

**COUNCIL CABINET**  
**20 December 2023**



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# ITEM 8

## Transforming the Council using AI Technology

### Purpose

- 1.1 Derby City Council and Derby Homes partnered with a leading AI company in January 2023 and in April 2023, Derby City Council launched Darcie and Derby Homes launched Ali as web Digital Helpers. In May 2023, Derby City Council and Derby Homes launched Darcie and Ali on the contact centre telephony solution, becoming the first council in the UK to replace its main switchboard with a phone-based AI assistant proficient in council services.
- 1.2 Following on from the implementation of Darcie and Ali, the Council commissioned the AI Partner to conduct a number of discovery workshops, tasked with compiling further specific business cases where the application of AI technology could enhance efficiency, reduce operational costs, and support the Council's objective of delivering cumulative cost savings.
- 1.3 The business cases, supported by huge and continuing advancements in AI have identified a minimum savings total combined of £12.25m, and will contribute towards the Council's MTFP, as included in the draft budget proposals being presented to Council Cabinet.

### Recommendation(s)

- 2.1 To approve an addition to the 2023/24 and 2024/25 ICT Capital programme the AI project of £2.561m to fund Phase 1 and 2 of the project. Profiled £1.140m in 2023/24 to be funded from Capital Receipts and £1.421m in 2024/25 to be funded from reserves (£0.294m to be funded from the Flexible use of Capital Receipts Reserve and £1.127m to be funded from the Cost of Change Reserve). If other funding sources become available in 2024/25 these will be used in the first instance to fund the 2024/25 scheme costs.
- 2.2 To approve the use of the Capital Flexibility Reserve and the Flexible use of Capital Receipts Reserve to fund the 2024/25 Capital costs.
- 2.3 To approve the use of the Flexible use of Capital Receipts Reserve to fund the one-off revenue costs of £0.318m in 2023/24.

- 2.4 To note the annual revenue costs of up to £1m for AI (when fully delivered) from 2024/25 onwards which has been included in the proposals in the consultation report on the MTFP on this Cabinet agenda.
- 2.5 To note that Phase 2 of the scheme is subject to successful completion of Phase 1 and will not commence until the outcomes of Phase 1 have been realised.
- 2.6 To note that Phase 3 (£0.690m Capital funding) is subject to successful completion of Phase 1 and 2 and will be presented to a future Cabinet for approval.
- 2.7 To seek approval under Contract and Financial Procedure rules for the following:  
  
Award a new £7m contract to enable both Derby City Council and Derby Homes to continue on their AI journey over the life of the contract following the introduction of Darcie and Ali, as outlined in section 4. The Council will work with Derby Homes to agree the apportionment of shared costs as appropriate on the specific AI projects involving both parties.
- 2.8 Final contract and business case details are still under discussion and therefore:  
  
To delegate authority for the Chief Executive to negotiate and finalise the contract terms, agree to any other third-party integration costs and proceed to contract award.

### **Reason(s)**

- 3.1 The level of the minimum savings total combined is significant and would make a very large contribution to support the Council's MTFP. Generative AI is a new technology that is able to understand complex information in a way that mirrors human capability, in addition it can respond with either original AI generated content, prescribed content or mixture of both, taking the Council's AI journey to the next level.
- 3.2 The Council is deriving confidence from this emerging technology through its successful pilot application, working with leading industry in its development and monitoring the work wide momentum of generative AI development and its impact on all sectors. However, as an early adopter, Derby will be pioneering this technology so there is some inherent risk in doing this as well as the significant reward.
- 3.3 Risk will be mitigated by introducing a fixed price contract including phased payments based on outcomes.

## Supporting information

- 4.1 In light of MTFP and Council Plan priorities, the Council set up a Delivery Programme to become more efficient and effective, including four workstreams of activity focusing on Demand & Insight, Efficiency and Innovation, Asset Rationalisation and People & Culture. This work included an innovative project to make greater use of AI technology to achieve process improvements and wider benefits.
- 4.2 There were 261 AI opportunities identified at the discovery workshops of which 54 have AI solutions proposed to deliver the minimum savings total combined. The plan to deliver the AI transformation programme is 18 months, split into three phases:
- Phase 1 (4 Months)
    - Adult Social Care External Co-pilot
    - Wider Staff Co-pilot
    - Customer Service Co-pilot
    - Debt Management
  - Phase 2 (8 Months)
    - Childrens Services External Co-pilot
    - Adult Social Care Internal Co-pilot
    - Customer Service Additional Skills
    - Derby Homes Co-pilot
  - Phase 3 (6 Months)
    - Childrens Services Internal Co-pilot
    - Revenue & Benefits Skill
    - Information Governance and IT

4.3 The minimum savings total combined of £12.25m is made up from the following areas of the business:

- **Adult Social Care -£8.9m**
  - Care Reviews
  - Managing Demand
  - Placement Management
  - Independent Services (Reablement/TEC/DLA)
  - Enquiry Management - self-service enquiry management, signposting and deflection
  - Financial Assessments
  - Increase in Continuing Health Care
  - Maximisation of benefit entitlement
  - Reduction in Self Funders
  
- **Children's Services -£0.950m**
  - Reduction in Child Allowances over payments, checking addresses and automation
  - Reduction in Care Placements through improved brokerage, increase in fostering placements
  - Increase in Supporting Families payments
  - Increase in Continuing Health Care
  - Reduction in spend on 17 year olds as part of the transition process by applying ASC eligibility earlier and moving to a package that person would have at 18
  - Maximisation of benefit entitlement
  - Reduction in IFA expenditure through increased fostering placements
  - Cost avoidance by managing increase demand through using AI to manage demand at the front end
  
- **Customer Channels -£1m**
  - Enquiry Deflection - increased self-service simple enquiry management, signposting and deflection
  - Skill Deflection - complex request management through skills providing self-service notification and request management and follow up
  - Inbox Management - AI management of inbound e-mails, filtering and triggering deflections and signposting
  
- **Wider Council Internal Automation including Debt Management -£1.4m**
  - IT Self Service and through AI Ticket Management
  - Application of AI for Information Governance redaction
  - Implementation of dynamic multi-lingual translation over all front doors
  - Reduction of benefit overpayments from notification of Change of Circumstances
  - Generation of daily press summaries on outbound content generation
  - Debt Consolidation
  - Debt Chasing (Finance)
  - Debt Chasing (Council Tax)

- 4.4 This is the minimum savings total combined saving. However, the Council has included a conservative estimate of £3.925m in the consultation report on the MTFP on this agenda.
- 4.5 The main pillars of the solutions to be implemented are:
- Control service demand at the front door
  - Provide employees and residents with self service
  - Reduce task friction with automation
  - Provide employees with timely access to the right tools
  - Provide employees with safe, timely access to resident data
  - Improve financial management
- 4.6 This programme will be the foundation to enable the Council to innovate over the coming years as further opportunities emerge and AI technology develops.
- 4.7 The Benefits Management Approach for the AI discovery focused on identifying and quantifying cost and time savings opportunities for the Council.

The qualification process focussed on identifying the AI opportunities that provided a cost saving against the savings criteria:

- **Time Saving:** Process efficiencies that reduce employee time required to complete activities and contributing towards potential future FTE savings
- **Cost Reduction:** Improvements that are anticipated to result in reduction to cost of delivery of services
- **Cost Avoidance:** Solutions that would facilitate a reduction in future planned spend
- **Revenue Collection:** Efficiencies in the collection of owed monies
- **Revenue Generation:** Solutions that facilitate the generation of new monies to the Council

4.8 In addition to the significant cost saving opportunities, there are also a number of other benefits that will be derived from the delivery of the programme:

- **Automated Processes:** AI can automate routine and repetitive tasks, allowing employees to focus on more complex and strategic activities, and undertaking more regular review and analysis than human capacity allows for
- **Enhanced Decision-Making:** AI can analyse large datasets quickly and provide valuable insights - this can empower decision-makers with accurate and timely information, leading to more informed and effective decision-making
- **Streamlined Operations:** AI can optimise workflows and streamline operations by identifying bottlenecks and inefficiencies
- **Risk Mitigation:** AI can predict potential issues or risks, allowing the Council to take proactive measures to mitigate them - this can enhance resilience and reduce the likelihood of unexpected disruptions
- **Skill Enhancement:** Implementing AI often requires upskilling the workforce. This can lead to increased job satisfaction as employees acquire new skills and adapt to evolving technologies
- **Innovation and Adaptability:** Introducing AI should encourage a culture of innovation within the Council - employees are more likely to explore creative solutions and embrace change, fostering adaptability

4.9 An AI compliance board will be created that will cover the following areas:

- **Governance and Ethics:** The board will ensure that AI solutions operate within ethical boundaries and legal frameworks, safeguarding against bias and protecting vulnerable populations.
- **Performance and Risk Management:** The board will monitor and evaluate the AI's performance, addressing risks and ensuring the technology meets its intended objectives while maintaining a human-in-the-loop for critical decision making.
- **Compliance and Engagement:** The board will oversee adherence to data protection laws and engage with stakeholders to maintain transparency and trust in the AI's operations and its impact on residents and employees.

## Public/stakeholder engagement

5.1 The business cases have been co-produced by leaders within the AI field, experienced local government Directors, including in Adult Social Care, and key personnel and lead professionals from all areas of the Council within the scope of the programme.

## Other options

6.1 AI represents an unprecedented generational opportunity swiftly advancing globally. Consequently, Derby is at the forefront of pioneering solutions, with limited alternatives currently available in the market.

## Financial and value for money issues

- 7.1 The business cases identified have identified a minimum savings total combined of £12.25m.
- 7.2 Costs relating to the new proposals are shown in the table below. As well as direct AI related costs, there will be expenditure against other existing Council contracts:

	2023/24	2024/25	2025/26	2026/27	2027/28	Total
<b>Cost Model</b>						
Direct AI Capital Costs (Phase 1)	£1,120,219	£373,406				<b>£1,493,625</b>
Direct AI Capital Costs (Phase 2)		£946,875				<b>£946,875</b>
Direct AI Capital Costs (Phase 3)		£345,187	£345,188			<b>£690,375</b>
Capital Costs under other Contracts	£20,000	£100,000				<b>£120,000</b>
	<b>£1,140,219</b>	<b>£1,765,468</b>	<b>£345,188</b>	<b>£0</b>	<b>£0</b>	<b>£3,250,875</b>
Direct AI Revenue Costs	£293,000	£598,300	£635,400	£649,600	£660,800	<b>£2,837,100</b>
Revenue Costs under other Contracts	£25,000	£274,000	£352,000	£352,000	£352,000	<b>£1,355,000</b>
	<b>£318,000</b>	<b>£872,300</b>	<b>£987,400</b>	<b>£1,001,600</b>	<b>£1,012,800</b>	<b>£4,192,100</b>

- 7.3 A breakdown of the Capital costs for each phase is included in the table below:

Capital costs	Phase 1 £m	Phase 2 £m	Phases 1 & 2 Total £m	Phase 3 £m	TOTAL £m
2023/24	£1.140		<b>£1.140</b>		<b>£1.140</b>
2024/25	£0.374	£1.047	<b>£1.421</b>	£0.345	<b>£1.766</b>
2025/26				£0.345	<b>£0.345</b>
<b>Total</b>	<b>£1.514</b>	<b>£1.047</b>	<b>£2.561</b>	<b>£0.690</b>	<b>£3.251</b>

- 7.4 At this stage, the Council is only seeking approval to add Phase 1 and 2 to the Capital programme £2.561m. Profiled £1.140m in 2023/24 funded from Capital Receipts and £1.421m in 2024/25 funded from reserves (£0.294m funded from the Flexible use of Capital Receipts Reserve and £1.127m funded from the Cost of Change Reserve) if other funding sources become available in 2024/25 these will be used in the first instance to fund the 2024/25 scheme.
- 7.5 Phase 3 (£0.690m Capital funding) is subject to successful completion of Phase 1 and 2 and will be presented to a future Cabinet for approval.
- 7.6 Revenue costs referenced in section 7.2 of £0.318m in 2023/24 will be funded from the Flexible use of Capital Receipts Reserve. Revenue costs referenced in section 7.2 in 2024/25 onward are included as a pressure (with associated savings) in the consultation document on the MTFP on this Cabinet agenda.

- 7.7 Early commencement of the contract maximises the potential MTFP savings. The later the commencement extends into the new calendar year, the less savings can be made in 2024/25. The cost profile presented in this report assumes the contract starting in early January 2024.
- 7.8 To reflect the partial year effect during the implementation period and the urgency surrounding the earliest possible contribution to the MTFP, savings of £3.925m are included in the MTFP proposal for 2024/25, specifically:
- **People Services – AH:** AI and Occupational Therapy led reviews of community care packages **-£2.904m**
  - **People Services – AH:** Use of AI to reduce the need for residential placement - keeping clients in the community **-£0.125m**
  - **People Services – AH:** Use of AI to allow Citizens & Professionals to obtain FAQ responses, signposting to services, self-assessment and create enquiries & notifications **-£0.050m**
  - **People Services – AH:** Use of AI - outbound proactive chasing of financial debt. The solution is anticipated to generate improved recovery of the existing debt **-£0.210m**
  - **People Services – CYP:** Use of AI - reduction in 3rd party translation costs through the ability to translate documents within the AI solution **-£0.025m**
  - **Chief Executive's:** Use of AI - outbound proactive chasing of Council tax debt. The solution is anticipated to generate improved recovery of the existing debt **-£0.336m**
  - **Council-Wide:** AI Management of Customer Service enquiries, filtering and signposting responses, increased Citizen self-service through new skills to handle most common complex tasks **-£0.275m**
- 7.9 The high level costs and savings included in this report are currently subject to a negotiation exercise led by the Chief Executive.

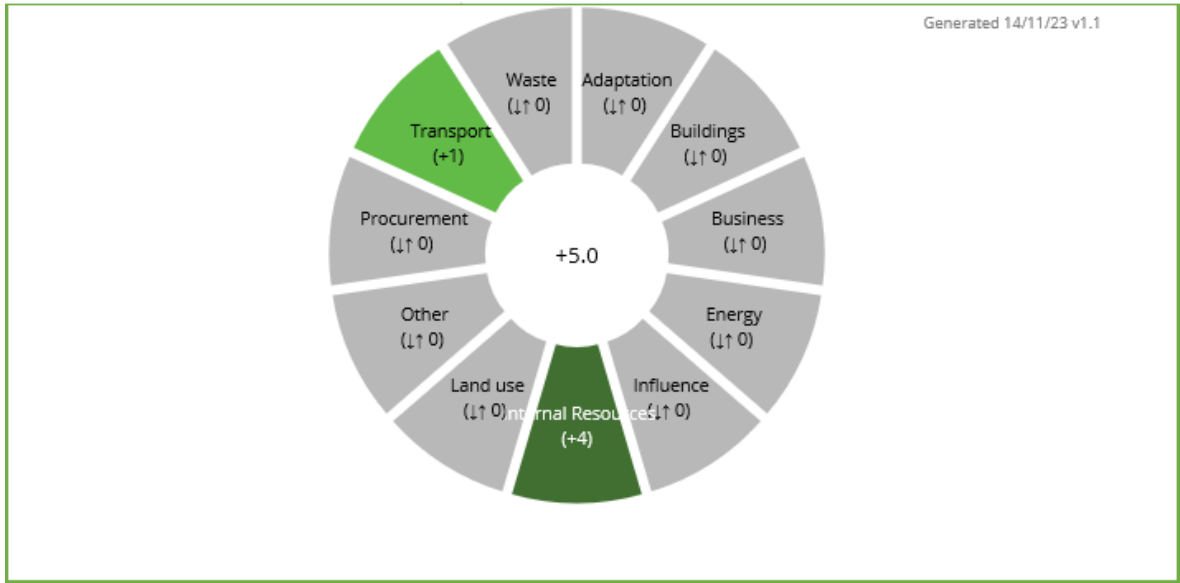
## Legal implications

- 8.1 Legal Service's input will be sought throughout the process of awarding the contract. The Council will follow the guidance on AI that the Equality and Human Rights Commission has produced to make sure of compliance under the Equality Act 2010. The Council will also ensure that appropriate advice is obtained in relation to implementation of a final solution to secure compliance with data protection principles.



## Climate implications

9.1 A climate change impact assessment has been completed, see diagram below:



9.2 AI solutions created will reduce amount of human effort required to administer services and will reduce travel to complete as many social care visits.

## Equality, Diversity and Socio- Economic Implications

- 10.1 AI Solutions introduced will always remain ethical and under the control of the Council. A Derby AI Compliance Board will be created to ensure that AI solutions operate within ethical boundaries and legal frameworks, safeguarding against bias and protecting vulnerable residents, following guidance from appropriate bodies such as the Equality and Human Rights Commission.
- 10.2 Assisted Digital is the term now being used to describe a range of developments, strategies, and actions aimed at ensuring that no one is left behind. AI Solutions introduced will always have a human-in-the-loop. Having a human-in-the-loop is also essential to provide ethical oversight, ensure accountability, and address complex, unforeseen situations that AI systems may encounter, ultimately fostering responsible development and deployment.

## Other significant implications

11.1 The Equality Impact Assessment will be reviewed as part of the project and advice will be taken as required. The Council recognises that not all customers can access every channel, so are committed to providing accessible channels for all customer groups with unique accessibility requirements.

The Council is collaborating with the Access, Equality and Inclusion Hub and a range of forums to identify additional measures that can be implemented and will

continue to offer face-to-face, human telephony channels and specific accessible channels albeit with potentially modified capacity, to cater for customers' needs. The Council is setting up a Working Group of key colleagues and disabled people with a range of impairments to look at the whole range of customer contact channels, AI just being one of them.

Furthermore, a comprehensive marketing plan is being developed aimed at supporting the Council's more vulnerable customers, helping them grasp the new channels, their usage, and the adjustments that are in place to facilitate seamless access.

- 11.2 While there are no direct personnel implications arising from the report's recommendations, any employee implications arising from the AI transformation programme implementation will be considered in line with Council policies, and there will be appropriate consultation with employees and Trade Unions if and when the likelihood of such issues becoming manifest begin to emerge.

**This report has been approved by the following people:**

<b>Role</b>	<b>Name</b>	<b>Date of sign-off</b>
<b>Legal</b>	Olu Idowu – Head of Legal Services	11/12/2023
<b>Finance</b>	Elly Tomlinson – Group Accountant – Capital element	11/12/2023
<b>Service Director(s)</b>	Alison Parkin – Director – Financial Services	11/12/2023
<b>Report sponsor</b>	Councillor Paul Hezelgrave, Cabinet Member for Cost of Living, Equalities and Customer Inclusion and	11/12/2023
	Andy Brammall - Director – Digital & Physical Infrastructure and Customer Engagement	11/12/2023
<b>Other(s)</b>	Ann Webster – Equalities	16/11/2023
	Liz Moore – Head of HR and OD	11/12/2023

<b>Background papers:</b> <b>List of appendices:</b>	
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