Financial management in government: monitoring and forecasting

NAO
National Audit Office

Good practice guide

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This guide aims to provide insights and good practice on how to monitor and forecast effectively for better financial management in government

We are the UK's independent public spending watchdog

Insights

Our insights products provide valuable and practical insights on how public services can be improved. We draw these from our extensive work focused on the issues that are a priority for government, where we observe both innovations and recurring issues. Our good practice guides make it easier for others to understand and apply the lessons from our work.

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We are the UK's independent public spending watchdog. We support Parliament in holding government to account and we help improve public services through our high-quality audits.

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The National Audit Office (NAO) scrutinises public spending for Parliament and is independent of government and the civil service. We help Parliament hold government to account and we use our insights to help people who manage and govern public bodies improve public services. The Comptroller and Auditor General (C&AG), Gareth Davies, is an Officer of the House of Commons and leads the NAO. We audit the financial accounts of departments and other public bodies. We also examine and report on the value for money of how public money has been spent. In 2023, the NAO's work led to a positive financial impact through reduced costs, improved service delivery, or other benefits to citizens, of £1.59 billion. This represents around £17 for every pound of our net expenditure.

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Overview

Why is financial management so important to government organisations?

Good financial management is essential for all organisations. For organisations in government particularly, financial management can be a driver for greater efficiency and productivity and for optimising the use of public money. Financial management is central to helping Accounting Officers exercise their responsibilities to the taxpayer as set out in _Managing Public Money_.

The test for government organisations is to maximise the use of limited resources to deliver services to taxpayers efficiently and ensuring value for money. In today's complex public service landscape, this represents both a significant challenge and an opportunity for finance leaders.

The Government Finance Function's vision is to put finance at the heart of decision making.[1] Our work on financial management reinforces the importance of this message. Finance teams are uniquely positioned to see across everything an organisation does. They can control and interpret information, and they can be a crucial support and enabler to the business. They are uniquely placed to help balance priorities not just within their own organisation, but across government more widely.

How to use our guidance

Our good practice guides:

- Set out why **finance teams** have a crucial role in helping their organisations navigate future challenges – from promoting accountability and realism, to providing trusted and timely information, and working across boundaries to deliver efficiencies and greater value.

- Provide a number of actions across the entire financial management lifecycle that allow **senior finance leaders** to assess the health of their finance function at regular intervals.

- Can be used by **Audit and Risk Assurance Committees** to assess how well organisations are equipped to deal with financial management challenges.

We draw on the insights from the National Audit Office's (NAO's) back catalogue of work, the experiences of our audit teams, and the thoughts of a range of senior finance decision-makers across and beyond government.

Through our insights work we make it clear that financial management enables government organisations to:

- make more timely and well-informed decisions;

- unlock efficiencies and drive better ways of working; and

- improve financial resilience and enhance their ability to adapt and respond to shocks and disruptions.

Our insights do not represent mandatory guidance. They complement existing guidance provided to finance teams across government by the Government Finance Function, such as the Finance Functional Standard and guidance provided through One Finance.

Our good practice guides are primarily written for senior finance leaders within central government. However, the actions and practical tips in this guidance may also be useful for other areas of the public sector and beyond.

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1   Government Finance Function, _Government Finance Function Strategy 2022-25_, June 2022.

Overview *continued*

✓ Our financial management good practice series

Strategic planning and budgeting

September 2023

Reporting

Autumn 2025

Enablers of success

July 2023

Allocating resources

December 2024

Monitoring and forecasting

January 2025

Monitoring and forecasting is the fourth guide in our series on financial management in government. Our guides span the full financial management lifecycle.

- *Enablers of success* explores the fundamental themes that underpin each stage of the financial management lifecycle, and how finance leaders can make the most of our guides.

- *Strategic planning and budgeting* outlines how finance leaders can plan strategically and realistically in the face of an uncertain landscape – whether in terms of policy direction or funding.

- *Allocating resources* shows how finance leaders can help decision makers prioritise and deploy their scarce resources to secure the best outcomes and value for money.

- *Reporting* will demonstrate how finance leaders can lead their teams to make the greatest impact to organisations on financial performance.

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Introduction

Monitoring and forecasting

This guide focuses on the importance of monitoring and forecasting, and suggests actions finance leaders can take to enhance this aspect of financial management in their organisations. While monitoring and forecasting are distinct concepts, they are closely linked, and essential for informed decision making throughout the year. Monitoring reflects the importance of budget holders reviewing and actively considering financial activity and performance. Forecasting reflects how finance leaders encourage budget holders to predict accurate future outcomes, and help organisations anticipate performance for upcoming periods.

Effective monitoring and forecasting forms the foundation of strong financial management. It can provide greater oversight and control of actual performance and lead to improved financial outcomes. HM Treasury's *Public Value Framework* sets out the importance of monitoring in delivering public value and the need to have high-quality and timely data for the monitoring process to be effective. In addition, as set out in HM Treasury's *Consolidated Budgeting Guidance*, it is essential that the government has good information about what it plans to spend, and what it actually spends.

It is beneficial for organisations to monitor and forecast well: they can identify underspends and overspends earlier, manage risks quicker and more effectively, and take advantage of opportunities. Our guide explores three key principles:

Promote a culture of accountability

Develop the right skills and capabilities

Make the best use of data and information

The NAO has reported on the importance of monitoring and forecasting in the past.

- In *Lessons learned: Delivering value from government investment in major projects* we outlined that better and more widespread monitoring and evaluation of projects could enable the government to improve its focus on what works and produce more value from its investment in major projects.

- In *Evaluating government spending* we set out that performance monitoring is important in informing decision making as it provides real-time insights into the delivery of an intervention.

- In *Initial learning from the government's response to the COVID-19 pandemic* we discussed the importance of monitoring performance, flexing government's response, forecasting changes in demand as far as possible and tackling issues arising from rapid implementation or changes in demand.

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Key takeaways

This table outlines the three principles that finance leaders can focus on when it comes to monitoring and forecasting. For each principle, we describe what 'good' looks like, and the key actions and practical tips finance leaders can take to enhance how effectively they monitor and forecast in their organisations. We go into more detail on each of these principles on pages 7 to 16.

Principle	What good looks like	Key actions for finance leaders	Practical tips
Promote a culture of accountability	Leadership emphasises the importance of budget holders being accountable for monitoring financial performance and ensuring forecasts are accurate and realistic.	Empower finance business partners to constructively challenge the realism of budget holder progress and performance.	Develop mandatory training to ensure budget holders understand their responsibilities and follow up any non-completion.
		Increase collaboration between finance and other functions across the organisation.	Create monthly forums to collaborate with other functions. For example, risk management to get a clearer view of risks and opportunities, human resources to understand current and future workplace challenges, and IT to build opportunities for digital improvements.
		Adopt a risk-based approach to contingencies.	Share examples with budget holders where contingencies are pragmatic based on inherent uncertainties, and examples where contingencies can reasonably be reduced as costs are more predictable.
		Encourage honest reporting of actuals against budget, even if this indicates poor monitoring previously.	With buy-in from other organisational leaders, integrate financial management objectives into the performance management system – specifically focusing on ensuring budget-holders accurately manage their forecasts throughout the year.

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Key takeaways *continued*

Principle	What good looks like	Key actions for finance leaders	Practical tips
Develop the right skills and capabilities	Finance professionals possess the skills and capabilities to monitor effectively and forecast with precision and leverage these to elevate the quality of the organisation's decision making.	Foster a mindset within the finance team to actively monitor internal and external factors which could influence the accuracy of forecasts.	Set goals for the finance team to identify emerging risks and external issues that could affect forecast accuracy. Share these findings in regular meetings to enhance overall awareness.
		Promote strong partnerships between finance business partners and budget holders.	Finance business partners should encourage budget holders to think about risks and opportunities which could impact on their forecasts on a regular basis. This enables finance business partners to offer timely and targeted advice based on the latest information.
		Develop a plan to enhance the skills and capabilities required within the finance team for effective monitoring and forecasting.	Encourage the finance team to use the Government Finance Function's *Skills Capture Tool*. This helps finance professionals review their strengths and identify potential areas for development.
		Prioritise in-year monitoring as part of the governance and oversight process.	Share the NAO's *Audit and Risk Assurance Committee (ARAC) effectiveness tool* with the ARAC Chair. Section two illustrates the range of skills increasingly important to those charged with governance as part of the monitoring process.
Make the best use of data and information	High-quality data and information is used to enable better monitoring and more accurate forecasting, helping decision makers respond to events quickly and effectively.	Identify opportunities for using technology to increase the effectiveness and efficiency of monitoring and forecasting processes.	Assess functionality within existing software packages to explore opportunities to present information in more accessible and interactive ways by using analytics or visualisations to aid decision makers.
		Understand the limitations of data and how this can affect monitoring and forecasting accuracy.	Work with digital colleagues to fully understand the implications for monitoring and forecasting. Build an action plan for mitigating these issues.
		Use trends and analytics to identify variances.	Have an up-to-date record of projects which can be quickly undertaken when underspends appear likely based on realistic monitoring and forecasting.
		Take a tailored approach to expenditure and income streams depending on their risk profiles.	Develop 'range forecasting' to model the uncertainty of different expenditure and income streams against the central forecast. This gives decision makers a more realistic view of the range of possible outcomes.

Promote a culture of accountability

What good looks like

Leadership emphasises the importance of budget holders being accountable for monitoring financial performance and ensuring forecasts are accurate and realistic.

Why this is important

In our guide *Enablers of success*, we highlighted the importance of setting clear accountabilities and responsibilities across the organisation to ensure that everyone understands their role in safeguarding the financial wellbeing of the organisation. This stretches from budget holders – who are responsible for the active monitoring and forecasting of their finances – to decision-makers who use forecasts to make allocation and spending decisions. Scrutinising how the organisation monitors and forecasts should be an important part of governance, assurance and accountability processes, including the work of audit and risk assurance committees. On a fundamental level, if budget holders fail to maintain accurate financial information on an ongoing basis, the organisation will lack a true picture of how it is performing against its plans. HM Treasury's *Consolidated Budgeting Guidance* states that "good spending control demands that public sector organisations monitor performance against objectives through the year and make adjustments to stay on track. This requires prompt and accurate management information systems coupled with active top management engagement."

In our discussions with senior leaders they recognised that fostering a culture of accountability and ownership is required for effective monitoring and forecasting. This culture drives the right behaviours and actions across the organisation, improving monitoring and forecasting processes while reinforcing timely and informed decision making. If budget holders do not understand their responsibility in updating forecasts, it can hinder Accounting Officers from fulfilling their duties. This oversight can result in organisations overspending against agreed budgets, potentially leading to qualified audit opinions. Organisations can also carry significant underspends throughout the year, which prevents them from making the most of the financial resources they are given by Parliament each year. In 2022-23, a total of £20.9 billion of underspends were recorded by ministerial government departments[2] (**Figure 1** – page 8).

Finance leaders can greatly benefit from instilling accountability in budget holders and appropriately delegating authority across their teams. For departments and ALBs, this approach significantly reduces the amount of remedial work finance teams need to perform to achieve confidence in in-year financial information. In our section *Make the best use of data and information*, we acknowledge that data within the same organisation can vary in format and quality. To help mitigate this, all organisations can instil a culture where individuals take responsibility for their financial information being up to date and realistic. Where there is a culture of historically poor forecasting, it is important that leaders take the opportunity to reset this. Promoting active monitoring and realistic forecasting will make a difference to decision makers being able to take important in-year spending decisions in a timely manner based on realistic information.
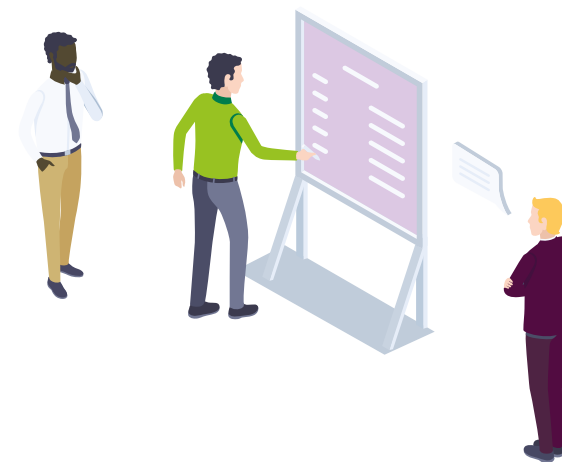
2   The analysis included ministerial departments from *GOV.UK*. Certain departments have been excluded where it has not been possible to consistently compare information across the five-year period.
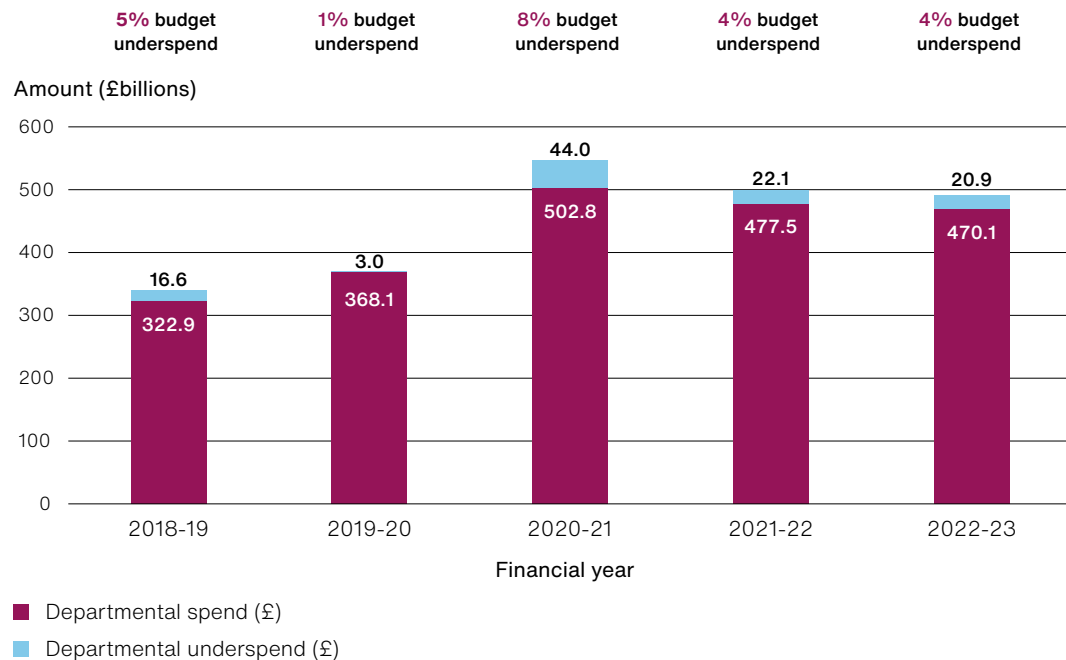
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Promote a culture of accountability *continued*

Figure 1

Annual spending of allocated budgets by government departments from 2018-19 to 2022-23

Over the period between 2018-19 and 2022-23, total annual underspending by government departments has ranged between 1% and 8% of allocated budgets.

5% budget underspend **1%** budget underspend **8%** budget underspend **4%** budget underspend **4%** budget underspend

Amount (£billions)

- ■ Departmental spend (£)
- ■ Departmental underspend (£)

Notes

1   The analysis included ministerial departments from GOV.UK. Certain departments have been excluded where it has not been possible to consistently compare information across the five-year period.

2   Departmental spend figures include capital expenditure (CDEL) and resource expenditure (RDEL) and they exclude annually managed expenditure (AME).

3   The total budgets allocated to departments per financial year can be calculated by totalling departmental spend and underspend.

4   Percentage underspend (%) is the proportion of total budget not spent by government departments.

5   The analysis runs to 2022-23 because, as of November 2024, 2023-24 audited information for all ministerial departmental accounts included in our analysis was not publicly available.

Source: National Audit Office analysis of departmental annual reports and accounts

Promote a culture of accountability *continued*

How finance leaders can address this

- **Empower finance business partners to constructively challenge the realism of budget holders' progress and performance.** Budget holders need to not only monitor but take active management decisions. Finance leaders should be clear that accountability rests with the budget holder – and set expectations for how the relationship with finance business partners will work. This will allow finance business partners to spend their time working in partnership with budget holders, providing advice and guidance throughout the year.

  Practical tip: Develop mandatory training to ensure budget holders understand their responsibilities and follow up any non-completion.

- **Increase collaboration between finance and other functions across the organisation.** For an organisation to make the best decisions on an ongoing basis, leaders should minimise boundaries and silos. Finance leaders can consider how finance business partners can collaborate with other functions to increase visibility and understanding of actual financial performance on an ongoing basis.

  Practical tip: Create monthly forums to collaborate with other functions. For example, risk management to get a clearer view of risks and opportunities, human resources to understand current and future workplace challenges, and IT to build opportunities for digital improvements.

- **Adopt a risk-based approach to contingencies.** Finance leaders need to have visibility of where contingencies are in their projects and ensure that each project has the right level of contingency based on its risk profile. For example, underspends may have recurred in budget lines year-on-year because too much contingency has been baked in – and there has been little incentive for budget holders to adjust them. It is therefore important that a clear approach to financial discipline is embedded throughout the organisation. HM Treasury's *Consolidated Budgeting Guidance* recommends adopting a robust approach to contingency so that, when risks do materialise, they can be managed within existing budgets.

  Practical tip: Share examples with budget holders where contingencies are pragmatic based on inherent uncertainties, and examples where contingencies can reasonably be reduced as costs are more predictable.

- **Encourage honest reporting of actuals against budget, even if this indicates poor monitoring previously.** To tackle a culture where overspending or underspending is commonplace, leaders should promote a 'no blame culture' with open conversations and incentivise the right behaviours to help shift the mindset of the operation to one where realistic and accurate monitoring is encouraged. This will help to motivate individuals, focus minds and attention, and improve the overall monitoring process.

  Practical tip: With buy-in from other organisational leaders, build financial management objectives into the performance management system – specifically those that focus on budget holders accurately managing their forecasts throughout the year.

Promote a culture of accountability *continued*

Case study

Background: HM Courts and Tribunal Service (HMCTS) recognises that promoting a culture of accountability where people understand their roles and take responsibilities for their actions is critical to the success of the organisation.

Approach: In 2022, HMCTS, in collaboration with the Ministry of Justice, introduced improved mandatory training that every budget holder has to complete to give them licence to operate. The training is a four-hour intensive session delivered in person by a finance business partner. This training covers the responsibilities of budget holders in managing public money and how to delegate effectively by giving accountabilities to members of their teams, as well as key aspects around improving forecasting plans. HMCTS also uses a register that contains information on when budget holders completed the training, and every three years budget holders need to undertake a refresher to ensure that their training remains up to date.

Benefit: With HMCTS increasing the focus on this mandatory training, budget holders understand their responsibilities and are more likely to feel accountable for maintaining financial information and updating forecasts accurately. This helps the finance team to monitor more effectively and provides decision makers with more timely and accurate information.

Further resources

- Our *Lessons learned from Major Programmes* report sets out that bodies must ensure that information within their organisation is accurate, consistent and timely, and that organisations should examine their own, and their contractors' culture, and behaviours to ensure that they allow an effective line of sight from the working level up to the decision makers, as well as to the wider public.

- The Government Finance Function's *Budget holder forecasting handbook* provides useful guidance and case studies to help budget holders work closely with finance teams to deliver a central, accurate and timely forecast.

- Annex 4.1 of *Managing Public Money* includes useful information on the role and responsibilities of finance directors.

Quote

"We are trying to build a culture that recognises the importance of good financial monitoring. We need to ensure we get the right understanding around variances and risks and pass that message across."

Jamie Darck, Head of Finance and Compliance, Zimbabwe Office, Foreign, Commonwealth & Development Office

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Develop the right skills and capabilities

What good looks like

Finance professionals possess the skills and capabilities to monitor effectively and forecast with precision and leverage these to elevate the quality of the organisation's decision making.

Why this is important

In our discussions with finance leaders, they emphasised the importance of developing the right skills and capabilities for the finance function to be able to monitor and forecast effectively. Developing the right technical skills and capabilities in the finance team is crucial in helping government organisations navigate a dynamic public service delivery landscape. But our work has found that government is facing significant challenges in attracting and retaining civil service staff especially

those with specialist skills.[3] In our guide *Enablers of success*, we outlined the range of skills finance leaders should prioritise in their teams. The Government Finance Function outlines that a finance business partner will translate financial information and concepts into easily understandable messages and recommendations.[4] For the purposes of monitoring, working in partnership with budget holders requires finance business partners to balance their technical accounting knowledge – and the intricacies of government spending controls – with a deep understanding of the business. This allows them to scrutinise variances, exercise challenge in the right areas, and ultimately help improve the accuracy of financial information on which in-year decisions are made.

To build effective partnerships across the business, finance professionals also need to have a range of soft skills to be able to add value to the monitoring and forecasting processes. Developing strong influencing and story-telling

skills will help to communicate performance clearly to stakeholders and support decision making. These skills will also help when engaging with different functions across the organisation to share data and insights. Professional scepticism and critical thinking can help identify where forecasts may be unrealistic. Being alive to factors in the external environment helps finance business partners navigate funding uncertainties and adapt their response in times of uncertainty.

Using data and systems effectively to drive improvements in monitoring and forecasting processes is an increasingly valued capability. Finance professionals we talked to recognised that, to improve monitoring and forecasting, finance teams value strong analytical and modelling skills so insightful information can be generated – allowing different users and stakeholders to have a clearer understanding of in-year performance.

3   Comptroller and Auditor General, *Civil service workforce: Recruitment, pay and performance management,* Session 2023-24, HC 192, National Audit Office, November 2023, paragraph 1.

4   Government Finance Function, *A Guide to Finance Business Partnering in Government*, section 10.

Develop the right skills and capabilities *continued*

How finance leaders can address this

- **Foster a mindset within the finance team to actively monitor internal and external factors which could influence the accuracy of forecasts.** Finance business partners will be able to work more effectively with budget holders by critically assessing performance through a solid understanding of the business and an appreciation of other external factors, such as inflationary pressures or emerging risks affecting similar organisations. By understanding the impact of constraints in other parts of the organisation – and beyond – finance business partners will be able to get a more holistic view of the business to effectively challenge whether forecasts are realistic.

  Practical tip: Set goals for the finance team to identify emerging risks and external issues that could affect forecast accuracy. Share these findings in regular meetings to enhance overall awareness.

- **Promote strong partnerships between finance business partners and budget holders.** Monitoring of financial performance throughout the year is an active process requiring relationships between finance and the rest of the organisation which are continuous rather than specific to annual events. Leaders should encourage their teams to create quality time on at least a monthly basis with budget holders – this will not only help with the accuracy of forecasting but will create more regular opportunities for upskilling budget holders.

  Practical tip: Finance business partners should encourage budget holders to think about risks and opportunities which could impact on their forecasts on a regular basis. This enables finance business partners to offer timely and targeted advice based on the latest information.

- **Develop a plan to enhance the skills and capabilities required within the finance team for effective monitoring and forecasting.** For example, strong analytical and modelling skills are crucial in interpreting data, monitoring trends, helping to indicate in-year variances and identifying errors in financial assumptions. These skills will help financial professionals to monitor effectively and forecast accurately to support in-year decision making.

  Practical tip: Encourage the finance team to use the Government Finance Function's *Skills Capture Tool*. This helps finance professionals review their strengths and identify potential areas for development.

- **Prioritise in-year monitoring as part of the governance and oversight process.** It is important that oversight committees, boards and other providers of oversight or assurance have a range of critical skills and capabilities to monitor ongoing performance and ask the right questions throughout the year, particularly when it comes to complex projects and programmes. Finance leaders can work with committees and boards to help them identify areas for upskilling.

  Practical tip: Share the NAO's *Audit and Risk Assurance Committee (ARAC) effectiveness tool* with the ARAC Chair. Section two illustrates the range of skills increasingly important to those charged with governance as part of the monitoring process.

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Develop the right skills and capabilities *continued*

Case study

Background: Within its Border Change Delivery area, HM Revenue and Customs (HMRC) has developed approaches to enhance budget holder capability and awareness, in which finance business partners (FBPs) play a crucial role.

Approach: There are some specific approaches FBPs within the Border Change Delivery area of HMRC use which have been successful in building partnerships with budget holders. Partnership building is something FBPs have found to be important for effective monitoring. Their approaches included:

- finding regular time with budget holders where FBPs can coach, upskill, and monitor forecasts on a continual basis;

- developing a training pack, aligned to *Consolidated Budgeting Guidance* and other public spending frameworks, which FBPs can use to explain to budget holders how funding and government finance works in practice; being deliberate and consistent with the language used in communication with budget holders – this helps to establish the budget holder's accountability and cement the role of the finance team as a trusted advisor;

- explaining the impact on spend classification through the lifecycle of a project – distinguishing what may constitute resource spend (RDEL) compared to capital spend (CDEL), and highlighting where there may be points that require judgement; and

- understanding the business and making finance 'real' – using common and well-understood examples from daily life to make complex issues more relatable, and then applying this to forecasting.

Benefit: This rounded approach to building a partnership with budget holders allows finance to develop the right skills and capabilities across the organisation. For monitoring and forecasting purposes, FBPs can work closely with the business to encourage accurate forecasting and identify issues, like misclassification of expenditure, early in the process.

Quote

"The Government Finance Function's focus is on developing skills for the future. We will need our finance professionals to be key partners to the business, confidently conveying key messages to finance and non-finance stakeholders alike to inform decision making and developing strong and effective storytelling skills, adding value as trusted partners."

Suzanne Ibbotson, Head of Finance Capability, Learning & Development for the Government Finance Function

Further resources

- The Government Finance Function has many resources around skills and capabilities including *The finance career framework* and the *Finance business partnering handbook*.

- Our *Civil service leadership capability report* explores the importance of leadership skills and capabilities for senior civil servants.

- Our *Improving government's planning and spending framework* report looks at skills and experience of spending teams in effectively monitoring and scrutinising departments.

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Make the best use of data and information

✓ What good looks like

High-quality data and information are used to enable better monitoring and more accurate forecasting, helping decision makers respond to events quickly and effectively.

✓ Why this is important

Finance teams across government face notable capacity challenges, so improving data and information can present efficiencies when used in the right way.[5] Finance leaders should understand the limitations of their data and look for ways to make gradual improvements to monthly processes which can improve the organisation's ability to monitor and forecast. Advancements in technology, such as artificial intelligence, present vast opportunities but do not provide an automatic solution. Finance leaders will wish to consider opportunities where advancements in technology enhance the monitoring and forecasting process, to build on the technical and professional support already provided by teams.

One of the main challenges to monitoring and forecasting well is the availability of good data. The NAO has reported on the need to urgently address these issues to drive better decision making and efficiency across government.[6] In our discussions with finance leaders they acknowledged difficulties with legacy systems and managing data from different sources – which can result in a lack of real-time information and delay decision making. There is naturally a conflict arising from generating timely information versus trusted information – and the cost and resource impact when data need to be reconciled and quality-checked before they can be the basis of informed decisions.

Poor data and information make monitoring and forecasting more difficult and, at times, impossible. Budget holders need to be able to see easily across the organisation to get a perspective on how projects and programmes are performing, and a clearer picture of what

lies ahead, so they can take the right course of action with their finances. When organisations are unable to present information in an accessible way, maintaining forecasts can be time-consuming and result in inaccuracies.

The quality of data and information impacts decision making and the effectiveness of finance teams. Finance functions need to establish what users find challenging and how they can be helped. Decision makers require an accurate view of the financial position of an organisation to make prioritisation decisions, manage risks and take opportunities. When data and information are of poor quality, finance business partners tend to spend time compensating for the inadequacies in data to convert them to a position where data can be used by decision makers, rather than optimising their time by working closely with budget holders and advising on forecasting.

5   Comptroller and Auditor General, *Challenges in using data across government*, Session 2017–2019, HC 2220, National Audit Office, June 2019, paragraph 3.2.

6   Comptroller and Auditor General, *Digital transformation in government: addressing the barriers to efficiency*, Session 2022-23, HC 1171, National Audit Office, March 2023, paragraphs 3.12-3.16.

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Make the best use of data and information *continued*

✓ How finance leaders can address this

- **Identify opportunities for using technology to increase the effectiveness and efficiency of monitoring and forecasting processes.** This doesn't need to be a whole system change and it can start with improving existing systems or processes. Streamlining the number of data sources can increase efficiency and limit conflicting data. Leaders will also need to understand the impact and scope of any committed plans for system development – for example, the impact of moving to shared service platforms in the future.

  Practical tip: Assess functionality within existing software packages to explore opportunities to present information in more accessible and interactive ways by using analytics or visualisations to aid decision makers.

- **Understand the limitations of data and how this can affect monitoring and forecasting accuracy.** To start to make the case for improvement, understanding the data landscape is essential. Finance leaders should be open about any existing limitations when data of a substandard quality are being used as part of decision making.

  Practical tip: Work with digital colleagues to fully understand the implications for monitoring and forecasting. Build an action plan for mitigating these issues.

- **Use trends and analytics to identify variances.** Intelligent use of data analytics allows finance leaders to 'tell a story'. This can include comparing actual performance with expected performance, comparing performance across different timeframes, and using it to benchmark across, or beyond, the organisation. This can also help identify optimism bias by analysing previous forecasting accuracy, which enables earlier intervention and generates more reliable forecasting in future.

  Practical tip: Have an up-to-date record of projects which can be quickly undertaken when underspends appear likely based on realistic monitoring and forecasting.

- **Take a tailored approach to expenditure and income streams depending on their risk profiles.** Assessing expenditure and income streams on a risk basis will allow a more deliberate form of monitoring focuses time and challenge in the most important areas. There may be areas of fixed costs which vary little from period to period – and, conversely, areas which are prone to uncertainty, which may have impacts on cashflow or control totals.

  Practical tip: Develop 'range forecasting' to model the uncertainty of different expenditure and income streams against the central forecast. This gives decision makers a more realistic view of the range of possible outcomes.

Make the best use of data and information *continued*

Case study

Background: The Ministry of Defence (MoD) is a large department comprising a number of different strategic areas, including Navy command, Army command and Air Command. Monitoring and forecasting across a large and disparate department is challenging, and MoD's strategic finance team identified some areas for improvement in its in-year forecasting processes.

Approach: MoD developed an 'automated forecasting' tool which uses machine learning and aims to act as a sense-check on forecasts produced by budget holders across the department. The tool considers a huge number of parameters and makes predictions for in-year forecasts based on a range of features, including current spend, committed spend and historical accuracy. MoD is conscious of the limitations of the tool and has worked within these limitations – for example, it only uses financial data because of the challenges of integrating data from other systems. Even within this context, the outputs from the tool provide a valuable sense-check for strategic finance teams to identify errors in forecasts. Finance now have more information to support discussions with budget holders and to challenge or support 'run-rates' throughout the financial year.

Benefit: Since the introduction of the tool, MoD has seen individuals across the department use it in tandem with their own forecasting processes – allowing them to sense-check their assumptions. It has provided MoD with the means to run a more sophisticated assessment of outturn against budget in the hope this will lead to less variance across the financial year.

Quote

"Good and timely data is a game-changer. In our case, we can personalise dashboards, so everyone gets views relevant to them from finance to budget holders. This lets everyone in the organisation get the information they need to make their decisions."

Ria Gill-Williams, Finance Controller, HM Land Registry

Further resources

- The Government Finance Function's *Budget holder forecasting handbook* outlines poor quality data as a common pitfall, and recommends consolidating data sources as a mitigation.

- Our *Challenges in using data across government* report set out principles for the government and its service providers for successful use of data to improve services for citizens and the way systems operate, and to support better decisions.

- In *Improving government data: a guide for senior leaders* we encourage decision makers to realise the benefits of better use of data by helping them understand in more detail the core issues to be addressed which have held back progress in the past.

- Our *Lessons learned: Delivering programmes at speed* report outlines that, for all programmes, data and information should be used in the right way and at the right time – for delivering programmes at speed this helps establish where issues may arise and when swift action is required.

Methodology appendix

We have used the following methods to generate our insights:

a We conducted five focus groups and one semi-structured interview with senior finance leaders from a range of our audited bodies. In one instance, we included more than one representative from the same organisation.

We met with Heads of Finance, Finance Directors, Chief Financial Officers, a Finance Controller, Finance Business Partners, and other finance leaders from:

- six ministerial departments;
- five non-ministerial departments;
- two non-departmental public bodies;
- two executive agencies; and
- one independent agency.

We included organisations of different sizes and complexity and participants from a range of senior finance roles, to capture a diversity of perspectives. The findings from the focus groups and interview were used to inform our themes and identify examples of good practice. We carried out our focus groups and interview between July and August 2024.

We chose to use focus groups to capture a range of perspectives from finance leaders across government and give participants the opportunity to present their views and experiences while listening and reflecting on what the others had to say. This helped us to collect insightful data on the main challenges for monitoring and forecasting effectively and ways to address these challenges.

b For the focus groups and the interviews, we organised the notes in an Excel matrix against the themes identified in our review of past NAO reports. We used this analysis to refine, test and supplement our findings and to identify and examine examples to illustrate them.

c We interviewed officials from private sector accountancy firms to discuss and gain their perspectives on the themes we had identified.

d We held an expert panel discussion with senior officials from academia, a professional body and one of the private sector consultancies to discuss our findings, test our themes and hear their views on strengthening monitoring and forecasting for effective financial management.

e We shared and discussed our findings with officials from the Government Finance Function.

f We interviewed a member of the NAO's finance team to understand the NAO's approach to monitoring and forecasting, and representatives from NAO's insights teams to discuss their perspectives based on their specialist areas.

g We reviewed our back catalogue of value-for-money reports, investigations and good practice guides. We used this information to identify our key themes, the main challenges for finance teams across government in monitoring and forecasting effectively, and actions that leaders can take to tackle these challenges.

h We conducted external research on monitoring and forecasting and its importance for financial management. This comprised desktop research of financial management materials and documentation from central government and the private sector, and discussions with organisations from beyond central government to deepen our understanding of the current challenges for effective monitoring and forecasting.