Putting analysis and assessment at the heart of government

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Introduction

Recent events including the Covid pandemic and the war in Ukraine have highlighted the complexity and uncertainty confronting government decision makers. During the Covid pandemic decisions that critically affected the lives of most people in the country were determined by the ability of the government – in particular the centre of government – to gather, synthesise and assess data. The availability and quality of information, and how that information was brought together and assessed – on rates of infection, hospital capacity and testing, among others – all shaped the way decisions were made on a day-to-day basis.

It is not only during crises that good analysis and assessment is vital. Many of the biggest challenges are complex and cross-cutting and require effective coordination and synthesis of information from across government and outside it. The transition to net zero and adapting to the impacts of climate change, for example, require rapid action across government. Decisions depend on accurate information and effective assessments about how technology, the economy and our climate are changing and the most effective mitigation and adaptation actions. This is also a moment of wider technological change, opening up the chance to innovate with new approaches – advances in AI could present new opportunities for using data to support decision making, for example – but also a need for effective standard-setting and safeguards.

This paper sets out the developments made in data analysis and assessment at the centre over the last few years, the gaps that remain, and proposes an indicative model for filling some of those gaps. It draws on research interviews and two roundtable discussions.

Throughout the paper the terms analysis and assessment will be used separately to indicate distinct functions. By analysis, we mean analysis of the underlying data that allows us to understand an issue; by assessment, taking a view of several pieces of analysis or information, synthesising them, and setting out the spectrum of evidence and possibilities and a conclusion on the balance of probabilities around the likely outcomes or significance. Importantly 'assessment' does not mean finding consensus overall, but consensus on a spectrum of possibilities and the probabilities attached to them. As one attendee at a roundtable put it: analysis is the 'what' and assessment is the 'so what'.

This is an Institute for Government paper, which is the result of collaboration between the Institute and the Heywood fellowship at the Blavatnik School of Government. The Heywood fellowship report, published in January 2024, looked at how policy making should change in a context where economic and security interests are increasingly intertwined, while an accompanying paper examined attempts in 20th century Britain to improve policy making at the intersection of economics and security.¹²

This paper has been written alongside the Institute for Government's Commission on the Centre of Government, which has looked at why No.10, the Cabinet Office and the Treasury do not always work as well as they should and what could be done to improve the UK centre of government. The Commission recommends that the centre must become more strategic and better able to set direction and hold the rest of government accountable for delivery. One of the proposals is that the Cabinet Office and No.10 should be restructured into a Department of the Prime Minister and Cabinet and a separate Department for the Civil Service. The recommendations in this paper are reflected in the IfG Commission's final report.

There have been real improvements in analysis at the centre of government

The government has made significant progress on improving the use of data and analysis at the centre over the last few years. The Covid pandemic catalysed several positive experiments and new capabilities were developed rapidly and organically to meet specific needs in the context of a national emergency. The Cabinet Office built a substantial analytical capability in the Covid-19 Taskforce by the later stages of the pandemic, placing data and analysis at the centre of policy formulation and decision making. A data science function (10DS) was established in No.10 to provide direct support on the prime minister's personal priorities. And the National Situation Centre (SitCen) was established to provide better data and analysis for crisis response, which we heard had improved the response to recent crises.

Elements of the Covid Taskforce were subsequently repurposed as the Joint Data and Analysis Centre (JDAC), a team of roughly 100 people with an annual budget of around £10 million. SitCen is part of JDAC and receives its operational direction from the National Security Secretariat. So far it has acquired data for two-thirds of National Security Risk Assessment risks and mapped around 600 crisis-related datasets on its interactive crisis data mapping and management tool.

JDAC teams produce analysis on key areas of interest for the government, working closely with the Analysis Hub in the Office for National Statistics. JDAC has teams devoted to foresight and 'futures thinking' (an area of work that it leads across Whitehall alongside the Government Office for Science), international comparative analysis (an area on which it works closely with the Foreign Office) data science (where it works closely with the Data Science Campus in the Office for National Statistics) and contributes to resilience planning on understanding chronic risks and strategic vulnerabilities.

10DS is a narrower function, with a closer relationship to the prime minister. It has around 25 staff members, recruited via rigorous technical testing, and focuses predominantly on creating engaging dashboards to help decision makers to understand the implications of different policy outcomes. Data scientists are assigned to policy areas – health, social policy and education, for instance – integrated with their respective colleagues in the prime minister's policy and delivery units and connected to relevant departmental teams. They largely work on high-impact decisions particularly of interest to the prime minister. This team has also created the No.10 Innovation Fellowship Programme, the new Incubator for AI and 'Evidence House' aiming to improve the skills of civil servants. There have also been wider improvements to the data infrastructure of the government. Last year, the Central Digital and Data Office, which leads the Government Digital and Data function and sits in the Cabinet Office, published a roadmap for the digital data future that set specific targets to improve the quality of data, encourage more sharing of data between departments and build the skills of senior civil servants in digital and data essentials.³

When it comes to national security, it has been the case for almost 80 years that the Joint Intelligence Committee (JIC), which includes relevant policy departments and the intelligence community, provides assessment to the prime minister and National Security Council on the most critical strategic issues of defence, security and geopolitics. The JIC secretariat sits in the Cabinet Office and is supported by analysts in the Joint Intelligence Organisation (JIO) and across the wider assessment community (e.g. FCDO Research Analysts, Treasury and BoE analysts, the Joint Terrorist Assessment Centre and many more).⁴

Each of these initiatives were designed to solve a specific problem at a specific time. The organic growth of capability at the centre has brought significant improvements but now is the moment to step back and assess existing capabilities and remaining gaps in the round.

Gaps remain in analysis and assessment capability

Analysis across government could be better convened and coordinated

JDAC has improved analysis capability at the centre of government but there is more work to be done to bring analysts together and coordinate their work across government, as well as in changing the culture around the use of data and information in policy and decision making.

The centre of government should not unnecessarily duplicate analysis done in departments. But, as JIO and JDAC when working successfully already do, it should have a role in coordinating and convening analysis teams to leverage the range of information and expertise across government more effectively. At the start of the pandemic Cabinet Office and No.10 struggled to get necessary data quickly in part because it was unclear where data and analysis were held. SitCen has improved this when it comes to emergency response in particular, but more could be done to improve the coordination of economic and domestic analysis.

Coordination is also important when it comes to complex, cross-cutting issues where no one department is clearly responsible for providing analysis and supporting decision making. Many of the chronic problems facing the UK cut across departmental boundaries and Whitehall is poorly set up to deal with them, with expertise siloed in different departments and limited incentives for cross-departmental cooperation. Attempts to establish effective cross-departmental teams have proved difficult and the centre struggles to coordinate and drive progress on cross-cutting policy areas. Although attempts are being made to improve this, capabilities across government could be much better joined up than they are currently.

As shown by the Heywood fellowship report,⁵ the interface of economic and security issues is particularly acute. There are entrenched institutional and cultural divides between national security and economic and domestic policy making, despite the desire within the system to work collaboratively.⁶ While the National Security Council was established in 2010 to improve co-ordination across the policy making system, and has many staff dedicated to issues of economic security, it rests on the JIC and JIO for its assessment capability, which does not have the same depth of expertise in economic matters as it does in defence and intelligence. JDAC, which sits in the Economic and Domestic Secretariat in the Cabinet Office, is more integrated into the domestic policy making machinery than national security. There are practical concerns around secrecy and information sharing when it comes to national security issues, but a lack of integration has hindered good decision making.

The centre should champion a collaborative approach, encouraging analysis teams across departments to be aware of each other's work and to collaborate on cross-cutting issues. Too many cross-cutting and chronic problems are not being addressed and decisions are too often made without consideration of the best analysis available from within and outside government. This does not mean centralising all analysis in the Cabinet Office or Number 10 but it does require better capacity to coordinate, synthesise and draw together expertise from across departments.

A change in the culture around analysis and policy making is also needed. High-quality analysis should be central to decision making, which requires a change of approach from policy and decision makers. Policy makers and analysts should work together from the start in multi-disciplinary teams and decision makers should be clear that they expect policies to come with high-quality data and analysis as standard. Canada, for example, has integrated a results annex into cabinet memorandums to set out evidence to support proposed policies. To get the best quality policy decisions the centre of government in the UK should lead on setting a new culture around the value of analysis and its role in policy and decision making.

Domestic and economic policy suffers from an assessment gap

When it comes to national security the Joint Intelligence Committee has played a longstanding role in source assessment, including co-ordinating inputs from the various intelligence services to agree the best understanding of the available evidence. Conclusions are then shared with ministers to help inform their decisions. But there is no comparable function for domestic, social and economic policy.

A recent IfG report found that during the pandemic, the Cabinet Office did not have effective structures for drawing together evidence from different departments and presenting ministers with a common understanding of the analysis. Instead, departments – including the Treasury – shared analysis strategically to support their particular point of view. This was, of course, an ineffective way to make decisions.⁷

The situation was improved by the establishment of an analytical team in the Covid Taskforce, which brought together analysts from different departments and helped to ensure a 'more comprehensive, balanced and consistent set of, and interpretation of, evidence' feeding into decision makers. However the standing central analytical function in the Cabinet Office should still be strengthened further, with greater capacity to synthesise evidence on domestic policy issues to ensure that ministers are working from a common understanding of the evidence.⁸

This gap has been demonstrated on a wide range of issues including levelling up, supply chains, and the transition to net zero. There needs to be more clarity about who is responsible for gathering the relevant data inputs, conducting the analysis, producing high-quality assessments and directly supporting decision making on these complex cross-cutting issues.

More needs to be done to enforce sharing of data and analysis

Better data and information-sharing across departments is crucial to joined-up decision making. Immigration forecasts, for example, are vital for planning workforce interventions and service provision as well as housing policy, among other things. Similarly, spatial data on predicted electricity demand from heat pumps and electric vehicles is key to planning the energy system and ensuring the grid is able to cope as the UK transitions to net zero.

An important function of the JIC is that it has the authority to ensure that departments submit their analysis. Concerns from departmental information officers about the privacy and legal implications of data sharing are legitimate, and incentivised by the current legislative framework, but we heard that this is at times hampering attempts to improve data sharing and linkages.

Safeguards are important, but where it benefits the public for them to work together, government departments should as far as possible be one team with one set of information.

There is no clear route for assessment to inform domestic and economic decisions

Comparison with the intelligence architecture illustrates the gaps in how assessment is brought into decision making for domestic policy. Key elements of the JIO and JIC model that work well are the JIO's independence, the clear route into decision making for the JIC's assessments through NSC meetings and the seat at the table guaranteed for the JIC chair. JIC conclusions set out an authoritative, cross-departmental position (not necessarily consensual – disagreements are also presented) on the assessment groundwork for key issues, setting up ministers to take decisions based on shared parameters.

JDAC does not have the independence of the JIO, which was strengthened after the Butler and Chilcot inquiries into the Iraq war, and it does not serve a specific committee, like the JIC. Cabinet committees on domestic and economic matters do not provide the same function as the NSC, with decisions often effectively taken outside the formal meeting, and organised at short notice. This is unlike the regular rhythm of NSC meetings, making it much more difficult on a practical level to provide high-quality assessments for consideration. And when domestic committees take place JDAC does not have a guaranteed seat at the table. So when the centre does synthesise information and analysis effectively on domestic and economic issues there is no clearly defined route to get those assessments into decision making.

Further growth in analytical and technological capability is needed

Technological advances like AI have the potential to change how governments use data to make decisions, particularly in areas where information is plentiful, contradictory and confusing. And even more basic improvements in data and analysis practices have the potential to bring major time and efficiency savings. The civil service has made real advances in its capability in these areas – the Incubator for AI programme, led by 10DS, for example, has a remit to champion the role of AI across government. It was launched in November 2023 with a yearly budget of £5 million, earmarked to rise to £110 million, offering salaries closer to industry norms than is usual for the public sector. But a step change in capability is needed to get the maximum possible benefit.

Government struggles to attract analysts and specialists in technologies like AI. The idiosyncrasy of government recruitment processes compared to the private sector is one issue. As noted above, pay is another problem and is always going to be hard to solve –

government is unlikely ever to be willing to compete fully on pay with multinational tech companies. Working in a multinational tech company does not offer the same opportunities to shape the biggest decisions a country is facing. But analysts are too often distanced from those big decisions in UK government, so it is hard to attract and retain those who would consider a career in public service. By changing that, and making analysis more central to decision making, the government can make a stronger offer to talent and increase its capability in these areas.

The case for a joint analysis and assessment centre (JAAC)

Although there have been significant improvements in analysis capabilities, structures and processes in the centre of government since 2020 in particular, more could still be done to improve the use of analysis and assessment in decision making. Present arrangements developed organically; now is a good opportunity to harness the current momentum and think more strategically about what is required. This section outlines one potential model for how a new unit could be built out as an evolution of JDAC and 10DS to capitalise on the progress so far and fill some of the remaining gaps.

A new unit would allow a systematic approach to capabilities and functions

Recent developments, particularly JDAC, have significantly improved data and analysis at the centre of government. Any new analysis function should be built out of JDAC, as well as 10DS, to ensure that it retains the capabilities that have been developed and the progress made.

However, one of the issues with the current set up is that capacity and functions have developed organically not through a systematic process. Creating a new unit would allow the government to start from which capabilities and functions are needed and how they should link into decision making. Another problem in the past has been the prestige and authority of analysis within the centre – a new unit would also provide an opportunity to raise the profile and authority of analysis and assessment in the centre of government and reaffirm the central role it should have in decision making.

A new joint analysis and assessment centre should have a clear focus and aims

To make sure analysis and assessment at the centre is most closely focused on the gaps that need to be filled and the areas where the centre adds most value a new unit should have a clear set of aims:

• To provide high-quality, authoritative assessment on a small number of high-priority, large, complex, cross-cutting policy areas. It should be responsible for providing a single, authoritative view on the range of evidence and spectrum of likely probabilities to the prime minister and cabinet on these issues, taking into account evidence and analysis from the relevant departments.

- To convene, coordinate, and synthesise data and information from across and outside government, encouraging data sharing. It should explicitly not undertake any data collection or analysis that is done in departments. Where new data or analysis is necessary, it should commission the relevant department.
- To act as an advocate for analysis in decision making across government, including identifying areas where capability or capacity should be improved and innovating with new techniques and technologies.

Assessments should be tightly focused on cross-cutting issues to prevent duplication

As outlined above there is a gap when it comes to high-quality, authoritative assessments of information for economic and domestic policy and in particular cross-cutting issues. There can be a tendency for central units to unhelpfully duplicate work already being done in departments. To fill this assessment gap while avoiding unnecessary duplication, a new unit should focus its synthesis and assessment on priority cross-cutting and complex issues, falling into four categories:

- 1. **Chronic policy issues that cross domains**. Recent examples include economic security, migration, early years education.
- 2. **Big systemic policy challenges**. Recent examples include energy security and the energy transition, levelling up and Covid.
- 3. **Major policy issues** that are single domain in theory, but in practice have a wider system impact due to their size, cost, or impact. Recent examples include HS2 and energy price support.
- 4. **Acute situations** that require analytical capability and support. Recent examples include the war in Ukraine and energy price crisis.

On these issues the unit could take the lead on coordinating analysis across departments and drawing that together to ensure decision makers are operating with a common set of information and that insights from across government are incorporated. While overall the government function should be able to integrate across all policy areas, including international and security as well as domestic and economic, that does not necessarily imply a shared structure with the JIO.

The JAAC would be responsible for gathering relevant analysis from departments, the ONS, and other external data sources on an issue. It would identify key questions, scrutinise analysis, identify gaps and test assumptions. Where necessary it would commission further analysis. The outcome would be an assessment of the balance of evidence and range of probabilities in a given area.

On almost all issues the office would not conduct analysis of its own, instead focusing on coordinating analysis from across government (and beyond), including to inform its assessment function. In priority areas where there is no relevant departmental owner, the unit could be responsible for conducting its own analysis, which would be tested with the relevant departments with an interest in the issue.

It should work on only a small number of projects at a time, with almost all of those (except in exceptional cases) being time-limited, to ensure that it is coordinating, synthesising and drawing together expertise from across departments, rather than building up duplicate bodies of expertise in the centre.

Assessment should directly inform decision making at the centre

There also needs to be a clear route for assessments to feed into decision making. This is not currently the case, making it difficult to ensure that analysis and assessment are playing a core role in decision making.

The unit should work on priorities that directly inform decisions on key issues. Priorities could be commissioned directly by the prime minister or the cabinet secretary to ensure that work is tightly targeted and will be most useful.

It should also have a formal link to a cabinet committee focused on domestic and economic issues with a regular forward look on key cross-cutting issues. This would give a clear route into the decision making process, ensuring that assessments can be prepared on reasonable timescales for at least some issues, and are regularly considered as decisions are being made.

The governance of the unit could be to a small board or committee with a senior chair, similar to the JIC chair, who can provide the assessments to the prime minister and senior ministers and the cabinet committee.

The JAAC should drive a step change in government capabilities and coordination

However, as discussed, a further step change is needed, as well as ensuring that improvements are consistently spread across departments. A new analysis and assessment unit could help to facilitate this by acting as an advocate for the use of analysis in decision making, as well as identifying areas where capability or capacity could be improved. In providing a coordinating function it could facilitate and encourage data sharing as well as setting standards to provide consistency across analysis teams. It should also provide a central space for experimentation, showing the value of new techniques and technologies and demonstrating best practice. It should promote innovation in analytical techniques, including drawing on advances in AI.

Finally, it could build on JDAC's current work on foresights, taking overall responsibility for the futures and scenarios work that is currently spread across government, in particular GO-Science. It could decide relevant futures scenarios and issues on which to work and coordinate across government. Where appropriate, this could support meetings of ministers or permanent secretaries to discuss policy responses. It could also involve horizon scanning for key risks and issues.

As part of this focus on innovation the unit should consider a different resourcing model, with an expectation that relevant expertise from across Whitehall is seconded in on specific issues, rather than retaining standing capacity. Teams should be multi-disciplinary and include a range of different capabilities. This would increase flexibility, improve the diversity of perspectives feeding into decision making and reduce the risk of duplication as well as providing an opportunity to innovate with and demonstrate new ways of working.

Conclusion

The Covid pandemic highlighted major issues with data sharing, analysis, and assessment to inform decision making at the centre of government. Although real progress has been made in improving these capabilities, this has been through an organic process in the context of national crises. Gaps remain, particularly when it comes to providing an authoritative assessment of the evidence on cross-cutting and complex issues.

The core resource allocated for analysis and assessment at the centre of government in the UK currently is generally sufficient. But that capacity could be more effectively plugged into decision making structures, as well as more tightly focused on cross-cutting and complex issues and providing authoritative assessments that synthesise analysis from across and outside government. The model above outlines one possible approach that could be taken.

With increasing uncertainty globally, more complex and cross-cutting chronic policy problems that require better coordination from the centre, and the acceleration of technologies like AI, now is the moment to build on the progress that has been made and further improve analysis and assessment at the centre of government.

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