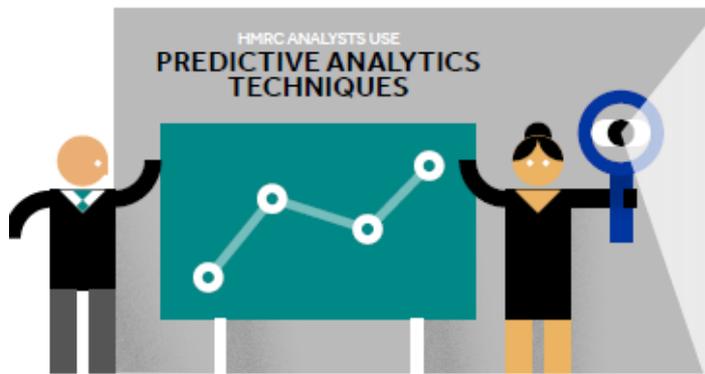
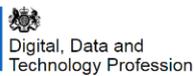
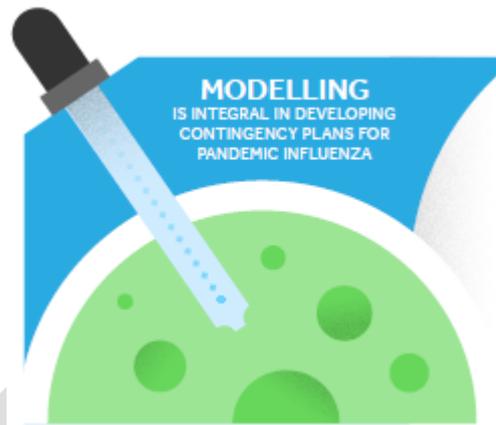


Analysis Function Strategy



A WIDE RANGE OF
ECONOMIC INDICATORS
PRODUCED BY ONS IS VITAL TO BOTH
HM TREASURY AND BANK OF ENGLAND



Government
Economic
Service



Government
Actuary's
Department



Analysis Function Strategy

Foreword

1. The ambition of the Analysis Function is supported and recognised by the most senior Civil Servants in government.

“... data can be used for many innovative purposes, from planning transport systems to predicting outbreaks of sickness. It really has changed people's lives for the better.” Sir Jeremy Heywood, April 2016

“Data can truly be a catalyst for a society, an economy, a country that works for everyone.” John Manzoni, Feb 2017

Mission

2. The Analysis Function mission is:
 - a. Better Analysis, Better Delivery for the UK

The value added by the Analysis Function

3. The best analysis, research and evidence enables effective user needs identification and policy design. At the same time it makes informed decision making and efficient service delivery possible. So the integration of analytical techniques and scientific methods into the business of government helps achieve the desired outcomes of decision makers and the public.
4. The scale of data available about our society continues to grow at the same time as technological changes are providing greater opportunities for analysis¹. For decision makers in government to benefit from the rewards this presents, they have to understand what is possible and have ready access to the skills. The Analysis Function is the community which can provide best practice and professional analysis standards to meet these needs. It will do this by making it easier for policy, finance and human resources to identify best practice analysis and use Analysis Function services.



¹ “Analysis” is shorthand for a wide range of specialist tools and techniques that each of the professions apply to inform decisions and improve the delivery of public services. The aim of “analysis” is to improve decision making, whether it is based on administrative data, scientific methods or mathematical modelling.

- The Analysis Function uses evidence and data to advise government on the best use of public resources. The outcomes from where this is done successfully are shown in Diagram 1. As specialists within the Function, professional actuaries, economists, engineers, operational researchers, scientists, social researchers, statisticians as well as data scientists all support these outcomes. However, all professions need core analytical skills and have a responsibility to use analysis to make their work as successful as possible.

Diagram 1: Outcomes from Integrating Analysis into Government Business



- More information is available to people from all professional backgrounds than ever before. The desire to seize the opportunities presented by analysis (and avoid pitfalls) means it is necessary for analytical skills to extend beyond traditional professional boundaries. By operating as a Function professional analysts will act as the catalyst for other professions contributing to analytical insight. This will be built on multi-disciplinary partnerships and developing capability in a similar way to the work started with the Policy profession.
- An expanding opportunity for analysis to have an impact is set against a backdrop of insufficient recruitment to meet the existing demand in most analyst professions. By seeking greater collaboration on career and learning initiatives the analytical community can provide an offer that is greater than the sum of its parts to its members and to other Functions.

Analysis Function Vision and Objectives

Analysis Function Vision

Analytical evidence and research helps make better decisions to deliver improved outcomes for the UK.

8. Across the Function professionals use specialist tools and techniques to gather qualitative and quantitative research, evidence and data to help make better decisions in policy, operations or deliver value for money. The goal being improved outcomes for the public.

Diagram 2: Analysis Function Vision and Objectives

Vision

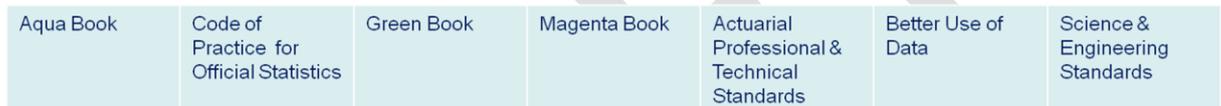
Analytical evidence and research helps make better decisions to deliver improved outcomes for the UK.

Strategy

To integrate the use of analysis, evidence and research into all policy, finance and operational decisions.



Analysis Function Standards



Skills Objectives

- | | | | |
|--|--|--|--|
| 1. The Learning and Development programme builds capability across the Function and within allied Functions and professions. | 2. Engage partner Functions to increase the integration of analysis and radically improve Civil Service capability in Analysis and Data Science. | 3. Strengthen the Function's management models and career framework to support multi-disciplinary teams and build analytical specialist as well as leadership roles. | 4. To develop a supply of talent which delivers the Civil Service Leadership and Diversity objectives. |
|--|--|--|--|

9. The vision is supported by the strategic aim to integrate analysis into all facets of government. This is a common goal which the analytical professions have always held. The difference now is that the proliferation of data has expanded the scale of the task and means analysis can have a greater impact than ever before. To ensure that is the case and analysis delivers improved outcomes requires a Functional approach, with professionals coming together to pool knowledge, skills and techniques.
10. By drawing together the shared standards and skills of analytical professions the value of the Functional approach becomes apparent. Collectively building capability within other Functions for all of the analytical guidance and standards makes things easier for partners. Working collaboratively also supports analysts reach their highest potential as they develop an understanding of all analytical best practice.
11. Embedding analytical best practice and standards across government requires linking up across four skills objectives². These provide a framework to test when the Functional

² All Functions are partners and customers of the Analysis Function Strategy. Initially up skilling others in analysis will focus on the understanding and use of analysis by policy, finance and operational professionals. The second objective requires a closer working with Digital, Data and Technology and Finance colleagues. The fourth objective takes account of the wider [Civil Service Leadership](#) agenda.

approach is best and when it is important to retain an individual profession approach.

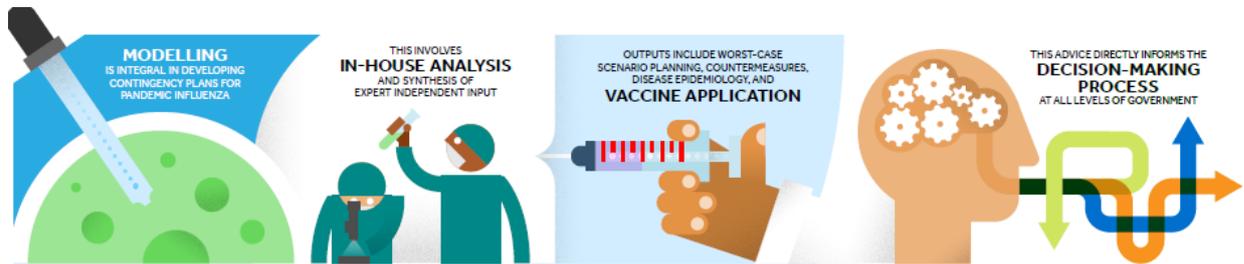
12. The Function has four skills objectives which drive the application of standards across government:
 - a. A Learning and Development programme which builds capability across the Function and within allied Functions and professions;
 - b. To engage partner Functions to increase the integration of analysis and radically improve Civil Service capability in Analysis and Data Science;
 - c. To strengthen the Function's management models and career framework to support multi-disciplinary teams while building analytical specialist as well as leadership roles;
 - d. To develop a supply of talent which delivers the Civil Service Leadership and Diversity objectives.
13. By up skilling others, having a unified approach for embedding standards, strengthening attraction and broadening its diversity the Analysis Function will have a greater positive impact on the government services.

Analysis Function Standards

14. By leading on behalf of government and the analytical professions the Analysis Function can set a unified approach to creating and embedding analytical standards across all professions and Functions in government. In doing this the Analysis Function will not only achieve its vision but help mitigate the risks from analysis which does not follow its standards. To achieve this the Function will need to make it easier for decision makers to know whether analysis meets the necessary standards.
15. The Analytical professions have standards and guidance for good analysis captured by:
 - a. The Green Book on Appraisal and Evaluation in Central Government -Provides best practice guidance on how to plan and analyse proposals for government interventions in advance of decisions to proceed, a process known as appraisal.
 - b. The Magenta Book - Provides detailed guidance on the design and methods used in the conduct of evaluations.
 - c. The Aqua Book - Provides guidance on quality assurance for analysis and modelling in government.
 - d. The Code of Practice for Official Statistics – Sets out the necessary principles and practices to produce statistics that are trustworthy, high quality and of public value.
 - e. The Government Transformation Strategy: Better Use of Data
 - f. Actuarial: Technical and professional actuarial standards
 - g. Science & Engineering: Professional Chartership & Accreditation

Pressure on public spending remains while the demand for sound evidence grows. Government analysts focus on the allocation and spatial distribution of limited resources to achieve the best possible economic, environmental and social outcomes. The standards, tools and approaches they use help identify the benefits, drawbacks, risks and linkages of various policy or spending options.

16. By creating and setting standards the Analysis Function will make up skilling partners more straight forward and make it easier for them to identify analysis on which they can confidently use to take decisions.

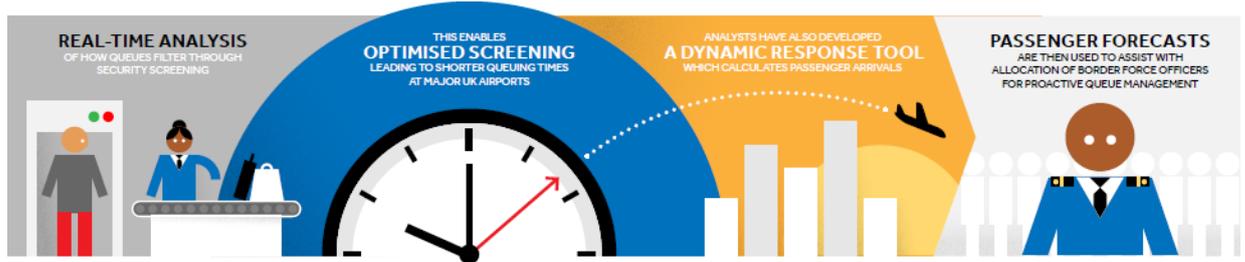


The Analysis Function at its best

17. The Analysis Function will achieve these objectives by growing as a high performing, vibrant and resilient community.
18. The Function will be high performing because:
- It will be influential at all levels of government.
 - It will be helpful because of the benefit its products bring partners, customers and citizens.
 - It will be authoritative because of its recognised professional skills and track record of success.
19. The Function will be vibrant because:
- Its career paths will attract and retain high numbers of people from diverse backgrounds.
 - It is a dynamic and agile learning community sharing best practice across professions to help people reach their potential and develop talent.
 - Its inclusivity will welcome varied expertise in analytical disciplines and skills.
20. The Function will be resilient because:
- It will deliver under pressure, horizon scan to identify future analytical needs and adapt at pace to move with changes in government.
 - It will have a diverse talent pipeline reflecting society.
 - The community will be supportive so its members are confident in advertising the value they add across government and externally.

How the Function works across government

21. Lots of analysts work in multi-disciplinary teams. This can be a formal structure within a department or an analytical network across departments. In each case it helps develop skills across professional boundaries as well as bringing together all the skills policy or operational partners need. However, sometimes it is appropriate for specialist skills to be concentrated in particular teams to provide necessary expertise. For example actuaries operate a consultancy model with their customers. The Analysis Function model will embed best practice for both approaches. It will also set an expectation for leaders to act as a single conduit to access analytical skills across all professions, whether they are in multi-disciplinary or expert teams. At the same time it brings together the standards for best use of data, research and evidence so they can be shared across government.



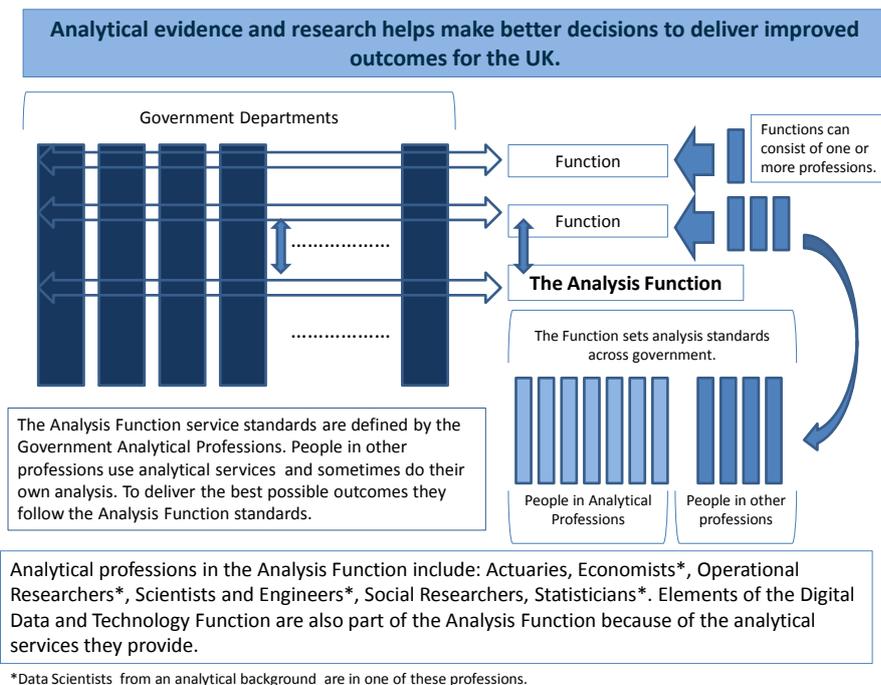
22. Analysts have common skills which support other Functions including data analysis, data science, problem structuring, informing decisions about resource allocation, policy challenge, horizon scanning, and evaluating the implementation and impact of policy initiatives. However, the individual professions remain important to specialist roles within government. Diagram 3 demonstrates this by recognising individual professions contribution to the Analysis Function cross cutting responsibility across government departments. Even as the Function matures the networks and governance of individual professions will continue to be essential to achieving the each of the Functional objectives.

23. The individual brands of each profession are important to attracting people who want to become scientists, engineers or actuaries in government. Importantly, this does not prevent a more joined up approach within government on the objectives set out in this strategy. Rather it shows that to achieve those objectives the Function will have specific goals on standards, skills, capability, talent, careers and diversity where having a unified approach works best. For example, each profession has similar capability requirements from the Fast Stream programme to develop future leaders who communicate complex concepts and results in way that has the greatest impact. This means analytical professions have individual pathways but to achieve our collective aim to have the greatest impact with our partners and allied professionals it makes sense to unite.

24. Analysis is growing in importance across government as access to data increases for all professions. This means that Policy, Finance and other partners need to have core analytical skills as well as be able to identify when they need to involve analytical professionals. The Function's Learning and Development Framework will have a specific strand addressing this need. This reflects its importance in setting the analytical standards for analytical and non-analytical professionals alike. The contribution non-analytical professionals make to analysis in government is shown in Diagram 3 by the coming together underneath the Analysis Function as well as the arrows cross-cutting department boundaries.



Diagram 3: The Analysis Function in Government



25. By operating as a Function, the Analytical Professions and other professions benefit from each other's specialist skills and capability building programmes. The strategic direction of the Functional model in government needs a strong Analysis Function to support its up skilling and leadership objectives. Diagram 4 shows how the leaders of the analytical professions form the Analysis Function Leadership Group and link to the wider Civil Service. It also shows how individually the analytical professions collectively advise the senior leadership via their own Boards and Heads of Profession.

26. Each of the leaders of the analytical professions across government is a member of the Analysis Function Board alongside a member from Digital, Data and Technology and the Civil Service Chief People Officer, Rupert McNeil. It is chaired by the Head of the Analysis Function, John Pullinger. The board sets the strategic objectives and priorities for the analytical professions and provides the link to other Heads of Function. The main programme of work for the Function is focused around skills and capability. To recognise this, the leaders of the Function are supported by the Analysis Talent Board which sets the agenda for the respective professional leadership communities on learning, development, a career framework and diversity. The Departmental Directors of Analysis Board provides the cross departmental focus for implementation of the Analysis Function Board's strategy.

To drive forward individual professional needs and ensure the wider strategic objectives fit with each professional community's programme the Profession's Boards feed both the Function and Talent Boards.



Diagram 4: Analysis Function Governance

