



Stockton-on-Tees Borough Council Strategic AI Approach

Harnessing Artificial Intelligence to transform public services

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Executive Summary

This AI strategy outlines a comprehensive approach for leveraging artificial intelligence to enhance service delivery, drive operational efficiency, and support data-driven decision-making. Through responsible AI adoption, the council can provide residents with improved, personalised experiences while optimising resource management and reducing operational costs. This strategy establishes a framework for ethical AI implementation, ensuring transparency, inclusivity, and accountability.

Context and Background

Stockton-on-Tees Borough Council is facing increasing demands for efficient, responsive, and inclusive public services. Artificial Intelligence presents an opportunity to address some of these challenges by automating routine tasks, predicting service demands, and enhancing decision-making processes. Through the strategic implementation of AI, governed and reported through Powering Our Futures Programme, Technical aspects managed through Digital Service Group (DSG), who are responsible for strategic council-wide oversight of the development of digital services, systems, technologies and solutions, the council can streamline operations, improve service quality, and ensure that resources are used more effectively. AI technologies, such as machine learning and natural language processing can be harnessed to develop sophisticated systems that can anticipate the needs of residents, offer personalised solutions, and provide real-time support.

Moreover, the council recognises the importance of adopting AI responsibly, ensuring alignment with its core values of being open, honest and transparent. To this end, the council is committed to establishing a robust governance framework delivered through the council's AI Strategy Group which ensures the strategic council-wide oversight of developments including reviewing proposed AI use cases, ensuring a clear purpose and benefit, assessing risk, ethics and data protection. The creation of an AI Ethics Group will oversee the ethical implementation of AI initiatives. The decision on the investment in AI will be made by Corporate Management Team in a determined forum.

This framework will ensure that all AI applications are developed and deployed with a focus on transparency, inclusivity, and accountability, thereby fostering public trust and safeguarding the interests of all stakeholders.

By embracing AI-driven transformation, the council aims to create a more efficient, equitable, and responsive service environment that meets the evolving needs of its community.

Vision Statement

Stockton-on-Tees Borough Council aims to become an AI enabled organisation where artificial intelligence empowers our workforce, enhances service delivery, and upholds our commitment to ethical governance and environment sustainability.

Definition of AI

For this AI strategy, the Council will be using the definition of AI as proposed by HM Government.

Artificial Intelligence (AI) as an umbrella term for a range of algorithm-based technologies that solve complex tasks by carrying out functions that previously required human thinking. AI systems are designed to simulate human cognition, allowing machines to learn, adapt, and improve over time through algorithms, data, and models.

Strategic Objectives

This AI strategy is designed to achieve the following key objectives:

Enhance Service Delivery

- Implement AI to automate routine tasks, freeing up staff time for high-value work.
- Provide 24/7 self-service options, where required, using AI-powered chatbots (Virtual Assistants) and enhancement of self-service solutions through the use of AI.
- Improve accessibility and provide personalised services for residents.

Operational Efficiency and Cost Savings

- Streamline processes using AI for predictive maintenance and resource management.
- Optimise workforce planning using AI-driven data analysis.

Data-Driven Decision Making

High-quality well-managed data is foundational for effective AI. The council will:

- Establish robust data governance practices for the use of AI, ensuring data accuracy, privacy and security.
- Develop AI tools to analyse data, generate insights, and support evidence-based policy making.
- Create dashboards and predictive models for proactive service management.
- Establish an approach of the use of AI within and integrating with existing line of business applications.

Skill Development and Culture

- Provide AI knowledge, training and upskilling programs for staff
- Foster a culture of innovation through cross-functional collaboration and experimentation, while ensuring that all AI implementations are carried out with caution, prioritising ethical considerations and mitigating potential risks.

Ethics, Transparency, and Inclusivity

AI systems will operate transparently, with clear

explanations provided where automated decision making takes place. This fosters trust and allows residents to understand how AI influences public services. AI applications must comply with existing laws and uphold ethical standards. The council will:

- Establish a governance framework for the ethical use of AI.
- Promote transparency in AI decision-making processes.
- Ensure AI systems are free from bias and accessible to all residents.

Key Initiatives

To achieve the strategic objectives, the council will implement the following AI initiatives:

AI-Powered Customer Service

- Deploy conversational AI chatbots (Virtual Assistants) on the council website to handle routine queries.
- Implement voice recognition for contact centers to assist residents with self-service options.

Intelligent Process Automation (IPA)

- Automate back-office functions such as applications, claims processing, licensing.
- Use AI to extract insights from unstructured data, like reports and case files.

Predictive Analytics for Service Management

- Develop predictive models to forecast service demands (e.g. social care needs, housing support).
- Develop predictive models to analyse potential risk factors (e.g. for use in Early intervention and prevention).
- Monitor infrastructure through sensor data for predictive maintenance.

AI for Compliance and Risk Management

- Use AI to detect anomalies and prevent fraud in financial transactions.
- Implement sentiment analysis to understand public feedback and identify emerging issues.

AI in Decision Support

- Provide decision-makers with AI-driven dashboards for real-time data insights.
- Develop scenario-based modeling to evaluate policy impacts.

AI in empowering staff in the use of AI

- Development of an AI usage policy defining where and how it is agreed to use AI within roles.
- AI literacy program, mandatory digital learning for staff on AI basics, bias and ethics.
- Role specific training on AI use cases.
- Implementation of AI tools to aid staff to do their job.
- AI-powered solution aiming to streamline the process of writing case notes and assessments, freeing up valuable time for social workers to focus on direct client care.

Implementation Roadmap

The council will adopt a phased approach to AI implementation, ensuring continuous learning and improvement.

AI projects will be governed and reported through Powering Our Futures Programme, Technical aspects managed through Digital Service Group (DSG), ensuring strategic council-wide oversight of AI developments.

The roadmap consists of the following phases:

Phase 1: Discovery and Assessment Identify opportunities, conduct feasibility studies, and engage stakeholders.	Phase 2: Pilot and Experimentation Implement AI pilots in selected service areas, evaluate results, and capture lessons learned.	Phase 3: Scaling and Integration Expand successful AI solutions across departments, ensuring proper governance and monitoring.	Phase 4: Continuous Improvement (Ongoing) Continuously refine AI applications, ensure transparency, and adapt to evolving technology.
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Environmental commitment

Reducing the carbon footprint of AI

The council recognises the environmental impact of AI, particularly the high energy demand for large-scale data processing. All AI implementations will align with the councils Environmental Sustainability and Carbon Reduction Strategy, prioritising, where possible, tools that promote energy efficiency and sustainable practices.

Sustainable AI practices

By promoting sustainable AI practices, the council aims to support its climate change objectives and lead by example in responsible technology use.

Exclusions

We will not use AI in the following areas, unless reassessed and formally approved through governance channels.

- Automated decision making without human oversight. All decisions that impact rights, access to services or financial outcomes will require human validation.
- Facial recognition in public places, due to privacy, bias and surveillance risks.
- Predictive enforcement tools, such tools are incompatible with transparency, bias control and public trust.
- AI in recruitment without human review, AI recruitments decisions must retain human-led review and scoring.

Risk Management

The council acknowledges that the AI market is constantly evolving which poses a risk to any product the council develops or procures as such the council has put the following mitigations in place and will keep risks under review.

To ensure responsible AI adoption, each AI project will include a comprehensive risk assessment to identify potential ethical, operational, and environmental risks. Mitigation plans will be developed for identified risks, with contingency plans in place for high-risk scenarios. Addressing potential risks such as:

- Bias and Discrimination – Implement bias detection mechanisms and ensure diverse datasets.
- Data Privacy and Security – Apply robust data protection policies and monitor data usage.
- Transparency and Accountability – Establish clear governance frameworks and explainable AI models.
- Skills Gaps – Provide training programs to upskill staff on AI literacy.
- Financial and Operational Risks – Start with pilot projects and conduct ongoing cost-benefit analysis.

Monitoring and Evaluation

This strategy will be reviewed yearly with each version agreed by the Corporate Management Team in a determined forum, following consultation with stakeholder groups and elected members. This strategy will also be reviewed and adjusted based on technological advancements, feedback and evolving local needs and the needs of our customers.

The council will measure the success of the AI strategy using key performance indicators (KPIs), including:

- Reduction in service processing time.
- Improved customer satisfaction scores.
- Cost savings through automation.
- Increased staff capacity.
- Enhanced data-driven decision-making capabilities.

Governance and Ethics

AI Ethics group

An AI Ethics group will be established to oversee the responsible implementation of AI solutions. This group will ensure compliance with ethical standards, review AI performance, ensure a human in the loop approach, ensure bias mitigation and accessibility checks and provide guidance on mitigating potential risks. The council's current EPIA process will be followed where needed as part of the implementation of AI.

The council is committed to harnessing AI to improve services and deliver value to residents. Approval of this AI strategy will enable the council to initiate pilot projects, establish governance structures, and develop staff capabilities. By adopting AI responsibly, the council will set a precedent for digital innovation within the council.