

NTT DATA

Civil Service Data Survey 2021



Executive Summary

The government's new National Data Strategy promises "major and radical changes" in its use of data – setting out plans to promote those changes by introducing new tools, levers and organisations at the centre of government. To better understand civil servants' perspectives on the data agenda, NTT DATA commissioned a survey asking their views on the opportunities and barriers around data use; the progress made by their departments to date; and how leaders should act to hasten progress, both at the departmental level and across government.

The survey ran for five weeks to 20 November 2020, gathering responses from 346 civil servants – nearly half of them in the Senior Civil Service (SCS) and Grades 6-7 (G6-7). As well as the 'whole group' data, we have analysed the responses of eight sub-groups: SCS, G6-7 and 'other grades' staff; HMRC and DWP employees; and members of the Project Delivery, Operational Delivery and Policy professions. Only a tiny proportion of respondents worked in the centre of government (meaning Number 10, the Cabinet Office and HM Treasury) or in the Digital, Data and Technology profession (DDAT). So our findings broadly represent the views of non-digital staff working in the 'line' departments.

Survey Findings

How important is this agenda?

Civil servants overwhelmingly recognise the need to make better use of data: some 63% believe that doing so is 'absolutely essential' to improving public services and staff tools, while a further 30% say that it's 'very important'. SCS are still more enthusiastic, with some 75% saying it's 'absolutely essential'.

How do you want to improve data use in tools, services and decision-making?

Asked to name the fields in which they're most keen to make better use of data, civil servants put evidence-based policymaking at the top of the list – with 65% of respondents including it among their top three priorities. Second is targeting services at the points of greatest need. Third, providing a single point of access to multiple, interlinked services. And fourth, assessing the impact of public spending and service delivery.

How advanced is your employer's use of data?

Most civil service bodies seem to be making fair progress on developing the policies and systems to make better use of data: about 40% of those expressing a view said their employers have already created many of the required capabilities, and a further 25% that they're implementing improvement plans. But the results highlight a long tail of organisations that have apparently made little progress, while many officials are hazy on the policy framework – with half unable to say whether their employer has a published data strategy.

How can civil service organisations hasten progress on data?

Here, the most popular answer was: 'Strong and visible leadership on data, supported by an active data strategy' – closely followed by introducing data standards, establishing a data management framework, and investing in the DDAT workforce. Most groups broadly agreed on this list of priorities, though Project Delivery professionals asked for business planning, spending approval and programme management systems to be rebuilt around the needs of digital technologies – putting this option at the top of their list.

How should the centre of government promote better use of data?

Civil servants overwhelmingly backed action by the centre of government to promote better use of data, showing strong support for almost all of the actions and policies named in our survey. These included key planks of the Data Strategy – include the launch of a central data-sharing platform and the introduction of mandatory data standards – as well as other options, such as legislative changes and investing in DDAT staff training. Asked whether the centre of government should win additional powers to promote compliance with data policies, respondents backed the idea by three to one.

In general, junior staff and those working in Operational Delivery or Project Delivery were the most supportive of stronger central action; SCS and Policy professionals were the most sceptical. But across the board, the picture is one of robust demand for strong central leadership on the civil service's use of data.

Key messages

Civil servants clearly recognise the importance and value of making better use of data, and many of their goals align with those of the government's Data Strategy. Data maturity varies across government – with many organisations in the early stages of developing their data strategies – and there is strong support for action by the centre of government to drive progress, for example by introducing mandatory data standards and creating a data-sharing platform.

Staff are clearly concerned about their organisations' DDAT capabilities – calling for investment, training and salary flexibilities to strengthen the specialist workforce – but the Data Strategy appears to be pushing at an open door: civil servants both understand the agenda's importance, and broadly support the government's proposals to enhance central direction and leadership. On the civil service's use of data, the greatest challenge now facing government is that of delivering on its stated goals.



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Introduction

Welcome to our 2021 Civil Service Data Survey!

The survey, which gathered nearly 350 civil servants' views on how government bodies can improve their use of data, was carried out as part of our work to understand your goals and interests in this important, fast-moving field.

The findings are hugely valuable for us at NTT DATA, helping us to hone our services and capabilities around government's needs. We believe that civil servants are the real experts on the challenges you face and how they're best addressed, and see our role as supporting you to achieve your goals.

We hope that publishing the findings from our data survey will be helpful to our colleagues in the civil service, contributing to the evidence base on how leaders can best build departments' data capabilities and implement the government's National Data Strategy.

The information we have gathered on how you want to make use of data, for example, could help public bodies ensure that new tools meet civil servants' needs. And the findings on how you believe the centre of government should act – which puncture stereotypical views about departments' resistance to central direction – will be of keen interest to all those involved in

developing and delivering the Strategy. Ultimately, we hope that this report will help support all the work underway to improve the way that data is used across the civil service, improving outcomes for its people and citizens.

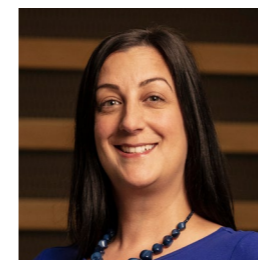
It is worth briefly noting the very high proportion of responses from senior officials, whose readiness to participate in the survey both demonstrated the importance of this agenda to leaders and managers, and generated sufficient data for us to segment the findings – indicating how views differ across the civil service grades. We also had enough responses from three professions and two departments to cut the data along these axes, adding a further level of granularity to our findings.

Touching on the headline findings, we were particularly interested to see both the widespread support for key elements of the Data Strategy, and your interest in seeing the centre of government win new powers to promote the agenda. And it's worth noting here that only 4.9% of respondents worked in the Digital, Data and Technology (DDAT) profession, and 2.9% in the Cabinet Office or HM Treasury – these are the views of civil servants out in the line departments, not those charged with driving progress from the

centre.

Finally, thank you very much to all of you who participated in the survey. The few minutes you spent answering our questions have not only raised awareness of civil servants' views, but helped support hard-pressed NHS charities: we have donated £5 to NHS Charities Together for each response, totalling £1730.

We do hope you find the report interesting, and would love to hear your views. Please get in touch to tell us what you think!



Vicki Chauhan

Head of Public Sector
NTT DATA UK

vicki.chauhan@nttdata.com



The 2021 Civil Service Data Survey

A new context for government data

“There is massive untapped potential in the way the government uses data,” says the government’s new [National Data Strategy](#) – promising to “implement major and radical changes in the way the government uses data”. This goal, it explains, is about “improving the delivery of public services, as well as our ability to measure the impact of policies and programmes, and to ensure resources are used effectively”.

The strategy goes on to outline the obstacles hampering civil servants’ ability to make better use of data, and to set out the government’s plans for hastening progress. These include the creation of an ‘Integrated Data Platform’ to link up datasets; the use of central directions and spend controls to drive adoption of new data standards; the appointment of a Chief Data Officer; a requirement that Single Departmental Plans cover data management; and training to boost data skills among senior leaders and the wider workforce.

The scale of the government’s ambitions – and its readiness to drive progress from the centre – are reminiscent of the period when, a decade ago, Cabinet Office minister Francis Maude created the Government Digital Service (GDS).

Using central levers to prod departments out of the IT era and into the world of truly digital technologies, GDS helped the UK to become a world leader in digital government and public services.

In recent years, GDS has focused on helping departments through the monumental task of Brexit preparations – addressing a public policy challenge that has pulled civil servants’ attention away from the digital agenda. And meanwhile, the digital frontline has advanced from system and service design to data. Now the Cabinet Office is gearing up for a new drive from the centre, using government-wide policies and levers to do for departments’ use of data what GDS did for their digital capabilities and reform plans ten years ago.

Our survey’s goals

Against this backdrop, NTT DATA gathered civil servants’ views on the data agenda via an online survey. As a government partner providing digital and data services, we wanted to understand your goals, priorities and concerns around the use of data. We were interested in your views on both the Cabinet Office’s emerging plans, and the keys to making progress on this agenda. And we hoped to provide digital and departmental leaders with a useful snapshot of civil servants’ perspectives on these issues, helping them to identify opportunities and address any concerns.

Our survey gathered views on five key topics around the use of data, aiming to understand both how civil servants want to use data, and how they believe civil service organisations can best create those capabilities:

1. Do civil servants recognise the importance and potential value of the data agenda?
2. Exactly how do you want to use data? What are your priorities in terms of new data-based tools, capabilities and services?
3. How advanced are civil service bodies in their use of data – and in implementing plans to improve its management and deployment?
4. How can civil service organisations act to drive progress in your use of data?
5. Which actions by the centre of government might best hasten progress among departments and agencies? Might any of the centre’s proposed activities hamper rather than promote progress? And should the centre adopt new powers and levers?



Participation and Segmentation

Our survey ran for five weeks to 20 November 2020, and gathered responses from 346 people. A high proportion of these were from senior grades: 9.2% were members of the Senior Civil Service (SCS) – a group representing just 1.3% of the workforce – and a further 39.6% were from Grades 6 and 7 (broadly, managers and other senior staff below SCS level). Overall, some 48.8% of respondents were drawn from grades that comprise the top 13% of the civil service.

As a result, our survey provides valuable insights into how the views of leaders and managers differ from those in other grades, for these groups are large enough to enable us to segment the data – separating the views of SCS, Grade 6-7s (G6-7s), and more junior staff. And the disproportionate number of SCS and G6-7s respondents is itself noteworthy, suggesting a strong interest in the topic among senior staff; this sounds like good news for those promoting the data agenda.

We have also segmented the data where we had large responses from particular departments and professions, enabling us to draw tentative conclusions on how their views differ from one another and the wider group.

Note that the findings on segmented data should only be seen as indicative: while the whole-group findings are statistically robust, these sub-groups are relatively small and their data – while interesting and, we hope, useful – should be used to guide future research rather than as the basis for decision-making (see also Appendix 1: Methodology).

The two departments with largest sample sizes were the Department for Work and Pensions (DWP), at 12.7% of respondents, and HM Revenue & Customs (HMRC), at 10.7%. These departments employ about 17% and 14% of civil servants respectively. It is worth noting here that only 2.9% of respondents worked for the Cabinet Office or HM Treasury – the survey almost exclusively gathered the views of staff working in 'line' departments and delivery agencies, rather than the centre of government.

Finally, three professions each provided more than 10% of our respondents: Operational Delivery (17.1%), Policy (14.5%) and Project Delivery (10.7%). Again, we have pulled out these professions to analyse how their views differ from one another and the wider group. Staff working in the Digital, Data and Technology profession totalled 4.9% of respondents.



Survey Findings

How important is this agenda?

Civil servants overwhelmingly recognised the need to make better use of data: some 63% said that doing so is 'absolutely essential', and a further 30% that it's 'very important'.

To test whether civil servants accept the value and relevance of the data agenda, we first asked: 'How important is better use of data to improving the tools used by civil servants and the public services received by citizens?' Respondents could answer 'Don't know' or select from: 'Potentially helpful', 'Quite valuable', 'Very important' or 'Absolutely essential'. See graph, right.

In a self-selecting survey on the use of data, it would be surprising if respondents didn't think data is important! But the force of their views is nonetheless striking: some 63% replied that it's 'Absolutely essential', and a further 30% 'Very important' – comprising 93%.

SCS respondents were even stronger on this point. Among the professions, Project Delivery staff were particularly enthusiastic about the potential of data, but policymakers weren't as convinced.

How important is better use of data to improving the tools used by civil servants and the public services received by citizens?



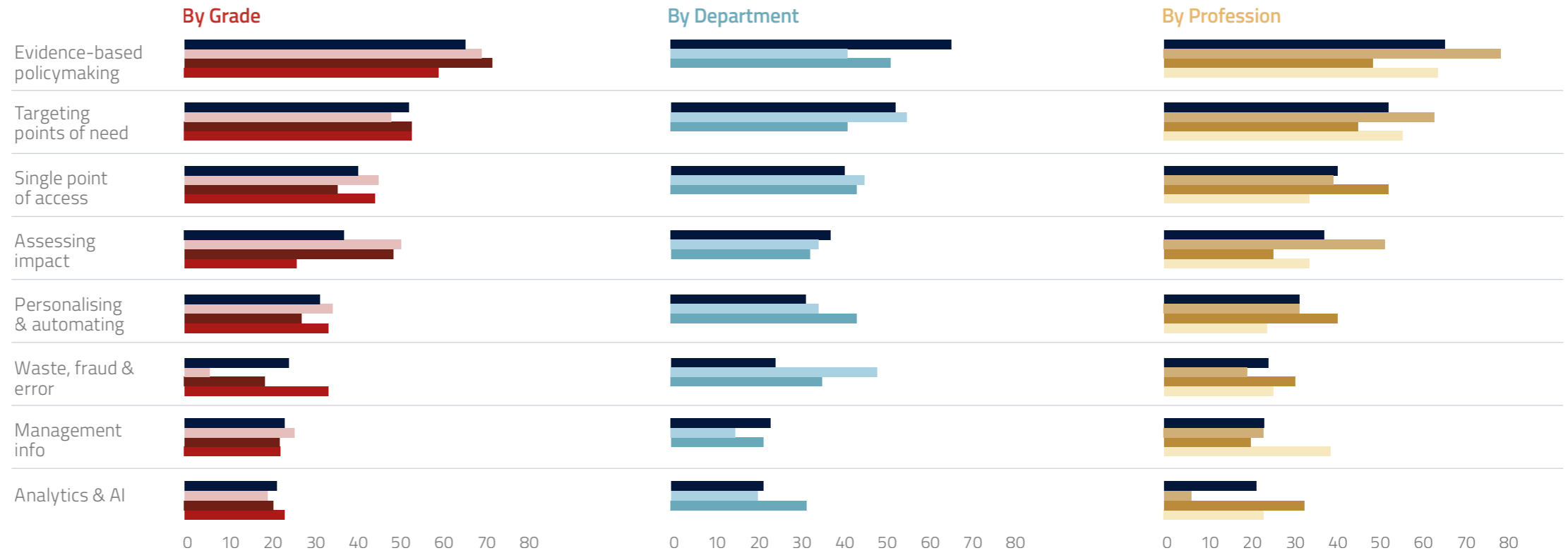
Within each group, over 90% of respondents replied that it was either 'very important' or 'absolutely essential' – with far more opting for the latter. The other options were 'quite valuable', 'potentially helpful', 'not at all important' and 'don't know'; the combined total giving these answers is represented by the space at the top of each column.

How do you want to improve data use in tools, services and decision-making?

Asked to name their top three goals in terms of better data use, nearly two-thirds of civil servants included improvements to evidence-based policymaking. They also prioritised the use of data to better connect and target services, provide a single access point for users, and strengthen impact assessments.

To understand civil servants' goals in terms of the new capabilities, tools and services enabled by better use of data, we asked: **'What are your priorities for work to realise the potential of data?'** Presented with a list of eight options (see box for details), respondents were asked to choose the three most important to them. They also had the option of naming their own priority, enabling us to check that we hadn't missed anything obvious. Throughout the survey, the order in which options were presented was randomised for each respondent.

What are your priorities for work to realise the potential data?



Presented with a list of eight potential applications of government data, respondents were asked to name the three most important to them. See table below for the full wording of each option and the proportion of the whole group selecting it. Respondents also had the ability to name their own priority, and 19 did so – see box on p16 for details.

Percentage including option as one of their three choices

- Whole group
- SCS
- Grades 6 & 7
- Other grades
- Whole group
- DWP
- HMRC
- Whole group
- Policy
- Op delivery
- Project delivery

Across the whole group, these are civil servants' top goals:

1. Collating and analysing data to support **evidence-based policymaking** (65%)
2. Using data to **target** services at the **points of greatest need**, improving impact and reducing waste (52%)
3. Providing a **single point of access** to multiple public services, and supporting data-sharing between them (40%)
4. **Assessing the impact** of public spending and services, supporting better evaluation of policies and services (37%)
5. **Personalising and automating services**, using data to adapt them around users' needs and streamline delivery (31%)
6. Interrogating data to identify **waste, fraud and error** in service delivery and government operations (24%)
7. Producing stronger **management information** to aid oversight of fields such as spending, staff management and logistics (23%)
8. Using **analytics and AI** technologies to provide supporting information to civil service managers, aiding decision-making (21%)

Across the whole group, these are civil servants' top goals:

1. **'Collating and analysing data to support evidence-based policymaking'** (named by 65%);
2. **'Using data to target services at the points of greatest need, improving impact and reducing waste'** (52%);
3. **'Providing a single point of access to multiple public services, and supporting data-sharing between them'** (40%);
4. **'Assessing the impact of public spending and services, supporting better evaluation of policies and services'** (37%).

It is notable that the first and fourth of these relate to the priorities of Cabinet Office minister Michael Gove, who has talked of the need for policymakers to use data to improve the appraisal and assessment of policies and services. And the second and third revolve around the goal of improving efficiency in service delivery – the former in terms of maximising value from public investments, and the latter to boost accessibility and convenience from the user's perspective.

All seniority groups except the more junior staff ranked these goals as their top four. Those below Grade 7 agreed on the top three, but were less interested in 'Assessing the impact' – which was pushed down to sixth place by two priorities tied in fourth: **'Personalising and automating services, using data to adapt them around users' needs and streamline delivery'**, and **'Interrogating data to identify waste, fraud and error in service delivery and government operations'**. These goals are, of course, more relevant to frontline staff – whose interests often focus on improving the efficiency and efficacy of service delivery, rather than strategic policymaking.

Similarly, DWP staff – many of whose roles revolve around high-volume, transactional services – placed 'Using data to target services' first, and 'Identify waste, fraud and error' second. Meanwhile, HMRC respondents ranked 'Evidence-based policymaking' top, but 'Providing a single point of access' and 'Personalising and automating services' as joint second. Operational Delivery staff – who dominate these departments – were most interested in 'Providing a single point of access', closely followed by 'Evidence-based policymaking' and 'Using data to target services'.

Other professions had their own perspectives. Policy followed the main findings, and its staff – naturally enough – were particularly enthusiastic about 'Evidence-based policymaking'. This was named by 78% of respondents, while no other idea gathered more than 71% support from any group. Project Delivery staff had a particular interest in **'Producing stronger management information to aid oversight of fields such as spending, staff management and logistics'**, which came third in their list. For the wider group, this was their seventh priority out of eight.

The least popular option, **'Using analytics and AI technologies to provide supporting information to civil service managers, aiding decision-making'**, was selected by 21% of respondents.

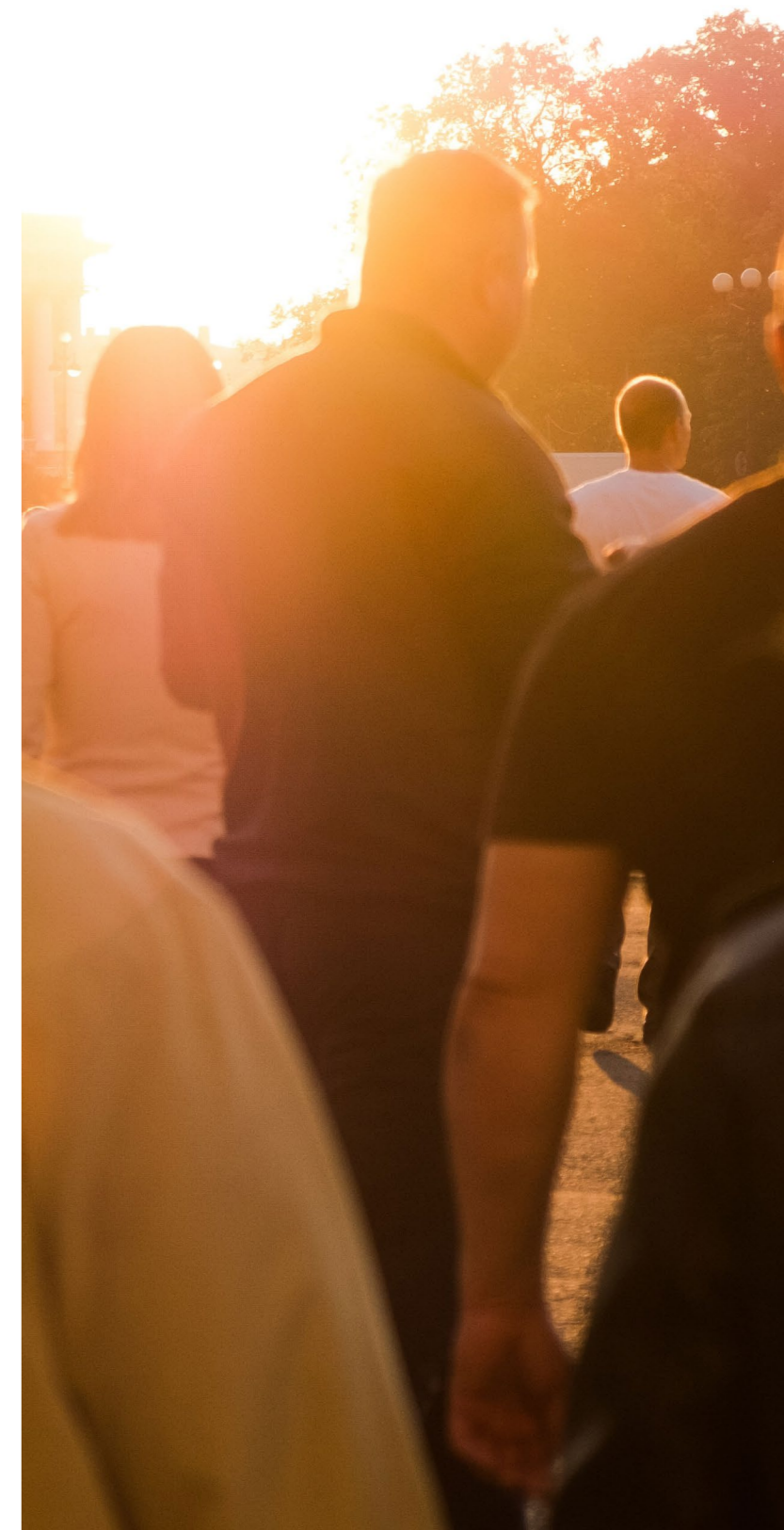
Respondents' comments

Just 19 civil servants took the option to name their own priority – fewer than those opting for any of the provided answers. In these comments, no single theme emerged. Here's a sample.

"Ensuring we have clear outcomes and success criteria before anything is launched, and that there is a clear owner who is responsible for monitoring performance against these success criteria throughout the lifecycle of a product and across a whole end-to-end service."

"Robust benchmarking data to validate spend against best practice private sector and international comparators."

"The need to organise and integrate data across common services, business planning, business performance management, people and finance."



How advanced is your employer's use of data?

Most civil servants reported that their employers are making fair progress in developing the policies and systems to make better use of data: about 40% said the necessary capabilities are largely in place, and a further 25% that they're implementing improvement plans. But a substantial minority of organisations seem to be well behind, while many officials were hazy on the policy framework – with half unable to say whether their employer has a published data strategy.

We explored the state of civil service bodies' data management strategies and programmes through two questions. One asked simply: **'Does your employer have a published data strategy?'** Here, people's answers provide some indication of whether strategies have been produced – but they're actually more valuable in what they tell us about civil servants' awareness of their departments' strategic data work.

The second asked: **'How advanced is your organisation's handling of data in the following fields?'**, requesting people's views on four key fields of data management.

On the first question (see graph, right), almost half of all respondents didn't know whether their employer has published a strategy, 41% said it had such a strategy, and 10% that it didn't. And even among managers, awareness wasn't much higher.

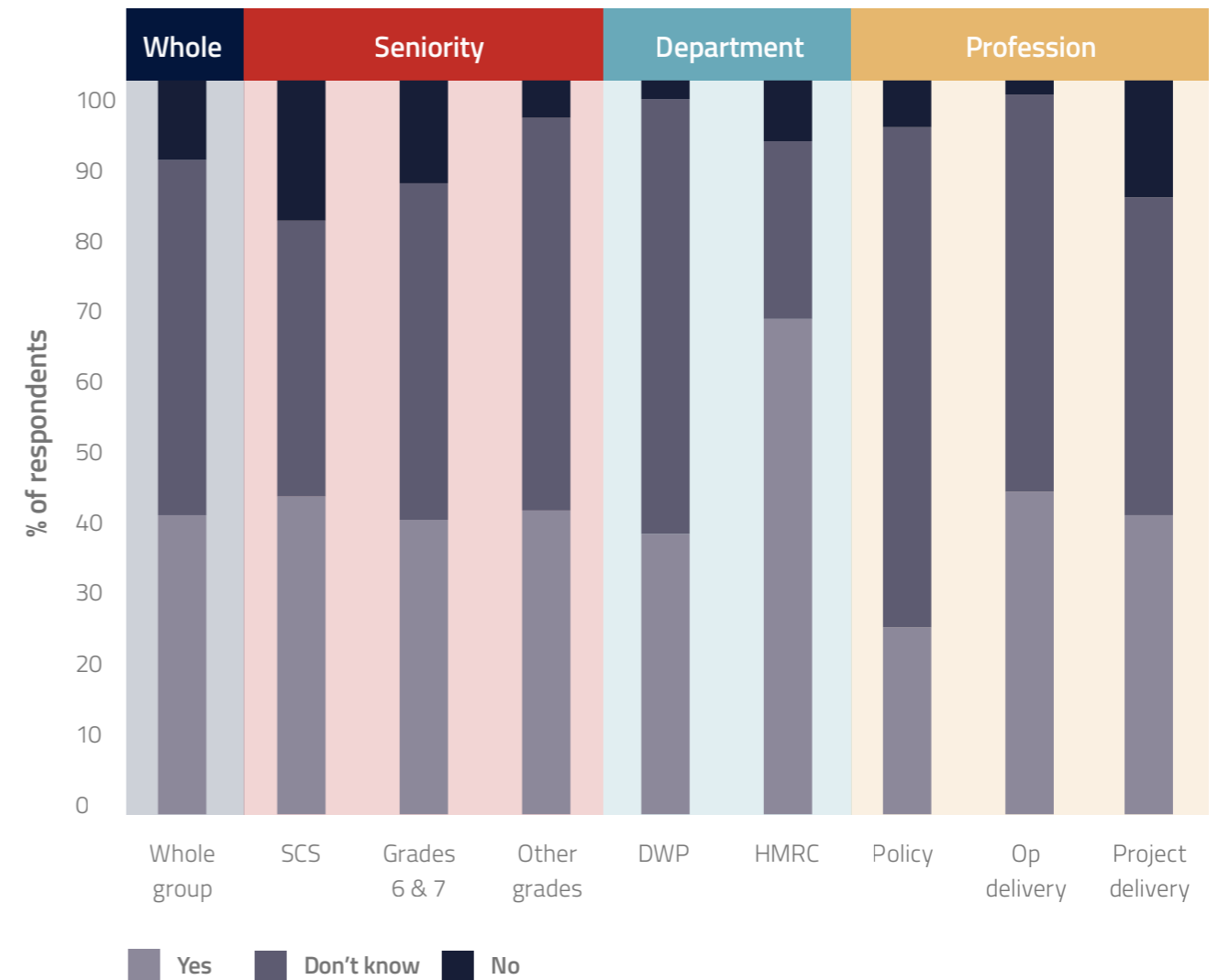
The outlier here was HMRC staff – where some 68% said they had a strategy, and just 24% didn't know. That 'Yes' figure is 24 points higher than the second-placed group, and probably reflects the organisation's focus on strengthening and communicating its data work. HMRC recently refreshed its data strategy – which is overseen by a dedicated Chief Data Officer and Data Governance Board – and offers training on data use and protection to all staff.

Of all the groups, awareness was lowest among Policy professionals.

The second question asked respondents to identify their employer's state of development in four fields of data management: they were asked to rate progress on a scale of 1-5, where 1 meant 'I am not aware of any progress in this field' and 5 meant 'We have strong, effective, up-to-date systems in this field' (see graph, p20). The first three fields broadly mapped onto key aspects of good data management, while the fourth asked about one approach to putting data tools into the hands of staff:

- Use of common standards governing language, definitions and formats, permitting the sharing, linking and comparison of datasets
- Compliance with an established data management framework, providing visibility on datasets' quality, provenance and handling

Does your employer have a published data strategy?



A high proportion did not know the answer, but there are interesting variations across the groups – with awareness particularly low among Policy professionals, and very high among HMRC staff.

How advanced is your organisation's handling of data in each of these four fields?

Active data governance through an established network of identified individuals able to oversee and improve use of data across the organisation



Compliance with an established **data management framework**, providing visibility on datasets' quality, provenance and handling



Use of common standards governing language, definitions and formats, permitting the sharing, linking and comparison of datasets



Provision of a widely-available **data management platform**, allowing self-service access to, and analysis of, departmental and government data



0 10 20 30 40 50 60 70 80 90 100

- I am not aware of any progress in this field
- Early development work is underway
- The organisation has a firm plan and is undertaking delivery
- Systems are largely deployed, and capabilities well developed
- We have strong, effective, up-to-date systems in this field

The top three bars relate to core elements of good data management; the fourth concerns one of the staff tools that good data management can support. Respondents answering 'Don't know' are not included in this graphic; but note that those answering 'I am not aware of any progress in this field' will include those who simply don't know about relevant data management projects, as well as those working in organisations where no progress has been made. All these figures relate to responses by the whole group.

- Active data governance through an established network of identified individuals able to oversee and improve use of data across the organisation
- Provision of a widely-available data management platform allowing self-service access to, and analysis of, departmental and government data

On each of the first three fields, the full group was fairly confident – with 58-65% answering 3 ('The organisation has a firm plan and is undertaking delivery') or more. And these figures were generally a few points higher on each metric for SCS – though G6-7s were a little less positive than the average.

Across the board, in only two groups did more than 15% of respondents answer any question with a 5 – meaning that they 'have strong, effective, up-to-date systems in this field'. Both were answering the 'Active data governance' question, where 19% of SCS and 22% of HMRC staff gave this answer (the latter may, again, reflect good internal communications on data programmes within the department).

Among the professions, Project Delivery officials were broadly in line with the average, while Operational Delivery staff were more positive on 'Use of common standards'. Policy professionals scored worse on every metric, suggesting frustration with the data management tools and systems available to them.

Scores were much lower on the provision of a data management platform allowing self-service access to departmental data, where 39% said little or no progress has been made. Such platforms are much more viable and effective following the delivery of a data strategy – and most respondents told us that they are very much still in the process of developing and implementing their data management plans.

NTT DATA comments...

These results suggest civil servants are realistic about how far there is still to go in the use of data, both for policy purposes and front-line service delivery.

Notwithstanding Cabinet Office minister Michael Gove's priorities, the practicalities of data-driven policymaking are often a struggle – mainly, in our experience, because of persistent and unjustified data silos. Since policymakers must weigh up many considerations, the need for a cross-cutting data infrastructure is going to be particularly strong in this group – something also reflected later in our survey.

We also see this outside government – those who need to ask the 'what if' questions are often poorly served by technology that is heavily aligned to operational needs.

We've seen successes where policymakers and data analysts work in joint teams, allowing data to drive policy while encouraging policymakers to acknowledge the needs of data collection.

The relative lack of enthusiasm for AI and analytics services also bears out the emphasis in the National Data Strategy on basic data management and infrastructure. In the short term, addressing critical data infrastructure will provide more immediate value – while bolstering the effectiveness of AI and analytics as these technologies are introduced.

How can civil service organisations hasten progress on data?

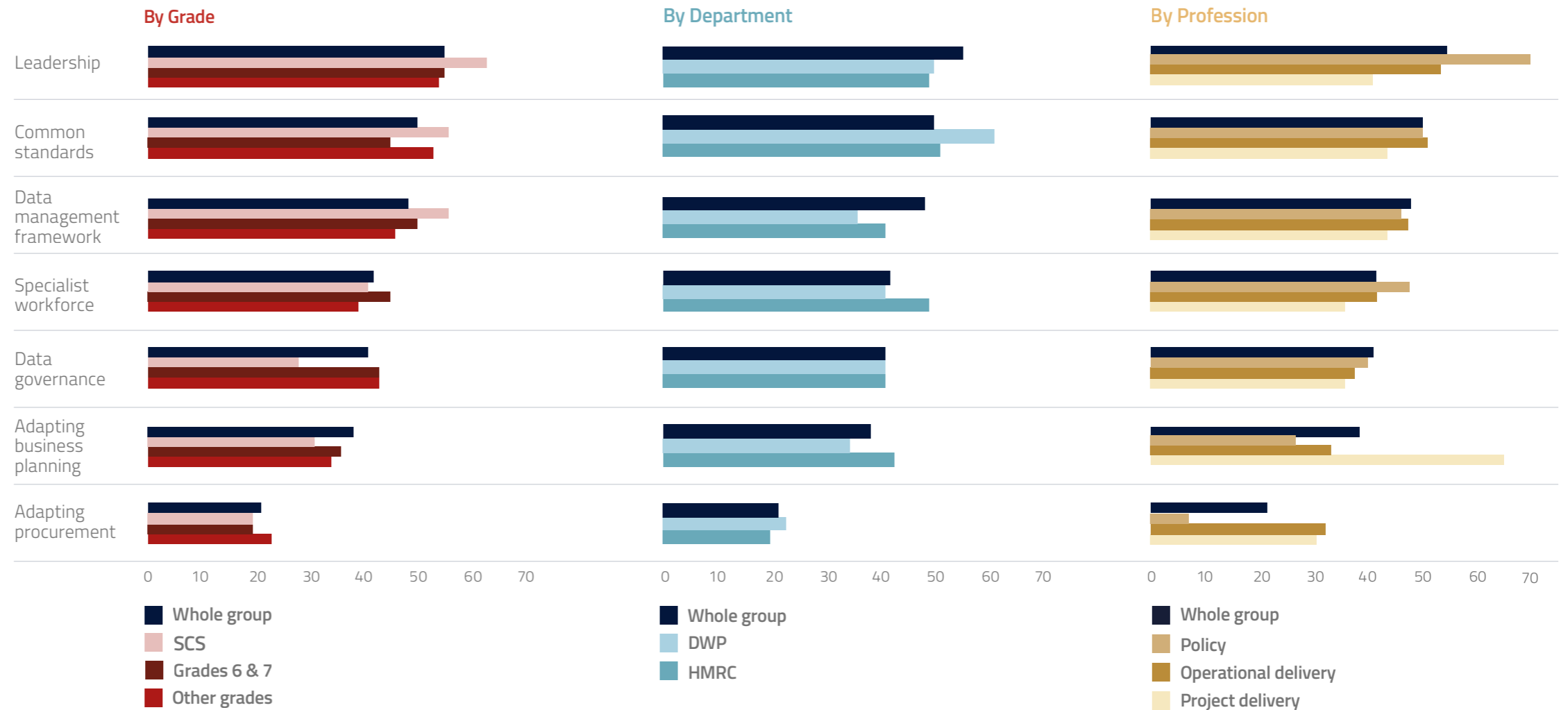
Asked to identify three key requirements for improved use of data, over half of respondents named strong and visible leadership. There was also strong support for the introduction of common standards and data management frameworks, and for work to boost the size and skills of digital workforces.

Respondents were asked: ‘In your view, which of the following activities should your organisation prioritise in order to realise the potential of data?’ Presented with seven options, they were asked to pick three. They could replace one of these with their own answer, providing a check on the options we’d given them.

Compared to the question above on how respondents wanted to use and deploy data, opinions were more evenly divided here: while on the former question the top three answers were backed by between 65% and 40% of respondents, here that spread ran from just 55% to 48%.

Yet the groups largely shared their top four priorities – particularly the first. With 55% support, there was widespread agreement that ‘**Strong and visible leadership on data, supported by an active data strategy**’ was the top priority.

In your view, which of the following activities should your organisations prioritise in order to realise the potential of data?



Presented with a list of seven potential applications of government data, respondents were asked to name the three most important to them. See box below for the full wording of each option and the proportion of the whole group selecting it. Respondents also had the ability to name their own priority, and 19 did so; see on box for details.

1. Strong and visible **leadership** on data, supported by an active data strategy (55%)
2. Introduction of **common standards** governing language, definitions and formats, permitting the sharing, linking and comparison of datasets (50%)
3. Establishment of a **data management framework**, providing visibility on datasets' quality, provenance and handling (48%)
4. Increasing the size and developing the skills of your permanent digital and data **specialist workforce** (42%)
5. Strengthening of **data governance** through an established network of identified individuals able to oversee and improve use of data across the organisation (41%)
6. **Adapting business planning**, spending approval and programme management systems to suit the nature of digital and data technologies (38%)
7. **Adapting procurement**, commissioning and contract management systems to suit the nature of digital and data technologies (21%)

Second was **'Introducing common standards governing language, definitions and formats, permitting the sharing and comparison of datasets'**. The third most popular also related closely to good data management practice: **'Establishing a data management framework, providing visibility on datasets' quality, provenance and handling'**. And in fourth place was **'Increasing the size and developing the skills of your permanent digital and data workforce'**.

The SCS group had the same four lead priorities, but with additional emphasis on the top three: 63% backed the top answer, for example, compared to 55% across the wider group. Meanwhile, junior staff shared the wider group's top three priorities, but displaced the data skills goal with the option named fifth by the whole group: **'Strengthening data governance through an established network of identified individuals able to improve use of data across the organisation'** – another key plank of good data management practice.

Policy and Operational Delivery professionals shared their top four priorities with the full group, with Policy staff particularly emphatic about the importance of leadership: some 70% named it among their three key goals, leaving the 'common standards' option a distant second on 50%. And Project Delivery specialists agreed on three of the top four, but chose as their number one priority **'Adapting business planning, spending approval and programme management systems to suit the nature of digital and data technologies'** – an option that came in sixth in the full-group data. This option acknowledged the tensions between the iterative, experimental approach to project management best suited to digital technologies, and the pressures on civil servants to minimise risks, decide key design elements before undertaking development work, and commit to specific delivery timelines and spending requirements.

Respondents were offered one final option, suggesting changes to another set of systems governing **'procurement, commissioning and contract management'**, but this came in a distant seventh. The low level of interest may reflect the fact that, while Project Delivery staff comprised 10.7% of respondents, commercial and procurement professionals made up just 1.7%.

DWP and HMRC staff both put common data standards at the top of their wish list, naming leadership second. Opinion then diverged, with DWP employees keen to boost the size and skills of digital workforces, while HMRC backed up Project Delivery professionals – calling for changes to business planning and spending approval systems.

Respondents' comments

Again, 19 civil servants took the option to name their own priority. This is a sample of comments.

"Provision of a widely-available data management platform allowing self-service access to, and analysis of, departmental and government data."

"Ensuring that systems and software are robust, intuitive to use and actually enable users to access and work easily rather than get slowed down by it (as is often the case)."

"More integration between government and industry data management, particularly in the area of citizen benefits and service use."

NTT DATA comments...

These results suggest civil servants are realistic about how far there is still to go in the use of data, both for policy purposes and frontline service delivery.

In our own response to the National Data Strategy consultation, we had already identified leadership and culture as the number one issue to address. We certainly need more data experts in senior roles; but perhaps more important is greater commitment across the civil service's leadership on data-driven decision-making and change. We also welcomed the introduction of the Data Standards Authority, which should start to make an impact on introducing data standards – ranked in our findings as civil servants' second priority.

Their third priority – that of establishing a data management framework – touches on metadata. This was barely mentioned in the Strategy, although it's covered under the broad topics of 'data foundations' and 'data inventories'.

It is important to remember that simply having access to a wide variety of data is not the end of the story for the user, who must be able to ask questions such as: Who gave us this data? How up to date is it? How much can I trust it? And can I re-publish it or acknowledge my sources without compromising data-sharing agreements?





How should the centre of government promote better use of data?

Civil servants overwhelmingly said that the centre of government should take stronger action to promote better use of data, and supported – by more than three to one – the idea of giving the centre additional levers to promote compliance among departments. They were particularly enthusiastic about better training for digital professionals, legislative changes and better communications to ease data-sharing, and two key planks of the government's Data Strategy: the launch of a central data-sharing platform, and the introduction of mandatory data standards. The idea attracting the least support was that of appointing a central digital chief – but even here, those in favour outnumbered those opposed by four to one.

A decade ago, the GDS – with political support from the Cabinet Office, and using spend controls agreed with HM Treasury – played a key role in driving forward the digital agenda. And today, many aspects of improved civil service data management – including popular goals identified in the section above, such as the introduction of common standards and data governance frameworks – will demand concerted action by the centre of government. But departments have in the past sometimes resisted central direction; we wanted to discover your views on how and where the centre should act to drive forward this agenda.

Presenting respondents with 13 possible central activities and powers, we asked: ‘In your view – and assuming effective delivery – how would the following actions by the centre of government be likely to affect progress on realising the potential of data across the civil service?’ Civil servants were offered five possible responses on each of the 13, ranging from ‘Likely to significantly impede progress’ to ‘Likely to significantly hasten progress’. They could also answer that the action would have ‘some potential’ to impede or hasten progress, or to say that it would be ‘Unlikely to affect things either way’.

Looking across the results (see graph, p30-31), the most striking finding is the overwhelming level of support for more action by the centre. The proportion of those sceptical never exceeded 20% on any action, while those favourable never fell below 40%. On almost all the suggested actions, 50-70% expressed a belief that they would help hasten progress.

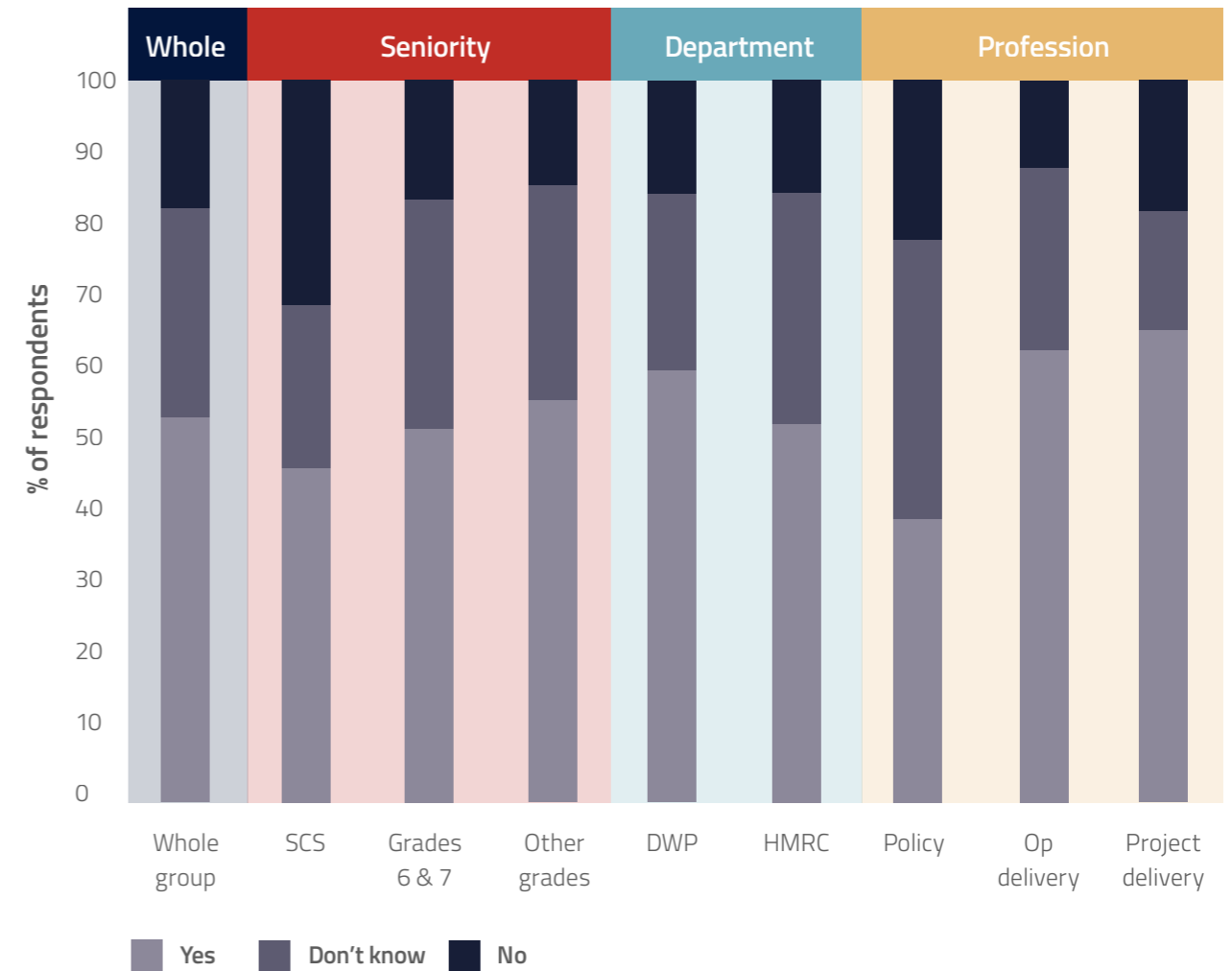
This finding was supported by the answers to one further question, in which respondents were asked: ‘Do you believe the centre of government should have additional levers to promote departmental compliance with central data strategies, policies and standards?’ Across the whole group, 53% replied in the affirmative, while 31% said they didn’t know and just 17% were opposed (see graph, right).

Looking across the grades, junior staff were the most enthusiastic for more central direction, while SCS were more sceptical than the average respondent. DWP employees, and staff working in Operational Delivery and Project Delivery, firmly backed more central action. The least keen group was Policy professionals – but even here, those in favour substantially outnumbered those opposed.

The graph on p30-31 shows civil servants’ views on each of the 13 suggested actions:

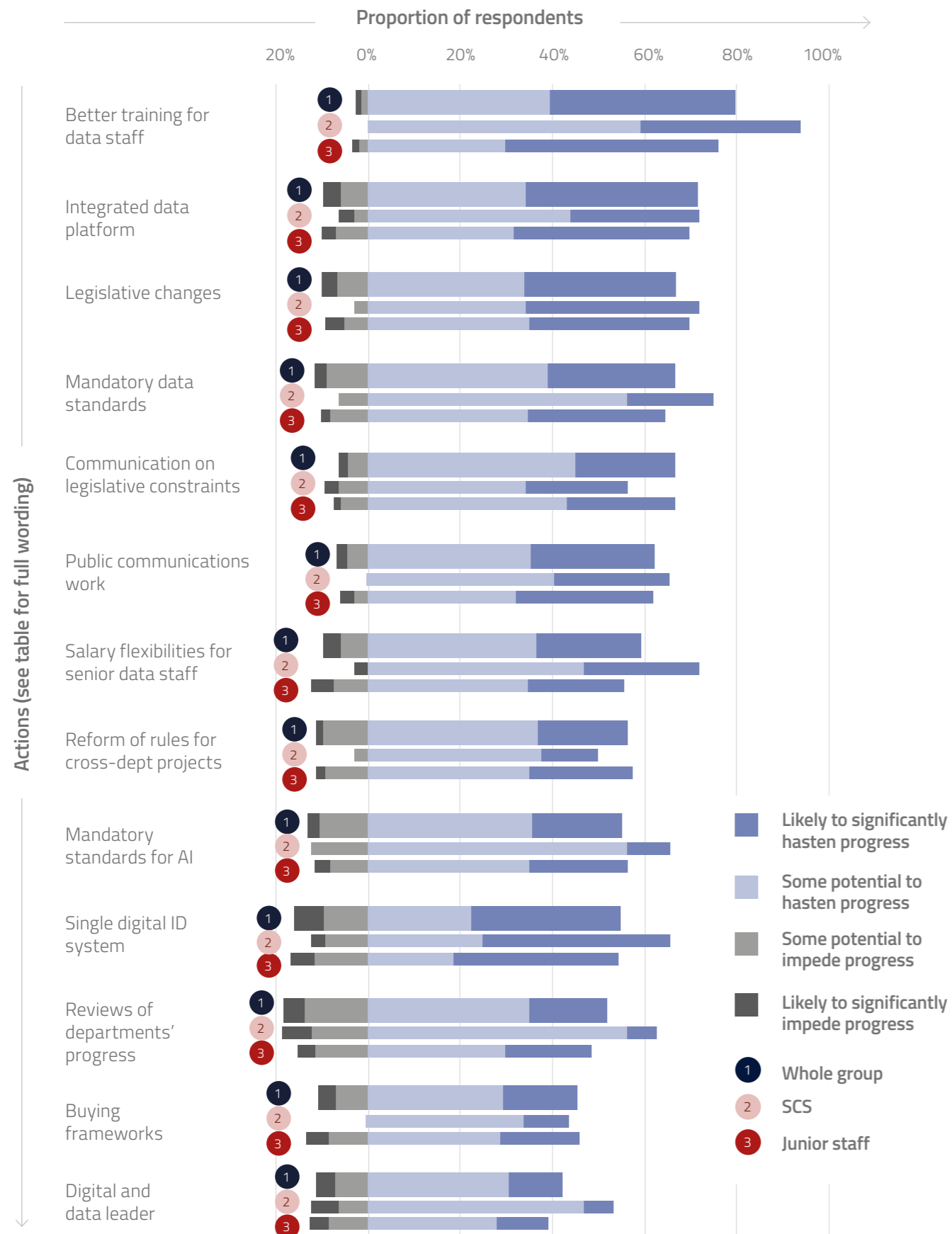
1. The most popular proposed action, backed by some 80% of respondents, was the uncontroversial **‘The establishment of better training and professional development for data professionals’**. SCS respondents were still more enthusiastic here, with 93% supporting the idea. And for more junior staff, among the 77% broadly in favour, some 47% thought it could make a big difference – perhaps reflecting their experience of digital skills shortages in service development and delivery.

Do you believe the centre of government should have additional levers to promote departmental compliance with central data strategies, policies and standards?



Across the whole group, 52.9% backed stronger levers for the centre of government, 16.5% opposed the idea, and 30.6% said they didn’t know. Support was strongest among staff in grades below 7, within the DWP workforce, and among Operational Delivery and Project Delivery professionals. Policy professionals and SCS were the most sceptical. These results have been rounded to 53%, 17% and 31% in the main report text, so do not total 100%.

In your view – and assuming effective delivery – how would the following actions by the centre of government be likely to affect progress on realising the potential of data across the civil service?



Analysis continues on p32.

Presented with 13 possible or planned actions by the centre of government, respondents were asked what effect they thought each would have on the pace of progress across the civil service. They had six potential responses on each action: four of these are listed in the key, running from 'likely to significantly impede progress' to 'likely to significantly hasten progress' – so the bars broadly show what proportion of respondents backed and opposed each action.

The fifth possible response was 'Unlikely to affect things either way', and the sixth was 'Don't know'. The proportion saying each action was unlikely to make a difference ranged between 8% and 29%, and that answering 'Don't know' between 8% and 18%. In the interests of legibility, these groups have been combined and excluded from the graph. In each case, the top bar covers results for the whole group; the second for SCS; and the third for junior staff, outside the SCS and G6-7.

See table on right for the full wording of each option and the proportion of the whole group giving a positive response. Respondents also had the ability to name their own priority, and 39 did so; see box on p34 for details.

Full answer options, with the proportion of the whole group saying the action has 'some potential to hasten progress' or is 'likely to significantly hasten progress'

1. The establishment of **better training** and professional development for data professionals (80%)
2. The creation of an **integrated data platform** to link up datasets (72%)
3. **Legislative changes** to support more data-sharing across government (67%)
4. The creation of **data standards** for use by departments, along with a framework requiring their application to new and key datasets (67%)
5. More clarity and **communication concerning the legislative constraints** on cross-departmental data-sharing (67%)
6. More **public communications work** to explain and demonstrate how improved use of data could enable government to better serve citizens (62%)
7. The provision of funds and **salary flexibilities** allowing departments to hire more senior, experienced digital and data professionals (59%)
8. The **reform of rules** governing accountability, governance and budgeting in **cross-departmental projects**, supporting better collaboration (56%)
9. The adoption of **mandatory standards** for the deployment of **artificial intelligence**, safeguarding equity, transparency and accountability in service delivery (55%)
10. The development of a single, effective, trusted **digital ID system** for citizens (55%)
11. The introduction of **reviews of departments' progress** on data governance and management (52%)
12. The establishment of more **buying frameworks** and a data tool approval system, easing procurement in the field (45%)
13. The appointment of a permanent secretary-level **digital and data leader** (42%)

The Data Strategy's authors will be cheered by this finding: when all positive responses are combined, four of the five next most popular actions reflected aspects of the government's ambitions.

These five actions were as follows:

2. **'The creation of an integrated data platform to link up datasets'.** This is a flagship policy within the Data Strategy.
3. **'Legislative changes to support more data-sharing across government'.** Here, the Strategy says only that government will "drive use of the Digital Economy Act (2017) powers", which allow "the sharing of publicly held information for a specific purpose". Again, SCS were stronger than the average on this issue, as were junior staff. This action tied with the two below on the broad level of support, but we can still rank them – using the proportion of those believing each would make a big difference.
4. **'The creation of data standards for use by departments, along with a framework requiring their application to new and key datasets'.** Again, this reflects one of the Data Strategy's headline goals.
5. **'More clarity and communication concerning the legislative constraints on cross-departmental data-sharing'.** SCS were noticeably less convinced here.
6. **'More public communications work to explain and demonstrate how improved government use of data could improve citizens' lives'.**

In positions 7-9 come three actions sitting outside the Data Strategy, namely:

7. **'The provision of funds and flexibilities allowing departments to hire more senior, experienced digital and data professionals'.** SCS were particularly strong on this: it may sound unsurprising that SCS think senior staff should be paid more, but remember that very few respondents work in digital roles themselves – so they're effectively asking for colleagues to receive higher salaries than them.
8. **'The reform of rules governing accountability, governance and budgeting in cross-departmental projects, supporting better collaboration'.** This option links back to the project management reforms covered in the previous section.
9. **'The adoption of mandatory standards for artificial intelligence to safeguard equity, transparency and accountability'.** It seems that civil servants are well aware of the risks of using AI technologies in the public sector, and believe central standards could improve officials' confidence in deploying them.

Next come two further aspects of the government's current digital agenda, which proved significantly less popular than the others:

10. **'The development of a single, effective, trusted digital ID system for citizens'.** This idea was significantly more popular among SCS. It also attracted relatively high proportions both of those strongly in favour, and those strongly opposed: 32% said it was likely to 'significantly hasten progress', and 6% thought it likely to 'significantly impede' it. The combined total of 16% who were

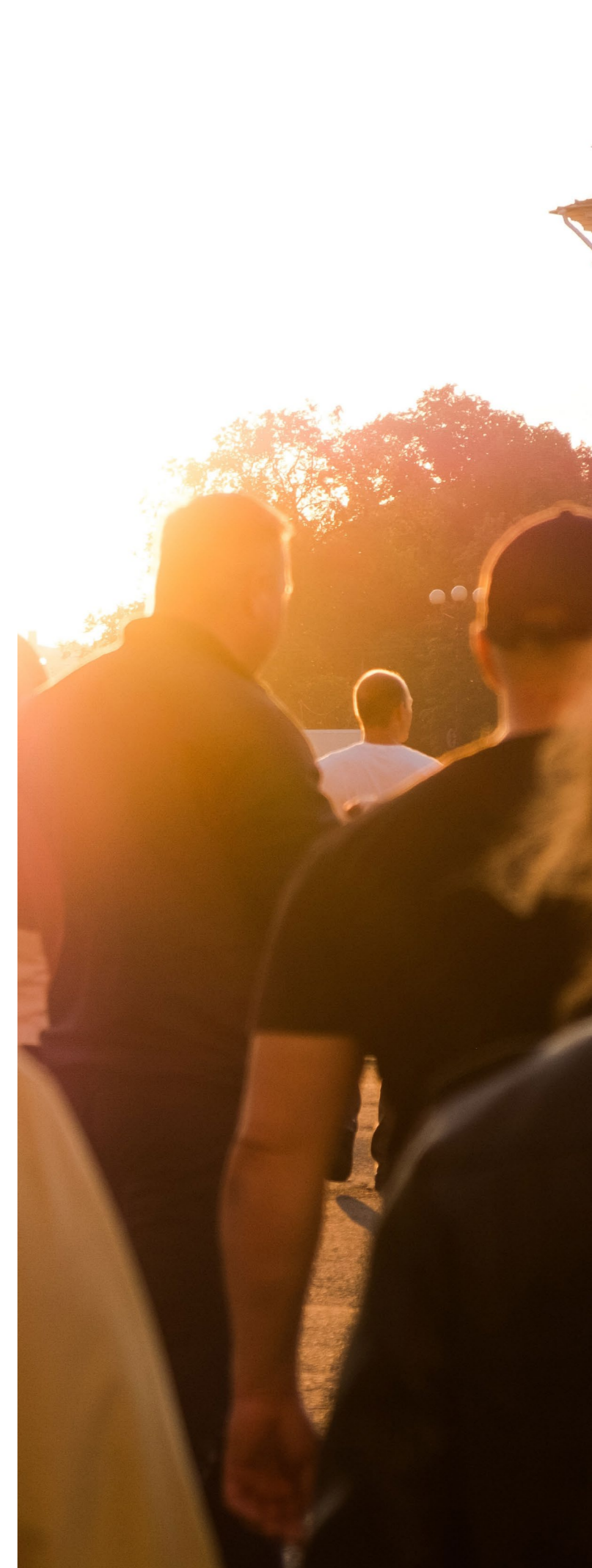
sceptical puts it in second place on this metric, behind departmental reviews (see below).

11. **'The introduction of reviews of departments' progress on data governance and management'.** More SCS were broadly keen than the average, but fewer thought they would make a big difference. This was the action attracting the largest proportion of people saying it might hamper progress, totalling 18%.

In only two fields did less than 50% of staff think the suggested actions would be likely to hasten progress – and even in these cases, those in favour vastly outnumbered those opposed. The first of these was:
12. **'The establishment of more buying frameworks and a data tool approval system, easing procurement'.** Here, SCS were less optimistic than the average respondent about the idea's potential, though none thought it could do any harm.

Finally – and in a finding that contrasts with people's general support for more central direction – the least popular option was another key aspect of the government's data plans:
13. **'The appointment of a permanent secretary-level digital and data leader'.** Here, SCS were slightly more supportive than the average. At 11%, this option came joint fourth in terms of the proportion expressing some opposition.

It's worth drawing out a few further points here. While SCS broadly agreed with the whole group on which actions would be likely to help drive progress, they tended to be less optimistic about their likely efficacy. In general, more of them fell into the 'some potential' camp while fewer said any particular action would be 'likely to significantly hasten progress'.



Within both DWP and HMRC, staff were particularly enthusiastic about the idea of a single ID system. The proportion supporting legislative changes was also well above average.

Their views differed, however, on a couple of options. In HMRC, far more respondents supported the creation of an integrated data platform. Far fewer HMRC staff liked the idea of departmental reviews than among their colleagues in DWP. And HMRC respondents showed relatively little interest in more training for Digital, Data and Technology (DDAT) staff. These findings are consistent with other survey results suggesting that HMRC staff have greater trust in their own departments' ability to use data and drive progress than the civil service average.

Among the professions, all three showed above-average support for the creation of an integrated data platform; Policy staff were the most enthusiastic. However, Policy respondents were particularly sceptical about the creation of a permanent secretary-level DDAT leader. By contrast, their Operational Delivery and Project Delivery colleagues were both more supportive of this idea than the whole group.

Operational Delivery people were particularly keen on legislative changes to support data-sharing and reforms of governance and budgeting rules, and also showed elevated support for more buying frameworks and a single ID system.

Respondents' comments

To check that our 13 options covered all of civil servants' priorities, we asked one additional question: 'If there's another activity that you strongly believe the centre of government should undertake to improve the civil service's use of data, please name it.' This gathered 39 responses, including five people who commented on the need to invest in updating legacy systems. Here are two examples:

"Funding for updating/replacing out-of-date systems that are holding back linked and open data aspirations."

"Guarantee of funding to remove and replace all legacy systems with direct Permanent Secretary and Senior Responsible Officer accountability to Parliament's Public Accounts Committee alongside National Audit Office sign-off."

Other comments included:

"Lifting the data literacy skill-sets of all – we have the opportunity to drive a Ferrari, but our ability extends only to riding a bicycle."

"Welcome feedback from individuals of lower grades who actually USE the data. It's all very well having highly-paid professionals at senior level producing data sets, but if they are not easily accessible and useable by the front-line minions then it's a waste of time."

"Need a Government Data Officer at director general level that is a data specialist (ie. not an analyst, data scientist, digital or tech specialist), but have a track record of leading significant data infrastructure projects as a chief digital officer. Accreditation of data as a specific profession, and not a by-product of analysis or digital/tech."

NTT DATA comments...

Civil servants' desire for the centre of government to take a more active role makes complete sense in the field of data management. These findings indicate a strong appreciation within the civil service that for the technical and human aspects of data-sharing to be effective, a central mandate is essential. This is patently obvious outside government: where industry sets agreed standards through central bodies, efficiencies and innovation follow.

The Integrated Data Platform for Government is one of the more ambitious parts of the National Data Strategy. It certainly has the potential to be the Ferrari mentioned by one respondent, especially if the government is willing to broaden the supplier base providing the major elements of its data infrastructure and inject fresh ideas. We also welcome the Strategy's commitment to working closely with the Open Data Institute, which has a wealth of expertise and research in this area. The more effective the Integrated Data Platform for Government becomes, the more important it will be for government to address our respondents' sixth priority: that of explaining to a sceptical public why linking datasets is essential.

It is interesting to see the high priority that civil servants attach to addressing actual and perceived legislative obstacles to data-sharing. Even as data practitioners, navigating the regulations and case law is complex, so we wholeheartedly support the need for more clarity and communications here. We would encourage the government not only to use the powers of the Digital Economy Act, but also to consider adding to or amending existing legislation that frustrates data-sharing or data quality.

Civil servants' support for funding and flexibilities to allow the recruitment of more senior data specialists highlights existing skills shortages, and suggests that investment is needed for the Data Strategy to be effective – along with work to address data literacy at the grassroots. We've seen time and again the value of bringing expert knowledge to bear on data challenges, which are often inherently intricate.

Key Messages

For the civil service's data leaders and professionals, there is much to cheer about within our findings. Civil servants' clear recognition of the importance of the issue is a great starting point, and many of the workforce's priorities – including those around evidence-based policymaking, impact assessments, linking up services and user-focused delivery – align with the goals set out in the government's new Data Strategy.

There is also overwhelming enthusiasm for stronger action by the centre of government. Civil servants believe, by more than three to one, that the centre should have additional powers to promote action by departments.

Our respondents would particularly like to see the centre use its new levers to roll out common data standards, data management frameworks and an integrated data platform, while working to strengthen digital skills and address the legislative barriers to data-sharing. And even in areas where they're less enthusiastic, there is strong support for more concerted action: none of our 13 suggested actions were supported by fewer than four in ten officials, or opposed by more than two in ten.

Data maturity varies across government. Asked about their employers' progress on improving their use of data, almost two thirds of respondents said they are well advanced in delivering the required policies and systems. But half didn't know whether their employer has a data strategy, and a large minority of organisations appear to have made slow progress – with respondents unaware of any activity or saying that they're at an early stage of planning.

Our findings challenge the established view that line departments tend to resist and resent the introduction of mandatory, cross-government policies by the centre. And they reveal huge enthusiasm for both concerted reforms to realise the potential of data, and many of the government's existing plans to boost data capabilities and strengthen data management. The Data Strategy's goals and provisions seem to attract broad support among civil servants, who recognise the need to act at a government-wide level.

Asked about the keys to making faster progress, respondents first named strong leadership and the publication of delivery strategies. So the government's Data Strategy – which itself proposes new powers and remits for central data leaders – appears to be pushing at an open door. Civil servants are eager to make better use of data, improving both their own tools and their ability to serve the public. It seems that the argument has been won; the biggest challenge facing civil service data leaders and professionals is that of delivering on their stated goals.

Appendix 1: Methodology

Our survey was delivered by [Global Government Forum](#) – the publishing house for civil servants around the world – and ran online from 15 October to 20 November 2020, attracting 346 responses. It was disseminated via email bulletins to Global Government Forum’s UK readers and through social media by NTT DATA, so the group was self-selecting. We incentivised participation both by donating £5 to NHS Charities Together for each full response, and by inviting respondents to enter a prize draw to win an iPad Pro. In total, £1730 was raised for NHS Charities Together; the iPad winner has asked to remain anonymous.

The results have not been weighted, and in the findings sections we’ve rounded answers to the nearest round number. The findings are statistically significant, with a margin of error of 5.27 points for the full dataset – meaning that we can be 95% confident that results are within 5.27 points of the value given.

Data on segmented groups does not reach the same standard, but nonetheless provides some interesting indications of the views of different seniorities, professions and departments. On the seniority side, these segmented groups include the Senior Civil Service, which provided 9.2% of respondents (and comprises 1.3% of the workforce); Grades 6 and 7, who formed 39.6% of respondents (and make up 11.7% of the workforce); and ‘other grades’, with 48.8% of responses (representing 87% of the workforce).

Among departments, we segmented the data for the Department for Work and Pensions (12.7% of respondents, against 17% of the civil service), and HM Revenue & Customs (10.7% of respondents, 14% of civil servants). And among the functions and professions, we pulled out data on Operational Delivery (17.1% of respondents), Policy (14.5%) and Project Delivery (10.7%) staff.

Respondents included six local authority and NHS trust staff, who incorrectly identified themselves as civil servants. Because they don’t fit into the civil service grades structure, they have been excluded from the ‘seniority’ groups.

[The full dataset is available here.](#)

Survey development, data analysis and report-writing by Matt Ross. Report production and graphics by The Marketing Practice.

Appendix 2: Questions and Answer Options

[Link to document](#)

NTT DATA



Vicki Chauhan
Head of Public Services
NTT DATA UK
vicki.chauhan@nttdata.com

Phillip Akers
Vice President – Public Services
NTT DATA UK
phillip.akers@nttdata.com

Bill Wilson
Head of Data
& Intelligence Solutions
NTT DATA UK
bill.m.wilson@nttdata.com

NTT DATA UK
1 Royal Exchange, London,
EC3V 3DG, United Kingdom
uk.nttdata.com