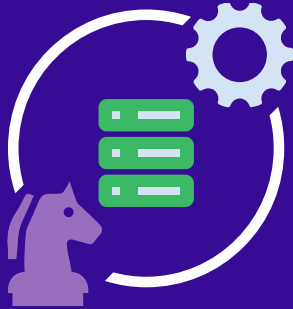


Data Strategy & Action Plan

2024 - 2028

Data Strategy & Action Plan: 2024-2028

Introduction



Purpose

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

"To improve outcomes for our residents and communities through better combination and use of data."

This mission closely aligns with two of the council's "Connect for Success" Change Programme principles:

Principle 4: data and evidence driven decision making.

Principle 7: maximising opportunities from technology.

The importance of data and evidence driven decision making in Principle 4 cannot be over-stated. These are unprecedented times with local authorities facing significant, prolonged, funding challenges. The ability to focus limited resources in ways that deliver the greatest value and impact has never been more important. To do so the council must have an informed understanding of the circumstances, needs and demands of our residents and communities. This will require harnessing the data we hold, and combining it with data from the wider public sector and other sources, so as to have a more complete picture of the lived realities of those we serve.

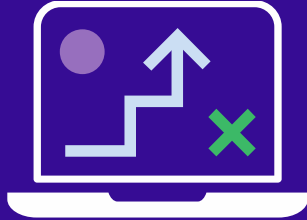
Background

To achieve the objectives above, the council must lay solid foundations upon which to build a new one-council approach to data. This process began in March 2022 with the creation of the council's new Data Advisory Group (DAG). With representation from across the council's services, the DAG represents a one-council, service-led forum for data.

Toward the end of 2022 the DAG planned and prepared the council's participation, along with several other local authorities, in the Scottish Government's Data Maturity Assessment programme which included a staff survey on data. The assessment gave a score for data maturity across seven metrics with results summarised in the following table...

Data Strategy & Action Plan: 2024-2028

Data Maturity



Argyll & Bute Council Data Maturity Assessment Results (December 2022)

| Maturity Metric | Score* |
|-----------------|--------|
| Data Assets | 3.8 |
| Data Culture | 3.8 |
| Data Use | 3.7 |
| Data Skills | 3.5 |
| Data Leadership | 3.4 |
| Data Analysis | 3.3 |
| Data Tools | 3.3 |

* Scores rated on a scale from 0 to 5.

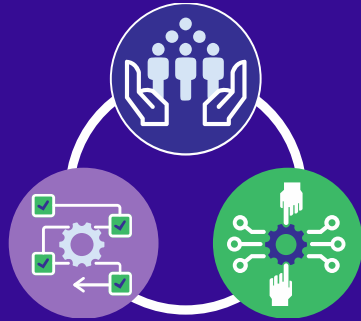
Our scores for these data maturity metrics were very similar to those of other councils. For example the high score for “Data Assets” shows that local authorities are commonly “data rich” with many and varied sets of administrative data collected in relation to the operation of council services. Whereas 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 one-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...

Data Strategy & Action Plan: 2024-2028

Strategic Themes



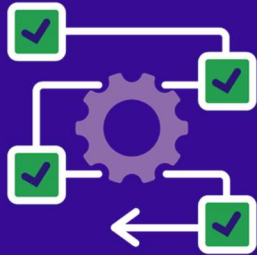
Items underlined in the following summary of strategic themes relate to the maturity metrics from the Data Maturity Assessment above:

| | | | |
|-------------------|---|--|---|
| People | Empowering our workforce with data literacy and <u>skills</u> . ➤ <i>Making available suitable learning pathways for all council staff.</i> | Defining data roles and responsibilities. ➤ <i>Providing data <u>leadership</u> and nominated data owners in each service.</i> | Embedding a strong data <u>culture</u> . ➤ <i>Encouraging innovation through a one-council approach.</i> |
| Processes | Supporting service transformation. ➤ <i>Providing clear insight and understanding of service demand and citizens' needs.</i> | Embedding good data governance. ➤ <i>Ensuring data quality, standards, security, ethics and compliance are maintained at all times.</i> | Supporting workflow and process automation. ➤ <i>Reducing unnecessary effort, data duplication and manual data handling.</i> |
| | Shifting from reactive to predictive service delivery. ➤ <i>Through trend monitoring, forecasting & other proactive <u>analysis</u>.</i> | Maximising council performance and resource prioritisation. ➤ <i>Improving collation and distribution of performance and benchmarking data.</i> | Broadening open data sharing. ➤ <i>Making more datasets available on the council website.</i> |
| Technology | Developing the data platform and associated data architecture. ➤ <i>Making shared resources and data <u>assets</u> available to services for more effective <u>data use</u>.</i> | Enabling adoption of PowerBI, AI and other data <u>tools</u> . ➤ <i>Creation and use of more powerful reports and processes to support operational and strategic decision making.</i> | Factoring data features into line of business systems. ➤ <i>Working with council services and Procurement to ensure new systems have rich data capabilities.</i> |

The “Action Plan by Theme” section below aligns with the strategic themes above and outlines specific, achievable activities for the five year period 2024-2028 to advance our data maturity. These activities will be coordinated within the council’s data programme...

Data Strategy & Action Plan: 2024-2028

The Data Programme



The council's data programme is the combination of groups and resources which together will drive forward the council's strategic objectives for data. The key elements of the data programme are summarised below.

The Data Advisory Group (DAG)

Created in March 2022 and chaired by the Head of Customer and Support Services, Jane Fowler, the DAG includes representatives from across council services and works with the Executive Leadership Team to define the data requirements for strategic, data-driven, decision making. The DAG will have a crucial role to play in delivery of the data strategy action plan deliverables below and so is referred to in many of the specific activities.

The Data Technical Group (DTG)

Including more data-facing representatives from across council services, the DTG scopes and translates the DAG's data requirements into technical specifications for deliverable data products, including PowerBI reports and dashboards. In practice there will be multiple short-life working groups within the DTG focussed on addressing specific requirements, sometimes across multiple services. Crucially there will always be representation in the DTG sub-groups from the services who expect to gain value from the new data product being implemented so as to bring their service-specific subject matter expertise to the solution. The Legal and Regulatory team will also be involved, especially on products where there's any use of personally identifiable information. In some cases there may also be involvement from external third-parties who can bring a valued technical perspective, such as the Improvement Service, Public Health Scotland, etc.

The Data Product Roadmap

The roadmap represents the pipeline of data products with delivery dates scheduled through continuous negotiation between the DAG and DTG. Together they will agree on priority setting and securing the resources required to support the development of specific data products, e.g. where costs may be incurred with system suppliers for essential data feature development, etc. In this context data products will include not only PowerBI reports and dashboards, but also solutions for process workflow and automation where the DAG has reviewed challenge solution proposals from the nominating service(s).

Microsoft PowerBI

One of the products in the Microsoft 365 (M365) productivity suite, PowerBI includes some familiar aspects of Microsoft Excel but with much greater capacity to combine and visualise data from multiple sources. Since the council has a long-term plan for the adoption and utilisation of M365 it is expected that PowerBI will form a key component of the strategy's one-council approach to data. However if during the lifetime of this strategy

Data Strategy & Action Plan: 2024-2028

Microsoft's commitment to PowerBI changes then there are other similar 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 along-side the DTG 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 DTG 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.

Data Strategy & Action Plan: 2024-2028

| Action Plan by Theme | | | |
|--|--|---|--|
| People | Empowering our workforce with DATA LITERACY & SKILLS | | |
| <p>What success will look like:</p> <ul style="list-style-type: none"> ➤ <i>Everyone in the organisation will have confidence in their ability to: <ul style="list-style-type: none"> ▪ <i>Understand the importance and relevance of the data they help to collect and rely on for their work.</i> ▪ <i>Suggest new ways in which data can be harnessed to improve service delivery and business outcomes.</i> ▪ <i>Apply critical thinking to data presented in reports and analysis so as to validate conclusions and recommendations in them.</i> </i> ➤ <i>Everyone will have access to skills development resources and learning opportunities to progress through pathways designed to be relevant to how they use data.</i> ➤ <i>Decisions taken at every level of the organisation will be informed by critical thinking applied to relevant, timely, reliable data.</i> | | | |
| WHAT | WHY | WHO | BY 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, HROD | April 2024 |
| Pilot adoption of some or all of the data skills development resources emerging from the Scottish Government’s public sector Data Transformation Framework programme through the work being conducted between Perth & Kinross Council, the Scottish Digital Academy (SDA) and others. | A shared need to develop and embed workforce data skills emerged as a common theme from the local authorities who, like us, completed data maturity assessments. The SDA are piloting a persona-based data skills curriculum which, having learning pathways tailored to local government, could have tangible benefits for the whole council. | Scottish Government’s Data Transformation Framework, SDA, Data Programme, HROD | December 2024 |
| The Data Advisory Group (DAG) will provide a route through which council services can raise challenges arising around data skills so that suitable measures to address them can be considered. The Data Programme will provide an annual report summarising these emerging requirements to HROD. | A crucial role of the DAG is to act as a one-council forum for data. By services discussing skills requirements and challenges at the DAG, common themes will emerge which HROD can take as inputs for planning the skills development programme. | Data Advisory Group, Data Programme, HROD | April 2024 April 2025 April 2026 April 2027 April 2028 |
| Repeat the Data Maturity Assessment from the Scottish Government’s Data Transformation Framework, after some of the above measures have been implemented. | To measure progress in the data maturity skills journey against the 2022 baseline and identify the next stages of development required. | Data Programme, Data Advisory Group | Dec 2025 |

Data Strategy & Action Plan: 2024-2028

| People | Defining DATA ROLES & RESPONSIBILITIES | | |
|--|---|--|--|
| <p>What success will look like:</p> <ul style="list-style-type: none"> ➤ Everyone will understand the importance of data to their work, to the council’s operations, and to positive outcomes for our citizens. ➤ Everyone will understand their own personal role(s) and responsibilities for data, ranging from ensuring accuracy at point of collection, to data owners’ authorisation of re-use of data in a safe and compliant manner. ➤ Processes and procedures agreed and adopted for the compliant and ethical use and management of data will be clearly understood and consistently adhered to across the organisation. | | | |
| WHAT | WHY | WHO | BY WHEN |
| Members of the Data Advisory Group (DAG) will be provided with an updated Terms of Reference for the group. | Members of the DAG play an important role in reviewing, assessing and prioritising data challenge proposals from services. | Data Programme | March 2024 |
| A new Terms of Reference for the Data Technical Group (DTG) will be produced and shared with participants in the sub-groups. This will have a particular focus on the important role staff involved in DTG sub-groups play in ensuring appropriate data governance (see related “Processes” theme). | DTG sub-groups are short-life working groups established to develop specific data products. Some members are fixed (Legal & Regulatory) while others will engage only as and when required, so a clear understanding of roles is especially important for these sub-groups. | Data Programme Information Management Steering Group | March 2024 |
| The Argyll and Bute Manager programme will be updated to promote data and evidence-driven behaviours. | Manager’s behaviours around data will be important in ensuring the positive impact of data on service delivery and outcomes. | HROD, Data Programme, Data Advisory Group | December 2024 |
| Continued engagement with the Scottish Government’s public sector Data Transformation Framework programme for guidance on good practice when defining roles and responsibilities relevant to the Scottish public sector and local government in particular. The Data Programme will provide an annual report to the DAG summarising the material emerging from the framework with recommendations for action/adoption. | From the local authorities who, like us, have conducted data maturity assessments a shared need emerged for everyone to understand their roles and responsibilities in relation to data. In absence of such understanding staff may sometimes assume data quality, security, compliance, etc., are someone else’s responsibility. | Scottish Government’s Data Transformation Framework, Data Programme, Data Advisory Group | April 2024 April 2025 April 2026 April 2027 April 2028 |
| The council’s Data Catalogue will be instituted and will include the services’ nominated data owners for each line-of-business system. | These service data owners will be involved via the DTG sub-groups when their systems are deemed relevant to a specific data product. | Data Programme | March 2024 |

Data Strategy & Action Plan: 2024-2028

| People | Embedding a strong DATA CULTURE | | |
|--|---|--|---|
| <p>What success will look like:</p> <ul style="list-style-type: none"> ➤ 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 access to the council's data resources, including PowerBI and the data platform. Anyone with an interest in using these tools for their service's priorities will be encouraged to participate in a DTG sub-group where the sub-group has been tasked with the evaluation and delivery of a data product from the DAG's roadmap relating to their service. | Services don't rely on others to build Excel spreadsheets for them, and the aim is for services to become similarly self-sufficient with PowerBI. As well as involving skills development this self-sufficiency will require hands-on experience. The DTG sub-groups will share opportunities to gain this experience while also allowing staff to contribute their personal expertise. | Data Technical Group Data Programme All Services | All services having had at least two representatives on data product DTG sub-groups: December 2025 |
| The Data Culture will be extended beyond the council with officers encouraged to engage with relevant external partners. DAG will have at least two presentations per year by external partners with data expertise to share. | Ideas for impactful innovation can come from many sources, including through ideas exchange with external parties on concepts which have been shown to have worked elsewhere. | Data Advisory Group All Services | December 2024 December 2025 December 2026 December 2027 December 2028 |

Data Strategy & Action Plan: 2024-2028

| Processes | Supporting SERVICE TRANSFORMATION | | |
|--|---|---|--|
| <p>What success will look like:</p> <ul style="list-style-type: none"> ➤ <i>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.</i> ➤ <i>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.</i> ➤ <i>Analysis of actual service usage data will allow us to recognise and address common pressure points which present persistent challenges for effective service delivery.</i> ➤ <i>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.</i> ➤ <i>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 decisions to support optimised service design and delivery.</i> | | | |
| WHAT | WHY | WHO | BY WHEN |
| The Data Advisory Group (DAG) will encourage engagement from any service contemplating service transformation or other specific business process change exercise. | The DAG will support services to increase the likelihood of successful service transformation, but the drive for change must come from the services themselves. With clearly outlined objectives from the service the DAG and data programme can then engage with the service to bring data skills and resources to bear. | Data Advisory Group Data Programme All Services | Ongoing |
| The Data Programme will work with HROD to establish and maintain a reference archive of case studies where council services have conducted service transformation exercises, detailing how data was used as a key ingredient for success in the transformation. | Common themes often emerge from service transformation exercises: stakeholder engagement, risk mitigation, cost/benefit projections, etc. | Data Programme HROD | August 2024 |
| The Data Programme will provide an annual report to the DAG summarising service transformations which concluded in the preceding year where data provided a critical ingredient for the planning and/or successful delivery of the transformation. | By sharing learning from past successes, and challenges, each new transformation exercise builds on the strengths of those before. | Data Advisory Group Data Programme All Services | April 2024 April 2025 April 2026 April 2027 April 2028 |

Data Strategy & Action Plan: 2024-2028

| Processes | Embedding good DATA GOVERNANCE | | |
|---|--|--|--|
| <p>What success will look like:</p> <ul style="list-style-type: none"> ➤ <i>Data quality, reliability and overall decision-making will be improved with less risk of decisions being taken based on a false representation/understanding of the situation on the ground.</i> ➤ <i>We will have greater confidence in the council’s legal and regulatory compliance through a better understanding of how data is being stored and used.</i> ➤ <i>Everyone will have a clearer understanding of how decisions are taken to use, re-use and share data, both internally and with partners. This will lead to more opportunities being taken to share and re-use data, with protocols in place to do so in a secure and compliant manner.</i> ➤ <i>Agreed processes and procedures for the storage and handling of data will be adhered to, including a robust and consistent approach to data standards and the ethical use of data.</i> | | | |
| WHAT | WHY | WHO | BY WHEN |
| The Data Advisory Group will be represented on the council’s new Information Management Steering Group (IMSG). Although the IMSG has no governance role over the DAG, both groups have a common interest in good data governance, and so the DAG may sometimes escalate issues arising with data to the IMSG. | Decisions made by the Data Advisory Group and the Information Management Steering Group will be mutually impactful in the context of data storage, processing and handling and as such will be taken in concert with each other to achieve optimal outcomes for the council. | Data Advisory Group, IM Steering Group, Data Programme | February 2024 |
| The design and implementation of data products approved by the Data Advisory Group will be subject to robust data governance review by the Data Technical Group, with representation and expertise from the Legal & Regulatory team where necessary. | While the focus of the DAG will be on using data to meet the strategic objectives of the council, the DTG sub-groups will have clearer sight on the specific data sources required to build the products and so better able to scope the data governance implications of (re)using the data. | Data Technical Group Legal & Regulatory | Ongoing |
| Where the DTG discovers development of a data product approved by the DAG would be blocked, delayed, or constrained by data quality or reliability issues, these issues will be escalated to the DAG for review. The DAG may in turn escalate them for the attention of the IMSG. The DAG will receive an annual report of issues escalated to the IMSG with a summary of their current status. | In many cases issues with a dataset will have been encountered before and be known to the service. By raising such issues with the IM Steering Group a decision can be taken on whether devoting resources to fix/resolve the issue is justified, or it’s more prudent to defer a solution and absorb the opportunity cost to the council of not being able to fully utilise the data. | Data Advisory Group, IM Steering Group, Data Programme | April 2024 April 2025 April 2026 April 2027 April 2028 |

Data Strategy & Action Plan: 2024-2028

| Processes | Supporting WORKFLOW & PROCESS AUTOMATION | | |
|--|--|---|---|
| <p>What success will look like:</p> <ul style="list-style-type: none"> ➤ <i>Increased employee satisfaction as task automation will allow reallocation of staff time away from repetitive data input, collation of routine returns, etc., to other more interesting and rewarding activities.</i> ➤ <i>Business processes which are automated will see reduced incidence of errors and increased efficiency. This will include robust design and testing to ensure errors don't become "baked in" to automated processes from the outset.</i> ➤ <i>Increased productivity, where staff able to leverage automated workflow tools will find they can process a larger number of cases/activities in the same amount of time.</i> ➤ <i>For service users, their experience of an automated workflow will often be faster and more consistent.</i> | | | |
| WHAT | WHY | WHO | BY WHEN |
| Services will be encouraged to bring to the Data Advisory Group (DAG) use-case proposals where the service has identified opportunities for workflow and process automation. | Services will know where existing processes are highly repetitive and/or labour intensive. By bringing use-cases to the DAG forum there can be discussion amongst the DAG's service and technology specialists of possible solutions. | Data Advisory Group All Services | On-going |
| Potential use-cases for implementing workflow and process automation can be treated as special cases of the data challenge proposals which the DAG reviews. A variation of the existing data challenge proposal submission process will be agreed and adopted. | As with potential PowerBI reports, the potential effort and impact of use-cases for workflow and process automation will vary. That said, the proposal process must reflect the considerations for DAG to evaluate are similar but different. | Data Advisory Group, Data Programme, ICT Apps Team, Digital Team | April 2024 |
| The Data Programme will establish and maintain a reference archive of case studies where council services have successfully implemented workflow and process automation projects, and how data was used as a key ingredient for success in each. | By sharing learning from services' successful implementations of workflow and process automation, each new implementation builds on the strengths of those which came before. | Data Programme | August 2024 |
| Services will be made aware of the broad and evolving toolkit to which the council has access for implementing workflow and process automation. DAG will receive at least two presentations per year on the opportunities offered by, and recent successes of, the workflow and process automation toolkit. | By increasing awareness of tools such as Microsoft PowerAutomate, Create-RPA (Robotic Process Automation) and similar tools which become available over the coming years, services will be better able to recognise opportunities for bringing use-cases to the DAG for consideration. | Data Advisory Group Data Programme | December 2024 December 2025 December 2026 December 2027 December 2028 |

Data Strategy & Action Plan: 2024-2028

| Processes | Shifting from reactive to PROACTIVE SERVICE DELIVERY | | |
|--|--|---|--|
| <p>What success will look like:</p> <ul style="list-style-type: none"> ➤ <i>More of the council's resources will be focussed on activities that have a proactive, pre-emptive rather than reactive, impact.</i> ➤ <i>A positive impact on council budgets will come from more focus on preventative maintenance and interventions rather than more costly, after-the-event, responses.</i> ➤ <i>Services will be offered to our citizens and communities closer to the time when they need them, rather than after an adverse event or crisis has already occurred.</i> ➤ <i>Greater customer satisfaction will stem from a more citizen-centric approach, with a larger proportion of customer interactions relating to requirements being met rather than missed.</i> | | | |
| WHAT | WHY | WHO | BY WHEN |
| Council services will be encouraged to identify situations in which the focus of some aspects of their service delivery can be shifted to a more proactive approach. These will be packaged for review by the Data Advisory Group as data challenge proposals for prioritisation and resourcing. | Services themselves best understand how resources are spent on service delivery, and where there are the best opportunities to shift focus to “upstream” activities to improve service delivery and outcomes. | All Services Data Advisory Group | On-going |
| Making more data available to council services about service demand and service delivery; data upon which predictions can be made both at a high level and where possible for specific service users. | A proactive approach to service delivery relies on being able to anticipate events, which in turn relies on trend analysis and recognising patterns in past events which may be repeating in real time, both at service level and in the needs and circumstances of individual service users. | Data Programme (See themes on the “data platform” and “data tools” below.) | On-going |
| Working with partners nationally (e.g. Improvement Service, PHS, other councils, academia, the private sector, etc.) to explore opportunities to adopt predictive models locally which have been proven to be impactful. The Data Programme will provide an annual report to the DAG summarising pro-active service delivery use-cases which concluded in the preceding year, acknowledging third-party involvement where relevant. | As a local authority we have limited resources but also face challenges which are shared by other councils. We will make more progress in transitioning from reactive to predictive service delivery if we seek opportunities to learn from the success of others and then share those successes internally. | Data Programme Data Advisory Group | April 2024 April 2025 April 2026 April 2027 April 2028 |

Data Strategy & Action Plan: 2024-2028

| Processes | Maximising council PERFORMANCE & RESOURCE PRIORITISATION | | |
|---|--|---|---------------|
| <p>What success will look like:</p> <ul style="list-style-type: none"> ➤ <i>We will be able to proactively use and scrutinise past performance data to improve future performance.</i> ➤ <i>We will be able to bring performance datasets together and enable linkages to be made across a range of factors affecting performance.</i> ➤ <i>We will be able to comply with Statutory Performance Information (SPI) Direction requirements.</i> ➤ <i>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.</i> ➤ <i>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.</i> | | | |
| WHAT | WHY | WHO | BY WHEN |
| Aligning with the Performance Excellence Project (PEP), identify new ways to provide performance data. There will be focus throughout on accuracy, consistency of template style, accessibility, and satisfying the requirements of the stakeholders who use the performance data. | PowerBI and the data platform will provide new, more effective, options for collating and distributing performance data. The PEP will define the “what” and “why” of performance reporting while the Data Programme will provide the technical support and infrastructure to help deliver on the PEP’s objectives. | Performance Excellence Project Data Programme | August 2024 |
| Transition from performance data collection via Excel spreadsheets to a more robust data collection framework based on data interoperability between the council’s line-of-business systems and the data platform. This may in turn lead to opportunities to increase the frequency of some performance reporting. | Once established, the data platform will be the optimum data source for PowerBI reports. Transitioning performance reports from Excel to the data platform collecting data directly from relevant line-of-business systems will reduce the burden of performance reporting and potentially increase the timeliness of reporting. | Performance Excellence Project Data Programme ICT Apps Team | December 2025 |
| Transition from current retrospective reporting against targets to more forward-looking actionable intelligence and analytics. | Reporting of past performance is useful up to a point, but to obtain actionable insight for bringing about change we need to be able to analyse patterns and trends so as to influence future performance. | Performance Excellence Project Data Programme | December 2025 |

Data Strategy & Action Plan: 2024-2028

| Processes | Broadening OPEN DATA Sharing | | |
|---|---|--|------------------------|
| <p>What success will look like:</p> <ul style="list-style-type: none"> ➤ <i>Members of the public and other interested parties will be able to access specific council open data and information via the council website.</i> ➤ <i>Time spent by council staff answering questions and responding to information requests will be reduced by channelling more of these enquiries to the open data published on the website.</i> ➤ <i>Open data and information on the council website will be published and updated with a high degree of accuracy and minimal administrative effort through largely automated data extraction and processing directly from line-of-business systems with robust data quality checks.</i> ➤ <i>Our published open data inventory will compare favourably to the breadth and currency of the open data offered by other Scottish local authorities of similar size.</i> | | | |
| WHAT | WHY | WHO | BY WHEN |
| Identify the types of data and information requests which are most frequent and/or which take the most staff effort to answer/fulfil. | A key benefit of publishing open data is to reduce the burden on council staff to respond to incoming information requests. | Data Advisory Group | March 2024 |
| Benchmark the open data published by other Scottish local authorities. | Learning from other councils who have derived benefit from publishing specific open data. | Data Programme | May 2024 |
| Create a prioritised list of the target additional open datasets to be published on the council website. Taking into account the relative ease/complexity of automating the data collection, approval process, etc. | Aiming to find the optimal balance between targeting datasets for which there will be a clear demand, while also relatively easy to publish in a fully or largely automated manner. | Data Advisory Group Data Programme | July 2024 |
| Proof of concept: leveraging the new Data Platform, publish one new open dataset on the council's website, to establish the robustness of the automated data collection, quality checks and approval process. | Aiming to establish a start-to-finish process for publishing the first open dataset which, if shown to be successful, can be repeated for subsequent target datasets. | ICT Apps team and the relevant Service (to which the data belongs) | September 2024 |
| Achieve 50% of the open datasets from the target list being published. Measuring public access and avoided manual staff effort to handle diverted enquiries. | A key milestone, although timing may shift if the target inventory of in-demand open datasets grows/changes over time. | ICT Apps team and relevant Services | April 2026 |
| Achieve 80% of the open datasets from the target list being published. Measuring public access and avoided manual staff effort to handle diverted enquiries. | The final 20% likely left to last because those have minimal benefit from publishing and/or would be the most difficult to automate. | ICT Apps team and relevant Services | April 2028 |
| Refresh the annual benchmarking exercise against open data published by other Scottish local authorities of a similar size. | So as to ensure maintenance of comparable status within that group of local authorities and provide equivalent value to our stakeholders. | Data Programme | Annually from May 2025 |

Data Strategy & Action Plan: 2024-2028

| Technology | Delivering the DATA PLATFORM & Related Architecture | | |
|--|--|---|---------------|
| <p>What success will look like:</p> <ul style="list-style-type: none"> ➤ <i>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.</i> ➤ <i>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 task of creating the PowerBI reports simpler.</i> ➤ <i>Staff will become less dependent on pulling data out of line-of-business systems into Excel for purpose of processing and manipulating data (e.g. for repetitive returns) as the data collation and processing will happen on a fully or largely automated basis within the data platform.</i> ➤ <i>Overall accuracy and reliability of the council's data will increase as quality control processes become embedded into the data platform workflows and will alert data owners when discrepancies in data are found automatically.</i> | | | |
| WHAT | WHY | WHO | BY WHEN |
| Designing and implementing the target data model (a logical structure for organising and finding data) to be embedded in the data platform. | This is a representation of the “things” within the council’s data (people, places, assets, etc.) and is essential for building data products. | Data Programme, ICT Apps | February 2024 |
| Designing and implementing the robust access/permissions model to be embedded in the data platform. | The data platform must simultaneously keep the council’s data secure while also making it easy for service staff to share and access. | IM Steering Group, ICT Apps | February 2024 |
| Designing and implementing the “data mart”, that is the part of the data platform which report builders in the services can see to pull data into their PowerBI reports. | The data platform cannot be entirely transparent, i.e. data owners in each service will choose how much or how little of their data to share via the data mart, and with whom. | Data Programme, ICT Apps | March 2024 |
| Linking the data platform to council line-of-business systems through a shared data architecture. This will be done on an as-needed basis as and when the DAG approves specific service data challenge proposals. | The aim is to have data arrive and update in the data platform with little or no manual effort. But the “pipes” through which data arrives must be implemented system-by-system. | Data Advisory Group, Data Technical Group, ICT Apps | March 2024 |
| Update of the business case for shifting the data platform from “on premise” to “cloud” hosting. There are features of Microsoft’s “data fabric” cloud products which are recognised as potentially useful, if the significant revenue costs can be justified. | Costs associated with Microsoft “data fabric” are significant and the cost/benefit business case was not proven in the September 2022 business case. Evidence to justify the shift will be reviewed and the business case updated. | Data Programme, ICT Apps | August 2025 |

Data Strategy & Action Plan: 2024-2028

| Technology | Enabling the adoption of POWERBI, AI and other data tools. | | |
|---|---|---|---|
| <p>What success will look like:</p> <ul style="list-style-type: none"> ➤ <i>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.</i> ➤ <i>Services will use data analysed and presented in PowerBI to better understand service demand and stress factors affecting service delivery.</i> ➤ <i>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.</i> ➤ <i>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.</i> ➤ <i>The council will maximise its use of Sharepoint Online to make compliance with retention and disposal policies more effective.</i> ➤ <i>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.</i> | | | |
| 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. | Data Programme | March 2024 |
| The Data Programme will present to the Data Advisory Group, at least twice per year, updates on potential uses of emerging technologies such as AI, Large-language Models, Microsoft Co-pilot, etc. | Opportunities for the council to use new data-driven technologies are constantly emerging but require critical, realistic evaluation and risk assessment and cost/benefit analysis. | Data Advisory Group Data Programme | December 2024 December 2025 December 2026 December 2027 December 2028 |

Data Strategy & Action Plan: 2024-2028

| Technology | Factoring DATA FEATURES into line-of-business systems | | |
|--|---|--|--|
| <p>What success will look like:</p> <ul style="list-style-type: none"> ➤ <i>While keeping our data secure, our systems will also make it easier, not harder, to harness our data to for reporting and analysis.</i> ➤ <i>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.</i> ➤ <i>Our systems will allow for recognised local government and statutory data standards to be applied consistently.</i> ➤ <i>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.</i> | | | |
| 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 data product, e.g. a PowerBI report, the success of the product will often depend on its ability to access data held in line-of-business systems. | Data Advisory Group Data Technical Group ICT | Ongoing |
| Create a standard set of procurement requirements for when systems are being implemented or replaced that reflect the organisation's need for rich data capabilities such as support for APIs (application programming interfaces), query/reporting tools for data extraction, and interoperability with the council's data platform. | Such standardised requirements will ensure: <ul style="list-style-type: none"> • our requirements for compliance with accepted local government and statutory data standards are met, • our requirements for interoperability and data extraction are met. | Data Programme ICT | June 2024 |
| Engage with system suppliers in their ongoing development of business applications to encourage richer data capabilities in their product roadmaps. Engagement will be directly through customer user groups as well as through national bodies such as SOCITM and Scotland Excel. The Data Programme will provide an annual report to the DAG summarising engagement with suppliers in the preceding year, with an indication of the outcome and/or current status of each. | Software suppliers operate in a competitive market. Since most of our expectations of their products are similar to those of other local authorities, collectively we have a better chance of getting fit-for-purpose systems if we press suppliers to continually improve their offerings. For example, requiring systems that support near realtime connections from PowerBI and/or the council's data platform, use of RPA (robotic process automation) agents, etc. | Data Programme ICT | April 2024 April 2025 April 2026 April 2027 April 2028 |



Bute • Helensburgh •Islay • Oban • Mull • Campbeltown • Iona • Dunoon • Tiree • Lochgilphead • Seil ...

#abplace2b