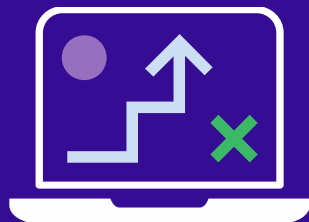# Introduction

The purpose of this data strategy and action plan is to introduce and advance the council's new mission statement for data:

"The purpose of data is

Data Maturity

Maturity Metric	Score*
Data Assets	38
Data Culture	38
Data Use	37
Data Skills	35
Data Leadership	34
Data Analysis	33
Data Tools	33

* Scores rated on a scale from 0 to 5

Our scores for these data maturity metrics were very similar to those of other councils. For example the high score for "Data Assets" shows that local authorities are commonly "data rich" with many and varied sets of administrative data collected in relation to the operation of council services. Whereas for tools and analysis all councils commonly face the challenge of having data split across multiple silos, stored in systems which do not readily interact with each other; making a one council approach to analysing and working with data a significant challenge.

Where we do score well is on "Data Culture". This can be a difficult concept to define but a clear indicator of data culture is the quality and nature of the conversations that happen within the organisation about data, its importance, and our responsibility for it. It is likely we scored comparatively well for this theme due to the positive influence of the Data Advisory Group which at the time of the assessment had been functioning for six months and was already encouraging cross service conversations about data

Within the Data Maturity Framework our scores were rated as "Developing" maturity and our aim is to progress through to the "Mastering" stage with improved scores between 4 and 5. This is where our data strategy and action plan will drive change. To truly succeed in our mission to improve outcomes with data, by making decisions based on reliable and timely data, we need to harness data as a core council resource, unhindered by silos, and with a workforce empowered with the skills they need to gain valuable insights from data. Therefore this strategy and action plan will focus on twelve strategic themes below…

Microsoft's commitment to PowerBI changes then there are other similar or non-Microsoft products on the market which can be used instead, such as Tableau, SAP Analytics, and others.

The Data Platform

In effect this will be the council's first implementation of a data warehouse or data lake. (In essence, the difference is a data warehouse is designed to apply a high degree of structure and organisation to data when it is stored, whereas a data lake is designed to accumulate large volumes of data at a more rapid pace with less focus on organising and structuring the data at the point of collection) The Data Platform will be essential to allowing "democratised" access to data for use in PowerBI report building by services themselves, working within or alongside the DIG sub groups. The Data Platform will also allow for access to datasets to be controlled and managed by a robust permissions framework, ensure consistent application of data quality, ethics and standards; and enable the FAIR Principles of making data Findable, Accessible, Interoperable and Re-usable.

In conclusion, the data programme will orchestrate the efforts of the groups and resources above so as to ensure council priorities are met. It will also ensure the data products green lit by the DAG are developed by the DIG sub groups and delivered on time in accordance with the data product roadmap by leveraging PowerBI, the data platform and other suitable data tools and resources.

The Future

The next five years will likely see technological change at an unimaginable pace. In June 2018, the research organisation OpenAI first introduced the concept of Generative Pre-trained Transformers (GPTs). Five years later, in March 2023, they released GPT-4 which began to fundamentally transform how we as humans interact with immense volumes of digitised data using natural language. Just as five years ago few anticipated where OpenAI's GPT research might lead, so we expect our own data strategy and action plan will need to be a living document. As the front-line of data innovation advances we will keep this strategy and the following action plan under review, and updates will be made where necessitated by the pace of change around us.

Action Plan by Theme

People	Empowering our workforce with DATA LITERACY & SKILLS

What success will look like:
- Everyone in the organisation will have confidence in their ability to
  - Understand the importance and relevance of the data they help to collect and rely on for their work
  - Suggest new ways in which data can be harnessed to improve service delivery and business outcomes
  - Apply critical thinking to data presented in reports and analysis so as to validate conclusions and recommendations in
- Everyone will have access to skills development resources and learning opportunities to progress through pathways designed to be relevant to how they use data
- Decisions taken at every level of the organisation will be informed by critical thinking applied to relevant, timely, reliable da

WHAT	WHY	WHO	WHEN
The corporate training programme will be updated to include suitable learning opportunities around data	A key driver of success is ensuring our employees have the necessary data skills and knowledge available to them	Data Programme, HR,	
Pilot adoption of some or all of the data skills da development resources emerging from the Scottish Government's public sector Data Transform Framework programme the conducted Scottish Digital Academy (SDA) and others	As data driven … embedded … … here from … … through a persona based data skills curriculum which, having learning path		

People	Embedding a strong DATA CULTURE

What success will look like:

We will take a one-council approach to data, with data silos being less of a barrier to how data is used

We will work together to identify common challenges and recognise data as a key ingredient to solutions

Decision making will improve as the organisation shifts to recognising the value of data informed, intelligence-led, decisions

Everyone will be empowered to speak up if they see an opportunity to improve data quality, service delivery, or citizen outcomes by using data differently.

Employee engagement will increase as staff perspectives on data are respected and their suggestions for using data to innovate recognised

Employee satisfaction and retention will increase as those with responsibility for data in their teams will feel less isolated and more valued as a member of a broad, supportive data community within and beyond the organisation

WHAT	WHY	WHO	BY WHEN
The Data Advisory Group (DAG) will seek to encourage attendance and participation from more service representatives.	One sign of a strong data culture is the fruitful conversations that happen within the organisation and the extent to which those conversations cross service boundaries. As the council's "data forum" the DAG will seek not only to encourage such conversations but also translate emerging themes into actions for change.	Data Advisory Group Data Programme All Services	All services having at least one nominated representative on the DAG July 2024
The Data Technical Group (DTG) will democratise			

Processes	Supporting SERVICE TRANSFORMATION

What success will look like:

- The principles of the Scottish Approach to Service Design will be enabled by, amongst other things, having access to relevant data on user needs and service demand both now and projected into the future.
- Collection and analysis of data about our service users and their needs will be enabled, both by easier access to survey response data, and through relevant administrative data collected by the council and other public sector agencies.
- Analysis of actual service usage data will allow us to recognise and address common pressure points which present persistent challenges for effective service delivery.
- Data-driven service transformation will lead to greater consistency across the council's change programme, where business intelligence provides for a coherent approach toward the objectives of business process change.
- We will see expansion from the day-to-day operational uses of data, to the more complex analytical use of data for making evidence led

Processes	Supporting WORKFLOW & PROCESS AUTOMATION
What success will look like:	

Processes	Maximising council PERFORMANCE & RESOURCE PRIORITISATION

What success will look like:

We will be able to proactively use and scrutinise past performance data to improve future performance.

We will be able to bring performance datasets together and enable linkages to be made across a range of factors affecting performance.

We will be able to comply with Statutory Performance Information (SPI) Direction requirements.

Enhanced performance data will be used to identify demands and opportunities to focus council resources on objectives which improve performance and service outcomes in key areas

Stakeholders inside and outside of the council will obtain greater value from performance reporting arrangements, e.g. where the council's enhanced data architecture allows for more timely or frequent performance reporting

WHAT	WHY	WHO	BY WHEN
Aligning with the Performance Excellence Project (PEP), identify new ways to provide p 2 s	igno ance Ei H		

Technology	Delivering the DATA PLATFORM & Related Architecture

What success will look like:

Services wanting to solve challenges with data will have access to a corporate resource in the data platform which makes it easier for them to combine their own data with datasets shared by other council services and brought in from trusted external bodies/partners.

Services wanting to use the enhanced reporting and analysis features of PowerBI but having had limited experience using it will be able to rely on some of the more complex data cleaning, modelling and transformation tasks being done for them within the data platform, making their

Technology	Enabling the adoption of POWERBI, AI and other data tools

What success will look like:

- Services will use reports built in PowerBI to monitor operational data in near real-time, so as to be able to intervene in situations where service delivery metrics are outside of expected tolerances.
- Services will use data analysed and presented in PowerBI to better understand service demand and stress factors affecting service delivery.
- Reports traditionally produced monthly or quarterly will be shifting to more frequent reporting as PowerBI reports, leveraging the data platform and associated data architecture, will be able to update more frequently with little or no additional administrative effort.
- Services will use more advanced features of PowerBI, such as trend analysis and AI (artificial intelligence) "co-pilot" for plain English queries to ask questions of data which would previously have been impossible to answer using Microsoft Excel alone.
- The council will maximise its use of Sharepoint Online to make compliance with retention and disposal policies more effective.
- The council will be able to more powerfully lobby the Scottish Government and others by using PowerBI to tell more effective stories with data using maps and other visualisations

WHAT	WHY	WHO	BY WHEN
Services will be encouraged to bring to the Data Advisory Group (DAG) data challenge proposals where the service has identified opportunities for PowerBI, data analytics, or AI to make a positive, impactful difference to service delivery and outcomes.	By bringing data challenges to the DAG forum there can be an informed discussion amongst the DAG's service and technology specialists of possible solutions. The DAG can help determine prioritisation and allocation of resource, including any software licenses when required	Data Advisory Group. All Services	Ongoing
The Data Programme will establish and maintain a reference archive accessible to all services of case studies where council services have successfully implemented PowerBI, AI or other tools.	Common themes often emerge from technology projects: risk mitigation, cost/benefit projections, etc. By sharing learning from past successes each new data product development builds on the strengths of those which came before.		

Technology	Factoring DATA FEATURES into line of business systems

What success will look like:

While keeping our data secure, our systems will also make it easier, not harder, to harness our data to for reporting and analysis.

Our systems will allow for interoperability, i.e. systems can exchange data and use common identifiers, such as Unique Property Reference Numbers, which make combining and sharing data between systems easier.

Our systems will allow for recognised local government and statutory data standards to be applied consistently.

Our systems will allow for portability of our data, i.e. when we change solution supplier for a given system we won't face unreasonable hurdles to moving our data to the new system.

WHAT	WHY	WHO	BY WHEN
When data products, e.g. new reports, on the data programme product roadmap are blocked, or have their functionality curtailed due to feature limitations of a line of business system, this will trigger a dialogue with the supplier to try and resolve the constraint.	When the Data Advisory Group has tasked the Data Technical Group with building a specific		