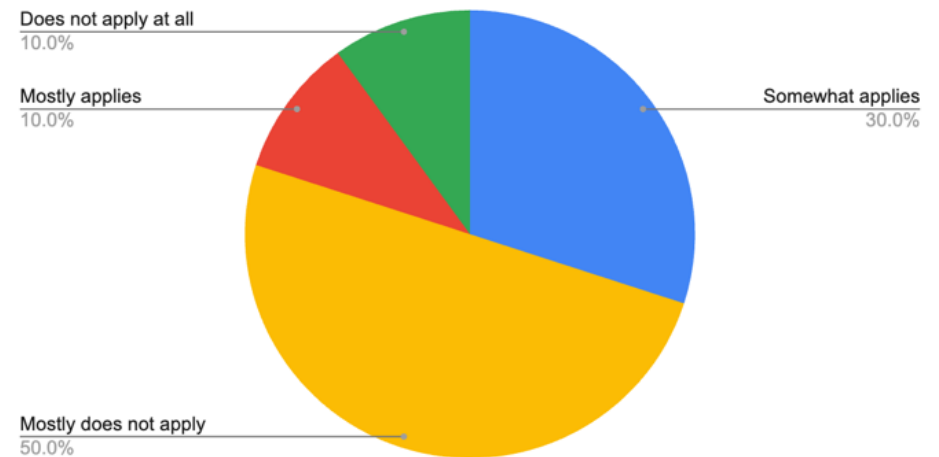
Why is this important to CCC?

For a digital strategy to be successfully implemented it is essential that the strategies are accompanied by upskilling and training of the workforce to ensure that everyone has the right tools to maximise the effectiveness of such strategies.

CCC faces greater challenges in technology procurement and partnership management compared to national councils

50% of the respondents in CCC believe that the statement “*my council has a mature approach to technology procurement and working with technology*” mostly does not apply, compared to only 14.6 percent of the average responses. When it comes to being successful in implementing a DDaT strategy, councils will have to work with partners to make sure the software and hardware used by the Council is providing the best value and that the procurement frameworks by which they are outsourced are modern, agile, and well managed.

Cambridge City Council: My council always applies agile methods to digital projects, including testing what we have built and iterating out...



Appendix C: DLUHC local government digitalisation survey

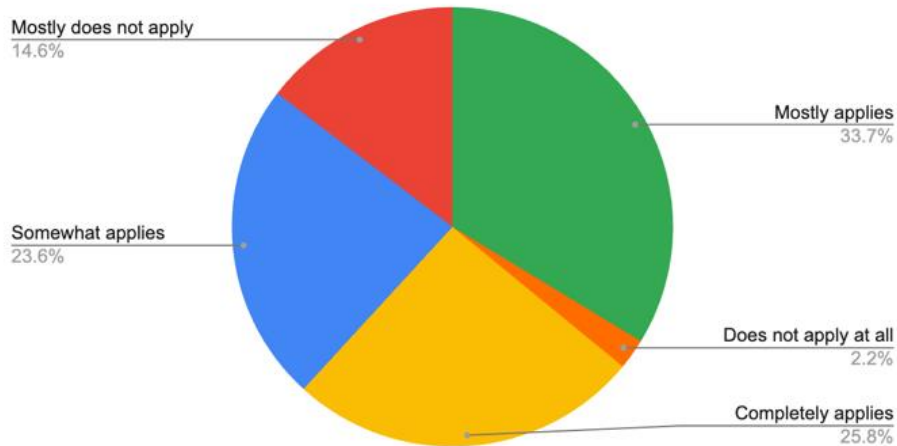
Why is this important to CCC?

As part of CCC's DDaT strategy, we are ensuring that priority is given to how technology is outsourced in the Council from procurement to implementation and contract management, which will improve the overall value and process of procurement for the technology that the Council is currently using and will use in the future.

Cambridge City Council: My council has a mature approach to technology procurement and working with technology suppliers



Average: My council has a mature approach to technology procurement and working with technology suppliers



Appendix D:

Supporting materials for strand one –
data and information management
(alignment to DTOM, risk assessment
and benefits calculation)

Appendix D: Supporting materials – 1.1 Enhance data interoperability

1.1 Enhance data interoperability

Recommendations for what to do with results of systems and data register survey.

The 'Systems and Data Register Survey' is a crucial tool for CCC to maintain a comprehensive and up-to-date inventory of its digital assets. This survey will serve as a pivotal resource in ensuring data and system governance align with the Council's strategic goals.

Upon collection, the information from this survey should be used to:

Enhance Data Security and Compliance: Understanding what personal and sensitive data is stored, and where, allows CCC to ensure proper data protection measures are in place. This is particularly important for compliance with GDPR and other data protection regulations. Regularly updating this information helps in identifying any potential vulnerabilities or non-compliance issues swiftly.

Optimise System Management and Procurement: By knowing the service areas each system serves, along with contract end dates and suppliers, CCC can effectively manage system lifecycles. This includes timely system upgrades, renegotiating contracts, or exploring new vendors as necessary. It also helps in avoiding redundant systems, ensuring that Council funds are utilised efficiently.

Foster Informed Decision Making: Having a clear picture of data sources, data owners, and access rights empowers decision-makers with accurate information. It aids in streamlining processes, enhancing inter-departmental collaboration, and making informed policy decisions.

Drive Data-Driven Strategies: Understanding the function of each data set or system allows for the strategic use of data in enhancing service delivery. It helps in identifying opportunities for data interoperability, leading to more integrated and user-friendly services for residents.

To keep this register relevant and effective, CCC should consider running this survey on a bi-annual basis or more frequently if major system changes or updates occur. This ensures that the register reflects the current state of systems and data, enabling CCC to respond dynamically to technological advancements and evolving data protection standards.

The Systems and Data Register can also significantly enhance various missions within the DDaT strategy in the following ways:

- Mission 1.1: The register provides an extensive overview of the current data systems. It can help identify potential opportunities for middleware solutions.
- Mission 1.4: The register aids in strengthening the Information Management policies by providing insights into what personal

Appendix D: Supporting materials – 1.1 Enhance data interoperability

and sensitive data is held, ensuring compliance with data protection regulations.

- Mission 2.1: The register supports the TDA in making informed technology management decisions and ensuring that IT contracts and technology choices align with the Council's strategic technology goals.
- Mission 2.2: The detailed data on system ownership, contract end dates, and suppliers within the register facilitates smarter technology procurement and contract management, ensuring value for money and optimal technology choices.
- Mission 2.4: The Systems and Data Register provides the necessary information for a comprehensive review of all IT systems, aiding the decision-making process regarding system retention, upgrade, or decommissioning, and ensuring alignment with the DDaT strategy.

Alignment to organisational structure

DTOM roles and activities aligned to this mission. Note: The final composition of roles for delivery of this mission will be dependent on the DTOM model which is adopted by CCC.

Digital Service Management:

- Responsible for managing the overall service delivery of the data interoperability project.
- Accountable for coordinating with Strategy Delivery to align the mission with corporate strategy.

Strategy Delivery:

- Informed about the progress and alignment of the interoperability mission with the broader corporate strategy.

ICT Consultancy/External Supplier Inputs:

- Consulted for the implementation of middleware solutions.

ICT Contract Management:

- Responsible for including middleware requirements in future contracts.
- Accountable for enforcing middleware requirements during contract management.

Solution Architecture:

- Responsible for assessing the technical feasibility of interoperability operations.
- Consulted for using the comprehensive data inventory to develop a thorough understanding of the data integration constraints of priority IT systems.

Change Management and Delivery:

- Responsible for managing the delivery of comprehensive inventories of all data sources and systems.
- Accountable for managing the delivery and implementation of middleware solutions across the Council, ensuring minimal disruption to services.

Appendix D: Supporting materials – 1.1 Enhance data interoperability

Product Management:

- Accountable for continuing the comprehensive inventory of all data sources and systems begun in October 2023.
- Responsible for working with the Solution Architect to assess the technical feasibility and practical need of data integration.
- Responsible for defining the product requirements for middleware solutions for CCC.
- Responsible for product managing the implementation of middleware solutions.
- Responsible for the creation of a roadmap of systems integration based on organisational priorities.

Business Analysis:

- Responsible for supporting the Product Manager in executing all product management-related tasks.

Performance indicators and success metrics

For this mission could include the following, and should be aligned to the timelines outlined in the Mission Roadmap ahead of implementation:

1. Comprehensive data inventory

- Performance Indicator: Completion and accuracy of a comprehensive inventory of all data sources and systems.
- Success Metrics
 - Achieve 100% completion with detailed documentation of all data sources and systems ensuring accuracy and completeness.

2. Migrate non-system data

- Performance Indicator: Non-system data (e.g., Word documents, emails, Excel sheets) migrated into interoperable IT systems.
- Success Metrics
 - Successfully migrate at least 80% of identified critical non-system data into IT systems, focusing on data that impacts service delivery and decision-making.

3. Middleware aggregator solutions implementation

- Performance Indicator: Effective implementation and integration performance of middleware aggregator solutions.
- Success Metrics
 - Complete robust market engagement.
 - Complete integration of middleware solutions in prioritised workstreams (Orchard, Storm, Tascomi, etc.).
 - Ensure that the middleware solutions meet or exceed the established technical requirements.
 - Develop roadmap for future systems integration.

4. Procurement and contract management

- Performance Indicator: Incorporation of middleware requirements in procurement practices and contracts, particularly focusing on the inclusion of RESTful APIs for new system procurements.
- Success Metric:

Appendix D: Supporting materials – 1.1 Enhance data interoperability

- 100% of new IT system procurements to include middleware integration requirements, specifically RESTful APIs.
- Successful integration of newly procured systems with existing middleware solutions.

Risk assessment and mitigation strategies

Risk	Severity level (RAG)	Mitigation strategy
<p>Inadequate Integration Capacity of Legacy Systems: Legacy systems at CCC might not have the necessary features to integrate smoothly with each other. This could lead to significant challenges in achieving interoperability and efficient data flow.</p>		<p>System Compatibility Analysis and Gradual Integration: Conduct an extensive compatibility analysis of all legacy systems. Implement change incrementally, beginning with the most compatible systems. Consider developing or procuring bridge solutions or adapters to facilitate the integration of less compatible legacy systems.</p>
<p>Data Security Vulnerabilities during Migration and Integration: The process of migrating non-system data (like Word documents, emails, Excel sheets) into IT systems and integrating these with middleware solutions exposes critical data to potential security risks and data breaches.</p>		<p>Strengthen Security Measures and Protocol Development: Implement stringent security protocols during the data migration phase, including encryption and access controls. Provide specialised training for staff involved in the process and conduct regular security audits to identify and address vulnerabilities promptly.</p>
<p>Resistance to Change and Low Adoption Rates among Staff: The introduction of interoperability solutions and the shift from non-IT formats to interoperable systems could meet with resistance from staff accustomed to existing workflows and systems.</p>		<p>Comprehensive Engagement and Training Programs: Develop a detailed communication plan to educate and engage staff about the benefits of the new system. Offer extensive training and support to ensure staff are comfortable and proficient. Establish feedback mechanisms to address concerns and improve the system based on user input.</p>

Appendix D: Supporting materials – 1.1 Enhance data interoperability

Additional detail on benefits calculation

	Cost	Figure	Notes
A	Number of housing transactions	10609	Based on number of calls transferred to agents or external parties related to housing (Housing Management, Housing Needs and Options, Housing Repairs)
B	Ratio of housing transactions to hours saved when joining up data	0.08	12:1 ratio of number of transactions to hours saved after joining up data in: https://arvato.co.uk/wp-content/uploads/2022/02/Who-we-work-with-Neath-Port-Talbot-Feb2022.pdf
C	Hours of time saved related to housing calls from joining up data	884	Final benefit figure (=A*B)

Appendix D: Supporting materials – 1.2 Improve the customer experience of digital services through better use of data

1.2 Improve the customer experience of digital services through better use of data

Alignment to organisational structure

DTOM roles and activities aligned to this mission. Note: The final composition of roles for delivery of this mission will be dependent on the DTOM model which is adopted by CCC.

1. Digital Service Management:

- Responsible for overseeing the execution of the mission, ensuring digital services are customer-centric and meet the set objectives.
- Accountable for ensuring coordination between all involved functions and monitoring overall mission progress.

2. Strategy Delivery:

- Responsible for aligning the mission with the Council's overarching digital strategy and service improvement plans.
- Informed about the strategic planning and prioritisation of customer-centric service enhancements.

3. Data Architecture:

- Responsible for defining the data architecture required for an integrated view of customer interactions.

4. Change Management and Delivery:

- Accountable for managing the implementation of new systems and processes to improve data utilisation in customer service.
- Responsible for facilitating the cultural change towards a more data-driven customer service approach.

5. Product Management:

- Responsible for assembling product requirements to support the overall functions and communicating those product requirements to the relevant functions to execute the delivery of this mission.
- Consulted for coordinating work to develop more seamless user-centric workflows.

6. Software Development:

- Responsible for the creation of customer service dashboards.

7. Business Analysis:

- Responsible for conducting analysis to identify the most impactful customer service areas for data optimisation.
- Consulted for providing insights into how data can be better utilised to improve customer service delivery.

8. Information Governance:

- Consulted for ensuring data utilisation complies with data protection and privacy standards.

Appendix D: Supporting materials – 1.2 Improve the customer experience of digital services through better use of data

- Accountable for establishing governance around the use of customer data and the ethical implications of data sharing.

9. Data Engineering:

- Responsible for developing the data pipelines and infrastructure for capturing, processing, and utilising customer data.
- Accountable for integrating customer data from various sources to provide a holistic view for customer service agents.

10. Data Management:

- Accountable for overseeing the management of data throughout the mission.
- Consulted for ensuring data quality, relevance, and timeliness in customer service applications.

11. Service Design:

- Responsible for ensuring that the service design of digital platforms is user-centric and caters to the various needs of CCC's diverse customer base.
- Consulted for applying user research and design thinking to develop self-service platforms that are intuitive and user-friendly.

12. User Research and Design:

- Responsible for gathering user insights to inform the development of self-service platforms and customer dashboards.
- Consulted for conducting usability testing and incorporating customer feedback into the design process.

13. User Analytics and Behaviours:

- Responsible for analysing customer interactions and behaviours to continuously improve the customer experience.
- Consulted for using analytics to refine self-service options and predict customer service needs.

Performance indicators and success metrics

For this mission could include the following, and should be aligned to the timelines outlined in the Mission Roadmap ahead of implementation:

1. Assessing and Enhancing Data Utilisation
 - Performance Indicator: Clear understanding of data utilisation, with priority actions to improve use in customer request service resolution.
 - Success metric
 - Achieve improved customer request service resolution due to improved data utilisation.
2. Implementing Efficient Data Sharing Mechanisms

Appendix D: Supporting materials – 1.2 Improve the customer experience of digital services through better use of data

- Performance Indicator: Improved speed and accuracy of customer service agent responses to customer requests.
 - Success Metric:
 - Reduction in average response time by customer service agent’s post-implementation.
3. Developing self-service Platforms
 - Performance Indicator: Usage, accessibility, and satisfaction rates of self-service platforms.
 - Success metric:
 - Attain an increase in user satisfaction and usage of self-service platforms.

Risk assessment and mitigation strategies

Risk	Severity level (RAG)	Mitigation strategy
Inadequate Utilisation and Integration of Customer Data: Customer data is not fully utilised or properly integrated, leading to inefficiencies in customer service. This could result in slower response times, reduced service quality, and missed opportunities for service personalisation.		Comprehensive Data Analysis and Integration Plan: Conduct a thorough evaluation of current data utilisation practices within customer service teams. Develop a strategic plan to enhance data integration, focusing on middleware solutions that facilitate effective data sharing. Regularly review and adjust the strategy based on feedback and performance metrics.
User Resistance in Self-Service Platform Adoption: The development and implementation of self-service platforms may face challenges due to inefficiency in design and resistance from customers accustomed to traditional service methods, leading to low adoption rates and failed investment in technology.		User-Centric Design and Extensive Testing: Involve customers in the design process of self-service platforms to ensure they are intuitive and meet user needs. Conduct pilot testing with different customer segments to gather feedback and make necessary adjustments. Implement an extensive awareness and training program to encourage adoption and provide support.
Data Privacy and Security Concerns in Data Sharing Mechanisms: Customer data might be exposed to security vulnerabilities, risking data breaches and loss of customer trust.		Robust Security Framework and Regular Audits: Implement strong data security policies and encryption methods to protect sensitive customer data. Conduct regular security audits and update the security framework as needed. Train staff in data privacy best practices and establish protocols for quick response to any security incidents.

Appendix D: Supporting materials – 1.2 Improve the customer experience of digital services through better use of data

Additional detail on benefits calculation

	Cost	Figure	Notes
A	Total number of calls	77287	Answered call count by customer service
B	Calls that are not first contact resolution - type 1	10087	Calls transferred to agent by customer service
C	Calls that are not first contact resolution - type 2	7265	Calls transferred to external party by customer service
D	Sum of calls that are not first contact resolution	17352	(=B+C)
E	Total number of FCR calls - pre intervention	59935	(=A-D)
F	% calls that are not FCR of total calls answered	22%	(=D/A)
G	Increase in FCR calls from joined-up data	2%	% increase in FCRs due to joined-up data at similar councils (source)
H	% calls that are not FCR of total calls answered at CCC after joined up data	20%	(=F-G)
I	Total number of FCR calls - post intervention	61480.74	Total number of additional FCR calls based on 2% increase
J		1,545.74	(=I-E)

Appendix D: Supporting materials – 1.3 Strengthen information management and data ethics

1.3 Strengthen information management and data ethics

Alignment to organisational structure

DTOM roles and activities aligned to this mission. Note: The final composition of roles for delivery of this mission will be dependent on the DTOM model which is adopted by CCC.

Digital Service Management:

- Informed about the development and updates to the Information Management Policy and the Council service catalogue.
- Accountable for overseeing the overall coordination and communication of the data governance mission.

Strategy Delivery:

- Consulted for strategic alignment of the Information Management Policy with the Council's broader strategic goals.

Information Governance:

- Accountable for reviewing and updating the Information Management Policy and ensuring it aligns with ethical standards and GDPR requirements.
- Responsible for the overall data governance framework and ensuring compliance with policies and regulations.
- Consulted on the development of the Council service catalogue to ensure it aligns with information governance policies.

- Responsible for audit and compliance monitoring.

Service Design:

- Accountable for designing the Council service catalogue to be user-friendly, accessible, and to support the application of the data governance policy.
- Consulted for ensuring that the service design aligns with ethical standards, promotes user understanding, and supports the data governance policy.

Performance indicators and success metrics

For this mission could include the following, and should be aligned to the timelines outlined in the Mission Roadmap ahead of implementation:

1. Opening the Council Service Catalogue
 - Performance Indicator: Creation and use of a user-friendly Council service catalogue.
 - Success Metric:
 - Launch an intuitive and comprehensive Council service catalogue.
2. Audit and Compliance Monitoring
 - Performance Indicator: Regularity and effectiveness of audits and compliance monitoring activities.
 - Success Metric:

Appendix D: Supporting materials – 1.3 Strengthen information management and data ethics

- Conduct bi-annual audits and achieve at least a 70% compliance rate with Information Management policies and GDPR.
3. Communicating the Benefits of Information Management
- Performance Indicator: Level of awareness and understanding of data governance benefits among Council staff.
- Success Metric:
 - Conduct comprehensive awareness campaigns, aiming for a 75% staff awareness rate about the importance and benefits of robust data governance.

Risk assessment and mitigation strategies

Risk	Severity level (RAG)	Mitigation strategy
Insufficient Understanding and Adoption of Information Management Policy: There's a risk that the Information Management policy may not be adequately understood or adopted by all staff, especially those with limited technical expertise. This could lead to inconsistent application of data standards and ethical practices across the Council.		Comprehensive Communication and Training: Develop a multifaceted communication strategy to ensure the Information Management policy is accessible and comprehensible to all staff. Offer training sessions and workshops that explain the policy in practical terms, highlighting its relevance to different roles within the Council. Regularly review and adapt the communication approach based on feedback.
Inadequate Monitoring and Compliance with Data Governance Standards: Effective monitoring and ensuring compliance with the Information Management policy and GDPR requirements might be challenging, potentially leading to data mismanagement and legal non-compliance.		Robust Audit and Compliance Framework: Establish a robust system for regular audits and compliance monitoring. This system should include clear metrics for assessing adherence to GDPR. Ensure there are processes in place for prompt response and remediation in case of non-compliance.

Appendix D: Supporting materials – 1.3 Strengthen information management and data ethics

Additional detail on benefits calculation

	Cost	Figure	Notes
A	Risk reduction of risk of fine for GDPR data breach	£120,000.00	Based on fines issued by ICO to Stoke on Trent for PII violations as savings derived from data breaches, staff time taken to resolve.

Appendix E:

Supporting materials for strand two –
technology and innovation (alignment to
DTOM, risk assessment and benefits
calculation)

Appendix E: Supporting materials – 2.1 Empower CCC's Technological Transformation through a Technical Design Authority (TDA)

2.1 Empower CCC's Technological Transformation through a Technical Design Authority (TDA)

Alignment to organisational structure

We recommend that the following roles from the DTOM be part of the TDA. Note: The final composition of roles for delivery of this mission will be dependent on the DTOM model which is adopted by CCC.

Digital Service Management:

- Responsible for coordinating the activities of the TDA overall.

Strategy Delivery:

- Accountable for ensuring that the TDA's activities and decisions are strategically aligned with the Council's broader digital goals and objectives.
- Informed about the progression and outcomes of technology management initiatives.

ICT Contract Management:

- Responsible for incorporating TDA's directives into vendor relationships, contract negotiations, and management.
- Accountable for overseeing the adoption of procurement best practices as guided by the TDA.

Solution Architecture:

- Consulted for technical guidance and solutions architecture in alignment with TDA's directives.

ICT Finance:

- Consulted by ICT Contract Management for financial advice and budget alignment related to ICT Contract Management TDA activities.

Service Design:

- Responsible for ensuring that end-user requirements are defined and met in accordance with TDA's technology management strategy.
- Consulted for input on designing services and products that align with TDA's technology recommendations and user needs.

Product Management:

- Responsible for being the 'voice of the user' and defining and owning user stories and the definition of product requirements.
- Accountable for ensuring that the TDA's technology recommendations and strategies align with product management best practices.

Change Management and Delivery:

- Responsible for guiding the establishment and regular cadence of TDA meetings and activities.

Appendix E: Supporting materials – 2.1 Empower CCC's Technological Transformation through a Technical Design Authority (TDA)

- Accountable for ensuring that the TDA's decisions and strategies are effectively communicated and implemented across the Council.

Performance Indicators and Success Metrics

For this mission could include the following, and should be aligned to the timelines outlined in the Mission Roadmap ahead of implementation:

1. Establishing the TDA
 - Performance Indicator: Complete establishment and alignment of the TDA with DDaT strategy.
 - Success Metric: TDA operational model established, members selected, and execution begun.
2. Defining Governance and Operating Procedures
 - Performance Indicator: Development and communication of TDA governance frameworks and operating procedures.
 - Success Metric: TDA governance frameworks and operating procedures established and communicated internally.
3. Ongoing Strategy Review and Adaptation
 - Performance Indicator: Regular and value-adding strategy reviews, reporting, and stakeholder engagement.
 - Success Metric: Conduct monthly TDA meetings, quarterly progress reports, and establish feedback mechanisms with 70% stakeholder engagement, along with biannual effectiveness reviews.

Appendix E: Supporting materials – 2.1 Empower CCC's Technological Transformation through a Technical Design Authority (TDA)

Risk assessment and mitigation strategies:

Risk	Severity level (RAG)	Mitigation strategy
Ineffective TDA Structure and Integration: There's a risk that the newly formed TDA may not be effectively integrated into the Council's existing structures, leading to confusion over roles, responsibilities, and authority. This could result in inefficiencies and a lack of clear direction for the DDaT strategy.		Clear Definition and Communication of Roles: Ensure the TDA's structure, roles, and responsibilities are clearly defined and documented. Communicate this information across the Council to establish the TDA's authority and mandate. Engage with all relevant departments to facilitate understanding and collaboration.
Misalignment with Council Goals and User Needs: The TDA might become disconnected from the evolving needs of the Council's departments and external stakeholders, leading to a strategy that does not align with user needs and organisational goals.		Regular Reviews and Feedback Mechanisms: Establish regular review sessions and feedback mechanisms involving Council departments and external stakeholders. Use these sessions to assess the effectiveness of the TDA and adapt its approach to ensure continuous alignment with user needs and strategic goals.

Additional detail on benefits calculation

	Cost	Figure	Notes
A	Total monetisable benefits aside from TDA formation	£2,782,232.03	
B	Percentage	5%	
C	Expected benefits gained from improved governance of overall DDaT strategy through formation of TDA	£139k	=A*B

Appendix E: Supporting materials – 2.2 Make technology buying and management smarter

2.2 Make technology buying and management smarter

Alignment to organisational structure

DTOM roles and activities aligned to this mission. Note: The final composition of roles for delivery of this mission will be dependent on the DTOM model which is adopted by CCC.

Digital Service Management:

- Accountable for overall ownership and coordination of the mission.
- Responsible for ensuring effective implementation of the procurement guidelines and overseeing the overall progress of the mission.

Strategy Delivery:

- Accountable for ensuring the alignment of procurement practices with the Council's digital strategy and organisational objectives.
- Consulted for strategic input on procurement practices and their integration with broader organisational goals.

ICT Contract Management:

- Responsible for managing vendor relationships, contract negotiations, and ensuring contracts are in support of digital transformation goals.

- Accountable for the overall management of contracts and ensuring that procurement practices align with the Council's strategic objectives.
- Consulted for input on contract management best practices and vendor engagement strategies.

ICT Finance:

- Responsible for budget management and financial analysis of procurement initiatives.
- Accountable for ensuring the cost-effectiveness of procurement strategies and managing the financial aspects of the mission.

Change Management and Delivery:

- Responsible for managing the transition to new procurement processes and systems.
- Accountable for driving the adoption of new procurement strategies across the organisation and ensuring smooth delivery of the mission.

Service Design:

- Consulted for ensuring that procured tools and platforms are intuitive and align with the Council's digital transformation goals.
- Informed about the design considerations and user-centricity of procured products and services.

Appendix E: Supporting materials – 2.2 Make technology buying and management smarter

Product Management:

- Responsible for overseeing the lifecycle of procurement products and platforms.
- Accountable for ensuring that product requirements are in line with digital transformation goals and user needs.
- Consulted for communicating product requirements and collaborating with other teams, such as Business Analysis, for a coherent product strategy.

Business Analysis:

- Responsible for conducting a comprehensive business needs analysis for procurement processes.

Technical Analysis:

- Consulted for providing in-depth technical evaluation of procurement systems and solutions.

Performance Indicators and Success Metrics

For this mission could include the following, and should be aligned to the timelines outlined in the Mission Roadmap ahead of implementation:

1. Developing Procurement Guidelines
 - Performance Indicator: Development and implementation of procurement guidelines detailing methodology for evaluating technology purchases based on clearly defined business requirements, user stories, and technical specifications, among others.
 - Success Metric: Adoption of procurement guidelines across all technology purchases.
2. Enhancing Staff Training and Role Clarification
 - Performance Indicator: Training program in business analysis, digital product management, and technology trends developed and implemented for procurement staff.
 - Success Metric: Complete training for all procurement staff.
3. Audit and Targeted Approach in Contract Management
 - Performance Indicator: Completion of contract audits and effectiveness of contract management system.
 - Success Metric: Conduct a full audit of existing contracts and establish a central contract register with effective tracking.
4. Adopt Best Practices in Technology Buying and Management
 - Performance Indicator: Establishment and routine adoption of best practice in technology buying and management, e.g., via pilot projects, robust market engagement, partnerships, and adherence to contract management processes.
 - Success Metric: Successfully implement pilot projects, establish robust vendor relationships, and achieve 100% compliance with contract management processes.

Appendix E: Supporting materials – 2.2 Make technology buying and management smarter

Risk assessment and mitigation strategies

Risk	Severity level (RAG)	Mitigation strategy
Ineffective Alignment of Procurement with Business Needs: There's a risk that technology procurement may not adequately align with the actual business needs and user requirements of CCC. This misalignment can lead to the purchase of unsuitable technology solutions, resulting in wasted resources and missed opportunities.		Rigorous Requirement Analysis and User Story Development: Implement a stringent process for defining and documenting clear business requirements and user stories before any technology procurement. Involve relevant stakeholders from different departments in this process to ensure a comprehensive understanding of needs. Regularly review and update these requirements to reflect changing needs and trends.
Inadequate Contract Management and Supplier Engagement: The management of technology contracts and engagement with suppliers might be inadequate, leading to poorly managed contracts, missed renewal dates, and suboptimal vendor relationships.		Robust Contract Management System and Supplier Engagement Model: Implement a central contract register and a system for tracking contract renewals and managing contracts based on KPIs. Develop best practices in vendor engagement, including pilot projects for system readiness checks, strengthening market engagement processes, fostering partnership approaches with suppliers, and implementing mandatory contract management and review processes.

Additional detail on benefits calculation

	Cost	Figure	Notes
A	Cost of procurement	£1,756,666	Based on value of ICT software contracts which City is listed as a partner in. Source file name: Contracts Analysis Software
B	% savings from innovation projects to streamline procurement and contract management	10%	Based on UK Multi-Academy Trust case study. To reduce costs, they turned to a procurement e-Marketplace tool to streamline the purchasing process. They were able to source price competitive goods, validate this for their purchasing requirements, and significantly reduce the time spent searching.
	£ value of 10% savings on 3CICT partnership and procurement	£175,666	(A*B)

Appendix E: Supporting materials – 2.3 Transform how outsourced IT is managed

2.3 Transform how outsourced IT is managed

Alignment to organisational structure

DTOM roles and activities aligned to this mission. Note: The final composition of roles for delivery of this mission will be dependent on the DTOM model which is adopted by CCC.

Digital Service Management:

- Accountable for ensuring external IT services align with the Council's digital service standards and strategic objectives.
- Responsible for managing the overall performance of outsourced IT services.

Strategy Delivery:

- Consulted for integrating outsourced IT management into the Council's broader digital strategy.
- Informed about the progress and impact of outsourced IT services on strategic goals.

ICT Contract Management:

- Responsible for implementing a contract management system
- Accountable for overseeing contract management processes and ensuring they meet the Council's needs.
- Responsible for clarifying contractual relationships with external partners.

ICT Finance:

- Responsible for managing the budgeting and financial aspects of outsourced IT contracts.
- Accountable for assessing cost implications and ensuring value for money in outsourced IT services.

ICT Consultancy/External Supplier Inputs:

- Consulted for providing expert advice on the selection and management of outsourced IT services.
- Informed about the requirements and expectations from external IT service providers.

Enterprise Architecture:

- Consulted for ensuring compatibility of externally developed technologies with the Council's systems.

Solution Architecture:

- Consulted for working closely with external suppliers to ensure solutions are robust and fit for purpose.
- Informed about the technical specifications and design of outsourced IT solutions.

Data Architecture:

- Consulted for aligning outsourced IT solutions with the Council's overall data architecture.

Change Management and Delivery:

- Accountable for implementing new processes and systems for managing outsourced IT relationships.

Appendix E: Supporting materials – 2.3 Transform how outsourced IT is managed

Service Design

- Consulted to ensure that outsourced IT solutions align with overall customer journeys for key services that the Council delivers.

Product Management:

- Responsible for ensuring robust business, product, and technical requirements are developed and communicated to all parties relevant to the procurement, implementation, adoption, and ongoing support of IT systems at the Council.
- Accountable for the coherence and alignment of product requirements with outsourced IT services.

Business Analysis:

- Consulted for working alongside Product Management to ensure business, product, and technical requirements are effectively communicated and aligned with Council's strategic goals and user needs.

Performance Indicators and Success Metrics

For this mission could include the following, and should be aligned to the timelines outlined in the Mission Roadmap ahead of implementation:

1. Strengthening Contract Management Capabilities
 - Performance Indicator: Implementation and utilisation of the contract management system.
 - Success Metric: Fully operational contract management system and training completion for all relevant staff in contract management best practices.
2. Defining and Communicating Requirements with External Providers
 - Performance Indicator: Clarity and alignment of requirements with external providers.
 - Success Metric: Establish clearly defined, communicated, and mutually understood business and technical requirements with all external partners, including 3CICT and district councils.
3. Enhancing Partnership and Collaboration
 - Performance Indicator: Effectiveness of stakeholder engagement and collaborative initiatives.
 - Success Metric: Launch a stakeholder engagement campaign and establish regular communication channels and joint working groups. Demonstrate at least two successful collaborative technology initiatives.
4. Establishing a Monitoring and Review Mechanism
 - Performance Indicator: Effectiveness of the monitoring and review mechanism for outsourced IT services.
 - Success Metric: Implement a monitoring system and conduct bi-annual review meetings, achieving at least 80% compliance with KPIs and SLAs.

Appendix E: Supporting materials – 2.3 Transform how outsourced IT is managed

Risk assessment and mitigation strategies

Risk	Severity level (RAG)	Mitigation strategy
<p>Ineffective Contract Management and Oversight: There's a risk that the new contract management system may not be effectively implemented or utilised, leading to poor oversight and management of IT service contracts. This could result in suboptimal service quality and value for money.</p>		<p>Comprehensive Training and System Utilisation: Ensure comprehensive training for staff in contract management best practices. Develop clear guidelines and processes for using the contract management system effectively, covering the entire lifecycle of IT service contracts. Regularly review the system's usage and effectiveness, making adjustments as needed.</p>
<p>Misalignment of Outsourced IT Services with CCC's Strategic Objectives: There is a potential risk of misalignment between the services provided by external IT providers and CCC's strategic objectives. This misalignment can hinder the achievement of desired outcomes and strategic goals.</p>		<p>Clear Communication and Regular Updates of Requirements: Develop a formal process for defining, communicating, and regularly updating business and technical requirements to external IT service providers. Ensure these requirements are aligned with CCC's strategic objectives and that they are clearly understood and agreed upon by all external partners.</p>
<p>Lack of Effective Collaboration and Partnership with External Stakeholders: Effective collaboration and partnership with external stakeholders such as Greater Cambridge Partnership and Smart Cambridge are crucial. There's a risk that these relationships may not be adequately nurtured, leading to missed opportunities for synergies and shared knowledge.</p>		<p>Structured Stakeholder Engagement and Collaboration Mechanisms: Launch a structured stakeholder engagement campaign and establish regular communication channels and joint working groups. These should facilitate collaboration, knowledge sharing, and ensure alignment of technology initiatives with the broader strategic objectives of CCC.</p>

Appendix E: Supporting materials – 2.3 Transform how outsourced IT is managed

Additional detail on benefits calculation

	Cost	Figure	Notes
A	Cost of 3CICT partnership	£3,007,092	2019/20 Forecast Outturn from 3CICT attributable to CCC. Source file name: 3Cs Legal and ICT Services and Greater Cambridge - Internal Audit Shared Service - 201920 Annual Re (1) (002) (1)
B	% savings from innovation projects to streamline procurement and contract management	10%	Based on case study from UK Multi-Academy Trust. In their quest to reduce costs, a major UK Multi-Academy Trust Department turned to a procurement e-Marketplace tool to streamline the purchasing process. They were able to source price competitive goods, validate this for their purchasing requirements, and significantly reduce the time spent searching.
	£ value of 10% savings on 3CICT partnership and procurement costs	£300,709.20	(A*B)

Appendix E: Supporting materials – 2.4 Rationalise our IT estate

2.4 Rationalise our IT estate

Alignment to organisational structure

DTOM roles and activities aligned to this mission. Note: The final composition of roles for delivery of this mission will be dependent on the DTOM model which is adopted by CCC.

Digital Service Management:

- Accountable for overseeing the overall IT estate rationalisation process.
- Responsible for ensuring IT services are aligned with the Council's digital service standards.

Strategy Delivery:

- Consulted for ensuring the IT rationalisation aligns with the broader strategic objectives of the Council.

ICT Contract Management:

- Responsible for managing and reviewing IT contracts as part of the rationalisation process.
- Consulted for assessing opportunities for consolidation and renegotiation of contracts.

ICT Finance:

- Accountable for conducting financial analysis of current IT systems.
- Consulted for identifying potential cost savings through rationalisation.

ICT Consultancy/External Supplier Inputs:

- Consulted for evaluating and recommending optimal solutions for the IT estate.
- Informed about the rationalisation process and its impact on IT services.

Enterprise Architecture:

- Consulted for contributing to the IT systems roadmap development from an enterprise architecture perspective.
- Informed about the alignment of IT systems with enterprise architecture standards.

Solution Architecture:

- Accountable for ensuring that the rationalised IT solutions align with the Council's needs.

Data Architecture:

- Consulted for identifying opportunities to optimise data architecture as part of the rationalisation.
- Informed about the impact of rationalisation on data architecture and data flow.

Change Management and Delivery:

- Accountable for managing the transition to new IT systems.
- Responsible for communicating changes and providing support throughout the organisation.

Appendix E: Supporting materials – 2.4 Rationalise our IT estate

Product Management:

- Responsible for evaluating specific IT systems and solutions for consolidation or replacement.
- Consulted for aligning product strategy with the rationalisation objectives.
- Informed about the changes to products and services as a result of the rationalisation process.

Business Analysis:

- Responsible for conducting in-depth analysis of business requirements for IT systems.
- Consulted for informing decisions on IT rationalisation based on business impact and requirements.

- Success Metric: Develop and align a strategic IT systems roadmap with DDaT strategy goals.

3. Stakeholder Engagement and Feedback Mechanism

- Performance Indicator: Establishment and effectiveness of the stakeholder feedback mechanism.
- Success Metric: Implement a regular, structured feedback process and integrate stakeholder input into the IT roadmap.

Performance Indicators and Success Metrics

For this mission could include the following, and should be aligned to the timelines outlined in the Mission Roadmap ahead of implementation:

1. IT Systems Assessment and Decision Framework
 - Performance Indicator: Completion of IT systems assessment and development of a decision framework.
 - Success Metric: Complete comprehensive IT systems review and establish a decision framework.
2. Strategic IT Systems Roadmap Development
 - Performance Indicator: Creation of a strategic IT systems roadmap.

Appendix E: Supporting materials – 2.4 Rationalise our IT estate

Risk assessment and mitigation strategies

Risk	Severity level (RAG)	Mitigation strategy
Inadequate Assessment and Misalignment of IT Systems with Strategic Goals: There's a risk that the comprehensive review of current IT systems may not accurately assess their efficiency, security, and alignment with CCC's strategic goals. This could lead to poor decision-making in terms of retaining, upgrading, or decommissioning systems.		Rigorous Review Process and Expert Involvement: Ensure the IT systems assessment is thorough and involves input from various stakeholders and IT experts. Utilise a well-defined decision framework that incorporates technical, financial, and strategic considerations to guide decisions on IT systems effectively.
Lack of Coherence and Synergy in IT Systems Roadmap: Developing a strategic IT systems roadmap presents the risk of creating plans that are not coherent with other missions in the DDaT strategy or that fail to synergise with broader organisational goals.		Integrated Planning and Regular Review: Align the IT systems roadmap closely with the overall DDaT strategy and CCC's strategic goals. Regularly review and update the roadmap to ensure it remains relevant and effectively integrated with other digital transformation initiatives.

Additional detail on benefits calculation

	Cost	Figure	Notes
A	Value of key on-prem contracts	£307,586.31	File name: Key On-Premise Contracts and Cloud Alternatives
B	% savings of moving from on-prem to cloud	25%	Source
	£ value of 10% savings on 3CICT partnership and procurement costs	£76,896.58	(A*B)

Appendix F:

Supporting materials for strand three – digital customer journey (alignment to DTOM, risk assessment and benefits calculation)

Appendix F: Supporting materials – 3.1 Create a unified user experience across all digital services to ensure universal accessibility

3.1 Create a unified user experience across all digital services to ensure universal accessibility

Alignment to organisational structure

DTOM roles and activities aligned to this mission. Note: The final composition of roles for delivery of this mission will be dependent on the DTOM model which is adopted by CCC.

Digital Service Management:

- Responsible for overseeing the coordination of efforts to enhance digital accessibility across all Council services.
- Accountable for managing the integration of accessibility standards into ongoing digital service improvements.

Strategy Delivery:

- Consulted for ensuring that accessibility initiatives align with the Council's overarching digital strategy.

Service Design:

- Accountable for leading the design of user-friendly and inclusive digital interfaces and forms.
- Responsible for developing unified digital service designs that integrate seamlessly with non-digital alternatives.

User Research and Design:

- Responsible for conducting comprehensive accessibility audits of digital platforms.

- Consulted for gathering insights on user needs and preferences to inform the redesign process.

User Analytics and Behaviours:

- Consulted for analysing user interactions with digital platforms to identify accessibility barriers.

User Acceptance Testing:

- Responsible for conducting thorough testing of redesigned digital services with a diverse group of users.
- Accountable for validating that the services meet accessibility standards and are user-friendly.

User Journey and Outcome Mapping:

- Responsible for mapping out both digital and non-digital user journeys, ensuring they are intuitive, efficient, and accessible
- Accountable for continuously refining these journeys based on user feedback and evolving needs.

Prototyping and Usability Testing:

- Responsible for developing prototypes for accessible digital services for early-stage testing and feedback.
- Accountable for performing usability testing to identify any issues in accessibility and make necessary improvements.

Product Management:

- Responsible for managing the lifecycle of accessible digital services.

Appendix F: Supporting materials – 3.1 Create a unified user experience across all digital services to ensure universal accessibility

- Accountable for overseeing updates and enhancements to ensure ongoing compliance with accessibility standards.
- Consulted for owning the product requirements related to accessibility across all services.

Digital Communication:

- Responsible for promoting the availability of accessible digital services to the residents.
- Accountable for developing communication strategies to encourage the use of accessible digital and non-digital services.

ICT Contract Management:

- Consulted for ensuring that suppliers meet the required accessibility standards during the procurement and management of contracts.

Information Governance:

- Consulted for overseeing the ethical and compliant use of data in enhancing digital accessibility.
- Informed about ensuring privacy standards are maintained in all accessible digital services.

Change Management and Delivery:

- Responsible for helping deliver elements such as audits, user journey mapping, and other change management activities.
- Consulted for managing the overall transition to enhanced digital accessibility and unified user experience.

Performance Indicators and Success Metrics

For this mission could include the following, and should be aligned to the timelines outlined in the Mission Roadmap ahead of implementation:

1. Comprehensive Accessibility Audit and Inclusive Redesign
 - Performance Indicator: Completion of the comprehensive accessibility audit and implementation of redesign changes.
 - Success Metric: Conduct the audit and complete redesign for inclusivity in all key digital platforms, ensuring adherence to CCC accessibility guidance.
2. Establishment of a Seamless Digital Service Design
 - Performance Indicator: Implementation of a consistent design language and creation of detailed user journey maps.
 - Success Metric: Develop and apply a unified design language across all digital services and complete user journey maps for each service area.
3. Development of Unified Service Design with Non-Digital Alternatives
 - Performance Indicator: Integration of user research into service design and provision of accessible non-digital service options.
 - Success Metric: Complete user research and ensure all digital services have inclusive and accessible non-digital alternatives.

Appendix F: Supporting materials – 3.1 Create a unified user experience across all digital services to ensure universal accessibility

4. Resident Feedback Mechanism and Maintenance

- Performance Indicator: Establishment of ongoing resident feedback mechanisms and adaptation of services.
- Success Metric: Set up continuous user testing and feedback loops, update services bi-annually based on

feedback, and conduct annual communication campaigns to inform residents of service improvements.

Risk assessment and mitigation strategies

Risk	Severity level (RAG)	Mitigation strategy
Inadequate Accessibility in Digital Service Design: There's a risk that the comprehensive accessibility audit and subsequent redesigns may not fully identify or address all accessibility barriers. This could result in digital services that are not universally accessible, especially to users with diverse needs.		In-depth Accessibility Audit and Inclusive Design Implementation: Build upon the work done by Zesty to conduct a thorough audit of digital platforms, involving users with various accessibility needs in the testing process. Implement inclusive design principles rigorously and ensure all digital services adhere to CCC's accessibility guidelines. Regularly update these guidelines to reflect current best practices.
Insufficient Provision of Non-Digital Alternatives: There's a risk that digital services might not adequately consider or provide for non-digital alternatives, alienating residents who prefer or require traditional service channels.		Comprehensive Non-Digital Service Planning: Conduct user research to understand the needs and preferences of all residents, including those who are less digitally literate. Develop and strategically plan non-digital counterparts for each digital service, ensuring that these alternatives are accessible, user-friendly, and well-integrated with digital offerings.
Lack of uptake by individual services: Individual services may be wedded to certain UX and UI solutions and be reluctant to shift to a new model.		Extensive alignment: Conduct alignment with service owners across the Council to ensure that their needs are incorporated into the future unified UX of the Council

Appendix F: Supporting materials – 3.1 Create a unified user experience across all digital services to ensure universal accessibility

Additional detail on benefits calculation

	Cost	Figure	Notes
A	Population of Cambridge	145,700	Most recent Cambridge census
B	Assumed % of Cambridge population with accessibility requirements	20%	Based on population of Manchester with accessibility needs
	# people in Cambridge with accessibility needs	29,140	=(A*B)

Appendix G:

Supporting materials for strand four –
digital and data skills and development
(alignment to DTOM, risk assessment
and benefits calculation)

Appendix G: Supporting materials – 4.1 Improve DDaT skills across the organisation

4.1 Improve DDaT skills across the organisation

Alignment to organisational structure

DTOM roles and activities aligned to this mission. Note: The final composition of roles for delivery of this mission will be dependent on the DTOM model which is adopted by CCC.

Digital Service Management:

- Responsible for coordinating the overall approach to integrating DDaT skills into daily operations.
- Accountable for overseeing the implementation of the training programme and tracking its adoption across the Council.

Strategy Delivery:

- Consulted for ensuring the mission is strategically aligned with the Council's digital transformation goals.
- Informed about the development of the curriculum based on the Council's strategic direction and the DTOM framework.

ICT Contract Management:

- Responsible for managing contracts for any external partners or platforms required for the training programme.
- Accountable for overseeing procurement of digital tools and resources needed for skills development.

ICT Consultancy/External Supplier Inputs:

- Consulted for delivering expertise in discovery, design, delivery, and development stages of the DDaT skills programme.

Service Design:

- Responsible for designing the training programme to ensure it is user-friendly and meets the diverse needs of Council staff.

Service Delivery Management:

- Accountable for implementing the training programme across various Council departments.
- Responsible for coordinating with User Research and Design to incorporate feedback into ongoing programme improvements.

User Research and Design:

- Responsible for conducting surveys and research to identify specific training needs across the organisation.
- Consulted for designing role-specific training modules, ensuring relevance and applicability to various job functions.

User Analytics and Behaviours:

- Responsible for analysing survey results and the effectiveness of the training programme through behavioural changes and skills application in the workplace.
- Consulted for adjusting training strategies based on analytics and feedback.

Appendix G: Supporting materials – 4.1 Improve DDaT skills across the organisation

Learning & Development (L&D):

- Responsible for embedding DDaT skills development into HR processes and career development plans.
- Accountable for continuously assessing and iterating the training programme based on L&D surveys and evolving staff needs.

Development Operations and Technical Analysis:

- Consulted for supporting the technical aspects of training platforms and digital learning environments.
- Informed about ensuring that the technical content in the training is accurate and reflects current best practices.

Performance Indicators and Success Metrics

For this mission could include the following, and should be aligned to the timelines outlined in the Mission Roadmap ahead of implementation:

1. Discovery: Mapping Skills and Identifying Practical Training Needs
 - Performance Indicator: Completion of skills gap analysis and needs assessment.
 - Success Metric
 - Conduct comprehensive skills surveys and complete gap analysis for all Council staff, clearly identifying training needs.
2. Design: Comprehensive Training Programme Development
 - Performance Indicator: Creation and readiness of a tiered DDaT skills training program.
 - Success Metric
 - Develop and validate the training program for all three tiers, ensuring alignment with job roles and Council needs.
3. Delivery of Training Programmes
 - Effective delivery of tiered training programs to appropriate staff segments.
 - A significant increase in the number of Council staff completing digital and data training modules within a set timeframe.
 - Observable improvements in service delivery and operational efficiency as a direct result of applied new digital skills.
 - Success Metric:
 - Tier 1: Ensure 100% of all employees undergo Tier 1 training.
 - Tier 2: Complete role-specific training for team leaders.
 - Tier 3: Deliver leadership training to C-suite and senior management.
4. Development and Iteration to Establish a Continuous Learning Culture
 - Performance Indicator: Integration of digital skills training into HR processes and the establishment of a continuous learning environment.

Appendix G: Supporting materials – 4.1 Improve DDaT skills across the organisation

- Success Metric:
 - Update HR processes to include digital skills development.
 - Achieve an annual increase in staff participation in advanced training modules (Tiers 2 and 3).

Risk assessment and mitigation strategies

Risk	Severity level (RAG)	Mitigation strategy
<p>Inadequate Engagement and Participation in Training Programs: There's a risk that employees may not fully engage with or participate in the new DDaT training programs. This could be due to a lack of awareness, perceived irrelevance, or resistance to change, resulting in ineffective skill development across the organisation.</p>		<p>Tailored Communication and Incentives: Develop a comprehensive communication strategy to highlight the importance and benefits of the training programs. Offer incentives for participation and completion, such as recognition, career advancement opportunities, and linking learning to organisational goals. Ensure the training is relevant to each role, making it more appealing for staff to participate.</p>
<p>Mismatch Between Training Content and Actual Skill Needs: The training content might not align perfectly with the actual skills needed in different roles across the Council. This mismatch can lead to a waste of resources and leave critical skill gaps unaddressed.</p>		<p>Regular Skills Analysis and Content Updates: Conduct thorough research upfront to ensure that the gap between what people need to know and what they already know is well defined. Continuously monitor and evaluate the effectiveness of the training programs. Regularly update the training content to align with evolving digital trends and the specific needs of the Council's services. Incorporate feedback from employees to ensure that the training remains relevant and practical.</p>
<p>Lack of Integration of New Skills into Daily Operations: Post-training, there is a risk that newly acquired skills may not be effectively applied in daily operations due to a lack of support, opportunity, or organisational alignment.</p>		<p>Continuous Learning Culture and Practical Application: Foster a continuous learning culture within the organisation where new skills are consistently applied to relevant tasks. Link training to practical, real-world applications within the Council. Work closely with leadership to ensure that learnings from the training programs are embedded and utilised in daily operations.</p>

Appendix G: Supporting materials – 4.1 Improve DDaT skills across the organisation

Additional detail on benefits calculation

	Cost	Figure	Notes
A	Est 2024/25 CCC gross salary costs	£608,222.00	Source file name: DTOM To-Be Report - Revised_sept
B	Possible CCC gross salary costs under new DTOM	£2,148,588.00	Recommended model from 6bythree. Source file name: DTOM To-Be Report - Revised_sept
C	Productivity uplift from reskilling	9%	Based on McKinsey analysis of economic impact of reskilling in UK organisations of on average 6–12% Source: https://www.mckinsey.com/capabilities/people-and-organizational-performance/our-insights/the-economic-case-for-reskilling-in-the-uk-how-employers-can-thrive-by-boosting-workers-skills
D	No. years reskilling remains relevant before requiring major reinvestment beyond regular iterative change	8.50	
E	Productivity uplift from reskilling based on current CCC gross salary costs	£465,289.83	$=(C*A)*D$
F	Productivity uplift from reskilling based on possible CCC gross salary costs	£1,643,669.82	$=(C*B)*D$

Appendix H:

Strategy execution, maintenance, and ownership

Appendix H: Strategy execution, maintenance, and ownership

How to read the strategy

This document is divided into three core sections, one for each of the strategy's strands:

- Strand 1: Data and information management
- Strand 2: Technology and innovation
- Strand 3: Digital customer journey
- Strand 5: Digital and data skills and development

For each strand, there are further sub-sections:

- Description – this section provides an overview of the Strand, and its core objectives.
- Definition of the target state – this section provides an overview of the target state that the Council will work to achieve in undertaking the missions set out under the Strand.
- Case studies – this section details examples of successful interventions in adjacent areas, such as other local governments or DLUHC, that CCC can learn from with relation to the Strand.
- Missions – this section sets out the missions that the Council will need to implement to achieve the Target State. Missions are composed of the following:
 - Objective – this section outlines the overarching objective that the mission is designed to achieve.

- Description – this section details additional information relevant to completion of the mission based on the research conducted to inform this report.
- Cost-benefit analysis – this section sets out the costs and benefits associated with undertaking the mission.
- Priority actions – this section sets out the high-level priority actions the Council will need to undertake to achieve the mission

Ownership and maintenance of the DDaT Strategy

The Digital Strategic Lead is the owner of the DDaT Strategy. Their role aligns with the Digital Service Management function of the DTOM. As such, they are responsible for the authoring, execution, maintenance, and revision of the DDaT Strategy over the next five years. To maintain the effectiveness and relevance of our Digital, Data, and Technology (DDaT) strategy, it is essential

to have a structured approach for regular reviews and assessments. This approach will enable us to align our efforts with our objectives and respond to new developments efficiently. The Digital Service Management and Strategy Delivery functions within the Digital Target Operating Model (DTOM) will play pivotal roles in this process, focusing on how the outcomes of the DDaT strategy align with the broader corporate objectives and target operating model (TOM) of CCC. They will provide strategic insights and ensure that the strategy's evolution is in line with the Council's long-term goals.

Appendix H: Strategy execution, maintenance, and ownership

The Digital Strategic Lead will organise bi-annual reviews of the DDaT strategy. The Digital Board will review first, before passing on a progress report to the Transformation Board. They will coordinate the gathering and analysis of performance data related to each mission of the Strategy. They will own the compilation and presentation of detailed reports on the progress of the strategy during the bi-annual reviews.

How to ensure that this strategy remains up to date during execution

As CCC embarks on the journey to transform its digital services, it is crucial to recognise the importance of beginning each mission with a structured, insightful 'discovery' project. We recommend this approach to ensure that the Council's Digital, Data and Technology (DDaT) strategy remains aligned with evolving organisational priorities, realistic about staffing and resources, and responsive to the ever-changing technological landscape.

Why a discovery project is essential

- Alignment with organisational priorities: the discovery project reassesses the alignment of each mission with the Council's overarching goals and the DDaT strategy. This helps in ensuring that the initiatives stay relevant and cater to the current needs of the Council and its residents
- Realistic staffing and resource planning: it offers an opportunity to critically evaluate the staffing requirements. Are the necessary roles filled, or is there a need to bring in external expertise? This aspect ensures that the missions are

grounded in reality, and are achievable with the available resources.

- Cost and technology evaluation: the discovery project scrutinises the estimated costs and explores if there are additional expenses to consider. It also opens avenues to consider new technologies or suppliers that could offer enhanced value to the Council's digital services.

Structuring discovery projects

- Ensure that costs and benefits are well calculated so that CCC understands the financial rationale behind pursuing these ideas.
- Think slow, act fast: embrace a deliberate, reflective approach in the planning stages. Allocate ample time for research, reflection, and consultation. Once the plan is set, shift to rapid and decisive action.
- Question every requirement: foster a culture where every project requirement is critically examined. Encourage team members to question the necessity and efficiency of each
- requirement, promoting a culture of innovation and meticulous planning.
- Balance analysis with timely decision-making: set clear deadlines for the planning phase to prevent analysis paralysis. Ensure that planning is thorough yet remains on schedule.
- Adaptability in execution: remain flexible and ready to adjust plans as needed during execution. Develop mechanisms to

Appendix H: Strategy execution, maintenance, and ownership

address unforeseen challenges or opportunities swiftly, borrowing from agile delivery methodologies.

- Post-action reflection: after execution, reflect on the outcomes. Conduct post-project reviews to evaluate the effectiveness of planning and execution phases, and integrate lessons learned into future strategies.

By recommending the initiation of each mission with a discovery project, we aim to provide CCC with a robust, structured, and thoughtful approach to implementing its DDaT strategy. This recommendation underlines the Council's commitment to delivering well-planned, effective, and adaptable digital services, ensuring that each step taken is in the best interest of the Council and the community it serves.

Appendix I:

Case studies

Appendix I: Family Context - Empowering Social Workers (strand one)

Family Context - Empowering Social Workers to Safeguard Vulnerable Children in Leeds (Leeds City Council and Stockport Council)

Challenge

Social workers often struggle to access relevant information on individuals connected to a child, hindering their ability to provide timely and effective support. Poor information sharing between multi-agency partnerships can lead to serious harm, abuse, or even death.

Solution

Family Context, a digital tool developed in collaboration between Leeds City Council and Stockport Council and funded by the Local Digital Fund, addresses this challenge by developing a user-centric, ethically driven approach to enhance information sharing and child welfare services. Some key characteristics of how the tool has been developed are:

User-Centric Design: the tool was designed with social workers at its core. Extensive research and user testing across the country informed every decision about the product's features, ensuring that it meets the real needs of those who use it.

Ethical Data Handling: data ethics were a central consideration during the tool's development. Family Context incorporates data from four different services while adhering to GDPR regulations. The tool only uses the minimum necessary data for its purpose,

and sources of data are transparently presented to users, allowing them to assess the limitations of the shared information.

Open-Source Commitment: Family Context has always strived to be open source, making all its work publicly available. This transparency includes user research insights, the business case, a video demo of the tool, and the reference application with open code for the API and user interface. An Implementation Guide assists new local authorities in adopting Family Context.

Benefits

- It saved time for social workers, prioritising more time to spend with families
- It empowered social workers to make informed decisions more easily
- Services around a family can be better connected

Relevance

Collaborative Development: Family Context is the result of collaboration between 12 local authorities who recognised the need for improved data standardisation and sharing.

Data and information sharing: they aimed to tackle the common problem of poor multi-agency partnership information sharing, which can have severe consequences for children's safety. The tool gives a more extensive range of data sources right at the

Appendix I: Family Context - Empowering Social Workers (strand one)

beginning of the assessment and helps services to coordinate support.

Saving time for workforce: Family Context gives social workers a snapshot of agencies working with a family and their contact details, significantly reducing the time it takes to gather this information from 2-3 hours per assessment to around 20 minutes, freeing up more time to spend face-to-face with families.

Source

<https://www.localdigital.gov.uk/funded-project/building-family-context-in-childrens-services/>

<https://www.stockport.gov.uk/news/stockport-council-to-showcase-award-winning-family-context-tool>

Appendix I: Shared Planning Service AI powered platform (strand one)

Shared Planning Service AI powered platform (Cambridge City Council)

Challenge

The system for collecting comments on planning applications needed to be brought up to date to make sure we are able to connect with our customers effectively and meet our legal obligations in the future.

Solution

CCC piloted innovative digital citizen engagement tools through the Department for Levelling Up, Housing and Communities' (DLUHC) PropTech Innovation Fund. The Council received £388K jointly with South Cambridgeshire District Council through the Greater Cambridge Shared Planning Service. In Round 1 (2021), the Council worked with the Future Fox to launch an online, AI-powered, cloud-hosted platform. to capture public comments about its Local Plan across social media like Twitter.

Benefits

This change has enabled future Regulation 18 public consultations to be more robust by to capturing public comments about its Local Plan across social media like Twitter.

Relevance

The creation of this innovative tool and platform is an exemplar of how AI can improve customer engagement.

Appendix I: Covid data management lessons learned (strand one)

Covid data management lessons learned (Cambridge City Council)

Challenge

At the point of the first Covid lockdown in March 2020, a data 'working group' was established to identify and target Cambridge City residents who were not shielded but would likely be considered 'vulnerable' to the virus and to offer appropriate support through the community resilience. The challenge was that the Council had a data asset inventory with over 300 individual datasets listed, no standardisation of the data held, and no central view of our residents to easily identify and communicate with them.

Solution

The Council needed to quickly establish how it would gather the data together, match datasets, categorise different vulnerable characteristics, prioritise the most valuable datasets (both internal and external) and establish how data can be shared in a compliant way with appropriate organisations who can respond.

Without any dedicated data analyst, the Council had to draw upon skills within the organisation to meet the capability required to complete this work. An officer was tasked with defining the methodology, determining, and obtaining relevant data from colleagues, producing workflows, cleaning, and matching data, and producing a master data sheet by ward, with personal, sensitive

and direct contact data (under the Vulnerable People's Protocol). This majority of this work was carried out using spreadsheets and manual data handling, with no automation or integration between data.

Benefits

The methodology produced to identify at risk vulnerable residents according to a range of different factors/characteristics provided a template that was adopted by the surrounding Councils. It was the first time that the Council had a holistic view of all vulnerable residents, for example by the likelihood of a chronic health condition, age, accessing social care, limited mobility, disability, care and support packages, families under stress, single parent or houses with multiple occupants, at risk of abuse, or in/at risk of economic hardship.

Relevance

Even with the introduction of a Data Analyst and PowerBi; four years on, if another lockdown were to happen, the Council would still need to obtain data individually from key line of business systems, does not have any data sharing agreements in place with other local authorities (or partners) would still need to introduce data standards and clean the data before any matching would be possible.

Sources

[Cambridge City Council needs assessment approach V1.2.pdf](#)

Appendix I: Procuring technology for Housing Services (strand two)

Procuring technology for Housing Services across the country (Redbridge, Woking, Greenwich, Kingston, Sutton, Adur, and Worthing Councils)

Challenge

Many Council housing services acknowledge that the technology currently in use falls short of meeting their requirements. This outdated technology lacks essential functionalities for residents and offers limited reporting capabilities for staff. Consequently, housing services struggle to fulfil regulatory obligations due, in part, to these technological shortcomings.

The challenges in technology procurement stem from a lack of strategic planning and expertise in the process. Successful procurement demands specialised knowledge in technology, service delivery, and procurement. Often, procurement is reactive and disconnected from organisational strategy, without a clear understanding of the problems that technology should address.

Solution

The DLUHC Local Digital Fund allocated £100,000 in Round 6 to Hackney, Redbridge, Woking, Greenwich, Kingston and Sutton, and Adur and Worthing for a discovery project. This project aimed to re-evaluate technology systems' procurement for housing services and identify opportunities to align technology with the needs of local authorities and residents.

Benefits

- Strategic Approach: Empower local authorities to strategically plan their procurement processes and anticipate legislative changes.
- User Empowerment: Involve end-users, both staff and residents, in the procurement process to ensure that chosen systems meet their needs effectively.
- Transparency and Efficiency: Provide staff with a clear view of the procurement journey, allowing them to better prepare and plan for each step, thereby increasing process efficiency.
- Risk Management: Proactively identify and mitigate risks in procurement, increasing the possibility of selecting smaller or new suppliers with innovative solutions.
- Collaboration: Enable local authorities to collaborate and amplify their influence over suppliers as a collective voice.
- Improved Supplier Relations: Foster better understanding and alignment between housing services and technology suppliers to ensure that supplier solutions meet the organisation's needs.

Relevance

The new DDaT strategy presents an opportunity for CCC to reshape its technology procurement process proactively. This aligns technology acquisition with the Council's overall strategy and the needs of residents and staff. However, without careful

Appendix I: Procuring technology for Housing Services (strand two)

planning, there are potential risks that could exacerbate existing challenges.

To make the DDaT strategy's recommendations achievable, we have outlined key actions that CCC can take. These actions ensure that the strategy's benefits are valuable and align with the objectives sought in this case study

Sources

<https://dluhcdigital.blog.gov.uk/2023/03/07/round-6-projects-announced/>

<https://www.localdigital.gov.uk/funded-project/better-value-technology-for-housing-services/>

Appendix I: IEG4 procurement lessons learned (strand two)

IEG4 procurement lessons learned (Cambridge City Council)

Challenge

The proposed renewal of Cambridge City Council's contract to use the IEG4 system would have seen the cost of access to this system rise from £100,00 per year to £160,000 per year even though it was clear to City Council staff that the system was not being used to its full capacity. The challenges stemmed from non-essential product usage, unpursued integrations (due to high cost and complex customer journeys), and a lack of effective account management from IEG4. The pricing structure used in the contract was unclear, yet the integration costs and products listed in the contracts were considered when determining the pricing. Nevertheless, the reduced usage of these products and minimal use of integrations led to an overall increased cost per form produced.

Solution

CCC conducted research and analysis of its IEG4 system usage to identify products and integrations aligned with its digital roadmap, emphasizing the importance of active engagement between both parties. The agreement for a new contract included only relevant products and integrations, fostering a collaborative approach to support CCC's goals and uncover opportunities for growth.

Benefits

IEG4 initially proposed a contract renewal price of £160,000 per annum for a two-year period. However, using the outputs of our research and benchmarking exercises, CCC proposed a contract restructure, which was agreed to, resulting in a significant cost saving. The informed decision-making process led to approximately £60,000 in annual savings for a three-year contract. Additionally, discussions uncovered a product offering from IEG4 that could enhance the customer journey, emphasizing the importance of ongoing collaboration and mutual benefits.

Relevance

The experience with IEG4 provides valuable lessons for CCC's contract management practices and highlights the importance of uncovering opportunities within its ICT domain. By understanding product functionalities and ensuring value for money, CCC will be better able to make informed decisions leading to more effective contract management and aligning ICT solutions with core business requirements to meet organisational needs. This experience can be extrapolated to improve ICT procurement practices across the Council, fostering a forward-thinking and digitally sound organization that prioritizes and supports the needs of residents and staff.

The strategic approach taken by CCC in renewing its contract with IEG4 demonstrates a commitment to enhancing efficiency and obtaining value for money. By actively engaging with the supplier,

Appendix I: IEG4 procurement lessons learned (strand two)

conducting thorough research, and re-evaluating terms, CCC successfully navigated the challenges presented by the existing contract. This experience serves as a blueprint for future ICT procurement endeavours, positioning CCC as a digitally savvy and forward-thinking Council dedicated to optimizing its technological investments for the benefit of all stakeholders.

Appendix I: Using service design to improve the user journey of housing repairs (strand three)

Using service design to improve the user journey of housing repairs across the country (London Borough of Southwark, City of Lincoln, Gravesham Borough Council)

Challenge

There are 1.6 million socially rented properties in England. Councils are responsible for providing repairs to those properties. For most organisations, this is a high-volume service which generates large numbers of phone calls to the Council. Digitising the housing repairs reporting service could provide tangible savings from channel shift, however, even where online channels exist take up with users tends to be relatively low.

Solution

The discovery project led by London Borough of Southwark, Lewisham Homes, City of Lincoln and Gravesham Borough Council, funded by MHCLG sought to answer the question: *Is a common service pattern for end-to-end delivery of repairs possible?*

Benefits

Through this discovery, London Borough of Southwark, Lewisham Homes, City of Lincoln and Gravesham Borough Council, funded by MHCLG that a common service pattern for online repairs is possible. We carried out extensive user research to identify users, their needs and their barriers to going online. Our research has

helped us estimate that a range of between 40% and 75% digital uptake could be achieved for different councils, depending on the characteristics of the council's organisation.

Relevance

Enhanced User-Centricity: Extensive user research, including call listening and customer interviews, provides valuable insights into user behaviours and preferences, which enables the development of more user-centric services and solutions.

Informed Decision-Making: The research across various authorities and IT systems providers helped identify best practices, lessons learned, and known issues.

Efficient Service Delivery: The design of a common service pattern for end-to-end repair delivery, validated by authorities with prior online repair experience.

User-Friendly Online Journey: The creation of a user-focused online journey, tested with both individual users and organisations which ensures that residents have a more intuitive and user-friendly experience when reporting repairs online.

Standardised Data Framework: The evaluation of the Housing Associations' Charitable Trust (HACT) data standard and its alignment with the common service pattern provides a standardised framework for data management.

Appendix I: Supporting materials – Using service design to improve the user journey of housing repairs (strand three)

Sources

<https://www.localdigital.gov.uk/funded-project/housing-repairs-online-discovery/>

Appendix I: Courses on digital and agile for local government (strand four)

Courses on digital and agile for local government (DLUHC)

Challenge

Lack of digital and agile skills in local government workforce which limits their capacity to use them effectively in digital delivery.

Solution

DLUHC launched the Digital and Agile for Local Government course designed to equip local government officers with a deeper understanding of agile and digital. The two-day online course is offered at no cost and consists of live presentations, interactive sessions and exercises from experienced trainers. During the 2 days the course covers topics like value delivery via agile, what is digital, user centred design and tools for successful delivery.

Benefits

From 2023 to date, the Digital and Agile training has been provided to over 200 local authority staff, helping them to grow confidence and knowledge in digital delivery. Through that knowledge, it supports local authorities to become better equipped with the skills, knowledge and tools they need to design and deliver modern digital public services.

DLUHC have also provided training to senior local government staff through the Executive Education Programme in Digital Transformation, in collaboration with AWS and Socitm. This two-

day training programme was delivered to 150 directors and senior managers from councils nationwide.

Relevance

Agile and digital training not only address the pressing challenges that councils in the UK face when it comes to adoption of digital but also capitalises on the opportunities that digitalisation offers to local government bodies. These initiatives are highly relevant to CCC's mission to enhance service delivery, adapt to changing citizen expectations, and usher in a more digitally savvy era of governance. By participating in these training programs, the Council can position itself as a forward-thinking and digitally competent authority, ready to meet the evolving needs of its residents effectively and implement the missions set out in the DDaT strategy.

Source

<https://www.localdigital.gov.uk/digital-and-agile-for-local-government-course/>

<https://www.localdigital.gov.uk/digital-training/>

Appendix I: Region of Learning and digital badging (strand four)

Region of Learning and digital badging (Cambridge City Council)

Challenge

Challenge 1: Cambridge City Council's approach to addressing digital inclusion needs for the residents of Cambridge and surrounding areas has been identified as not fully effective.

Challenge 2: Cambridge City Council employees are not currently connected to the wider skills eco-system which can negatively impact professional development.

Solution

Solution 1: To utilise the role of the library service as a central community learning hub to support community cohesion and lifelong learning. To repurpose the use of library cards through technical innovation, to address digital inclusion and improve digital literacy.

Solution 2: To create an eco-system where a shared skills currency in the form of digital badges, connects and progresses engagement with skills-based opportunities. Through Region of Learning, Council employees will have the benefit of building their in-house skills portfolio with digital badges, as well as accessing regional opportunities such as badged skills bootcamps and adult learning courses. Region of Learning is an interoperable service,

championing the use of e-skills wallets as a tool to manage and share achievements.

Benefits

Benefits to Solution 1: Mass engagement through the library service membership would see more residents skilled in digital literacy, including those from marginalised communities or who are deemed less advantaged. This technical innovation would also allow further development, acting as a gateway to other local authority services, customer relationship management systems, and the data dashboard from the connected badge issuing platform, Navigatr.

Benefits to solution 2: Council employees would build a comprehensive portfolio of skills based on the requirements of new digital services and software. Council managers can monitor performance through dashboard data.

Relevance

Access to improved digital skills for both residents are essential strands within this strategy.

Sources

[Region of Learning](#)

[Region of Learning – Navigatr](#)

Appendix J:

Proposed changes to DTOM dependent capabilities

Appendix J: Proposed changes to DTOM dependent capabilities

In our pursuit to refine and enhance the Digital, Data, and Technology (DDaT) strategy at CCC, we recommend a strategic expansion and renaming of the User-Centred Design area of the DTOM. This area, pivotal in our strategy, will be aptly renamed as 'Product.' This change not only reflects a broader scope but also aligns more closely with the delivery needs of our strategy.

This consists of three core changes:

1. Renaming to 'Product': The transition from 'User-Centred Design' to 'Product' is more than a mere change of name; it signifies a shift in focus and approach. The term 'Product' encompasses the end-to-end lifecycle of service and product development. It includes design, functionality, delivery, and ongoing maintenance, reflecting a comprehensive view of our services from the users' perspective. This renaming encapsulates our commitment to not only design services that are user-focused but also to manage and deliver them as holistic products that meet the evolving needs of our community.
2. Expansion to Include Business Analysis: We propose to include Business Analysis within the newly defined Product area. The integration of Business Analysis into this area is a strategic move to align business requirements more closely with user needs and experiences. Business analysts, by being part of this area, will have a more direct role in understanding,

articulating, and incorporating user requirements into the design and development of our services. This integration ensures that our services are designed with a holistic view, keeping user needs central from inception to delivery.

3. Incorporating Change management and Delivery: Change Management and Delivery will also form part of the Product area. This inclusion is crucial for ensuring that all changes in services and processes are deeply rooted in user-centric principles. By situating Change Management and Delivery within the Product area, we emphasise the importance of implementing changes that are not just technically sound but also resonate with and are easily adopted by our users. This approach leads to more effective transitions, higher adoption rates, and services that truly reflect the needs of our community.

These proposed changes, while diverging from the standard government DDaT framework, are specifically tailored to meet the unique challenges and opportunities at CCC. Our aim is to enhance the effectiveness of our DDaT strategy, ensuring it is robust, user-focused, and adaptable to the dynamic digital landscape.

Appendix K:

Design and delivery principles

Appendix K: Design and delivery principles - Technical Design Authority rules

Rules for Technical Design Authority (TDA)

Alignment with Organisational Goals:

- All proposed solutions must align with the strategic objectives and priorities of the organisation, as well as aligning with the Target Operating Model (TOM).
- When purchasing new systems, consideration should be given to how the proposed solution contributes to improving efficiency, enhancing customer experience, and achieving the desired outcomes for our residents.

2. Comprehensive Evaluation:

- Conduct a thorough evaluation of alternative solutions, considering factors such as functionality, scalability, security, cost-effectiveness, and compatibility with existing systems. This includes consideration of how solutions need to exchange data with existing systems.
- Solutions should be assessed based on their ability to meet current requirements, while also accommodating future needs and technological advancements (such as AI).

3. Risk Assessment and Mitigation:

- Identify and assess potential risks associated with each proposed solution, including security

vulnerabilities, compliance issues, and operational disruptions.

- Develop mitigation strategies to address identified risks and ensure that proposed solutions comply with relevant regulatory requirements and industry standards. This includes our Data Standards Policy and our Information Management Policy.

4. Technology Standards Compliance:

- Ensure that proposed solutions adhere to established technology standards, architecture principles, and best practices. This includes assessing proposed solutions against the Government Digital Service's Technology Code of Practice.
- Evaluate the compatibility of proposed solutions with existing technology infrastructure and the feasibility of integration with other systems and applications. Make reference to our Data Standards Policy when conducting this evaluation.
- Assess the accessibility of proposed solutions, including identifying potential risks or usability issues for service users. Make reference to the Government Digital Service's Digital Inclusion Toolkit when conducting this assessment. Assess how well proposed solutions meet WCAG accessibility standards.

Appendix K: Design and delivery principles - Technical Design Authority rules

5. Cost–Benefit Analysis:

- Conduct a comprehensive cost–benefit analysis to evaluate the financial implications of implementing each proposed solution.
- Consider not only the initial investment but also ongoing maintenance costs, licensing fees, and potential savings or revenue generation opportunities.
- Consider benefits that are monetisable, such as direct cost savings and time savings, as well as non-monetisable benefits, such as social, environmental or well-being benefits.

6. Stakeholder Engagement:

- Engage with key stakeholders, including service areas, ICT teams, and end-users, throughout the solution research, selection and implementation process.
- Solicit feedback and input from stakeholders to ensure that proposed solutions adequately address their needs and requirements.
- Engage widely with the market when researching or assessing proposed technology solutions. Ensure that you are aware of the breadth of technology solutions available before making selection or procurement decisions.

7. Scalability and Flexibility:

- Prioritise solutions that are scalable and flexible enough to accommodate future growth and evolving resident needs.
- Consider the ease of customisation and adaptation to changing market conditions or organisational priorities.
- Agree scope for flexibility, testing and iteration in contracts with solution providers, including clear provision for innovation and continuous improvement through the contract lifecycle.

8. Performance and Reliability:

- Evaluate the performance and reliability of proposed solutions under different operating conditions and usage scenarios.
- Consider factors such as uptime, response times, and fault tolerance to ensure that solutions can deliver consistent and reliable service to customers.
- Consider setting performance targets for suppliers to meet when providing solutions, and clear mitigation strategies where performance targets are not met.

Appendix K: Design and delivery principles – Data standards and guidance

9. Documentation and Knowledge Transfer:

- Document the rationale behind solution selection, including the evaluation criteria, decision-making process, and key considerations.
- Ensure knowledge transfer and training so that relevant stakeholders understand the selected solution and its implications for the organisation and for residents.
- Share information and intelligence captured about technology solutions widely across the organisation, especially where there may be cross-cutting applications across service areas (such as AI).

10. Continuous Improvement:

- Ensure that there is a mechanism to monitor the performance and impact of the implemented solutions over time, gathering feedback from stakeholders and measuring against success criteria.
- Continuously assess emerging technologies and industry trends to identify opportunities for innovation and improvement in existing solutions. Ensure that partner solution providers also commit to assessing and implementing new technology capabilities.

By adhering to these rules, the Technical Design Authority can ensure that solutions are selected and implemented in a manner

that maximises overall benefit to the organisation and its customers, while also mitigating risks and promoting long-term sustainability.

Data Standards

1. Data Handling:

- All data must be handled in compliance with relevant data protection regulations (e.g., GDPR, CCPA). This includes our Information Management Policy.
- Encryption protocols must be implemented for sensitive data during transmission and storage.
- Access controls and authentication mechanisms must be enforced to restrict unauthorised access to data.
- Regular data backups must be conducted to ensure data integrity and availability.
- Data handling procedures should prioritise confidentiality, integrity, and availability (CIA triad).

2. Data Optimisation:

- Data storage solutions should be optimised for performance, scalability, and cost-effectiveness.
- Periodic data audits and cleanup processes should be conducted to remove redundant or obsolete data.

Appendix K: Design and delivery principles – Data standards and guidance

- Data compression techniques should be employed where feasible to reduce storage requirements.
- Data caching mechanisms should be utilised to improve data retrieval speed and system performance.

3. Data Purpose:

- Data collection and processing must be aligned with specific and lawful purposes.
- Data usage must be limited to purposes specified during collection, and any additional uses must be approved.
- Transparent communication with stakeholders regarding the purposes of data collection and usage must be maintained.

4. Data Standardisation:

- Standard data formats and conventions must be adopted where possible, especially for units or identifiers that span multiple systems or council service areas. An example of this is the Scalable Approach to Vulnerability Via Interoperability (SAVVI) data standards, which have been developed to share information relating to vulnerable adults across different databases and case management systems. Work with colleagues across service areas

to explore where common data standards can be developed.

- Metadata standards should be established to provide consistent information about the structure, context, and quality of the data.
- Data dictionaries should be maintained to document definitions and usage guidelines for various data elements.
- Consistent naming conventions and coding schemes must be enforced across datasets to facilitate data aggregation and analysis.

5. Data Quality:

- Data quality assessments should be conducted regularly to ensure accuracy, completeness, and reliability.
- Data validation procedures must be implemented to detect and correct errors or inconsistencies.
- Data cleansing techniques should be applied to improve data quality by removing duplicates, correcting inaccuracies, and standardising formats.
- Metrics for assessing data quality, such as accuracy, completeness, and timeliness, should be defined and monitored.

Appendix K: Design and delivery principles – Data standards and guidance

6. Data Ownership:

- Data ownership and stewardship responsibilities must be clearly defined and assigned to individuals or departments. Ownership should clearly be transferred when individuals move roles, departments, or leave the organisation.
- Data governance policies should outline rights, responsibilities, and accountability regarding data ownership.
- Legal agreements and contracts should specify data ownership rights and obligations when sharing data with external parties.
- Data ownership should be accompanied by appropriate controls to prevent unauthorized access, modification, or disclosure.

Adherence to these data standards will promote consistent approaches across operational activities, integrity and accountability in the management of data for Cambridge City Council, ultimately facilitating more effective decision-making and service delivery.

SAVVI – the Scalable Approach to Vulnerability Via Interoperability – is a set of open data standards developed by a number of councils, supported by DLUHC.

The SAVVI framework has been built by councils aiming to better use data to find vulnerable people during lock-down and potential homelessness, and information governance to access secondary use of data to find vulnerable people.

At the heart of the SAVVI project is a set of data standards that have been developed to create a common set of identifiers, concepts and processes for supporting vulnerable people. This allows councils to standardise how vulnerability outcomes are reported within the council, but also between different councils

The SAAVI data standard describes a number of concepts, with standardised ways of labelling and using these concepts, which cover the different processes and identifiers involved in finding and supporting vulnerable people. Some of these are detailed below:

Appendix K: Design and delivery principles – Data standards and guidance

SAVVI Concepts			
Concept	Label	Definition	Smart City Concept Model
1 savvi: Action	Action	An action that has been carried out as a part of responding to a NEED .	sccm: Event
2 savvi: Area	Area	A geographic area	sccm: Place
3 savvi: Attribute	Attribute	A state of a person or household.	sccm: State
4 savvi: Case	Case	A container for information recording the history of events for a person or household who may have needs.	sccm: Case
5 savvi: ContactEvent	Contact Event	A record of an event in which the situation of a person or household was sought.	sccm: Observation
6 savvi: DeliveryOrganisation	Delivery Organisation	A service provider who delivers actions that respond to a NEED .	sccm: Organisation
7 savvi: Household	Household	A collection of PERSON s who live together.	sccm: Organisation
8 savvi: LeadOrganisation	Lead Organisation	An organisation responsible for coordinating a vulnerability initiative.	sccm: Organization
9 savvi: Need	Need	The need where assistance is required to mitigate a vulnerability.	sccm: Objective
10 savvi: Outcome	Outcome	The resulting situation of a CASE , or a NEED	sccm: State

For each of those concepts, the SAVVI data standard then defines how data should be labelled, described and linked, to provide a unified framework for identifying and supporting vulnerable people. An example of two of these concepts can be found below:

Need			ContactEvent		
Attribute	Field	Occurs	Attribute	Field	Occurs
Type	Characteristic	once	Date	date	
Rationale	text		ContactRole	Characteristic	
Date	date		ContactPerson	string	
EndDate	date		ContactMethod	lookup	
Target Date	date		ContactDirection	lookup	

SAVVI can be used as an example of what it might look like to define data standards for different core council service areas from the ground up, working from the overall logic model of different characteristics, down to the specific data standards and labelling processes. This can enable better data collection and sharing within the council, but also with Cambridge’s local partners and neighbouring councils. These approaches can be first adopted for services relating to vulnerable people, but also other service areas.

Appendix K: Design and delivery principles – Online content principles

The online content principles tell you what can go online and what cannot. Please follow this guidance when you want to publish information or services online for the public.

The principles have been created to help us streamline our online content to improve user experience. We want to reduce the need for customers to contact us with queries and provide easily findable and readable answers online so they can self-serve when it suits them.

Please also see our [writing for the web guide](#).

Contact webteam@cambridge.gov.uk if you aren't sure whether something should go online or not.

What goes online

Online means our websites, forms, and portals that the public use. These principles do not include social media.

- See our [websites and portals list](#).

All online content must meet a user need. Think about who you are aiming the content at and what they need to understand it. Users should not have to understand the structure of the council to find what they need. They should also be able to find what they need without prior knowledge of the task they set out to do.

Your content should be one of the following:

- service information
- service task
- engagement
- campaign to raise awareness
- partnership content
- policy, strategy, or report
- legal requirement
- response to a major event

Service information

Information about a service that only we supply.

For example:

- [Cambridge car park spaces](#)
- [What goes in which bin](#)
- [Service updates](#)
- [News](#)
- [Committee meetings](#)

The main information about our services should be on the [Cambridge City Council website](#).

Portals and forms should be used for tasks/transactions only.

Service task

A user task for a service that only we supply. The user can check, provide or report personalised information.

For example:

Appendix K: Design and delivery principles – Online content principles

- [Check when your bin will be emptied](#)
- [Pay your Council Tax](#)

Portals and forms should be used for tasks/transactions only.

- The action to the task should be linked from the website, for example, pay your Council Tax.
- The website should have clear and concise guidance of:
 - information the user needs
 - what to expect to complete the task
 - response timings
- The portal or form should include concise information at the start on:
 - how to fill out the form
 - what the user needs to have available to complete the form

Engagement

Inviting residents, businesses, or community groups to have their say on our services via online engagement.

For example:

- [Consultations](#)
- Our [online engagement platform](#)

See [consultation and engagement](#) for further details.

Campaign to raise awareness

Campaigns run or supported by the council that raise awareness about important issues.

For example:

- [Cost of living help](#)
- [Black History Month](#)
- [Cambridge Street Aid Week](#)

Don't rewrite or reinvent content when we don't need to.

Consider whether third-party information would be better linked directly from the third-party website. Please keep third-party content up to date.

If we are producing a news release about a campaign, consider whether we need a content page on the website about it as well. Instead, we could link to the news release from the appropriate website section.

Partnership content

Co-ordinating information and raising awareness of programmes we are involved in with partners.

For example:

- [Vaccine community champions project](#)
- [Greater Cambridge Partnership \(GCP\) Making Connections consultation](#)

Appendix K: Design and delivery principles – Online content principles

Policy, strategy, or report

A policy is a set of principles or rules. A strategy is goals and objectives.

Publishing these helps us to be transparent and explain our principles, goals and objectives.

For example:

- [Constitution](#)
- Our [priorities for the next 5 years](#)

Legal requirement

Information that we must publish on our website as a legal requirement.

For example:

- [expenditure exceeding £500](#)
- salaries over £50k
- anything advised in the [local government transparency code](#)

Response to a major event

To show what we are doing about issues and incidents that have a direct impact on people's lives or significant public interest.

For example:

- the [death of Her Majesty The Queen Elizabeth II](#)
- [Covid-19](#)
- [Support for Ukraine](#)

What doesn't go online

Your content must not go online if it:

- is general advice that doesn't relate to a service, campaign, or partnership
 - For example, [NHS – how to cope in hot weather](#). This is general advice that isn't a service we provide. This information is better supplied directly by the NHS.
 - We would not want to create our own webpage about coping in hot weather. Instead, we could link to this guidance from a website promotion (one of the three tiles that displays in the footer on every page).
- is third party information or services that can be better supplied by other organisations (you can link directly to their content instead)
- advertises or gives commercial advantage to an organisation other than our own, unless included in a campaign or partnership content- for example, Cost of Living
- is exclusively for council staff
- is professional training or qualifications other than those we provide
- is party political content
- duplicates other content or services already online

Appendix L:

Service assessment and lifecycle guidance

Appendix L: Service assessment and lifecycle guidance

GDS Service Manual and Best Practices

Introduction and guidance for Cambridge City Council

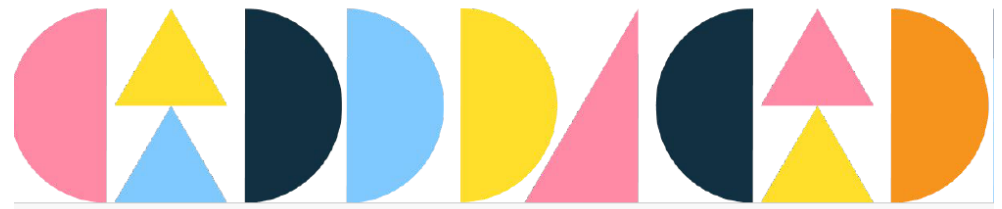
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Contents

01. Building a digital service - GDS approaches
02. Teaming and outcomes for Disco-Alpha-Beta
03. The Service Assessment
04. Service Assessment in Discovery-Alpha-Beta
05. Resources and further reading

Building a digital service in Government



Summary of service lifecycle

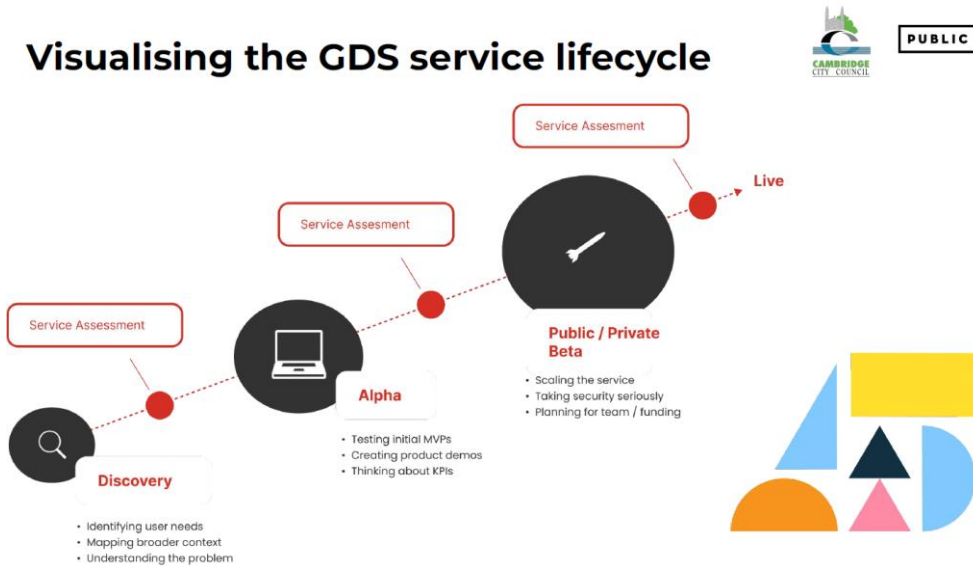


The UK Government Digital Service (GDS) outlines in its [Service Manual](#) that digital projects should be broken down into the following phases:

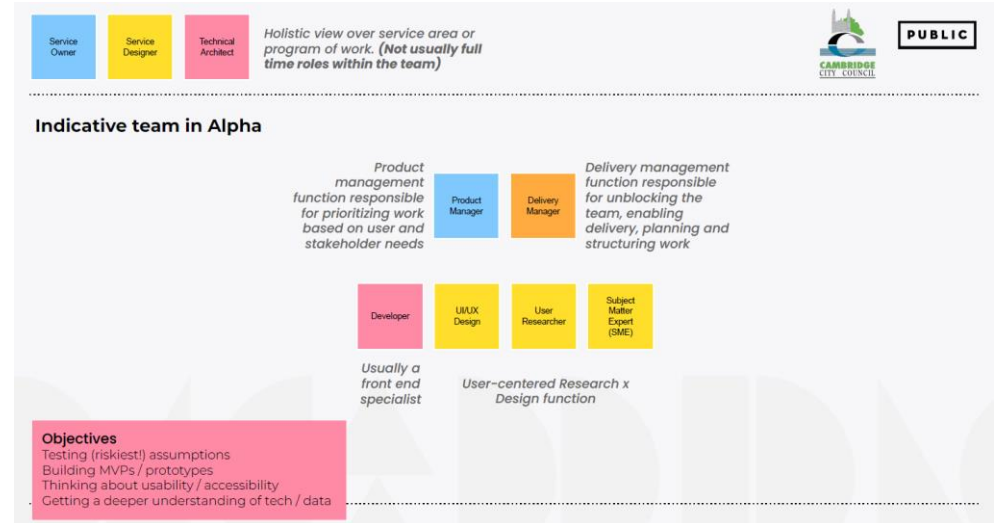
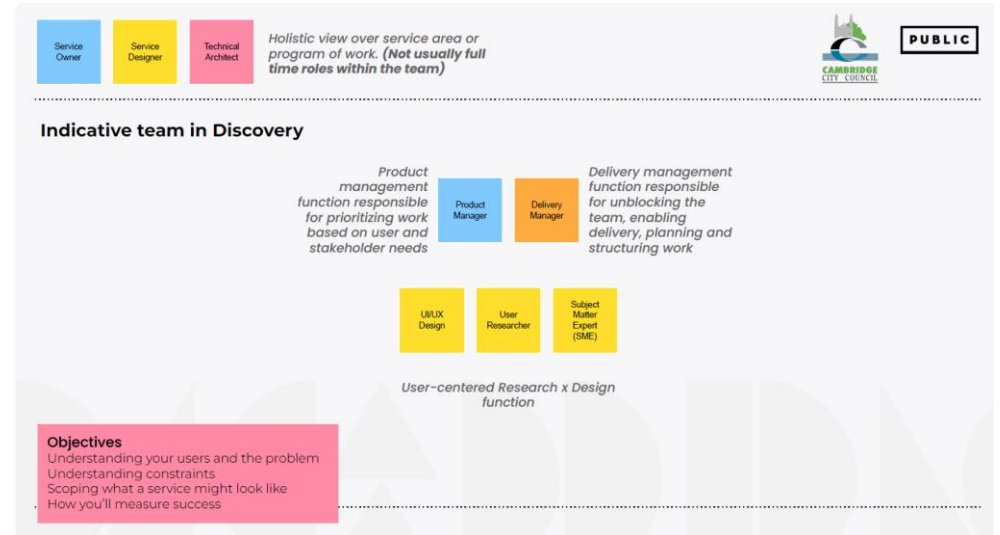
- **Discovery**
'What problem are we trying to solve... and is it a problem?'
- **Alpha**
'We have agreed to build a product or service, how can we test our riskiest assumptions efficiently and effectively?'
- **Private Beta**
'Let's release and test a working product or service with a small subset of users.'
- **Public Beta**
'Let's increase the number of users and functionality to test this further.'
- **Live**
'Have we solved the problem, and how will the product or service carry on to the end of its life?'

Appendix L: Service assessment and lifecycle guidance

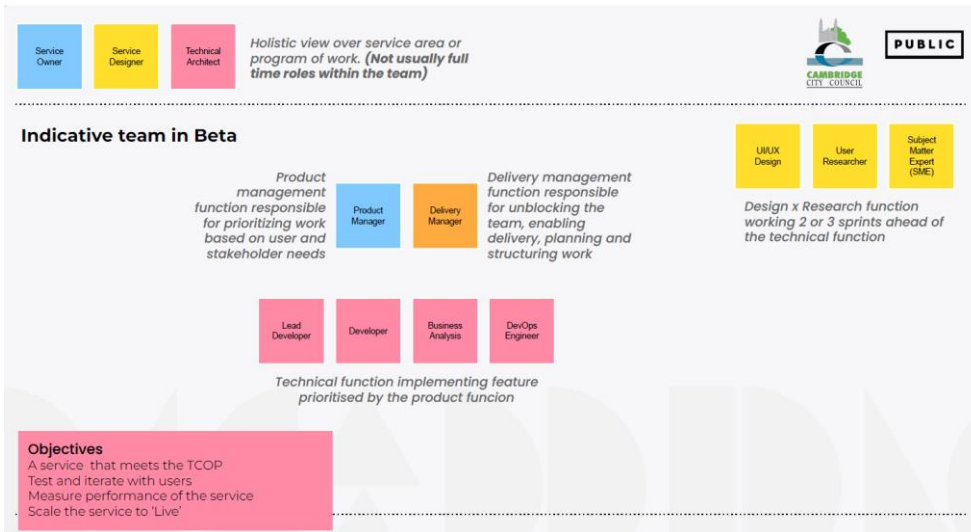
Visualising the GDS service lifecycle



Suggested team structures and outcomes for Discovery-Alpha-Beta



Appendix L: Service assessment and lifecycle guidance



Discovery outcomes and objectives

- Understanding users and their context**
 - 'Who are our users?'
 - 'What are their current painpoints?'
 - 'What do they need?'
 - 'What other services connect with this one?'
 - 'Do we understand their accessibility needs?'
- Understanding wider constraints**
 - 'What legislation do we need to be aware of?'
 - 'Are there any contracts affecting the service?'
 - 'What legacy technology exists?'
 - 'Are there any existing processes and systems we need to be aware of?'
 - 'Do we need to change any processes or ways of working?'
- Identify improvements you might be able to make**
 - 'What would a better service look like?'
 - 'What benefits would it deliver?'
 - 'How can we segment benefit types?'
 - 'Can we really deliver on these improvements?'
 - 'Is this the best way of delivering on our needs?'
 - 'Should we take this forward?'
 - 'Have we tested these ideas with users?'
 - 'How do we take the first steps in Alpha?'
- How you'll measure success**
 - 'What would success look like?'
 - 'How can we segment benefit types?'
 - 'How can we collect data - and from where?'
 - 'What would success in Alpha look like?'

Delivering a Discovery



Discovery steps and key activities

Analysing and mapping our users	Mapping current process flows	Making go/no-go decision for Alpha
Identifying our key questions to answer	Mapping painpoints onto process flows	Identifying priority areas for Alpha
Creating a user research plan and script	Creating adjacent service and data maps	Creating service roadmap for Alpha
Reaching out to users	Consolidating and prioritising user needs	Testing final approach with users
Interviewing users	Defining service requirements	Outlining team requirements for Alpha
Understanding their current processes	Exploring service delivery models	Defining benefits of proposed approach
Understanding their painpoints	Investigating COTS solutions and components	Defining metrics for success
Understanding the wider context	Investigating existing services across Gov	Supporting with internal next-steps
Understanding their needs	Assessing costs and benefits of different models and approaches	Positioning for follow-on work
Testing accessibility requirements	Testing different approaches with users	Handing over project deliverables
Testing technical preferences		Providing ongoing support

Appendix L: Service assessment and lifecycle guidance

The Service Assessment



The Service Assessment

The Service Assessment is a key ongoing assurance process that runs through the service lifecycle - and needs to be tackled before moving onto the next stage.

On the right-hand side are the 14 points that are used to measure services against - which get applied differently depending on the service stage.

Service Assessments can be applied by an internal team, or by an external panel from GDS/CDDO.

Meeting users' needs	<ol style="list-style-type: none"> 1 Understand users and their needs 2 Solve a whole problem for users 3 Provide a joined up experience across all channels 4 Make the service simple to use 5 Make sure everyone can use the service
Providing a good service	<ol style="list-style-type: none"> 6 Have a multidisciplinary team 7 Use agile ways of working 8 Iterate and improve frequently 9 Create a secure service which protects users' privacy 10 Define what success looks like and publish performance data
Using the right technology	<ol style="list-style-type: none"> 11 Choose the right tools and technology 12 Make new source code open 13 Use and contribute to common standards, components and patterns 14 Operate a reliable service

Service Assessment in Disco-Alpha-Beta



Service Assessment - Discovery

Key questions assessed at Discovery:

- 1 / Who your users / stakeholders
- 1 / What problem are you solving? Is it problem? Is it right problem?
- 3 / Have we thought about how it crosses organisational boundaries?
- 3 / Do you have an understanding of the broader service context?
- 5 / Have you got an understanding of the accessibility / usability reqs of your user base?
- 8 / What are the key potential blockers in Alpha?
- 10 / Have you got prioritised view of key problems to be solved?
- 10 / Have you got clear KPIs / metrics for success?

Appendix L: Service assessment and lifecycle guidance

Service Assessment - Alpha



Key questions assessed at Alpha:

- 1 / User needs - how they have changed / evolved - going deeper
- 2 / Can you articulate the product vision and roadmap? Is the vision realistic? Are they getting ahead of themselves?
- 6 / Team shape, size
- 7 / Ways of working / tooling / agile / JIRA (definition of done - acceptance criteria)
- 8 / How did you test user needs?
- 9 / Security / assurance
 - Threat assessment (internally or externally) - different models, risks
 - DPIAs
 - High-level designs (architecture), low-level (components)
- 11 / How did you use the right technology in the right way?
 - Figma UI prototypes / GOV.UK Prototype kit
 - Performance roadmap
- 13 / Using open components



Service Assessment - Beta

Key questions assessed at Beta:

- 3 / Think about end-to-end journey (including non-digital)
- 6 / What is the long-term teaming and funding approach?
- 8 / How have you thought about ongoing development, while maximising up-time performance?
 - Deploy quick and timely updates (build pipeline, staging, feature flagging)
 - Testing environment close to live environment as far as possible
- 9 / Have you thought properly about security and assurance
 - Independent (internal / external) pen test (can take months - usually outsourced)
 - Data storage, risks mapping
- 10 / Are you taking service metrics seriously?
 - Are you following best practice for sharing / dashboarding
- 14 / What is your approach to patching and updating COTS products
 - How are you running support?



Key advice and insights for passing an SA



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- Follow good document hygiene and management - it'll come in handy!
- Show clearly how you have addressed the SM, TCOP throughout
- Think about what you can reuse - Prototype Kit, Design System
- Show the thread of user needs throughout
- Be open about what you got wrong, and scrapped
- Show how you kept things small and lean
- Show how you identified particularly uncertain assumptions
- Show how you identified risks as early as possible
- Show how you have built skills in the Client team



Resources and further reading



Appendix L: Service assessment and lifecycle guidance

Key resources and examples



- The Service Standard ([of course!](#))
- [Bank of Service Assessment reports](#)
- Example - [TRO Data Model Alpha Report](#) (DfT)
- Example - [National Travel Survey Digital Survey](#) (DfT)
- Example - [Assessment for Technology Enhanced Learning Alpha Report](#) (NHSE)
- Example - [Children Services Alpha Report](#) (BANES)



Appendix M:

Data access and API requirements –
tender wording

Appendix M: Data access and API requirements – tender wording

This appendix is an amended version of a document created by the London Office of Technology and Innovation (LOTI) in 2020, with support from PUBLIC, and crowdsourced insights from a wide range of technology and data specialists.

One of the major challenges faced by Cambridge City Council when attempting digital change programmes in the past is restricted access to data created by, or held in, its business line systems. The council has found itself facing significant fees for extracting data that is not part of standard reports or dashboards, and costs of data integration when trying to join up services has also been a major historic barrier. While these costs are sometimes fair and proportionate, the council should have clarity, and a standardised approach, with technology vendors with respect to the costs and processes for data access and sharing.

In particular, enabling data sharing specifically via Application Programming interfaces (APIs) – which allow two applications to talk to each other – will be a key enabler of the council’s ability to create seamless digital services for its local residents and users. However, APIs will not always be the optimal way to do things (e.g. where data volumes are vast, and data sharing does not have to be in real-time) and other data sharing approaches may be more appropriate. Similarly, the council does not wish to penalise suppliers who are trying to do the right thing but offer data access in a different way.

This document offers suggested wording to be included in tender documentation so that teams within the council can set clear and explicit expectations with suppliers about their data access and API requirements. This wording is intended to be used as a template, with review and oversight from the Digital team, and relevant Service team members where necessary.

Tender wording

The Supplier must provide a full description of how they meet the Data Extraction and Application Programming Interfaces requirements outlined below.

Appendix M: Data access and API requirements – tender wording

Data extraction (for use in all tenders)

Tender Clause Wording	Explanation / Caveat
<p>1. Wherever permitted according to the General Data Protection Regulation, all other relevant data protection legislation, and where the Council has control and rightful permission to use the data:</p>	<p>The caveats in this statement are needed because some systems license external data to augment services. For example, weather data might be used to help predict or explain patterns, but that raw weather data can't be supplied as it's not owned by the supplier or the council.</p>
<p>1.1. The Council will have the right to recover, share, reuse and publish: all data that is entered into the system; any data that is augmented using the system (e.g., linked data); and any data generated through the operation of the system.</p>	<p>Include as template in all tenders, unless not appropriate.</p>
<p>1.2. The system must enable full copies of all system data to be extracted at any time. This should be in a structured, standardised (preferably open) and machine-readable format.</p>	<p>Include as template in all tenders, unless not appropriate.</p>
<p>1.3. The Supplier will surrender, delete, or return the system data to the Council at any time, at the request of the Council.</p>	<p>Include as template in all tenders, unless not appropriate.</p>
<p>2. <i>Either:</i> These features must be provided without additional charge or limitation that would prevent the Council from accessing, sharing and using system data over which it has control and rightful permission. <i>Or</i> Any and all charges that would be incurred in respect of the above functionality must be explicitly stated in the tender response.</p>	<p>If you require a guarantee of free access to system data, use the first clause. However, note the risk that some suppliers may simply include the cost in the overall contract charge.</p> <p>The first clause may still be preferred if councils are specifically hindered from using data if they have to get sign off for <i>additional</i> charges when wishing to access data.</p>

Appendix M: Data access and API requirements – tender wording

Application programming interfaces (for use in most tenders, at the discretion of the Council)

Tender Clause Wording	Explanation / Caveat
1. Wherever permitted according to the General Data Protection Regulation, all other relevant data protection legislation, and where the Council has control and rightful permission to use the data:	The caveats in this statement are needed because some systems license external data to augment services. For example, weather data might help predict or explain patterns, but that raw weather data can't be supplied as it's not owned by the supplier or the council.
1.1. The system must have web APIs that enable the Council to give other applications full ability to send data to, or request data from it. This should cover all significant business functions.	You may wish to replace <i>"This should cover all significant business functions"</i> with a more granular list, e.g. <i>"This should cover, at minimum, the following business functions..."</i>
1.2. APIs should enable live data to be queried in real-time.	Delete / include as appropriate.
1.3. Where datasets are linked to timestamps, APIs should support "Time Based Extracts" (e.g., data changed after date "X") for both full system extracts as well as for more specific web API calls.	Delete / include as appropriate. You may wish to explicitly state specific datasets that are recorded against a timestamp for inclusion in this clause.
1.4. Any data directly relevant to the business function of the application that can be submitted by a user operating the system should also be able to be entered via API.	For complex applications with lots of areas of functionality, this clause may need to be modified / made more specific in order to be practical.
1.5. A complete register of all the system's APIs that are available to the Council must be provided. All Open APIs must be discoverable.	We recommend always including this clause, as many councils have complained that APIs promised to them during sales meetings are not present when the system is deployed. Note that not all APIs maintained by a software supplier are APIs of relevance to local authorities. This is because one must distinguish between APIs that

Appendix M: Data access and API requirements – tender wording

	<p>suppliers host for their own systems to speak with each other internally, and APIs which speak with external systems, such as those developed by an innovative startup. Increasingly, many software suppliers use a 'microservice architecture', where instead of building their product as one monolithic software they have built many modular components that speak with each other using APIs. Therefore, a blanket tender requirement to access every API your supplier's system features, including internal ones, will demand more than you need and may risk the integrity of the internal system.</p>
<p>1.6. All APIs must come with comprehensive documentation.</p>	<p>Include as template in all tenders, unless not appropriate.</p>
<p>1.7. Where API access is restricted, a test API must be available. Ideally, test environment(s) should be provided that let developers test the API without affecting production environments.</p>	<p>Discuss this clause with your IT team to determine if there are specific areas where a test API and/or test environment are vital. This clause may be too onerous as a blanket statement for complex applications and for some smaller suppliers.</p>
<p>2. <i>Either:</i> These features must be provided without additional charge or limitation that would prevent the Council from accessing, sharing and using the data through the API. <i>Or</i> Any and all charges that would be incurred in respect of the above functionality must be explicitly stated in the tender response.</p>	<p>If you require a guarantee of free access to system data via API, use the first clause. However, note the risk that some suppliers may simply include the cost in the overall contract charge.</p> <p>The first clause may still be preferred if councils are specifically hindered from using data if they have to get sign off for <i>additional</i> charges when wishing to access data.</p>

Appendix N:

Digital journeys research (Dorset Council
and Cambridge City Council)

Appendix N: Digital journeys research (Dorset Council and Cambridge City Council)

Research on digital journeys

Cambridge City Council Digital Strategy

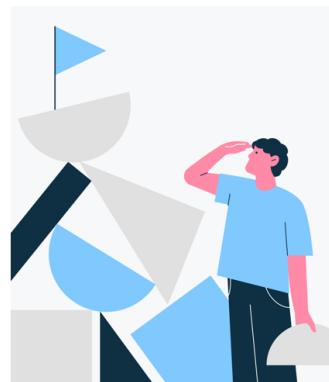
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Goals of this document

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Benchmark analysis: Use Dorset website as model user journey for council digital services



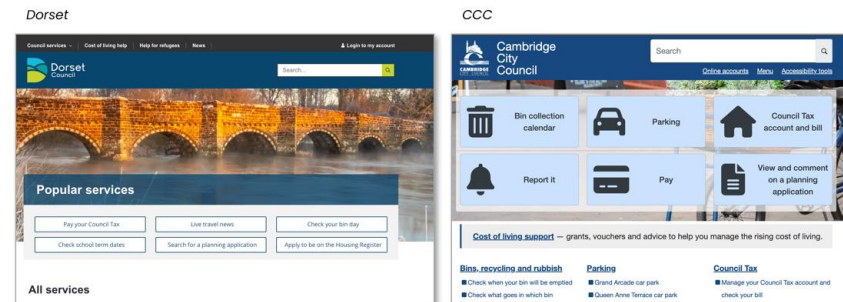
Key takeaways from Dorset Council website as a benchmark for user experience

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- **Intuitive Navigation and Familiarity:** Embrace clear and intuitive navigation structures that align with widely recognized design standards, like those seen on gov.uk websites. This approach leverages user familiarity, reducing the learning curve and enhancing the overall user experience.
- **Clear and Recognizable Calls to Action:** Ensure that buttons and links are visually distinctive and clearly labelled. This practice immediately directs users to the next steps, making the user journey smoother and more straightforward.
- **Streamlined Search Functionality:** Integrate search functionalities directly within the page wherever possible. Providing immediate, on-page search tools simplifies the user journey, keeping users engaged and reducing the need for additional navigation steps.
- **Efficient User Journey to end result:** Reduce end-to-end journey time. Review and optimize the steps leading to transactional actions, such as payments. A focus on efficiency, by reducing the number of steps and ensuring that each step is clear and purposeful, can significantly enhance the user's sense of progress and satisfaction.

Home page

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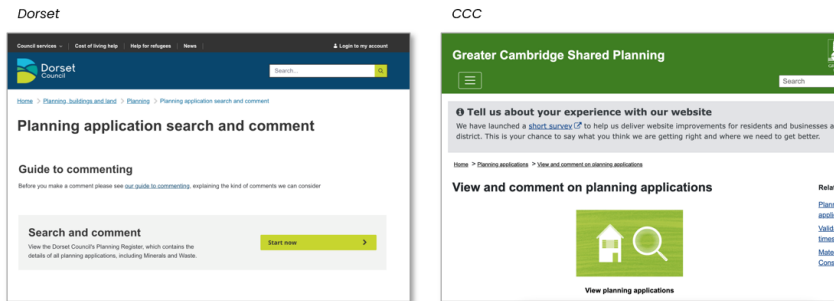


Both CCC and Dorset Council websites prominently feature frequently accessed services, ensuring immediate visibility of key offerings. This design choice aligns with user-centric principles, offering a direct and clear entry point for essential council services.

Appendix N: Digital journeys research (Dorset Council and Cambridge City Council)

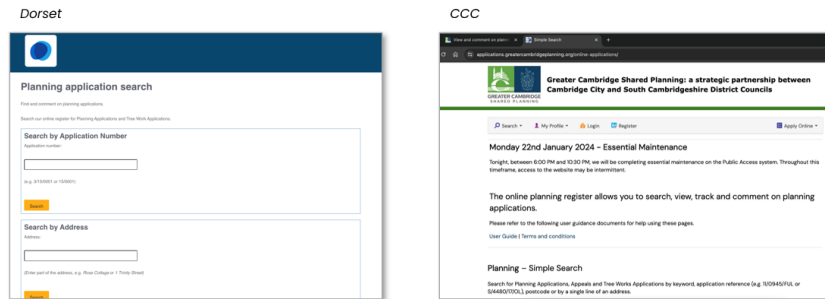
Planning Applications - Initial Navigation

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Planning Applications - Search Functionality

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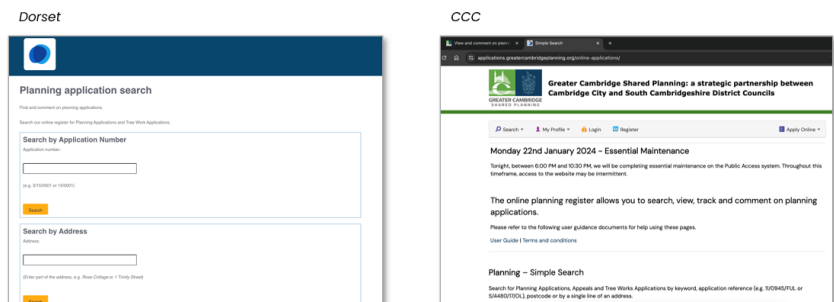


The Dorset Council website provides clear and intuitive navigation for the initiation of planning application searches and commentary. Its design adheres to the standard [gov.uk](https://www.gov.uk) aesthetic, promoting user familiarity and navigation ease through consistent visual cues. In contrast, CCC's website could improve its visual signposting, as its call-to-action buttons are not as immediately distinguishable.

Dorset's website integrates search functionality within the same webpage, reducing navigation steps and potentially enhancing user engagement. Conversely, CCC's approach redirects users to a new tab for searching, which introduces an additional step and lacks immediate, on-page search tools.

Planning Applications - Search Functionality

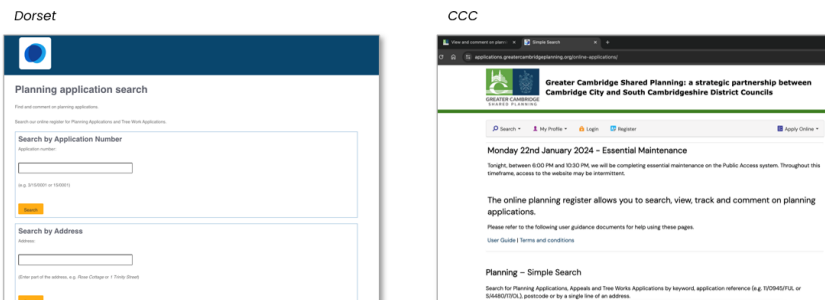
PUBLIC



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Planning Applications - Search Functionality

PUBLIC

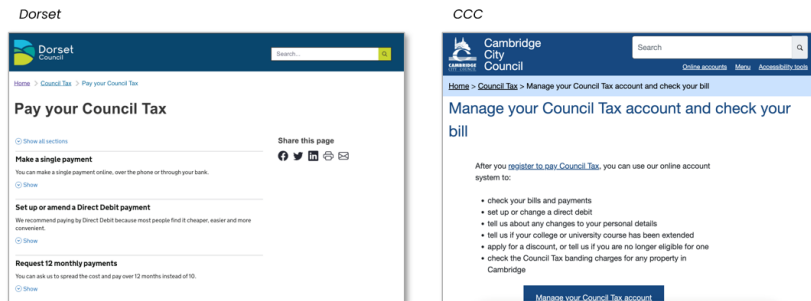


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Appendix N: Digital journeys research (Dorset Council and Cambridge City Council)

Council Tax - Initial Interaction:

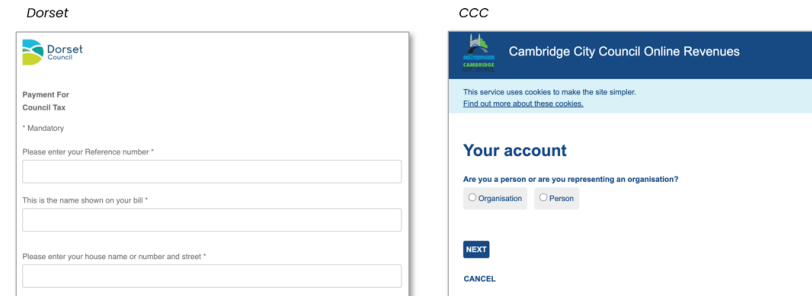
PUBLIC



CCC's website offers clear progression in the user journey with well-defined action buttons. Dorset's website maintains consistency with the gov.uk interface and provides more specific calls to action early in the user journey, potentially guiding users more precisely and streamlining their navigation experience.

Council Tax - Steps to Payment

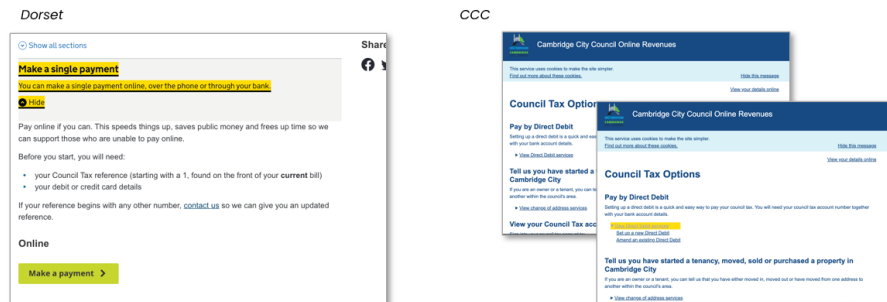
PUBLIC



CCC's website opts for a minimalistic approach, limiting the number of actions on each page to reduce complexity. However, this design choice results in a longer journey to the payment stage compared to Dorset's website, which manages to combine a straightforward journey with a reduced number of steps, striking a balance between simplicity and journey length. The time to completed task at Dorset will be shorter.

Council Tax - Journey to Payment

PUBLIC



The Dorset website efficiently guides users towards the payment stage with clear and prominent progression buttons. The CCC website, while offering a structured journey, presents a longer path to payment with calls to action that could be more explicitly defined to facilitate user progression.