



Delivering Data's Promise

Making data strategy work in the public sector

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Executive summary

The UK public sector has long been promised that data will be transformative. There's a lot of talk about how data can help to achieve outcomes for citizens, manage risks, and cut costs. Yet these results still seem just out-of-grasp for some, leading to under-productive staff, frustrated leaders and disappointed stakeholders.

At Nous we have heard from many public sector leaders who have been through a painful learning curve from “We need a data strategy” to “Why aren't we getting what we need from our data?” – before coming to us for help. In many cases these organisations have some form of data strategy in place, or at least an intention and direction at leadership level, yet progress can remain elusive.

To help bridge the strategy to delivery gap, Nous has identified five critical elements of successful data strategies in the public sector:

- 1 STRATEGIC ALIGNMENT**
The most adept public organisations go further than underpinning their business strategy with their data strategy by intertwining them.
- 2 DATA STANCE**
Organisations making the most progress in their data strategies address tensions between data exploitation and data protection head on.
- 3 LEADERSHIP SUPPORT**
Data-informed leaders aligned on the way forward are most able to drive forward improvements.
- 4 DATA CULTURE**
Fostering a culture of curiosity drives up demand for data and in turn data quality.
- 5 INVESTMENT**
Successful organisations find clever and creative ways to get results from constrained funding.



To learn more, we spoke to CEOs and digital and data leaders of 12 UK public sector organisations to understand their data strategy journeys, drawing out success stories and pitfalls to avoid. We scored each organisation against these five elements to identify trends in strengths and challenges.

FIGURE 1
Summary of scores



The strongest performance was in **leadership support** as leaders recognise and coalesce around the potential of better use of data assets. But this commitment is not consistently translated into **strategic alignment**, where there was variation in the “how”. Lower scores here tended to correlate with organisations that had not consulted widely while developing their data strategy.

Regarding **data stance**, there are two groupings – those who reported a broadly agreed position on how data could be used (giving them confidence to proceed at pace) and those held back by discord. **Data culture** is still evolving in most organisations, but organisations are not yet in a virtuous circle of data curiosity driving data quality. Few felt they could commit adequate **investment** to meet their data ambitions, making this the lowest scoring element.

This report presents our findings, providing details, case studies, quotes, and suggestions for readers to consider in their own context.

Introduction

This report seeks to help UK public sector leaders to develop and deliver data strategies that unlock value for their organisation. Nous ran a series of structured interviews with senior leaders at 12 public sector organisations in the UK, drawing from our experience with data strategy, data maturity and analytics in the UK and internationally. We wanted to investigate why progress for public organisations with data can remain elusive, despite all the talk and investment and the many data strategies floating around the public sector.

Data strategies' failure to deliver results is often more about how those strategies are developed, rather than their content. ChatGPT could write a generic data strategy, but would miss the fundamental foundations of success: identifying and coalescing around shared goals, understanding what is required, and agreeing on necessary trade-offs. These foundations are built through structured, intentional internal and external dialogue during the strategy development process. They provide a supportive context for delivery: without them, a data strategy will languish and organisations' ability and commitment to make better use of data will wane.

We have identified five elements that are essential to successful data strategy development in the public sector. Together these provide a framework for the structured dialogue essential to success.

We gave the 12 organisations participating in this study a score out of five on each of these elements.

ELEMENT	KEY QUESTIONS
STRATEGIC ALIGNMENT	<ul style="list-style-type: none"> How can data help you deliver your strategic objectives? What are the priorities for data capability development to achieve this? How can you align your business, digital and data strategies?
DATA STANCE	<ul style="list-style-type: none"> What is the right balance between data protection and data exploitation? Where can you adjust the balance to get the most out of your data?
LEADERSHIP SUPPORT	<ul style="list-style-type: none"> What is the value of your data assets to each area of your organisation? How can you exploit those assets to make better decisions everywhere? How will you prevent siloes getting in the way of progress?
DATA CULTURE	<ul style="list-style-type: none"> What data quality improvements will deliver better outcomes for the public? What are the questions you have that you currently can't answer? What information will make you and your team better at your day job?
INVESTMENT	<ul style="list-style-type: none"> How can you align your investment with the scale of your ambition? How can you align digital and data investment? How can you articulate the potential overall value of your data assets to unlock the right level of investment?

Terminology

We distinguish between **data** (such as letters, numbers, images and sounds) and **digital** (the boxes and wires that hold, move, manipulate and enable access to data) in this study.

When we talk about **data**, we are thinking broadly. This includes citizen and customer data, operational data, maps, photographs, video and audio, management information and business intelligence, statistics and analysis.

When we refer to **data strategy**, we mean an organisation's vision and direction for data, and the choices and trade-offs it is making to get more value from data. A data strategy is typically a written document but can also be a shared understanding in a leadership team, or a set of conscious trade-offs, decisions and investments an organisation is making to get more from data.





1 Underpinning is good, intertwining is better

Developing data capability because you recognise its innate value will only get you so far. Organisations with the most effective data strategies intertwine them with their business strategy.

Clear strategic intent is important for a data strategy to deliver results. We've found the best way to achieve this clarity across leadership and beyond is as much in the process of developing a data strategy as in the strategy itself. Written strategy is important, but the type and extent of engagement is key to success. In practice, this looks like broad engagement with both technical and non-technical experts, led by people who can bridge the gap.

Engage broadly to secure organisational buy-in. An open and collaborative approach makes this more effective. For example, one Arm's-length body (ALB) ran an all-day workshop with staff, exploring how the strategy would impact each role, so people could understand how it connected to their work. As a result, leadership and staff buy-in was high as the organisation proceeded through delivery.

Bridge the gap between strategy and technical experts using people who can communicate with both. Language, concepts and knowledge from the data and non-data worlds have to come together for these conversations to be productive, and that is no easy feat. Leaders told us the data strategies they found most useful, and most likely to deliver strategic priorities,

were developed by people who could facilitate conversations between technical and non-technical specialists. People who understand what strategic leaders are seeking and know what digital and data capability is needed are highly valuable in articulating an agreed approach to delivering those objectives.

Write it down. Not all organisations we spoke with had a written data strategy. But many had engaged in conversations to determine strategic intent, and all had invested in data capability. Those with a written data strategy scored more highly on alignment of their intent between business and data strategies – setting them up for greater success with their data strategy.

FIGURE 2
Organisations' scores on strategic alignment, grouped by status

Written strategies drive greater strategic alignment.



The write way?

Written strategies correlate strongly with alignment of strategic intent, but there are pitfalls to avoid. A written strategy without engagement across the organisation and without a bridge between technical and non-technical experts can be counterproductive.

One organisational leader told us the written data strategy they commissioned did not reflect what they needed to do as an organisation. Lack of engagement across the organisation meant the strategy process was cheap and quick, but it also meant it was generic and did not reflect the context or wider priorities. This is like asking ChatGPT to write a data strategy for you: it will produce some helpful basic principles, but it will not help you focus efforts on what your organisation needs to do to succeed.

Another organisation told us it had abandoned the process of developing a written data strategy after several attempts to get agreement with the leadership. A key barrier was a lack of understanding and buy-in among the leadership about the technological investment required. This organisation found it helpful to pause the process of developing a written strategy and instead focus on delivering small data capability improvements, which demonstrated more tangible business value, unlocking further investment.

CASE STUDY

PUTTING DATA AT THE HEART OF A BUSINESS STRATEGY

Want to see our data strategy? Just look at our corporate strategy.

This was the response from one regulator leading the way on data. This organisation had brought all three of these approaches together in its 2022+ corporate strategy. In doing so, they completely aligned their data strategy with their organisational strategic intent, generating clear buy-in across the board.

Every aspect of the corporate strategy was coupled with an articulation of the role of data to achieve it. For example, it clearly set out how having common data standards would contribute to swifter transactions for customers.

To meet their ambition to provide accessible, near-real-time information for customers the organisation was clear about the need to move from paper to digital data. Intertwining the two meant everyone in the organisation, and key stakeholders, could understand what enhanced data capabilities would enable it to do.

Beyond this, the organisation has articulated an objective of making their data more findable, accessible, and interoperable, and have committed to supporting new, innovative businesses that can use their data to develop new products and services.

2 Go beyond data protection vs exploitation

Public sector organisations can be torn between protecting data and exploiting it. Effective leaders move their organisations past the tension and do both by addressing the question head on.

Caught between game-changing opportunities in public services and the need for data privacy and security, public sector leaders often feel stuck in the middle.

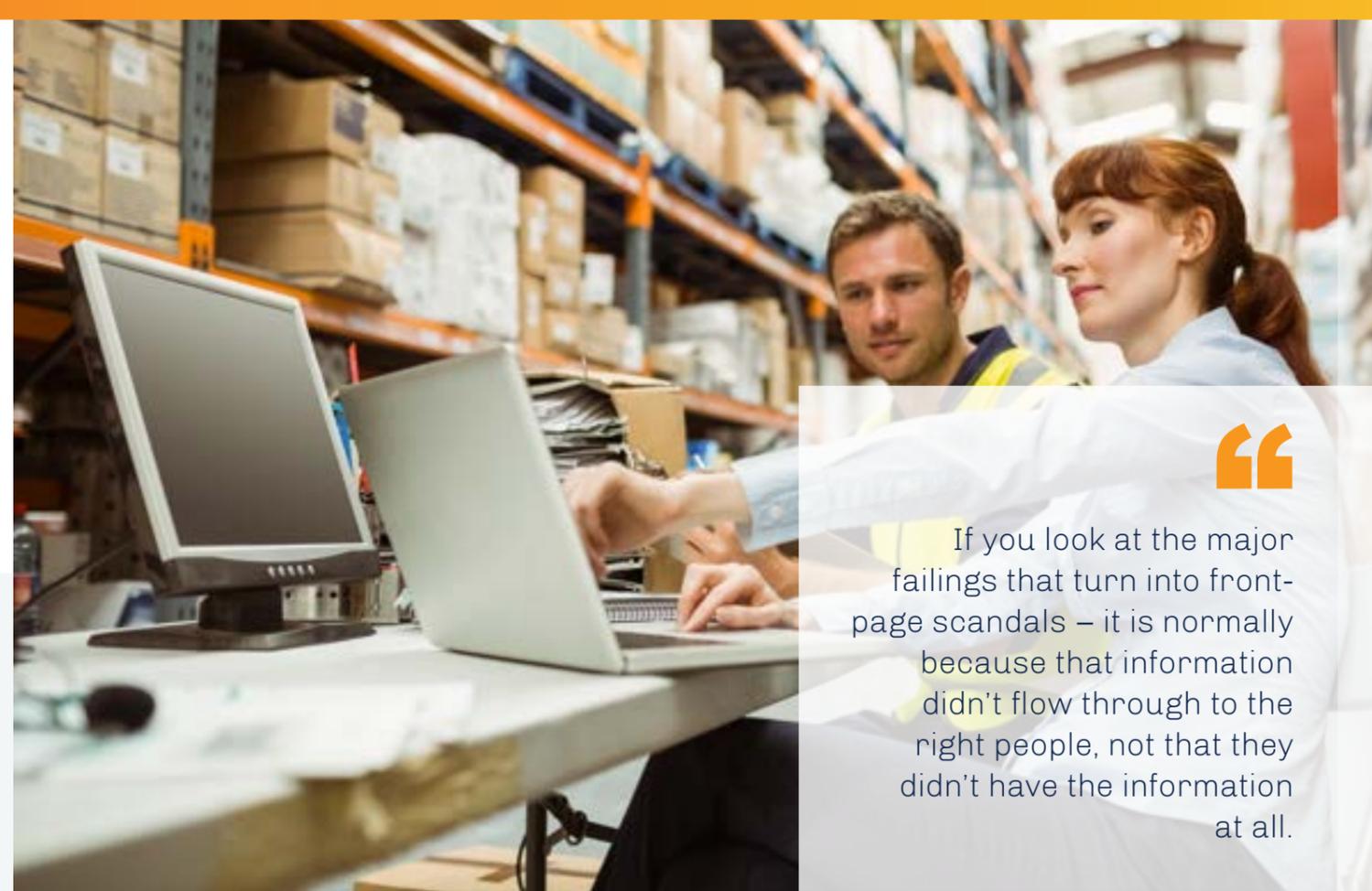
Many participating leaders spoke about the frustrations of repeated conversations on the topic of data sharing and data protection, failing to overcome the deadlock. But the picture is not all bad: there are clear ways forward to unblock and make progress. So how do you shift the data mindset of an organisation from “only open if we have to” to “open data, unless we can’t”?

Move away from a one-size-fits-all approach. Being more flexible, responsive, and collaborative in data governance is an increasingly accepted way to break past the deadlock. The technical term is “Adaptive Data Enablement”. This means stepping away from strict data governance and data protection strategies, tools, practices and environments that apply to all data sets equally. A better way is introducing flexibility in the controls and use of data in some areas (for example, by allowing experimentation in advanced analytics), but tighter controls in others (for example, around how sensitive personal data is used). This reframes data governance as “enabling” rather than “restricting” the use of data and adapting over time to respond to

evolving business need and emerging technologies. An important part of enabling this shift is building data skills across staff and data literacy across leaders.

Repeated discussions can be a good thing. Half of our respondents said that once leaders took the time to understand more advanced uses of data, they could agree on a data stance. This gave leaders confidence they could move forward with their data strategies. (This is reflected in the higher-scoring set of organisations in figure 3). Conversely, organisations whose board had not discussed this issue found their ambition to re-use data met by internal opposition or uncertainty. Don’t be discouraged by the length of discussions – focus on whether they are helping to build understanding and consensus, even if only slowly.

Building clarity on the boundary between what you will and won’t do with data is crucial. Once one organisation agreed this, it gave them the confidence to open up data sets more broadly. It now works with partners to fund up to 10 start-ups a year, focused on generating wider public and economic benefit through the use of this data. The organisation communicates the benefits widely, further building confidence and support for this approach.

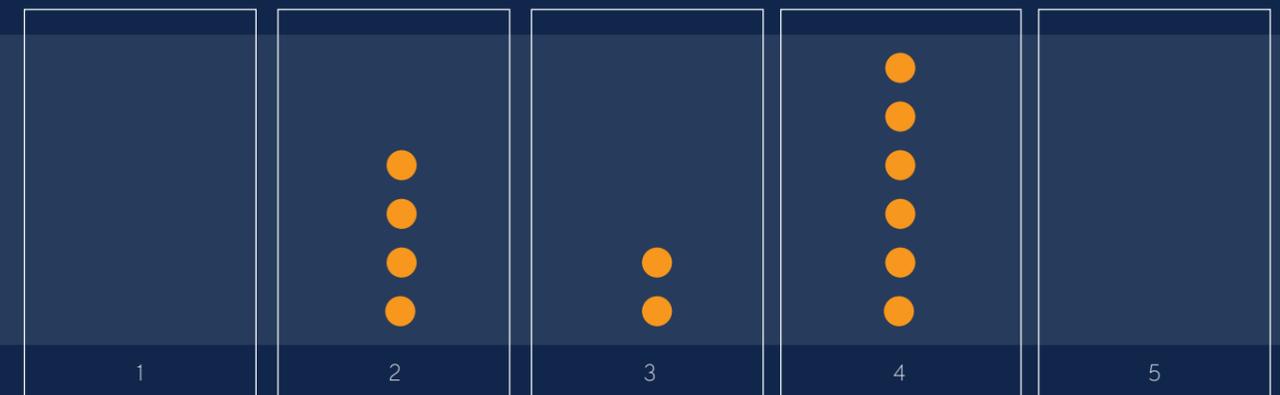


If you look at the major failings that turn into front-page scandals – it is normally because that information didn’t flow through to the right people, not that they didn’t have the information at all.

FIGURE 3

Distribution of organisations’ scores on data stance

Most participants do well on their data stance, with a few lagging behind



ELEMENT 2

DATA STANCE

One barrier to data strategy success is the tension between data protection and data exploitation. Risk-averse leaders can inhibit an organisation’s ability to make the most of its data assets. The best outcome is for an organisation to take a considered, intentional approach, agreeing on where flexibility is needed and where constraints are necessary.



3 Educate yourself

Many leaders want their organisation to become data-led but few truly understand what this means – or the compromises needed to make this a reality.

In our research we have seen a growing recognition among leaders of the value of data to organisations. Leaders in the public sector agree on the need to do more with data, pushing their organisations to become data-led and building momentum for change.

However, organisational leaders' limited understanding of data systems and technologies reduce their confidence in conversations about data, in turn inhibiting their

understanding of the investment needed and the potential return. In some organisations, progress is slowed by conflicting priorities from leaders of silos.

The best leaders educate themselves to make the most of the growing opportunities to use data and provide opportunities for others to do so.



Bringing in experts gave us a window into the art of the possible – it lit our fire. Data is now not just what we do, but who we are.

ELEMENT 3

LEADERSHIP SUPPORT

An organisation is more likely to fail in its ability to maximise the value of its data if the chair, board, and executive team are not aligned in recognising the importance of data to meeting the organisation's objectives. This may be due to leaders not understanding what is really needed to uplift data capability or different views among leaders with siloed interests.



BRING IN EXTERNAL EXPERTISE

The CEO of one ALB said several years ago, the body's chair invited external experts to discuss with the executive how it could use data to stimulate transformational change. This was the catalyst the ALB needed to align its leadership behind an ambitious vision.

IDENTIFY AN OPERATIONAL SENIOR LEADER WITH THE POTENTIAL TO MAKE REAL GAINS

One successful approach is to identify a leader who can improve data quality. Work with them to identify potential impactful changes (such as in the way data is collected) and what is needed to make that change. Working with them to make these changes turns them into a champion who can support other changes and secure investment.

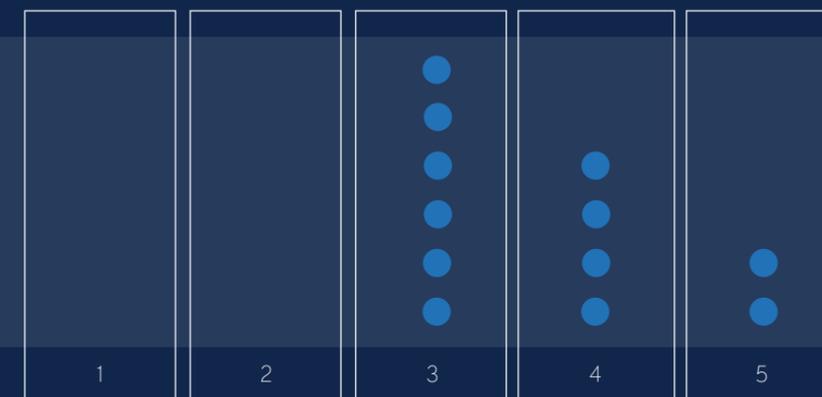
PROVIDE AVENUES AND OPPORTUNITIES TO ENGAGE LEADERS IN DATA STRATEGY

A data-fuelled away day for the whole executive and non-executive team enables a full-emersion approach to unlocking insights. It can allow an organisation's leaders to explore the range of data it has and where there is value in filling gaps in their knowledge. This can help build excitement and curiosity about data in senior leaders.

FIGURE 4

Distribution of organisations' scores on leadership support

Leadership support is generally good with some excelling



4 Drive data curiosity to create a virtuous circle

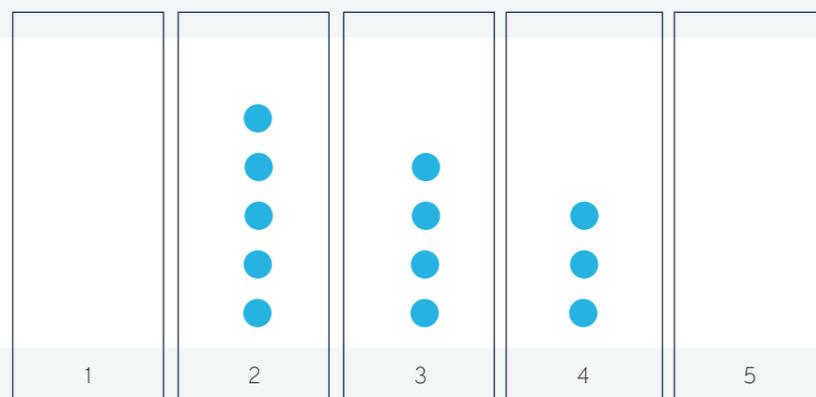
The more curious and interested your staff are in how data can help them do their jobs, the greater the quality of your data. When staff recognise the importance of data quality to insights which benefit their work, they take steps to help data quality improve. Better data quality leads to stronger insights. This in turn leads to a commitment to further increasing data quality for insight. Staff curiosity drives a self-reinforcing loop.

Data is often collected and created by people who are not direct users of that data, so they do not recognise its full potential. Public bodies in particular are frequently not the primary collectors of the data they use, so data quality issues cross organisational boundaries.

Addressing these issues typically requires sustained close collaboration at multiple levels. This can be a big barrier to a successful data strategy – the level of data debt this creates is costly and time consuming to rectify.

FIGURE 5
Distribution of organisations' scores on data culture

There is further to go to strengthen data culture



ELEMENT 4

DATA CULTURE

Data strategies that build the infrastructure and tools for data exploitation without addressing data quality will struggle to reap the benefits. Data quality depends on staff who collect or create data recognising its value beyond its immediate purpose. Driving a culture of data curiosity enables operators and managers to use data to improve the efficiency and/or effectiveness of delivery, and demonstrates the benefits of actions to improve data quality.

There are several methods to achieve this:

Make it easy to collect quality data.

Attempts to improve data collection can be met with resistance when the value of the exercise is not communicated or understood. It is often perceived as unnecessary paperwork or an administrative burden for already busy people. Successful data strategies tackle these issues at multiple points: creating sound mechanisms to ingest data into the organisation in a way that drives up quality and usability for multiple purposes, improving the whole organisation's understanding of the value and potential of data and analytics, as well as sound data architecture that makes it easy for colleagues to access data. These changes can add up to a

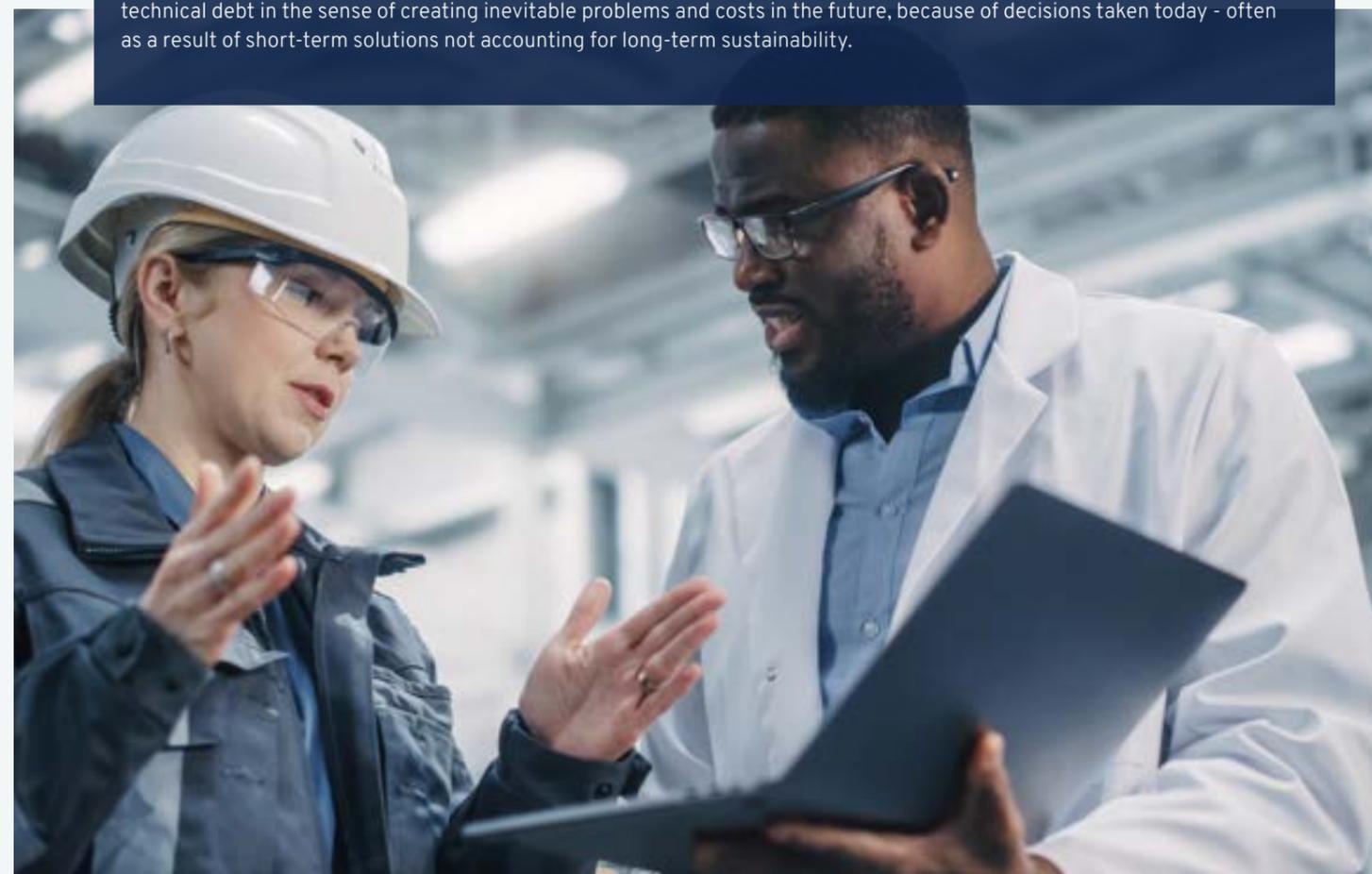
powerful combination in shifting how your staff understand, collect and use data.

Drive data curiosity. Data does not have to be dull or frightening. It can be exciting and motivating. If the right data is presented in the right way, your people will find it engaging and compelling – if they can see how it would improve what they can do, internally or for your stakeholders and communities. One ALB created an 'insights hub' accessible by talented employees from any role. The employees were given time to look at the data on areas they were familiar with and to ask questions. The CEO told us that this resulted in incredible innovations in the way services were delivered. Because employees are now telling the

organisation what they want data to do for them, they are more willing to support change.

Articulate the benefits. It is worth taking the time, and finding people with the right skills, to tell the stories around data and its uses across your organisation in a structured and systematic way. One ALB we spoke with had deployed an internal communications campaign to demonstrate to caseworkers the benefits of converting paper-based records with long text boxes to a structured data set they could access and interrogate to give them greater insights into the case. Caseworkers could see the tangible benefits to collecting and accessing data this way.

Data debt refers to organisations accumulating data which is low-quality or otherwise not fit-for-purpose. It is similar to technical debt in the sense of creating inevitable problems and costs in the future, because of decisions taken today - often as a result of short-term solutions not accounting for long-term sustainability.





5 Get clever, get creative

Yes, funding is short, but are you making the most of what you have? Effective public organisations align data with digital to get more mileage from both investments, and to create a strong value proposition for data employees that rivals the private sector.

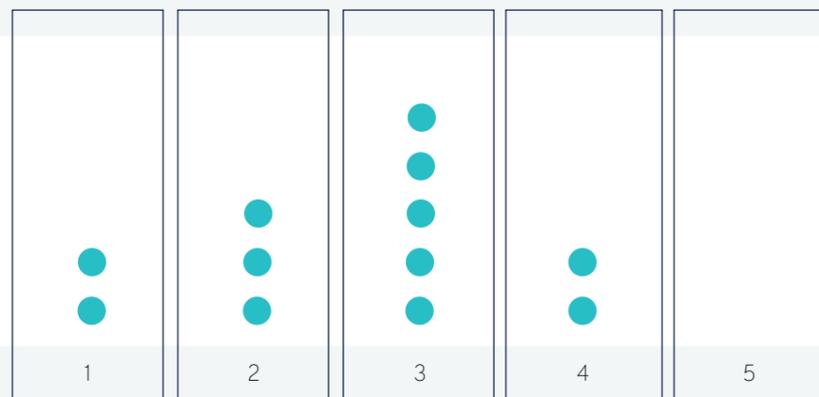
A consistent challenge for public organisations is making the case for investing in data capability development to match their ambition. The average score in our assessment was 2.6 out of 5 – the lowest of our five elements. We found investment in data was dwarfed by investment in digital more widely.



It is hard to make the case for investment in data quality when competing with the need to invest in speed of service.

FIGURE 6
Distribution of organisations' scores on investment

Investment scores were widely spread across participants



ELEMENT 5

INVESTMENT

Organisations often know how to build their data capability and have an ambitious data strategy, but struggle to invest in the capability and capacity to put data to its best use. This includes investing in digital and data infrastructure and data specialists.

We identified three approaches to handling the mismatch between ambition and investment:

Embed investment in developing data capability within digital transformation. Public sector data leaders often tell us they are frustrated playing second fiddle to digital in their organisation. This frustration is exacerbated by tensions between digital and data silos, with investment in digital capability always seeming to trump data priorities. Often this leads to reticence in combining digital and data capabilities and strategies. However we have seen some public bodies combine digital and data teams under a single officer with successful results. This risks being counterproductive if digital and organisational leaders do not understand the importance of

investment in data; however, where the capability is led by a data professional, they can ensure investment progresses both areas. For example, one digital leader we spoke to explained how they were ensuring that every element of investment in digital transformation is being done in a way that improves the quality, usability or interoperability of data.

Start small and prove the value as you go. Successes will beget more successes; if you are struggling with momentum or buy-in, use your initial projects as stepping stones to bigger things. For example, one organisation identified an area where it felt investment in data quality could drive savings in its operations. Securing investment in that smaller project enabled the organisation to show value

and grow its confidence in investing further in data capability development.

Articulate the value of your data as a strategic asset. There is an opportunity across the UK public sector to fundamentally shift the way it invests in data capability by valuing, and articulating the value of its data assets. This aligns with the approach taken for other critical assets, such as people, finance, IT and estates. Data is not yet seen this way – but in the near future it might sit alongside the others as a recognised asset that is basic to your operations. One organisation adopted this valuation approach, enabling its leaders to view data assets in a new light and recognise the return they would get from investment in data capability.

PART OF INVESTING SUCCESSFULLY

IS ATTRACTING AND RETAINING TALENT

“Investment isn’t really the problem; accessing the skills we need is the biggest barrier to meeting our ambition.”

This sentiment was common among the public sector leaders to which we spoke. This is driven in part by an inability to compete with private sector salaries. Ambitious and talented data specialists also struggle to see the appeal in working with legacy public sector data systems that require otherwise obsolete skills to access, maintain and use the data held in them.

Organisations more successful at tackling this issue told us that creative employee value propositions (EVP) helped them compete for talent with the private sector. This EVP could include interesting challenges, development opportunities (training and mentorship support) and work on meaningful problems for public good. Public bodies told us how offering flexibility to candidates and providing diverse kinds of work had helped to attract good talent. It is important to build a strong team culture and ensure that people feel that they have ownership of their work.



The positive social focus works well to get people in the door and retain them, compared to the private sector

Nous in data

Nous is your ideal partner to maximise data impact in the public sector

Data is transforming society and public services across the world. Excellence in data now goes beyond understanding numbers and systems. It requires a diverse mix of creativity, capability and communication to build a shared understanding of data's potential and deliver on it.

Nous combines expertise in data – from strategy to implementation and use – with a deep understanding of the public sector. This means we can help you focus scarce resources on harnessing data to advance your strategic priorities and deliver on data's promise.

Authors

Katharine Purser
PRINCIPAL

katharine.purser@nousgroup.com



Peter Horne
PRINCIPAL

peter.horne@nousgroup.com



Veevek Doolabh
MANAGER

veevek.doolabh@nousgroup.com



Lucy Hubbard
CONSULTANT

lucy.hubbard@nousgroup.com



Meet some of our other experts in data & analytics

Nic Dillon
DIRECTOR, UK

nic.dillon@nousgroup.com



Oliver Jawara
DIRECTOR, UK

oliver.jawara@nousgroup.com



Jessica Weeraratne
DIRECTOR, UK

jessica.weeraratne@nousgroup.com



Antonia Instone
DIRECTOR, UK

antonia.instone@nousgroup.com



David Diviny
PRINCIPAL, AUSTRALIA

david.diviny@nousgroup.com



Janet Vanderlan
PRINCIPAL, CANADA

janet.vanderlan@nousgroup.com



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5
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Business cases

PUBLIC POLICY

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Regulation
Evaluation

ECONOMICS

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Pricing and cost recovery
Market design and efficiency

TRANSFORMATION & IMPLEMENTATION

Transformation strategy and delivery
Implementation support and assurance
Mergers, acquisition and integration

ORGANISATIONAL PERFORMANCE

Operating model
Culture
Workforce
Equity, diversity and inclusion

LEADERSHIP & CAPABILITY

Leadership strategy, assessment and development
Capability and learning

DATA & ANALYTICS

Data strategy and capability
Advanced analytics
Data Assets Warehouse for Nous (DAWN)

DIGITAL

Digital strategy
Digital transformation advisory
Cyber security capability and culture

DESIGN

Service design and implementation
Customer experience strategy and measurement
User research and insights
Digital product design

Cubane Consulting -
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+80.7

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