Guidance on analytical leadership: achieving better outcomes

This guide is for anyone (analysts or non-analysts) seeking to build a stronger, data-driven culture within their organisation by focusing on **six enablers of effective analytical leadership**. It draws on insights from the Office for Statistics Regulation's report, Analytical leadership: Achieving better outcomes for citizens to illustrate both **what** analytical leadership is and **how** to achieve it. It is relevant for people across different professions and at different levels of seniority.

The guide includes an analytical leadership check-in tool for reviewing how your organisation is doing against the six analytical leadership enablers below and a reflective log to record actions that you might take to strengthen your practice.

You can consider this from an individual perspective, as a team, or as an organisation, recording areas of specific strength, and where you think improvements to analytical leadership in your organisation may be needed.

Working professionally with data and analysis used as evidence

Analytical leadership is a professional approach to working with data, analysis, and statistics. It ensures that evidence is produced and used consistently, confidently, and competently.

Effective analytical leadership ensures the right data and analyses are available for informed, effective policy- and decision-making within government. It ensures that analysts are skilled and resourced to answer society's most important questions, and that analytical evidence is more routinely shared with the public.

Strong leadership also supports public confidence in how analytical evidence is produced and used by government, and in the government policies and decisions based on that evidence, with potential to narrow the confidence gap between those working inside and outside of government.

By applying the six enablers of analytical leadership alongside a commitment to ensuring Trustworthiness, Quality and Value – a 'Think TQV' approach – everyone in government can demonstrate analytical leadership when working with data, analysis or statistics used as evidence. TQV are the core principles of the Code of Practice for Statistics which provides a universal framework for statistical best practice.

The six enablers of analytical leadership

1. Foster an evidence-driven culture
2. Demonstrate transparency and integrity
3. Collaborate across organisations to add value
4. Embed structures to support evidence
5. Invest in analytical capacity and capability
6. Draw on analytical standards and expert functions

Understanding the enablers of analytical leadership

1. Foster an evidence-driven culture

Create an environment where analysis and evidence are valued, trusted, and used to inform decisions.

What:

Fostering an evidence-driven culture is essential for effective policymaking and sound operational decisions – both of which can lead to better outcomes for citizens. An evidence-based approach places the best available research and analysis at the heart of policy development and implementation, enabling well-informed decisions across policies, programmes, and projects.

Publishing more of the analytical evidence produced by government—openly, transparently, and accessibly—enhances accountability, supports evaluation, and drives improved outcomes. It also helps build public trust in an organisation's commitment to evidence-based decision-making and the appropriate use of data.

However, fostering this kind of culture begins with a fundamental recognition of the value (Value – V) that robust analytical evidence brings for understanding:

- how to operationally work smarter rather than harder
- which policy interventions work and those which do not
- how to support society's needs for information

Being able to draw conclusions from analytical evidence with confidence also requires the evidence to be:

- based on suitable data and methods (Quality – Q) produced and used in professional and orderly manner (Trustworthiness – T)

We identified four important aspects for **fostering an evidence-driven culture**:

i. Facilitate evidence-based policy and decisions

Advocating for evidence-based policy and decisions, and leading by example in doing so, helps others to see their benefits, as well as how they can effectively use evidence in their own contexts.

Analysts and non-analysts both have important roles and responsibilities (T) in supporting a strong, evidence-driven culture and making evidence publicly available to support society's information needs and public accountability (V), wherever possible.

ii. Have non-analysts create demand for analytical evidence

A strong evidence-driven culture needs non-analysts at all levels to actively seek out analysis and work collaboratively with analysts to inform new policy areas and key operational decisions (V) as part of a standard, professional way of working (T).

Very senior leaders have an important role here. If for every new initiative they ask: "how is it going to be measured?" (Q) or "what are our plans for publishing our findings?" (T) it becomes the norm to integrate data into all policy and decision-making.

iii. Have visible analytical leaders at the highest levels

A strong evidence-driven culture ensures that analysts have a seat at the right tables and have channels (T) to advocate their professional advice within government and to the public.

Representation of analysis at senior levels and in key, influential, decision-making conversations helps to embed expectations and demand for evidence and build a culture of evidence-based decision-making. Analysts should also be visible and have public channels to communicate clear, impartial insights (V) both within government and to the public.

iv. Champion outstanding analytical work

Everyone in government has a role in advocating for, promoting and championing strong analytical insights that can help answer key public and policy questions and improve the lives of citizens (V).

As well as sharing the benefits of these insights as knowledge across government and publishing them to inform wider society, demonstrating the value of analytical work supports the case for resourcing future analytical projects (T).

How:

Our work identified a range of case studies that help demonstrate how to **foster an evidence driven culture**. Some of the essential skills and behaviours illustrated through these examples include:

- **Making evidence visible and accessible:** Use clear, timely outputs and share findings openly, including uncertainties.
- **Strategic thinking**: Align evidence with organisational priorities and identify gaps that matter.
- **Leading by example**: Senior leaders and analysts should visibly advocate for evidence use to shape culture and decision making.
- **Collaboration across boundaries:** Work effectively with non-analysts, including operational, policy and communications teams, and external partners**.**

- **Embedding evidence in decision-making structures**: Create expert panels and schedule regular evidence reviews.
- **Empowering champions beyond analysts**: Equip non-analysts to promote evidence in their domains and the value of evidence in decision-making.
- **Recognising and rewarding impact**: Celebrate examples where evidence influenced outcomes.

2. Demonstrate transparency and integrity

Ensure openness in how analysis is conducted and used, building public trust and accountability.

What:

Demonstrating transparency and analytical integrity builds public trust and confidence in how analytical evidence is produced and used across government, and crucially, in the policies and wider decisions that are based on that evidence.

Three important aspects to **demonstrating transparency and integrity** are to**:**

i. Be transparent about the evidence used

Data transparency and integrity should be considered throughout the policy life cycle, with analytical work feeding into policy in a transparent way and clear separation between impartial analytical insights and policy decisions, political positions, and communications (T).

Everyone should be transparent (T) about what and how analytical evidence is used (V) in policy-making and other government decisions. Publishing analytical evidence that is used to inform policy decisions to support public accountability, and evaluation should happen whenever possible, and every time government analysis is used or quoted publicly (T). This should be done as part of viewing government analysis as an essential government asset, and a public asset when published (V) under the guidance of senior analysts (T).

ii. Lead through the effective communication of evidence

It is essential that analysts are capable (T) of communicating the key messages of their work, as well as relevant limitations, caveats, and uncertainty, to non-analysts.

Understanding the needs of the audience (V) is crucial to support the clear and accurate communication of key messages, as well as essential information on limitations and uncertainty.

iii. Challenge evidence misrepresentation and misuse

Everyone should demonstrate integrity by challenging the misuse or misinterpretation of analytical evidence where necessary (T), including by correcting the public record.

Ensuring the accurate use and representation of evidence requires involving the right professionals (T) in the preparation of data communications to prevent misuse in the first place but also challenging (T) and calling out misuse or misinterpretation and correcting inaccuracies in the public record, where necessary.

How:

Our work identified a range of case studies that help demonstrate how to **demonstrate transparency and integrity**. Some of the essential skills and behaviours illustrated through these examples include:

- **Embedding ethical and governance standards:** Use clear frameworks for research conduct and impartiality.
- **Following structured publication processes:** Release outputs in an orderly, consistent, and politically independent way.
- **Communicating clearly and accessibly:** Use plain language, visuals, and layered content to explain complexity.
- **Being open about uncertainty and limitations:** Share caveats honestly to maintain credibility and trust.
- **Actively correcting and challenging misinformation:** Respond quickly to errors and provide authoritative clarifications.

3. Collaborate across organisations to add value

Work across boundaries to share insights, align efforts, and solve complex problems together.

What:

The multidimensional nature of many of today's complex problems means that they now rarely fall neatly within fixed departmental boundaries. Working together across professional and organisational boundaries helps government to both identify the key analytical questions (V) that really matter for policy and for citizens and bring the available data and evidence together to help answer them.

Two important aspects to **collaborating across organisations to add value** are to**:**

i. Triangulate expertise from multiple professions

Bringing the insights and professional capabilities (T) of multiple professions together on a common question helps to ensure that key decisions made on these topics are based on a sound (Q) analytical evidence base.

ii. Add value with external expertise

There should be recognition of where and when drawing on external professional expertise (T) can add significant value, especially where collaborating might offer benefits such as innovative insights (V) and methods or external assurance (Q).

How:

Our work identified a range of case studies that help demonstrate how to **collaborate across organisations to add value**. Some of the essential skills and behaviours illustrated through these examples include:

- **Starting with shared purpose**: Agree on common goals and clarify roles early to align efforts.
- **Building trust and relationships**: Invest time in open communication and mutual respect to sustain collaboration.
- **Enabling rapid and secure information sharing:** Put in place clear data-sharing agreements and common standards.
- **Leveraging complementary expertise**: Bring in academics, specialists, and external networks for innovation and credibility.
- **Creating and sustaining networks**: Use cross-organisation communities and forums to share best practice and resources.

4. Embed structures to support evidence

Put in place governance, processes, and leadership that enable analysis to thrive and influence outcomes.

What:

How organisations are structured, in terms of delivery and governance, is key to enabling analytical leadership. It is important that departmental governance structures (T) have an analytical aspect built into them to embed the expectation and demand for evidence across an organisation and support a culture of decision-making based on sound evidence (Q).

Two important aspects of **embedding structures to support evidence** are to**:**

i. Integrate evidence into policy and decision-making

Analytical leadership is supported when established governance structures enable analytical professions contribute to policy and decision-making at senior levels. Effective structures are also required to facilitate the orderly publication of evidence (T) for public information needs.

ii. Establish structures that support cross-profession collaboration

Collaboration is facilitated when departments establish structures (T) that support different professionals to work effectively together and combine the most suitable analytical evidence and techniques (Q) to answer key questions and support effective decisions.

How:

Our work identified a range of case studies that help demonstrate how to **Embed structures to support evidence**. Some of the essential skills and behaviours illustrated through these examples, include:

- **Creating governance that prioritises evidence**: Formalise roles, responsibilities, and processes that embed evidence in decisions.
- **Building cross-profession leadership structures**: Bringing analysts, policy, and delivery leaders together for shared accountability.
- **Operationalising insights**: Develop processes that turn analysis into actionable steps.
- **Engaging stakeholders to identify evidence needs**: Use seminars, workshops, and forums to align priorities.
- **Combining expertise for robust advice**: Draw on internal teams, external specialists, and academic partners.

5. Invest in analytical capacity and capability

Build and sustain the skills and tools needed to deliver high-quality analysis.

What:

Strong analytical skills are increasingly seen as a significant organisational asset, and analytical awareness is becoming essential for a range of roles. Analytical capability is increasingly essential for everyone, not just those in analytical roles. Investment in the skills and infrastructure (T) needed to build analytical capability and resilience is necessary to realise the benefits (V) of an evidence-driven culture.

Three important aspects to **investing in analytical capacity and capability** are to**:**

i. Upskill analytical capability for all

Maximising opportunities for cross-profession learning can help enhance the skillsets (T) of everyone in government. This ensures that government is suitably skilled and resourced to answer the most pressing questions of today, and those of tomorrow, and facilitates innovation (V) by drawing on the most up-to-date approaches and techniques.

Analysts should also have access to wider analytical networks so that they are supported in their current roles as well as their longer-term careers (T), regardless of whether they work in a large department or a smaller Arm's Length Body (ALB).

Affiliation with professional networks is a critical mechanism that supports cross-government learning and access to development opportunities, such as those gained through job rotations, secondments, and swaps.

ii. Embrace new tools and skills to meet future evidence demand

Investing in new analytical systems and tools also helps to ensure that analytical conclusions on which decisions are based is sound (Q) and that analysts are enabled to respond to the key policy questions of the future (V).

It is key that analysts stay up to date with innovative technologies (V) and have the time to develop new skills (T). With growing recognition of the opportunities afforded by new methods, (Q) such as data science, data linkage and the use of artificial intelligence, more investment is needed to ensure government can reap the benefits and safeguard (T) against the risks. Senior leaders have an important role to play here, prioritising and championing (T) innovation and investment in new methods and tools.

iii. Pool resources to improve analytical capability

To answer a pressing analytical question (V), the necessary analytical resources and expertise need to be in the right place, at the right time. However, this is not always the case. Effective analytical leadership can therefore require sharing, pooling and redistribution of experience, skills, and resources (T) beyond established organisational silos to ensure that the required analytical evidence is timely, relevant, and robust (Q).

How:

Our work identified a range of case studies that help demonstrate how to **Invest in analytical capacity and capability**. Some of the essential skills and behaviours illustrated through these examples, include:

- **Prioritising workforce development:** Deliver structured training and leadership programmes to build data literacy.

- **Securing senior sponsorship**: Engage leaders to champion and resource analytical capability.
- **Modernising analytical practices:** Make reproducibility and automation the default for efficiency and quality.
- **Investing in data and tools:** Use linked datasets and innovative technologies to enhance insight generation.
- **Sharing capability across boundaries:** Enable local decision-making and cross-organisation collaboration through resource and data sharing.

6. Draw on analytical standards and expert functions

Use established frameworks and expert advice to ensure consistency, quality, and ethical use of data.

What:

It is important that there are clear standards (T) for analysis in government and that analysts have the access to the guidance that they need. Accessing the right guidance requires drawing on advice, expertise, and resources, both within departments and beyond.

Two important aspects of **draw on analytical standards and expert functions** are**:**

i. Follow and promote professional standards

Having clear guidance helps to ensure that analytical approaches, standards, and techniques follow professional best practice (Q), wherever possible, and comply with established legal and ethical standards (T).

Clear standards also help to ensure efficiency and analytical coherence by drawing on established sources, definitions, and approaches to communicating strengths, limitations, and uncertainty (Q), rather than reinventing the wheel.

A variety of established professional standards (T) set out expectations for undertaking methodologically sound, robust, and assured (Q) analysis across government.

ii. Draw on UK expert functions

The UK has a range of analytical expert and advice functions that support the suitable (Q) and responsible (T) production of analysis across government. They are open to providing support to anyone in government undertaking analytical work both in terms of collaborative projects and bespoke analytical advice.

Crucially, there are opportunities to build links between different professions around shared values, standards, and priorities for analysis, and by drawing on UK expert functions.

How:

Our work presented a range of case studies to demonstrate a selection of established UK **analytical standards and expert functions.** These include:

Analytical Standards:

- The Analysis Functional Standard: sets expectations for the planning and undertaking of analysis across government to support well-informed decision making; to deliver better outcomes and improve the lives of citizens.
- The Code of Practice for Statistics: Sets the standards that producers of official statistics should commit to, to support public confidence in how statistics are produced and used.
- The Aqua Book: provides guidance on producing quality analysis for government.
- The Magenta Book: Provides guidance on what to consider when designing an evaluation.
- The Green Book: Provides guidance on how to appraise and evaluate policies, projects and programmes.

Expert Functions:

- The Centre for Applied Data Ethics: Provides practical support and thought leadership in the application of data ethics by the research and statistical community.
- No 10. Evidence House: Aims to radically upskill civil servants in data science, software development and AI while delivering innovative solutions to crowdsourced problems.
- The ONS Data Science Campus: a Centre of Excellence with the purpose of applying data science, and building data skills, for the public good across the UK and internationally.
- The Government Data Quality Framework: sets out five principles which act as a guide to help create a strong data quality culture.
- The Regulatory Policy Commission: Provides expert advice on the quality of evidence and analysis used to inform government regulatory proposals.

Analytical leadership check-in tool and reflective log

You can complete the analytical leadership check-in tool below to see how you and or your organisation are doing against the six analytical leadership enablers. You can consider this from an individual perspective, as a team, or as an organisation.

Use the reflective log at the end of each section to record identified areas of strength, where improvements may be needed, and any actions you might take to strengthen your practice for each enabler.

Consider the essential skills and behaviours presented in the **How** sections for each enabler in the guide and where they might provide a helpful focus for strengthening analytical leadership within your organisation.

Enabler	Analytical leadership indicator by TQV	Frequency of practice				
1. Foster an evidence-driven culture		Always	Often	Occasionally	Rarely	Never
i. Do you facilitate evidence-based policy and decisions?	Does your organisation recognise the value that sound analytical evidence offers for effective decision making? (V) Do you integrate data into all policy and decision making in your organisation? (T) Do you consistently use the best available evidence based on suitable data and methods, to inform policies, programmes, and projects? (Q) Do analysts and non-analysts both have roles and responsibilities for supporting a strong, evidence driven culture? (T)					
ii. Are non-analysts able to create demand for analytical evidence?	Are analytical insights sought and considered early in the policy development process? (V) Do non-analysts actively seek out analysis to inform policy and key operational decisions? (V) Is this supported as part of a standard, professional way of working? (T) Do your very senior leaders always check new initiatives and ask how they will they be evaluated or measured? (Q) Is the current use of analytical evidence for decision making serving to further to embed expectations and demand for evidence? (V)					
iii. Are analytical leaders visible at the highest levels?	Are your analysts visible at all levels within your organisation? (V) Do analysts have a seat at the right tables and channels to easily advocate their professional advice effectively, both through the right channels within the organisation and to the public? (T)					

iv. Do you champion outstanding analytical work?	Is knowledge shared across your organisation and publicly, to highlight the value of analytical work and support resource cases for future projects? (T) Is everyone enabled to champion the importance of strong analytical insights that can help answer key public and policy questions? (V)					
Reflect on your responses for the previous section. Consider and record here what actions you or your organisation might do to increase the likelihood that you '**Always**' ***foster an evidence-driven culture***.	Strengths: Improvements needed: Actions:					
2. Demonstrate transparency and analytical integrity		Always	Often	Occasionally	Rarely	Never
i. Are you transparent about the evidence used?	Do you make analytical evidence publicly available wherever possible, to support society's information needs and public accountability? (V) Are your analytical outputs published with clear insights of what they do and do not show? (V/Q) Are you transparent about how analytical work feeds into policy? (T) Is there clear separation between analytical insights and policy decisions, political positions, and communications? (T)					
ii. Are you able to lead through the effective communication of evidence?	Are analysts suitably skilled to communicate the key messages of their work to non-analysts, including on relevant limitations, caveats, and uncertainty? (T) Do analysts understand the needs of their audiences, to support clear, accurate and appropriate communication of key messages, an including information on limitations and uncertainty? (V/Q)					
iii. Are you able to challenge evidence misrepresentation and misuse?	Do you challenge the misuse or misinterpretation of your analytical outputs, and seek corrections to the public record for inaccuracies wherever necessary? (T)					

Reflect on your responses for the previous section. Consider and record here what actions you or your organisation might do to increase the likelihood that you '**Always**' ***demonstrate transparency and analytical integrity***	Strengths: Improvements needed: Actions:					
3. Collaborate across organisations to add value		Always	Often	Occasionally	Rarely	Never
i. Do you triangulate expertise from multiple professions?	Are you able to bring together experts and insight across the organisation to better understand 'needs' in terms of the question or issue that needs to be addressed using analytical evidence? (V) Do you draw on expertise from other professions to ensure that the relative strengths of each approach or data source are understood and they are appropriate for their uses? (Q) Do you undertake cross-profession learning to enhance wider skillsets and support innovation? (T/V)					
ii. Do you add value with external expertise?	Do you recognise when drawing on external professional expertise can add significant value? (T) Is your organisation able to draw on external expertise to enhance insights, innovate methods or obtain external assurance? (V/Q)					

Reflect on your responses for the previous section. Consider and record here what actions you or your organisation might do to increase the likelihood that you '**Always**' ***collaborate across organisations to add value***	Strengths: Improvements needed: Actions:					
4. Embed structures to support evidence		Always	Often	Occasionally	Rarely	Never
i. Do you integrate evidence into policy and decision-making?	Does your organisational governance allow analytical evidence to flow easily between distinct roles or professions? (T) Does the governance support a culture of decision-making based on sound evidence? (Q) Is the right analytical evidence available to inform decision makers at the right levels when it is needed? (V) Do you have effective structures to facilitate the orderly publication of evidence for public information needs and accountability? (T)					
ii. Have you established structures that support cross-profession collaboration?	Are you structured, in terms of governance and delivery, in ways that combine suitable analytical evidence and techniques from across multiple professions, to effectively answer key questions and inform decisions? (T/Q)					

Reflect on your responses for the previous section. Consider and record here what actions you or your organisation might do to increase the likelihood that you '**Always**' ***embed structures to support evidence***	Strengths: Improvements needed: Actions:					
5. Invest in analytical capacity and capability		Always	Often	Occasionally	Rarely	Never
i. How do you upskill analytical capability for all?	Do you maximise opportunities for cross-profession learning to enhance the skills of all staff? (T) Do you invest in the skills and infrastructure needed to build analytical capability and resilience? (T) Are you realising the benefits of an evidence driven culture, both within your organisation, and by supporting capability in partner or smaller bodies that are part of your broader analytical evidence ecosystem? (V)					
ii. Have you embraced new tools and skills to meet future evidence demand?	Do your analysts have the time to develop new skills in innovative technologies or techniques, or have opportunities to do so, for example, through training, job rotations, secondments or swaps? (V/T) Is sufficient investment made in systems that will support an evidence-driven culture tomorrow, so that the analytical evidence on which future decisions will be based is sound, and you safeguard against the risks? (Q) Are senior leaders prioritising and championing innovation and investment in new methods and analytical tools to answer the key policy questions of the future? (T/V)					
iii. Do you pool resources to improve analytical capability?	Are you and your partners benefitting from any sharing, pooling or redistribution of experience, skills, and resources beyond established organisational silos? (T) Are pooled resources helping to ensure that the required analytical evidence is timely, relevant, and robust? (Q) Are you able to use pooled resources to answer or support others to answer, the most pressing analytical question of the day? (V)					

Reflect on your responses for the previous section. Consider and record here what actions you or your organisation might do to increase the likelihood that you '**Always**' ***invest in analytical capacity and capability***	Strengths: Improvements needed: Actions:					
6. Draw on analytical standards and expert functions		Always	Often	Occasionally	Rarely	Never
i. Do you follow and promote professional standards?	Do you follow established professional standards for undertaking methodologically sound, robust, and assured analysis across you organisation? (T/Q) Do you have clear standards to ensure, for example, organisational consistency and coherence by drawing on established sources, definitions, and approaches, or on communicating strengths, limitations, and uncertainty (Q) Are analysts trained and/or given access to the core guidance and standards that they need in these areas? (T/Q)					
ii. Do you draw on UK expert functions?	Do you ever seek (or provide) external analytical advice and support from analytical experts or advice functions from relevant bodies, including across government and the devolved administrations? (Q)	`				
Reflect on your responses for the previous section. Consider and record here what actions you or your organisation might do to increase the likelihood that you '**Always**' ***draw on analytical standards and expert functions***	Strengths: Improvements needed: Actions:					

For more information about analytical leadership read OSR's report, Analytical leadership: Achieving better outcomes for citizens. A range of case studies are provided in the report to help illustrate best practice for each of the six enablers.