Office for National Statistics

Statistical bulletin

Public Sector Management Practices Survey pilot, UK: 2023

The Public Sector Management Practices Survey (PSMPS) is a new survey of management practices in public sector organisations. These are official statistics in development.

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Next release:
To be announced

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1 . Main Points

- On a scale of 0 to 1, the mean public sector management practice score (0.56) was broadly comparable to the private sector management practice score (0.55), and the median in the public sector (0.58) was also broadly comparable to the private sector (0.60).

- Police and fire service organisations had the highest median management practice score (0.69); education organisations had the lowest median management practice score (0.57).

- Across all public services surveyed, organisations with more employees had higher management practice scores.

- Public sector organisations with higher management practice scores were more likely to adopt technology, including artificial intelligence, and were more likely to see automation as way to deliver work in a different way.

- Only around one-fifth (19%) of public sector organisations surveyed reported facing no barriers to improving how they were managed, compared with almost one-third (32%) of private sector organisations.

- The pilot study of our Public Sector Management Practices Survey (PSMPS) faced challenges in reaching some public sector organisations, notably in healthcare; public sector respondents reported some difficulty in applying private sector-structured management practice questions to their organisation.

Caution should be taken when interpreting these results, which are based on a pilot survey with low response rates in some public service sectors. For more details, please see Section 8.

2 . Measurement of management practices in the public sector

This bulletin reports the main findings from the pilot of our Public Sector Management Practices Survey (PSMPS). This pilot was conducted across the UK from April to July 2024. It asked public sector organisations about their structured management practices in 2023. The survey covered organisations in five public service sectors:

- central government – ministerial and non-ministerial departments, devolved administrations, and arm's length bodies

- local government

- education

- health and social care – boards, trusts, and local healthcare providers; local healthcare units were excluded from analysis because of low response rates

- police and fire services

This is the first time a survey of management practices across the public sector has been conducted in the UK. The PSMPS contributes to our Public Services Productivity Review (PSPR) by improving our understanding of the role of management practices for productivity. The PSMPS pilot is based on our established Management and Expectations Survey (MES), which we have conducted periodically since 2016.

Differences in management quality have been found to be related to important private sector firm outcomes like productivity, as described in The New Empirical Economics of Management article by Bloom, Sadun, Van Reenen and co-authors. Small-scale, bespoke studies of the public sector have found that management is important to delivering better outcomes in areas like health and education. These include The impact of competition on management quality working paper (PDF, 164KB) and Does management matter in schools paper (PDF, 394KB), both by Bloom and co-authors.

Management practice scoring questions have been developed to measure management quality across organisations. This allows for comparisons of management practices between the public and private sector, across the public sector, internationally, and over time. The structured management practices scores were developed across a series of academic projects by Nick Bloom, Raffaela Sadun, John Van Reenen and co-authors, as described in their Measuring and explaining management practices across firms and countries paper (PDF, 575KB). Scores consist of four categories:

- continuous improvement – how well organisations monitor and adapt to unexpected situations (1 question)

- key performance indicators (KPIs) – how many, and how frequently they are reviewed (3 questions)

- targets – how targets are set, tracked, and reviewed (6 questions)

- employment practices – processes of promotion, management, and training of employees (6 questions)

Management practice scores range from 0 to 1. Organisations score 0 if they do not respond to ongoing problems, base promotion decisions on factors other than merit, and do not track performance or set targets. To score 1, organisations need to continuously review their processes to minimise future challenges, carry out regular performance reviews, train employees, and base hiring and promotion decisions on merit.

The PSMPS pilot also included supplementary questions on topics related to structured management practices and organisational performance, such as technology adoption, innovation, and staff retention. Given this is an initial pilot study of the PSMPS in the UK, we consider these findings to be provisional. They are classified as official statistics in development.

The pilot survey aims to provide a baseline measure of public sector management practices, and to test the translation of the survey instrument from the private to the public sector. Conducting the survey has highlighted the benefits and limitations of comparing management practices between private and public sectors using the same approach. We found that some aspects of management are more relevant to the private sector than the public sector. For example, anecdotal evidence from respondents during the fieldwork period suggested that they have a different understanding of how best practice can be achieved across the four dimensions of management.

We also carried out qualitative research to further explore management practices, particularly on the impact of administrative tasks and the use of innovation through automation and technology, like artificial intelligence, on productivity. Findings from this research are published in our Public sector managers' views on management practices, Great Britain: August to September 2024 article.

3 . Management practices in the public sector, 2023

The total management practice score is a simple average of all 16 questions across the 4 dimensions of management. On a scale of 0 to 1, the overall mean management practice score was 0.56 across the UK public sector. This is similar to the private sector average of 0.55, as found in our Management and Expectations Survey (MES) 2023. The public sector median score of 0.58 was also similar to the private sector MES median score of 0.60.

Figure 1 shows the distribution of management practice scores across organisations in the public sector and the private sector. The public sector had fewer respondents with management practice scores at the lower end of the scale, compared with the private sector. However, a greater proportion of public organisations are concentrated just below the average, while proportionally, more private firms have a higher score. This is why the public sector median score is lower than the private sector median score.

Figure 1: Management practice scores in the public sector are broadly comparable to the private sector

Comparison of Public Sector Management Practices Survey (PSMPS) and Management and Expectations Survey (MES) overall management practice score distribution, UK, 2023

Figure 2 shows the distribution of management practice scores for each sector surveyed by the Public Sector Management Practices Survey (PSMPS) using a box-and-whisker plot. Police and fire services had the highest management score, with a median score of 0.69. This is followed by central government (0.67), health boards (0.66), local government (0.65), and education (0.57).

Differences in these median sector scores were statistically tested to determine whether they are significant. When excluding education, differences were not found to be significant. Therefore, users should interpret these results as showing a large degree of similarity in management scores across the public sector.

Public sector organisations are more closely distributed around the median. However, in the private sector, the median is closer to the 75th percentile. This means there are many higher-scoring firms, but with a larger proportion of low-scoring firms.

Figure 2: Management practices vary by sector

Management practice score by sector, UK, 2023

Notes:

1. Lines show the 10th to 90th percentiles.

2. Boxes show the 25th to 75th percentiles, with the middle line showing the median and the "x" showing the mean.

3. "MES23" refers to results from the Management and Expectations Survey, 2023, of private firms.

Figure 3 presents average scores for each of the four dimensions of management by PSMPS public service sector and for the private sector overall from the MES. Like the private sector, "continuous improvement" and "employment practices" were the highest-scoring components of management across the public sector. "Key performance indicators (KPIs)" in the public sector varies more than other components of structured management practices, ranging from 0.42 in education to 0.66 in health boards.

Figure 3: "Continuous improvement" is the highest scoring component of management practice score by sector

Mean management practice score by component and public service sector, UK, 2023

Figure 3: "Continuous improvement" is the highest scoring component of management practice score by sector

Mean management practice score by component and public service sector, UK, 2023
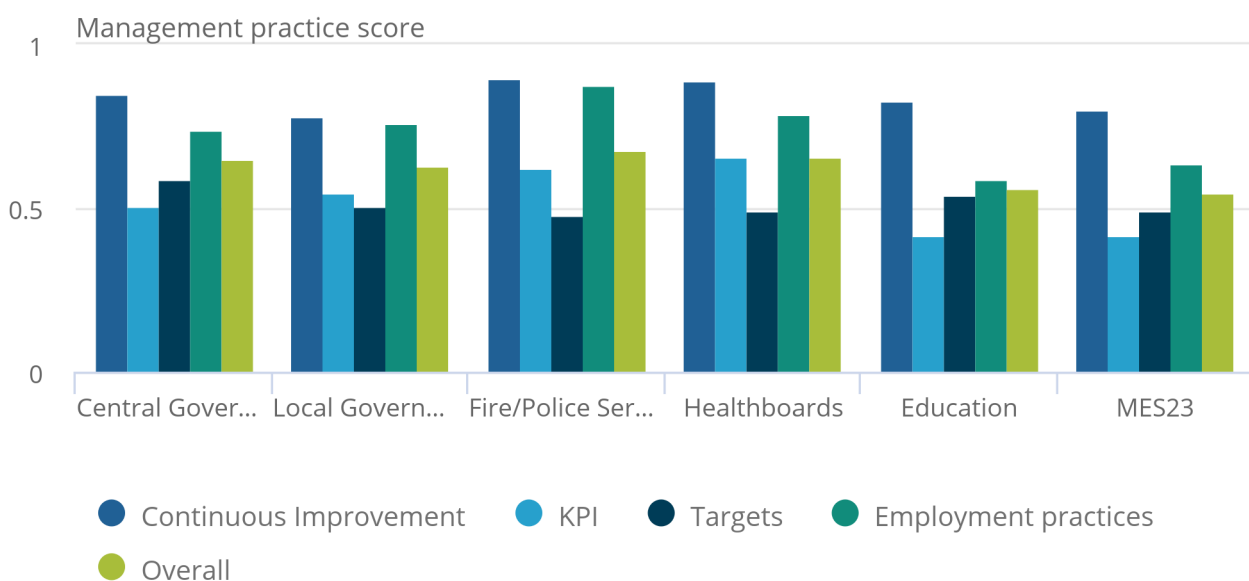
Source: Public Sector Management Practices Survey (PSMPS) pilot and Management and Expectations Survey (MES) from the Office for National Statistics

The relationship between firm size and management score in the private sector has been shown to be positive and statistically significant. We tested this hypothesis for the public sector, controlling for the type of public organisation. Figure 4 shows the regression coefficients for organisation size.

Organisations that employ between 100 and 249 people have management scores on average 0.06 points higher than organisations that employ between 20 to 49 people. As organisations continue to become larger, management scores continue to increase, but at a slower rate. An organisation that had 5,000 or more employees had a score on average 0.02 points higher than one that had between 1,000 and 1,999 employees.

Figure 4: Organisations with more employees have a higher management practice score on average

Conditional analysis of the relationship between management practices score and organisation size, UK, 2023

# 4 . Management practices and technology adoption in the public sector

Levels of current or planned artificial intelligence (AI) adoption and testing vary by management practice score (Figure 5). Over a quarter (27%) of organisations in the bottom decile of management practice score had tested, used, or planned to use the technology, compared with 47% in the top decile.

Figure 5: Organisations with higher management practice scores were more likely to test, use, or plan to use artificial intelligence

Proportion of organisations that used or tested artificial intelligence, UK, 2023

Figure 5: Organisations with higher management practice scores were more likely to test, use, or plan to use artificial intelligence

Proportion of organisations that used or tested artificial intelligence, UK, 2023
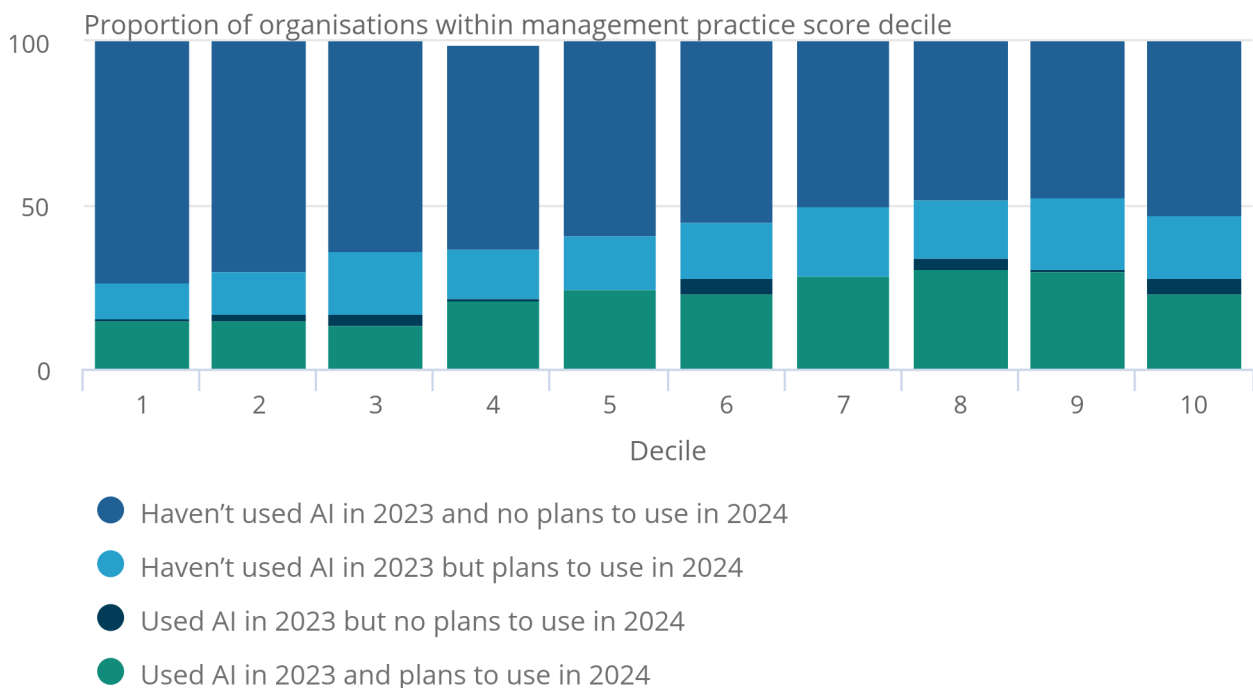
Source: Public Sector Management Practices Survey (PSMPS) pilot from the Office for National Statistics
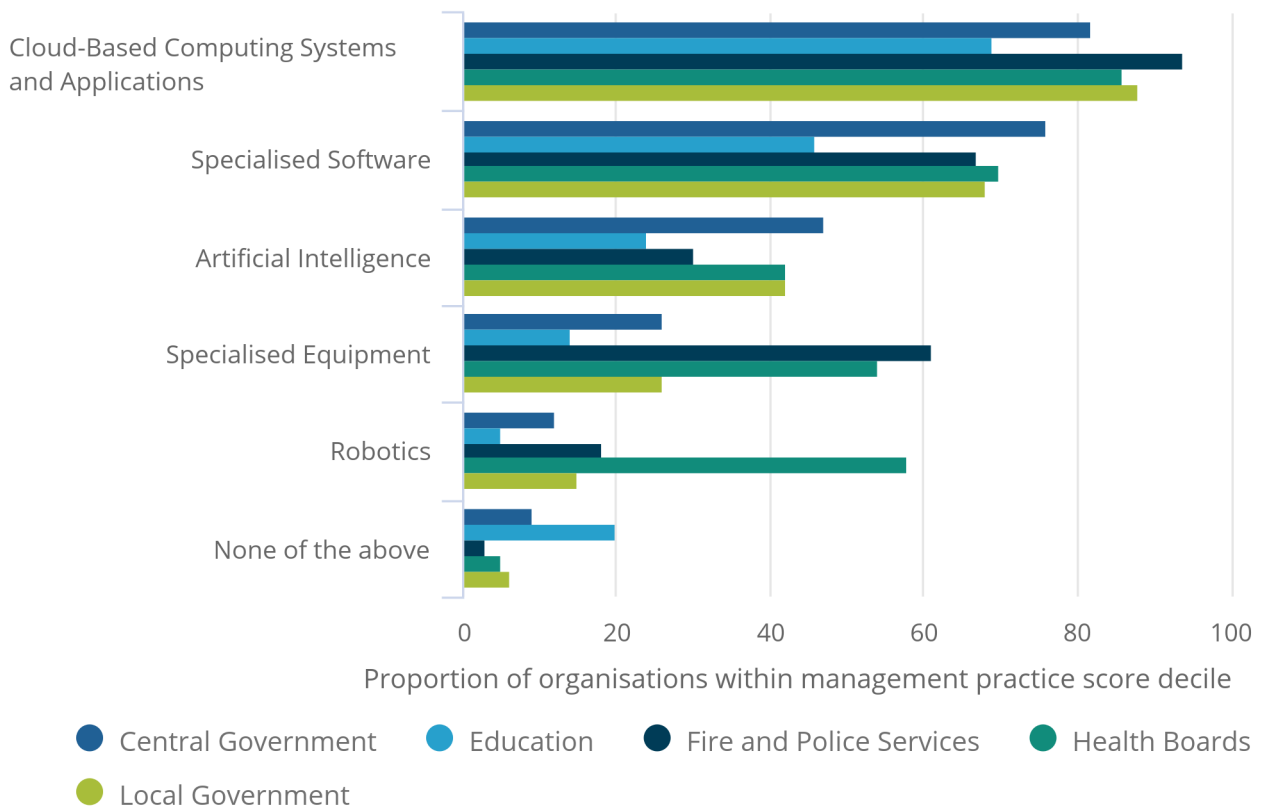
The technologies used in 2023 varied across the public service sector (Figure 6). Cloud-computing was reported as the most common technology that had been adopted in 2023 across all sectors, followed by specialised software. Healthcare organisations were more likely to adopt robotics than other sectors, with 58% of health boards reporting they had done so. Specialised equipment was also more widely used in health boards (54%) and in police and fire services (61%) than in other sectors.

Figure 6: Cloud-based computing was the most commonly-used technology

Use of technology type by public service sector, percentage of respondents, UK, 2023

Figure 6: Cloud-based computing was the most commonly-used technology

Use of technology type by public service sector, percentage of respondents, UK, 2023

Proportion of organisations within management practice score decile

● Central Government   ● Education   ● Fire and Police Services   ● Health Boards
● Local Government

Source: Public Sector Management Practices Survey (PSMPS) pilot from the Office for National Statistics

We asked organisations about the types of analysis they use to support making important decisions. In the bottom decile of management practice scores, 22% of organisations used little to no analysis, compared with 0% in the top decile. The most common use of data analysis was timeseries analysis (73%), followed by dashboards and interactive tools analysis (69%).

Figure 7: Analysis was more commonly used for decision making in better-managed organisations

Use of analysis by management practice score decile, percentage of respondents, UK, 2023

Figure 7: Analysis was more commonly used for decision making in better-managed organisations

Use of analysis by management practice score decile, percentage of respondents, UK, 2023
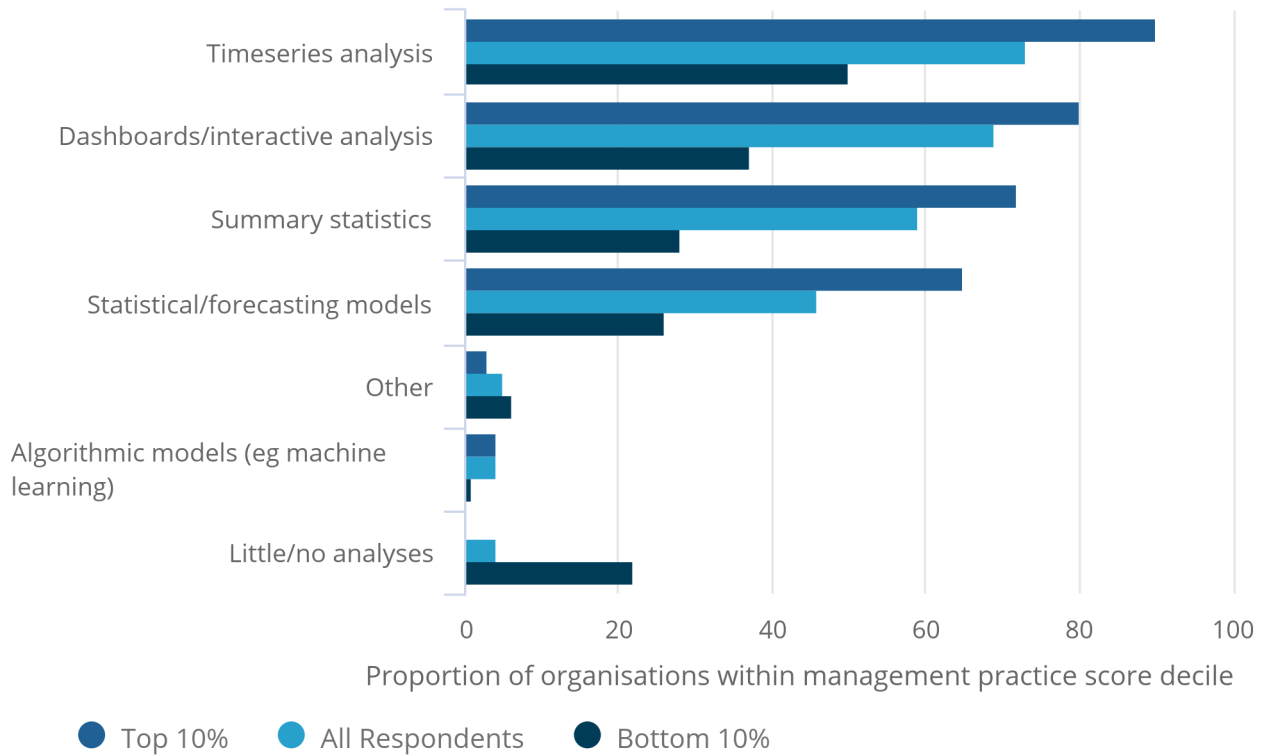
Source: Public Sector Management Practices Survey (PSMPS) pilot from the Office for National Statistics

5 . Improving public sector management

Just under one-fifth (19%) of organisations reported facing no barriers to improving how they were managed. In 2023, 23% of the top decile of management practice scores faced no barriers, compared with 28% in the bottom scoring decile. In comparison, 32% of private sector firms reported no barriers in 2023, according to the Management and Expectations Survey (MES).

The most commonly-reported barriers to improving the way organisations were managed were cost (58%), or there was too little time to think about or implement those changes (41%). This varied by decile, with cost being the most common response for the top decile and the second-most common response for the bottom decile. "Employee resistance" was reported as a barrier to improvement by 28% of organisations in the top decile of management practices, compared with 5% of organisations in the bottom decile.

Figure 8: Cost and too little time were the most common barriers to improving management in organisations

Barriers to improving management by management practice score decile, percentage of respondents, UK, 2023

Figure 8: Cost and too little time were the most common barriers to improving management in organisations

Barriers to improving management by management practice score decile, percentage of respondents, UK, 2023
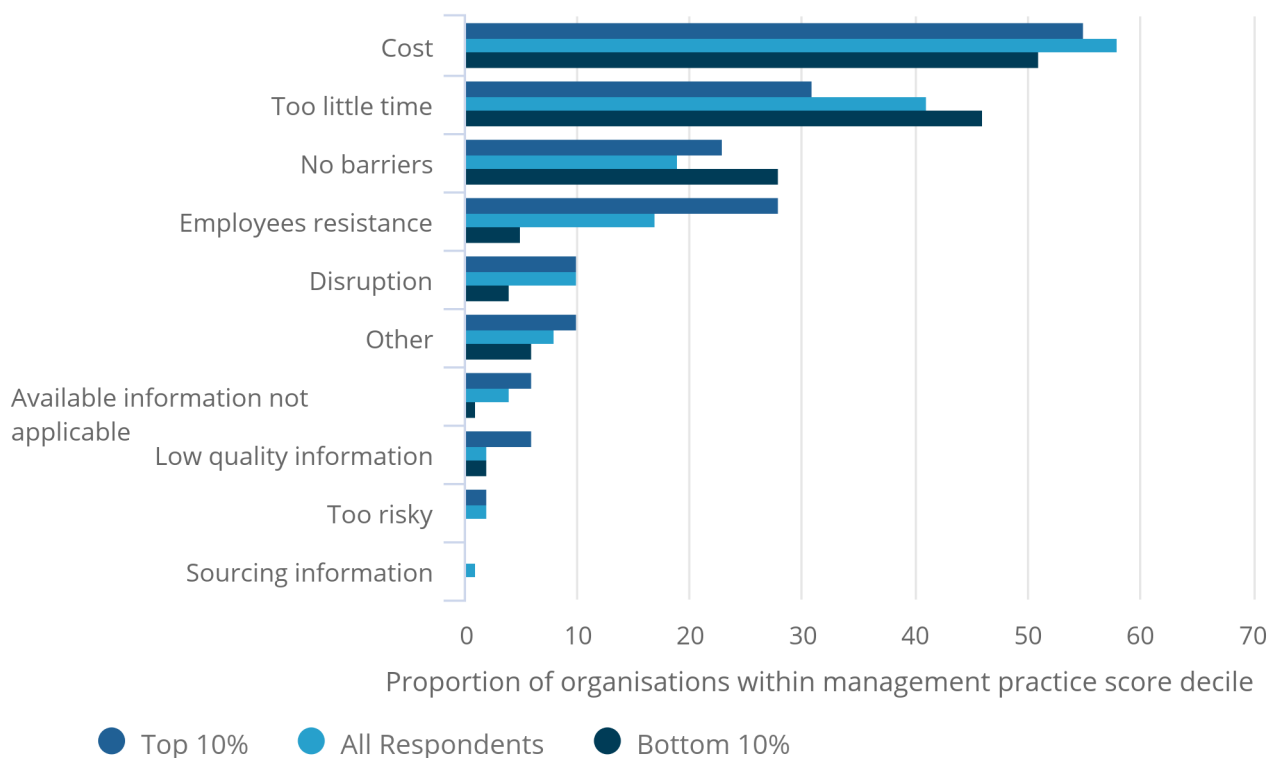
Source: Public Sector Management Practices Survey (PSMPS) pilot from the Office for National Statistics

When asked how managers improve the way the organisation is managed, the most common response (80%) was "formal training online" (Figure 9). Within the top decile, 41% of organisations would carry out their own experimental changes to improve management practices. This was more than double the proportion of organisations in the bottom decile (19%). There were also large differences between the proportion of organisations making use of government-funded training schemes, with 67% of the top decile doing so, compared with 33% of the bottom decile. Employees would be consulted by 84% of organisations in the top decile, compared with 61% in the bottom decile.

Better-managed organisations more commonly reported more than one means of improving the way the organisation was managed. Of organisations in the bottom decile reported, 4% reported that "nothing" was done as a means of improving the way the organisation was managed, compared with 1% of the top decile.

Figure 9: Better-managed organisations were more likely to report ways of improving management their organisation

Solutions to improving management by management practice score decile, percentage of respondents, UK, 2023

Figure 9: Better-managed organisations were more likely to report ways of improving management their organisation

Solutions to improving management by management practice score decile, percentage of respondents, UK, 2023

Source: Public Sector Management Practices Survey (PSMPS) pilot from the Office for National Statistics

When asked about factors that reduce their ability to get work activities done on time (Figure 10), the most common factors reported were "understaffing" (66%) and "ad hoc work" (56%). "Lack of digital/technical skills" was identified as a barrier in more organisations in the top decile (22%) and bottom decile (10%). The only factor more commonly reported by the bottom decile was "excessive mandatory/statutory training" (14%), compared with 11% of the top decile.

Figure 10: Understaffing and ad-hoc requests were common factors affecting organisations' ability to get work done on time

Factors affecting the ability to get work done on time by management practice score decile, percentage of respondents, UK, 2023

Figure 10: Understaffing and ad-hoc requests were common factors affecting organisations' ability to get work done on time

Factors affecting the ability to get work done on time by management practice score decile, percentage of respondents, UK, 2023

Proportion of organisations within management practice score decile

● Top 10%   ● All Respondents   ● Bottom 10%

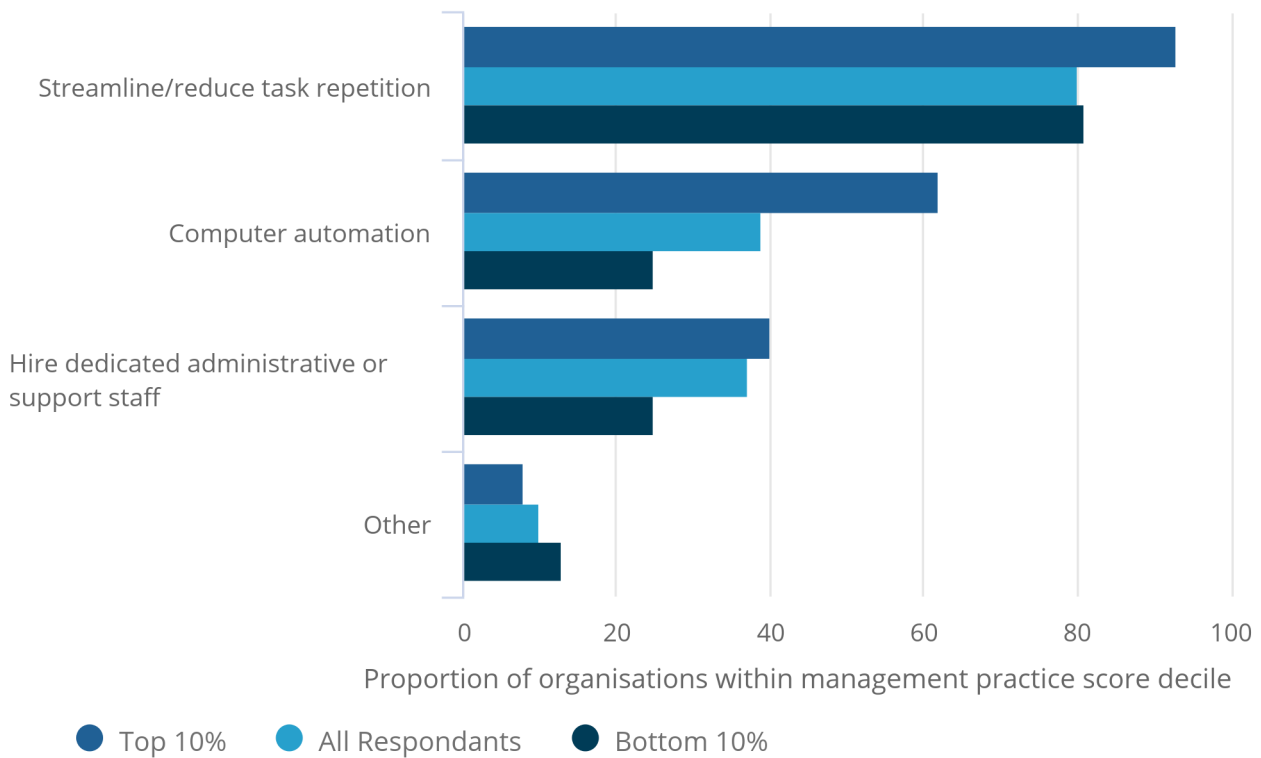**Source: Public Sector Management Practices Survey (PSMPS) pilot from the Office for National Statistics**

We asked organisations "How could administration work in your organisation be done in a more efficient way?". The most common response was to "streamline or reduce task repetition", with 80% of all respondents citing this option (Figure 11). Of organisations in the top decile of management practice scores, 62% reported "using automated computer process", compared with 25% in the bottom decile.

Figure 11: Better-managed organisations were more likely to report computer automation as an opportunity to do work more efficiently

Ways work could be done more efficiently by scoring decile, percentage of respondents, UK, 2023

Figure 11: Better-managed organisations were more likely to report computer automation as an opportunity to do work more efficiently

Ways work could be done more efficiently by scoring decile, percentage of respondents, UK, 2023

Source: Public Sector Management Practices Survey (PSMPS) pilot from the Office for National Statistics

When asked about the amount of administration work that could be done by something else in each week (for example, by automation), 56% of the top decile of management practice scores reported that between 10% and 24% of work could be automated. The most common response (48%) in the bottom decile was that less than 10% of work could be automated. Some 30% of organisations in the bottom decile reported that no work could be automated, compared with 10% in the top decile.

Figure 12: Better-managed organisations reported more work could be done in a different way in a typical week

Amount of administration work that could be done in another way by scoring decile, percentage of respondents, UK, 2023
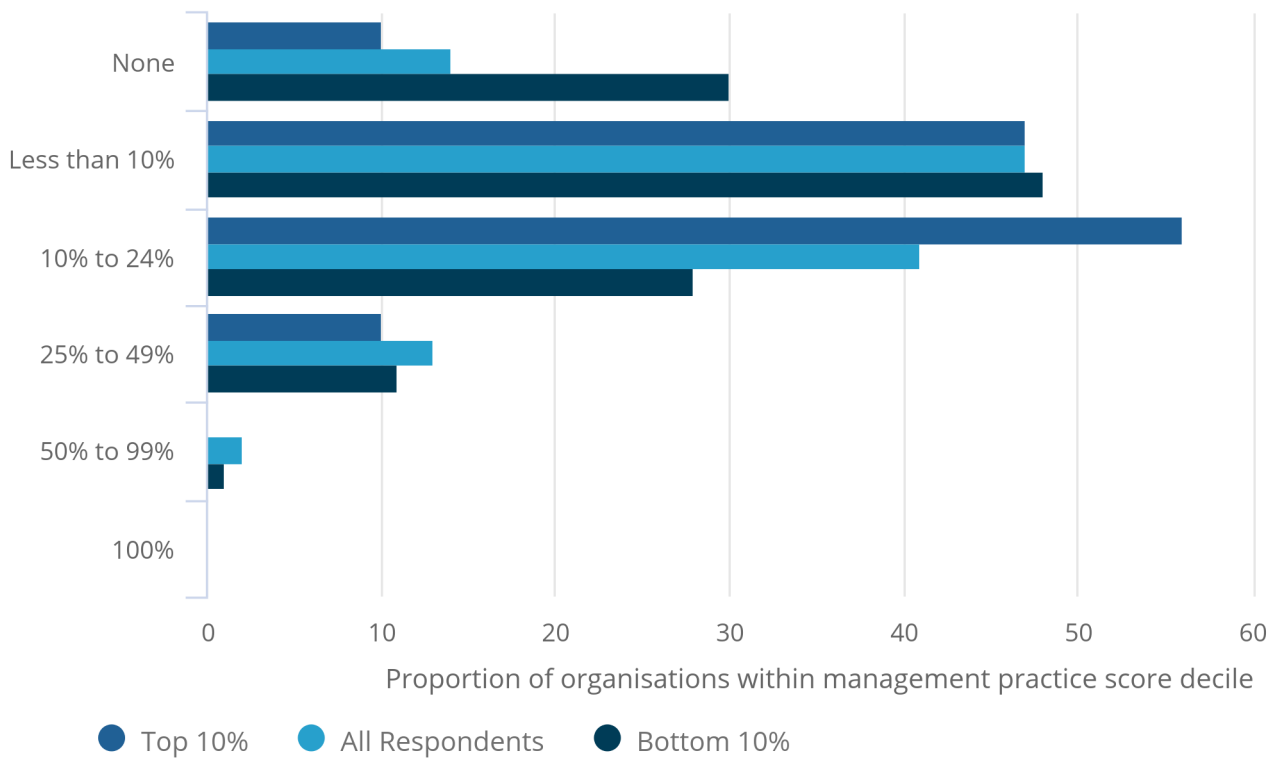
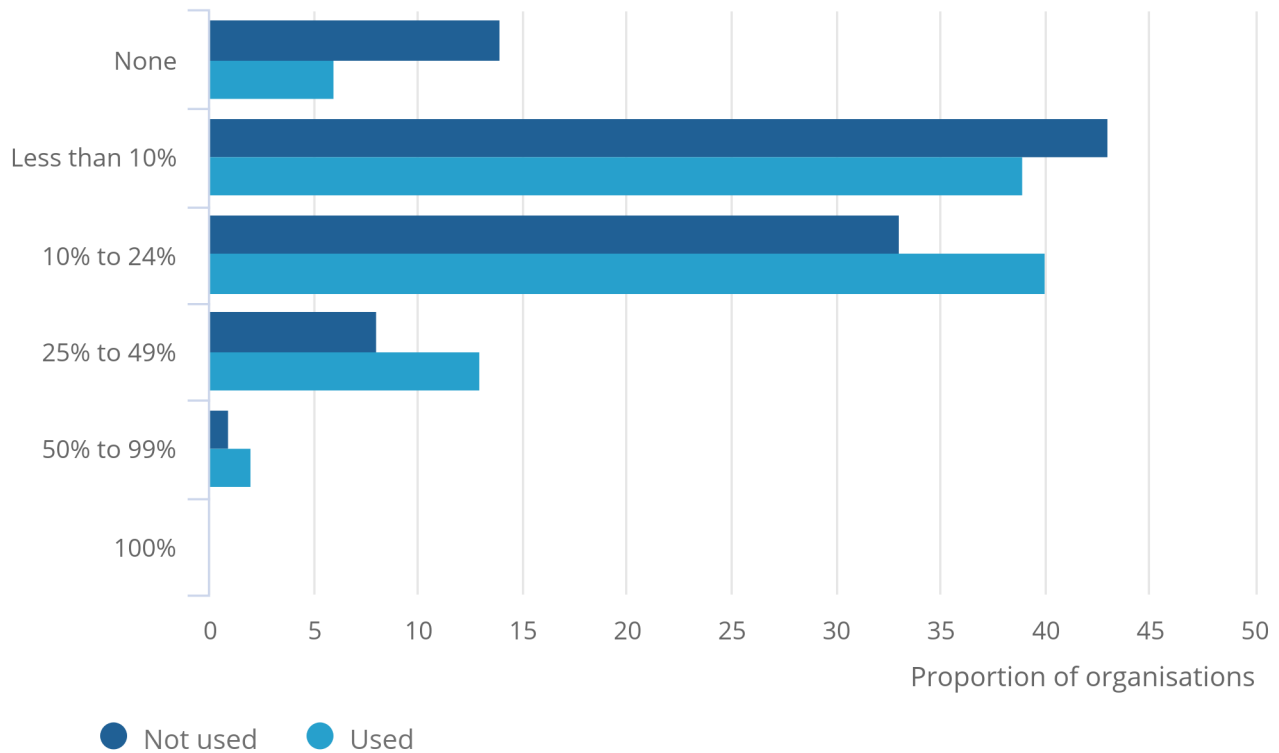**Source: Public Sector Management Practices Survey (PSMPS) pilot from the Office for National Statistics**

Organisations were grouped into those which have used or tested artificial intelligence (AI) and those who have not used or tested AI in the workplace. This allows us to understand whether users or non-users are more likely to identify opportunities for administration work to be assisted by the application of technology. Figure 13 shows that 6% of organisations that have used AI reported no administration work could be automated or done by something else, compared with 14% of non-users.

Figure 13: Organisations with experience of using artificial intelligence are more likely to report opportunities to automate work

Amount of administration work that could be done in another way by experience of use of artificial intelligence, percentage of respondents, UK, 2023

Figure 13: Organisations with experience of using artificial intelligence are more likely to report opportunities to automate work

Amount of administration work that could be done in another way by experience of use of artificial intelligence, percentage of respondents, UK, 2023

Source: Public Sector Management Practices Survey (PSMPS) pilot from the Office for National Statistics

6 . Data on management practices in the public sector

[Management score estimates from the Public Sector Management Practices Survey](#)
Dataset | Released 21 October 2024
Management score estimates from the Public Sector Management Practices Survey (PSMPS), a new survey of management practices in public sector organisations.

7 . Glossary

Management practices score

The overall management practices score (or management score) is an average of the scores along the four dimensions of management practices measured: continuous improvement, key performance indicators (KPIs), targets, and employment practices.

Artificial intelligence

Artificial intelligence (AI) is computer programs or machines that can learn from data and perform tasks that are usually completed by humans. AI is currently used in many ways, including online product recommendations, facial recognition, self-driving vehicles, medical diagnostic tools, and chatbots that interact in a conversational way and can answer complex questions.

Automation

Automation is a set of technologies that can substitute routine, non-cognitive tasks or jobs. For example, this could include the introduction of the telephone switchboard replacing switchboard operators, or accounting software.

8 . Data sources and quality

Coverage and defining the public sector for the Public Sector Management Practices Survey pilot

Public sector organisations may have several thousand employees. They may operate on a multi-site basis, within the same organisational structure, or be responsible for overseeing a variety of functions or frontline services. We arrived at the approach of surveying sectors by selecting a single location per organisation, typically the headquarters, by engaging with departmental leads during development of the Public Sector Management Practices Survey (PSMPS). This means that a single office is asked to report on the management practices for the whole organisation, which could be spread across multiple sites. The benefit of this approach is that surveys could be targeted at organisation leaders, ensuring senior managers or their delegates were the respondent. However, it does mean less granularity within organisations, from the perspective of their different locations or the functions they deliver.

Our business surveys will typically only survey once per reporting unit. The exceptions to this single-site PSMPS approach are the health and social care sector and the education sector. This is because community schools, academy status schools, and health and social care providers are, in effect, delivering public services within a larger organisation like the local authority, multi-academy trust, or health board.

For this pilot, the public sector is primarily defined by using the Inter-Departmental Business Register (IDBR) legal status of organisations, or by selecting schools from the Department for Education's school establishment list. Only those organisations on the IDBR with a public sector legal status were eligible to be sampled. We made exclusions below sector-specific employment thresholds to reduce the respondent burden on small organisations. This approach meant that some organisations that are commonly considered as part of the public sector were not included.

General practitioners (GPs) are an example of public services not included in the pilot. GPs are classified as "social transfers in kind – market production purchased by general government and non-profit institutions serving households (NPISHs)", as described in our Public sector classification guide and forward work plan. They provide healthcare free at the point of use, and are services purchased by central government. However, GP surgeries are commonly classified as having a private sector legal statuson the IDBR. It is not possible to identify from the IDBR whether the services they deliver are solely on behalf of the NHS, with contracts to provide NHS healthcare free at the point of use. Conversely, an NHS health board has a public sector legal status and would be eligible to be surveyed. Academy schools or trusts are state funded but have charitable legal status. They are classified under central government, with the Department for Education being the sponsoring body, and so have been included in this pilot. Classifications are described in more detail in our Public sector classification guide and forward work plan.

Users may be interested in a more granular breakdown of results. This will require a separate weighting approach and further disclosure checks to maintain respondent confidentiality, which we will develop over the coming months. Results with extended breakdowns will be published when these weights have been fully quality assured.

Sampling and response rates

Public sector organisations, such as ministerial departments, were selected to represent themselves. Where the number of organisations were large, such as schools or local healthcare providers, a stratified random sample was drawn to represent the subsector. The sample was comprised of the eligible organisations in each sector.

Eligible organisations in the central government sector (selected by census)

- Ministerial departments

- Non-ministerial departments

- Arm's length bodies (ALBs)

- Executive agencies

- Devolved administrations and their departments, ALBs and agencies

Eligible organisations in the local government sector (selected by census)

- Local authorities

- Devolved English regions

Eligible organisations in the health and social care sector

- Health boards (selected by census)

- Health and social care providers (selected by threshold sample)

Eligible organisations in the police and fire services sector (selected by census)

- All headquarters

Eligible organisations in the education sector (selected by stratified random sample)

- Local authority schools

- Academy groups

- Academy schools

Achieving responses from local units below health board level in the health and social care sector proved to be challenging. The low response rate has led to concerns with data quality, so they were excluded for the purposes of this bulletin. Further work will be done to investigate the feasibility of deriving results from these respondents. The effective response rate was 18%. Response rates by public service are shown in Table 1.

Table 1: Response rates by public service

	Response rate	Completed	Sample size
Local government	40%	155	388
Central government	35%	85	242
Police and fire	35%	33	95
Health boards	20%	57	281
Education	16%	1423	8928
All	18%	1753	9934

Source: Public Sector Management Practices Survey (PSMPS) pilot from the Office for National Statistics

Weighting

Weighting is applied to results to make them reflect the population of organisations within the public sector, rather than just the organisations that have responded. Responses have been weighted by selection probability and response rates within stratification groups.

Selection probability weights are referred to as "a-weights". For the PSMPS, organisations that were selected by census were given an a-weight of 1, meaning they represent only themselves. If 20% of organisations within a stratification group were randomly sampled, each organisation sampled was assigned an a-weight of 5, so its return represented five organisations. A-weights were adjusted by the response rate of each group, using a similar approach. If 50% of organisations in a stratification group responded, each return in that group represented two organisations.

Future developments

The PSMPS pilot has captured an important baseline of management practices and provides a strong basis for conducting further waves of this survey. The survey gives important insight into how public sector organisations are managed, as well as how to measure management practices in the public sector.

Users may be interested in a more granular breakdown of results. This will require a separate weighting approach and further disclosure checks to maintain respondent confidentiality, which we will develop over the coming months. Results with extended breakdowns, such as by geography, will be published when these weights have been fully quality assured.

Official statistics in development

These statistics are labelled as "official statistics in development". Until September 2023, these were called "experimental statistics". Read more about the change in our Guide to official statistics in development.

We are developing how we collect and produce the data to improve the quality of these statistics. Once the developments are complete, we will review the statistics with the Statistics Head of Profession. We will decide whether the statistics are of sufficient quality and value to be published as official statistics, or whether further development is needed. Production may be stopped if they are not of sufficient quality or value. Users will be informed of the outcome and any changes.

We value your feedback on these statistics. Contact us at psmps@ons.gov.uk.

9 . Related links

Management practices in the UK: 2016 to 2023
Bulletin | Released 13 May 2024
Review of management practice scores for firms in the production and services industries across the UK in 2023 and Great Britain from 2016 to 2023.

Public sector managers' views on management practices, Great Britain: August to September 2024
Bulletin | Released 21 October 2024
Public sector managers' views on their organisations' management practices, administration, technology and innovation, and on how these affect productivity.

Time use in the public sector, further analysis, Great Britain: February 2024
Bulletin | Released 21 October 2024
Estimates of time spent by public sector workers on a range of work activities. These are official statistics in development.

How we are transforming our understanding of public services productivity
Blog | Released 21 October 2024
National Statistical blog explaining how work on public services productivity is progressing. Includes insights about where productivity could potentially be improved.

Time Well Spent: How the ONS is improving the measurement of public service productivity Blog | Released 09 January 2024
National Statistical blog explaining why the Office for National Statistics (ONS) launched the pilot Time Use Survey for public sector workers.

10 . Cite this statistical bulletin

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