

In the blink of an AI

Clearing the backlog in UK
public services

Sam Robinson
Gideon Salutin

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CONTENTS

Acknowledgements	4
About the authors	4
Executive summary	5
Chapter One – Introduction	9
Chapter Two – How can AI improve productivity in the public sector?	14
Chapter Three – Where is the opportunity?	17
Chapter Four – Recommendations	24
Appendix – Case studies	31
Endnotes	34

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EXECUTIVE SUMMARY

Artificial intelligence and automation are ideally suited to processing large datasets, sorting information, and identifying patterns. In short, many of the tasks that public servants in user-facing roles currently spend hours managing. This report outlines the benefits the civil service can reap by integrating AI and automation into its user-facing workstreams, as well as the time savings available to the public which use them.

We looked at dozens of case studies that used existing technologies – such as AI-based triaging systems, chatbots, voicebots and OCR scanning to convert physical documents into formats that a computer can read – in real-world settings, with a particular focus on public services, to evaluate how integrating AI and automation could improve processes within Britain’s civil service. The time-savings reported in these case studies were compared to the wait times currently experienced by Britain’s service users to estimate how much of the backlog could be dealt with by improving uptake.

AI and automation can save thousands of years annually by deflecting or automating phone calls and appointments

- While complex cases will continue to need human support, most calls can be deflected by AI.
 - Basic questions and answers, as well as information filing can and should be automated to save time for both civil servants and the public.
 - Abroad, these have been able to increase processing speeds while decreasing mistakes made when allocating benefits
- Citizens spent the equivalent of over 6,895 working years in 2022-23 on the phone with DWP and HMRC, two of the largest user-facing government departments
 - Two thirds of these calls can be automated, based on case studies where automation and AI tools were introduced in similar sectors
 - In total, we estimate **8.12 million hours, or more than 4,300 working years**, could be saved by deflecting or streamlining caseload at the DWP and HMRC by using AI and automation procedures.
- Out of the roughly 350 million GP patient contacts seen in the latest year, more than 320 million of these could potentially be automatically allocated without staff intervention, if results from trials of AI triaging systems were scaled up.
 - GP practices trialling AI-powered triaging systems have been able to achieve as much as a 73% reduction in patient waiting times for appointments and a 47% reduction in calls at peak hours – significantly easing the infamous ‘8am rush’.
- At the Driving and Vehicle Licensing Authority, more than 200,000 medical licensing decisions took over 90 days , making up nearly 20% of all cases

- While estimating time savings is difficult, a majority of these decisions are paper-based, meaning AI and automation have significant potential to decrease user wait times through technologies such as OCR and triaging.

To harness these opportunities, the civil service must deal with structural impediments currently impeding uptake

- As part of this project we conducted research evaluating why civil servants have been slow to acclimatize to AI and automated tools.
- Structural impediments are a major issue, and include risk aversion, difficulty scaling pilots, and institutional capacity/expertise.
- Difficulty in moving from outdated legacy systems.
- Siloed decision making is another problem, with vertical organisational structures that do not maximise horizontal coherence across the public sector when it comes to AI/automation adoption.
- A reluctance to 'double-run' new systems alongside old systems, rather than building out from old systems.
- Investment decisions are also holding back uptake, as some AI projects which can provide long-term savings require upfront spending on capital and training.

POLICY RECOMMENDATIONS

Machinery of government

- DSIT should act as the centre for digital innovation in government, providing a 'one-stop shop' for all public sector AI and automation needs. To effectively play a coordinating role, it should:
 - Synthesise evidence on evaluations of AI and automation that have already been implemented across the UK government or in other, similar, jurisdictions and make this available as a central resource to leaders in government departments and public bodies.
 - Provide guidance on best practice for evaluating AI and automation interventions, including approaches to benchmarking and monitoring.
 - Draw on the example of Singapore, which already shows the benefits of centralising leadership and working with businesses and research institutions to establish a long-term strategy
- The expert team in DSIT's Digital Centre should be empowered to both proactively advise departments on promising areas of opportunity and push back on automation proposals from departments that are too unambitious, unrealistic, or do not have proper regard to interoperability.
- A Head of Citizen Experience role should be created in the DSIT Digital Centre. This role, at least Director level, would identify opportunities for where citizens' time can be saved (e.g. from duplicative processes, form-filling etc), and oversee different departments' automation strategies.

Funding and risk appetite

- The business case process for spending on AI and automation should be streamlined, so that business case submissions are shorter and there is a move towards fewer, more comprehensive submissions. Streamlined business case processes should aim to strengthen a culture of “invest to save”, facilitating capital investment where in-year RDEL returns can be demonstrated.
- In addition to introducing a more streamlined process, DSIT could help other departments to quickly build business cases by sharing model business cases for a range of automation/AI use cases and consulting with departments on building their business cases.
- DSIT should also be able to accredit and pre-approve off-the-shelf AI or automation products that have been used at scale and evaluated. This would simplify the procurement process for other departments who are looking to adopt the same product.
- Governments in Canada and the US have used regulation to guide and hasten technological uptake within the public sector.
- A ‘parity of risk principle’ should be developed whereby as part of risk assessments and internal processes, departments and public bodies are obliged to give consideration to the risks of *not* automating processes as well as to the risks of adopting new automation/AI approaches.
- To encourage the kind of calculated risk-taking that can maximise the potential of new technologies, institutions such as the National Audit Office (NAO) should adopt more of a ‘portfolio approach’ to evaluating some spending programmes relevant to AI and automation, judging investments as an overall package rather than each investment in isolation.

Scaling pilots

- To prioritise areas for scaling up, DSIT should use their oversight of AI/automation adoption to shortlist the implementations and use cases of these technologies that have the most extensive evidence base and the strongest potential to achieve significant performance gains. Ideally, as others have recommended, DSIT should be given control of a ‘transformation fund’ that it is able to disburse to projects on this ‘scaling shortlist’. Short of this, DSIT should work with the Treasury and NAO to identify ways to fast-track shortlisted projects.

Building capacity

- Central government bodies should appoint Automation Leads to work with DSIT to proactively identify opportunities to use automation as well as oversee and monitor the implementation of new automation projects. Automation Leads should report to the Head of Citizen Experience based in the DSIT Digital Centre, who can ensure that automation efforts are working horizontally across government.
- Estonia provides a model case study of the benefits of in-house upskilling and training to improve service delivery within the public service

- DSIT should work to develop a 'data academy' to equip civil servants with key skills needed to understand and harness AI and automation.

CHAPTER ONE – INTRODUCTION

The need to improve public service delivery

Every day in the UK, the state interacts with millions of people on a wide range of issues, ranging from the mundane – such as clarifications of tax codes – all the way to potentially life-changing decisions such as processing benefit awards, issuing driving licenses and arranging court hearings to name just a few. In all, it is estimated that every year the UK conducts approximately one billion citizen-facing transactions across around 400 different services.¹

Smooth-running public services are essential to ensuring that government is effective, responsive, as well as efficient with taxpayers' money and time. Yet in recent years, public services in the UK have come under increasing strain and scrutiny. There has been extensive media coverage centred on the difficulties people face in securing an appointment with the NHS – particularly the infamous '8am rush' to get a GP appointment; delays in approving and distributing benefits; and significant backlogs in the courts system.

Public concern towards these issues is, in large part, warranted. Data from August 2024 shows that over 30% of GP appointments take place more than seven days after they were first booked.² Of course, this is not always a bad thing, as patients may want to book ahead for routine checks or predictable issues. However, it is clear that a significant number of patients are finding the process of getting a GP appointment frustratingly difficult. In the most recent GP Patient Survey, 34% said the wait for their appointment was too long.³ Many also experience issues in the appointment booking process itself: 38% of patients say it is difficult to contact their GP by phone, and of those who have called their GP, 75% are held in a queue while 4% of patient calls are not answered at all.⁴ All this is contributing to public pessimism: only 37% of people are confident that if they needed an appointment with a GP they could get one quickly.⁵

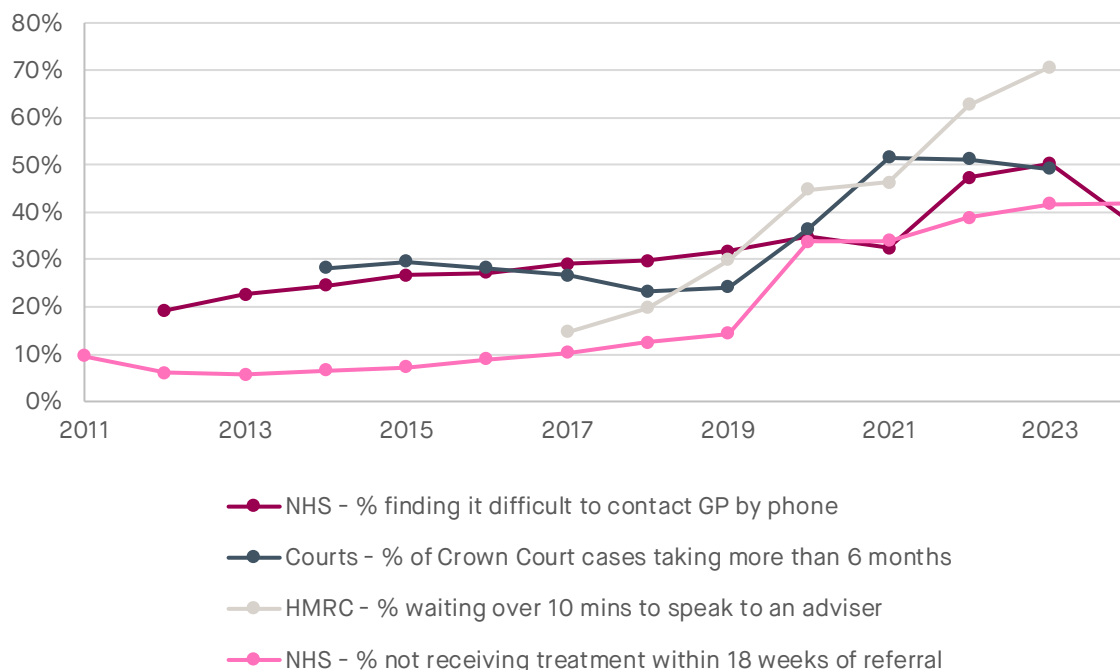
Benefits are another salient area where public services are under strain. This is particularly the case for Pension Credit take-up, which soared in the wake of the new Labour government's move to restrict eligibility for Winter Fuel Payments to those claiming Pension Credit. The most recent statistics, from August-September, indicate government is receiving between 9,000 and 13,400 Pension Credit applications a week.⁶ This represents a roughly 150% increase in application volume compared to previous trends, putting significant strain on the Pension Credit system. Currently, the Average Actual Clearance Time for Pension Credit – the time taken from application to approve the benefit – stands at 28.1 working days.⁷

A third area where backlogs have entered the public eye in recent years is in the courts system, particularly for Crown Court cases. The backlog for criminal cases stood at 67,753 in December 2023, a record number that is up from around 35,000 in 2019.⁸ All this has meant that it now takes 686 days on average from offence to completion of the case in the Crown Court, for cases completed in 2023 – up from 486 in 2019.⁹ Difficulties in swiftly processing court cases has also contributed to the prison places crisis. In June 2024, there were 17,070 prisoners on remand, a record

high and an increase of around 86% compared to the number on remand in 2019 (9,145).¹⁰

As Figure 1 below shows, steady deterioration in the performance public services has affected multiple types of service, from call centres to court disposals and NHS appointments. An increasing proportion of the public are finding it difficult to contact public services, and in many areas unacceptably long wait times have become much more commonplace.

Figure 1: Overview of performance for selected public services



Source: SMF analysis

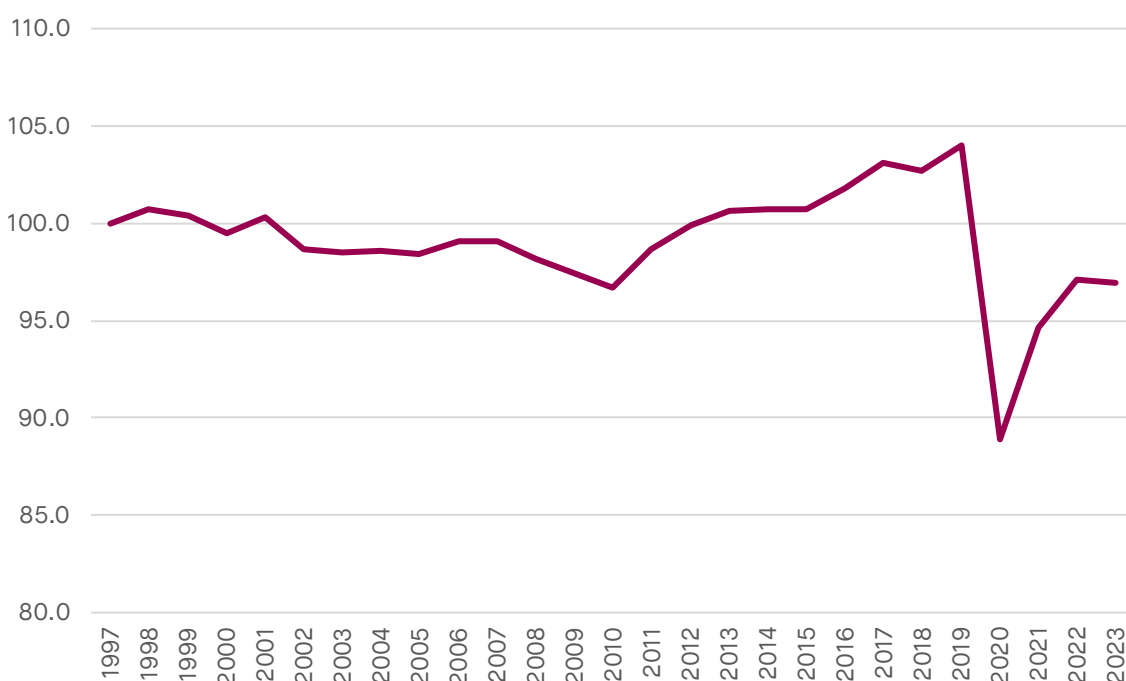
The case for automation and AI in public services

An obvious, and frequently touted, answer to the issues described above is to simply invest more money and staffing into affected public services. But although this is tempting, and indeed may be necessary in some areas, it is not on its own likely to be a sustainable solution in the current environment.

Firstly, the public finances are highly constrained. Public sector net debt currently stands at 98.4% of GDP, the highest it has been since the 1960s, and is projected by the OBR to increase to 270% of GDP over the next 50 years.¹¹ This is the case even as taxes have reached an all-time high. Perhaps unsurprisingly, several economic institutions have described the UK’s fiscal situation as “constrained”,¹² “unenviable”¹³ and facing significant “structural headwinds”¹⁴ such as population ageing. To add to this challenge, economic growth is expected to remain sluggish, set to remain below 2% even under optimistic forecasts.¹⁵ Admittedly, this does not have to be a binding constraint: several countries similar to the UK have higher levels of taxes, so raising more revenue is certainly possible.¹⁶ However, there seems to be historically little room for manoeuvre from a fiscal perspective.

Secondly, the UK's public sector productivity has now been stagnant for decades. According to ONS statistics, public service productivity is in fact no higher now than it was in 1997, as Figure 2 below shows.

Figure 2: Indexed UK public service productivity (1997 = 100)



Source: ONS

To add to this problem, evidence suggests that public services have been affected by Baumol's cost disease – as productivity has lagged behind, public services have consequently become more expensive to provide over time.ⁱ Between 1997 and 2019, input productivity in the public sector grew more slowly than in the private sector (at a rate of 0.2% per year versus 0.8% per year). However, real average wages of full-time employees grew at the same average rate over this period.¹⁷

Lastly, policymakers are faced with a tight labour market and have complained of ongoing recruitment issues. Constrained finances have also generated chronic pay issues that lower morale and restrict the ability of the civil service to recruit and retain skilled staff.¹⁸ The Local Government Association has warned that 9 in 10 local authorities face recruitment and retention issues.¹⁹ These challenges are present not only in the UK, but across OECD countries.²⁰

A combination of constrained public finances and a tight labour market means that there are no easy answers to improving public services, particularly when it comes to “conventional” approaches focused on staffing and higher spending. It suggests, however, that improving public service productivity should be an urgent priority.

ⁱ The ‘Baumol effect’ stipulates that wages tend to rise with economy-wide productivity growth, however productivity growth varies across sectors – meaning that even in sectors with below-average or minimal productivity growth wages will rise, as the sector has to compete with others to retain labour and talent.

Encouragingly, efforts are already underway to increase productivity in the public sector through the use of technology. There are exciting efforts across a number of departments and public bodies to integrate technologies such as Robotic Process Automation (RPA) and AI to streamline processes, predict demand and allocate resources efficiently. These range from trials of AI-powered chatbots in HMRC²¹ to using AI to improve hospital bed allocation and much more besides.²² In some public services, there have already been efforts to bring together different automation efforts under a strategic approach. For example, DWP set up its 'Intelligent Automation Garage' in 2017 to pilot and rollout automation technologies in order to manage peak demands, and has already seen success in managing backlogs.²³

These early efforts have revealed opportunities to deliver better public services, but there are significant opportunities to be had from building on this foundation and adopting automation more widely across the public sector. Progress in rolling out new technology has not been even, and in many areas there have been promising pilots but much less use of new technology at scale. A recent NAO report found that in 2024, only 37% of government bodies have deployed AI, although a further 37% reported that they had not deployed but were piloting or planning to.²⁴

More widespread use of automation and AI in the public sector has enormous potential to deliver higher productivity, reducing wait times and backlogs. Crucially, AI should not be considered a silver bullet but more widespread use of such technologies could ease some of the painful trade-offs that the current economic situation entails for investment in the public sector. There have already been several studies estimating the potential overall impacts of generative AI on the public sector: these estimates on savings for the UK public sector range widely, from £17 billion by 2035²⁵ to up to £200 billion over the next five years.²⁶

Former Shadow Secretary of State for Work and Pensions, Jonathan Ashworth, noted the importance of using AI to increase productivity in the public service, in a speech he made at the Social Market Foundation. "A Labour Department of Work and Pensions will be a trailblazer, embracing AI to open up opportunities for work for everyone", he described.

The government has consistently demonstrated interest in reforming the public sector, but have yet to offer a clear strategy.²⁷ In October of 2024 the Prime Minister hinted that AI would play a key role, describing the technology as "a game changer when it comes to the delivery of public services."²⁸ His ambition was fortified by the Industrial Strategy Green Paper, which promised the government would focus on emerging technologies like AI and lead a range of sectors, including research organisations, start-ups, and established businesses in driving investment and scale the technology.²⁹

As the sheer breadth of estimates suggest, predicting the cost savings new technologies such as generative artificial intelligence could bring five or ten years down the line is fiendishly difficult. But there are undoubtedly significant benefits to be reaped. This report focuses on what technology can do today in specific areas of the public sector, and the short answer is it already can make enormous impacts on public service delivery. For example, in the US, automating unemployment claims has

enabled state departments to process 4.3 million claims in a matter of hours³⁰ and distribute payments in 2-3 days rather than weeks under the previous system.³¹ In some cases, digital technology has been observed to be five times faster than human workers at processing simple tasks,³² enabling human colleagues to focus more of their efforts on complex cases. Automation holds a lot of promise for clearing backlogs for document-intensive investigations as well, from 75% time savings on fraud investigations³³ to as much as 90% time savings on the process of generating legal documents.³⁴ The point is that we don't have to speculate about the gains new innovations such as GenAI might have in a few years' time; the technology is already having astounding impacts on service delivery today.

The new government has a chance to harness automation to be bold on public service reform. Its vision should be ambitious: waiting times cut from weeks to hours or minutes, backlogs cleared within days, and no one having to waste time in a phone queue to get information or schedule appointments.

CHAPTER TWO – HOW CAN AI IMPROVE PRODUCTIVITY IN THE PUBLIC SECTOR?

Our approach

Automation and artificial intelligence encompass a wide range of technologies and methods including language processing, facial recognition, and mathematical functioning. Since 2017, advancements in GenAI have encouraged new innovations and moved the technology forward. GenAI refers to a program that generates content which aligns with patterns the computer finds in large datasets. Examples include automated emails which reply to formulaic correspondence, or that create new images based on an artist's existing portfolio.

Within the public sector, advancements in GenAI have prompted departments to look inward and understand how they can optimise efficiency within their team and improve service delivery. Numerous laws, regulations, and public bodies have been developed by governments around the world to speed the uptake of GenAI products across civil service departments. These address various topics including government oversight, training, disclosure, and support for particular sectors.

AI and automation technology have potentially impactful solutions across Britain's public services. By taking large amounts of data, finding patterns, and generating statistically probable outputs, Generative AI and automation excel at performing repetitive tasks. Tasks that can be addressed probabilistically, such as organising documents based on specified characteristics, answering common questions, and connecting user requests with the appropriate personnel, are all within the capacity of existing technologies.

But the potential applications of currently available AI technology have limits. There are certain tasks which it cannot reliably complete, particularly when it comes to qualitative insights, causal explanations, creativity, ethics, and reason. It is not inconceivable that such advances will be made in the future, but they are not yet within the realm of possibility for GenAI models or other automation tools.

This report therefore evaluates the potential impact of *existing* technologies on public services. User-facing services provide the lowest-hanging fruit in this area, given the proportion of tasks which can be solved through probability and repetition. This includes taking care of categorisation, triaging, simple questions, and connections.

Estimating time-savings from AI uptake

We collected over sixty case studies where AI was used to improve efficiency in user-facing services. A majority of these were user-facing public service departments, however some case studies from the private sector were included. Case studies were found in the United States, Europe, Latin America, and Asia; as well as UK local authorities and civil service departments. For example, the case of Egen.ai was used as a case study after the software processed 4.3 million unemployment claims for the US state of Arizona in a matter of hours.

Cases were then filtered to include those directly relevant to UK user-facing departments where AI processes could be reasonably expected to improve efficiency. These include HMRC, DWP, DVLA, NHS emergency services, and HM Courts and Tribunals Service. We categorised cases based on which department they would be most relevant to. With the former example, we took the time savings in Arizona and modelled how similar time savings would affect processing claims at the DWP. We then established a range of potential time savings based on these estimates.

We used civil service data to calculate the wait times for calls to the user-facing public services listed above. Where available, we used NAO customer service reports which record average wait times by minutes, number of calls, case processing times, and other variables. These were applied to the DWP, HMRC, and courts systems. Data on DVLA and NHS call services were found separately. We then applied average AI time savings in each category to relevant offices to estimate the potential impact of AI in user-facing roles.

We have chosen to mention the more conservative estimates for three reasons. Firstly, even the low end of time savings estimates show enormous potential for application in government, particularly for users of government services. Second, AI processes of the efficiency we are discussing are relatively new. There are few case studies available, and there is no guarantee that the experience of a particular department with a particular software will echo perfectly in the UK. Lastly, there is a considerable publication bias, where case studies that are published and promoted are often generated by commercial organisations incentivised to highlight their most successful cases. This heightens the risk of overpromising, and we have included the conservative estimates alongside the average to offset this problem and ensure our findings are robust.

How does this align with existing literature?

The growing interest in GenAI and automation capabilities have led to various reports estimating the potential impact of the technology on time saving in the public sector. A study by Microsoft estimated that 23 million hours could be saved annually across the public sector through reduced administration, while the Tony Blair Institute argued the DWP could save up to 40% of its workforce time by better integrating AI.³⁵ These have implications for spending, with the Microsoft report finding such uptake could save £17 billion by 2023.

Researchers at the Alan Turing Institute published a report in the Spring of 2024 on the potential impact of AI on approximately one billion citizen-facing transactions conducted by the UK's central government.³⁶ They estimated 84% of calls were highly automatable, and that implementing new technology could save 1,200 person-years of work every year. That means 1,200 employees working full days every working day of the year, minus holidays. The National Audit Office released a report at the same time finding government was already implementing AI, albeit only in a select few areas, with just over a third of public bodies having deployed the technology as of late 2023. Researchers here found that a third of civil service tasks could be automated, freeing staff for work in other roles.

Our work is the first in Britain to provide a comparative overview in this sector. We review public bodies abroad which have successfully integrated AI and automation into their user-facing processes, with the goal of understanding the methods used to do so and the benefits they have reaped. Generative AI is still in its infancy, and its real-world applications in the public sector are so far limited. As such, it is important to learn from the experiences of other countries' bureaucracies to supplement theoretical estimates of its impact with their lived reality.

CHAPTER THREE – WHERE IS THE OPPORTUNITY?

We have broken up our time savings estimates into distinct categories, as processes at civil service departments differ widely.

NHS

For many people, getting a GP appointment is their first port of call when it comes to interacting with the NHS – and also the most visible challenge. On a single day in October last year, it was estimated that around 5 million inbound calls to GP practices waited an average of 9.1 minutes to get through to speak to receptionists.³⁷ While there is scant information on the number of calls to GP practices at the national level, across 2023-24 we know that there were over 350 million patient contacts related to GP appointments³⁸ and that 68% of contacts to GP practices are made by phone, implying 240 million calls to practices over a year.³⁹ Scaling up the average wait time of 9.1 minutes for calls, this means that over the course of a year the public could collectively be waiting over 4,100 years in phone queues to their GP practice. To add to this challenge, a significant number of people fail to get through to their GP practice at all: according to the GP Patient Survey, 4% of patient calls are not answered at all, while government research from November 2023 found that as many as 1 in 10 callers were unable to get through.⁴⁰ Even taking a conservative estimate here, then, that implies that around 9.6 million calls to GP practices (4% of the total) a year are left unanswered.

Against this backdrop, GP practices are struggling to manage the demand for appointments. Indeed, over 30% of GP appointments take place more than seven days after they were first booked.⁴¹ However, there is evidence of real potential for automation to assist in managing the caseload for GP practices and alleviating the ‘8am rush’. The Groves Medical Centre, a GP practice based in Surrey and South West London, was able to achieve a 73% reduction in patient waiting times for pre-bookable appointments, from 11 to 3 days, using an AI-based triaging system.⁴² Alongside this, the practice reduced the 8am rush significantly: there were 47% fewer phone calls at peak hours, with 91% of appointments overall able to be automatically allocated without staff or clinical intervention.⁴³ The new system led to considerably less reliance on phone lines as well: only 18% of patient requests were initiated by phone after the intervention, compared to 88% before.

Undoubtedly, the AI triage system has achieved greater speed and lower workload for the practice when it came to arranging appointments. But notably, this did not come at the expense of quality: 85% of appointments booked via the new system were delivered face-to-face, which was a 60% increase compared to the pre-implementation period. And 70% fewer patients needed a repeat appointment afterwards. In fact, the new system has been so successful at rationalising appointments that GPs at the practice have been able to move from 10 minute to 15 minute appointments with patients.⁴⁴

So far, approaches such as this have been seen at a small scale at innovative practices such as the Groves Medical Centre. Were these results to be replicated across the country, this could greatly reduce the pressure on GP practice receptions.

If a reduction in the use of phones on the scale of the trial described above were achieved, it would mean that rather than 68% of patient contacts with GPs using phones, this could in future be as low as 14%. And out of the roughly 350 million GP patient contacts seen in the latest year, more than 320 million of these could be automatically allocated without staff intervention. Operational efficiencies on this scale would save GP practices considerable time and resource, all but eliminating the infamous 8am rush to get appointments.

Improving access to GP appointments is the most visible area where automation can deliver improvements for the public. But on the other side of the ledger, AI and automation also has significant potential in helping the NHS reduce waste and improve productivity. Where automation has been implemented, it has reduced the number of unattended appointments – something that is estimated to cost the NHS £1.2 billion a year.⁴⁵ In a trial run at the University Hospitals Coventry and Warwickshire NHS Trust, implementing AI to analyse appointment cancellation data allowed the Trust to reduce the rate of unattended appointments among the most challenging subset of patients from 10% to just 4%.⁴⁶ In other trials, AI software has achieved reductions in the number of ‘did not attends’ of 28.8%⁴⁷ and 30%.⁴⁸ Taking the lower of these figures, if this was scaled up nationally this would generate £345 million in savings every year for the NHS from reduced non-attendance – and that is before accounting for additional savings resulting from being able to rebook some of the remaining 70% of appointments that would have resulted in a did not attend.

The focus of this report is on customer-facing functions, however it should be noted that there is also considerable scope to realise cost savings to the NHS through improving back-office processes. For example, the onboarding process for new NHS staff can take as long as 100 days. Not only are the extensive checks, registrations and onboarding processes resource-intensive, but many staff drop out before their start date as a result of this long onboarding. Automation could speed up this onboarding process by 65%, reducing it to around 30 days.⁴⁹ After onboarding, many processes can also be streamlined. Automation has also freed up 650 hours for the 5,500 staff members of the NHS Blood and Transplant service by reducing the need for manual updates and data checks and introducing an enhanced employee services portal.⁵⁰

Department for Work and Pensions (DWP)

The DWP manages and processes millions of transactions every year, leading to a large volume of calls coming into the department as well as outgoing calls requesting more information and documentation.

An NAO Customer Service Report on DWP processes published in 2024 found that customers on average spent over eight minutes on calls, rising to fifteen minutes for calls handled in-house.⁵¹ The researchers estimated that 31.6 million of these minutes, or 43%, are avoidable, while an additional 3.8 million (5%) are potentially avoidable through greater digitisation. The remaining 51% could still be automatable but are more complicated as they required customers to give information.

This high caseload and call times have negative effects on processing times. 28% of cases were not processed on time, rising to 48% for Personal Independence Payments (PIP) and 60% for Employment and Support Allowance (ESA). There are also serious errors, with 3.7% of cases being overpaid and 0.4% being underpaid. 12.4% of universal credit cases are overpaid.⁵²

Artificial intelligence and automation can play an important role here. We identified eight regions and departments where artificial intelligence sped up processing times for claims similar to those which the DWP face, including state unemployment offices in the US, as well as councils and departments in the UK. Processing times per case in these offices were cut by between 40% and 95%, with an average time saving of 64%.

Applying this benchmark to the NAO figures, the department handles 72.4 million minutes of calls annually, including 37 million minutes spent by users waiting for an agent and 35.4 million by agents themselves. Alternatively, this can be understood as 150,000 working days or 645 years. An IRS report found that AI chatbots and automated tools can deflect 40% of calls while an intervention by ServiceNow managed to deflect 55%. Given that these tools answer calls immediately, any calls they manage to deflect experience no wait times at all. Taking the more conservative IRS estimate, this would save users 14.8 million minutes in wait times alone. Reducing processing times by 64%, including some cases being fully automated and others being partially automated, such as through categorisation and triaging, would reduce the department's total annual call time by 22.66 million minutes. The combined total of these savings is 37.46 million minutes, 624,333 hours, or 334 working years.

It should be noted that AI is particularly effective at handling backlogs, which involve a large amount of data that must be handled through repetitive tasks. At the Arizona Department of Economic Security, a backlog of 4.3 million unemployment claims were processed in a matter of hours. As of Autumn, 2024, the DWP had hired an additional 101 case managers to handle a backlog of 392,000 PIP payments, as over the preceding year the department could only decrease the overall backlog by 10,000.⁵³ Currently, case workers determine whether recipients' medical conditions or disability have changed and whether these changes affect their disability payments. But this increase, worth just 5.5% of the dedicated staff, is disproportionate to the mountain of cases currently piling up. AI and automation has been proven extremely effective at processing cases like these, doing so faster and with fewer mistakes than staff members. The benefits of integrating new technology at the DWP extend beyond dealing with incoming cases and is capable of addressing large historical backlogs.

One specific example of where AI and automation could be put to use to clear caseload is Pension Credit. Pension Credit has long struggled with low take-up, however applications to the benefit have risen considerably – to the tune of a 150% increase – following the new Labour government's decision to restrict Winter Fuel Payments to those claiming Pension Credit. This has put pressure on DWP in terms of managing the caseload, with recent statistics showing between 9,000 and 13,400

applications a week. Currently, the average time to approve a Pension Credit claim stands at 28.1 working days.

The application process for Pension Credit often involves exchanging documents to prove income, savings and investments levels, necessitating lengthy checks. While there will be complex cases where information will need to be reviewed by staff, there is potential for some automation here as well. Even with a relatively simple form of automation, such as OCR document scanning, and on a very conservative assumption of a saving of 3 minutes per case, which has been achieved in several applications such as classifying and extracting court documents,⁵⁴ this would result in time savings of around 33,000 minutes a week, assuming that new Pension Credit applications keep coming in at a similar rate to what we have seen recently.

Alongside the NHS, there are ongoing efforts to find efficiencies by streamlining back office processes at the DWP. Notably, DWP is piloting an automated Employee Transfer Service alongside the Cabinet Office and Ministry of Defence, which aims to ensure that when a civil servant moves between government organisations their HR data can be automatically transferred without the need for cumbersome Excel-based forms, which currently take up a total of 420,000 work days a year.⁵⁵

HM Revenue and Customs (HMRC)

HMRC is responsible for collecting tax and customs revenue and assisting households with targeted financial support. Given their work on administering targeted tax credits and collecting and enforcing the flow of money to the Exchequer, the department spends significant time and energy on phone calls with the public.

The agency spent 4.7 million hours answering and handling calls from customers in 2022-23.⁵⁶ Customers, meanwhile, spent a total of 7 million hours waiting to speak to an adviser – more than double the total in 2019-20. 72% of these calls were considered avoidable by HMRC, as they were caused by process failures or delays, customers checking progress, or customer errors. This is partly due to increasing complexity related to Brexit and the COVID-19 pandemic, and the extra complications have meant just 67% of calls are answered, down from 77% in 2021.

Using seven case studies where a tax-collecting body similar to HMRC implemented AI and automation policies, including government agencies in the US and EU, as well as public sector agencies like police and education bodies, we found technology can greatly decrease time spent on customer service in the sector.ⁱⁱ We found agencies were increasing processing speeds up to 86% in some sectors, with conservative estimates as low as 30%, and an average of 70%.

This has the potential to greatly improve HMRC efficiency. From the agency's perspective, the integration of AI technology can decrease time spent answering calls from 4.7 million hours to 1.41 million hours. This means over 400,000 working days, or 1,750 years, would be saved annually by the uptake of such technology.

ⁱⁱ These case studies, as well as others we collected, are listed in the Appendix.

The public's experience would also improve. In 2022-23, 62.7% of callers waited over ten minutes to speak to an adviser, up from 46.3% in 2021-22.⁵⁷ By automating call reception, customers would no longer spend seven million hours waiting to speak to an adviser.⁵⁸ It is difficult to estimate the time savings from this move as it depends on the complications of each case and the availability of advisers dedicated to each area. However, HMRC's data shows 72% of calls are based on simple mistakes and avoidable⁵⁹, which implies chatbots and other automation could greatly decrease call volumes and could answer users immediately, cancelling out wait times.⁶⁰ Taking the more conservative IRS estimate that 40% of these calls can be deflected, that implies 2.8 million hours in wait times could be prevented entirely through automatised information provision. The remaining 28% of calls could benefit from the increased efficiency, potentially saving a further 1.37 million hours, though this area is less certain given that these callers would be more likely to require a human adviser.

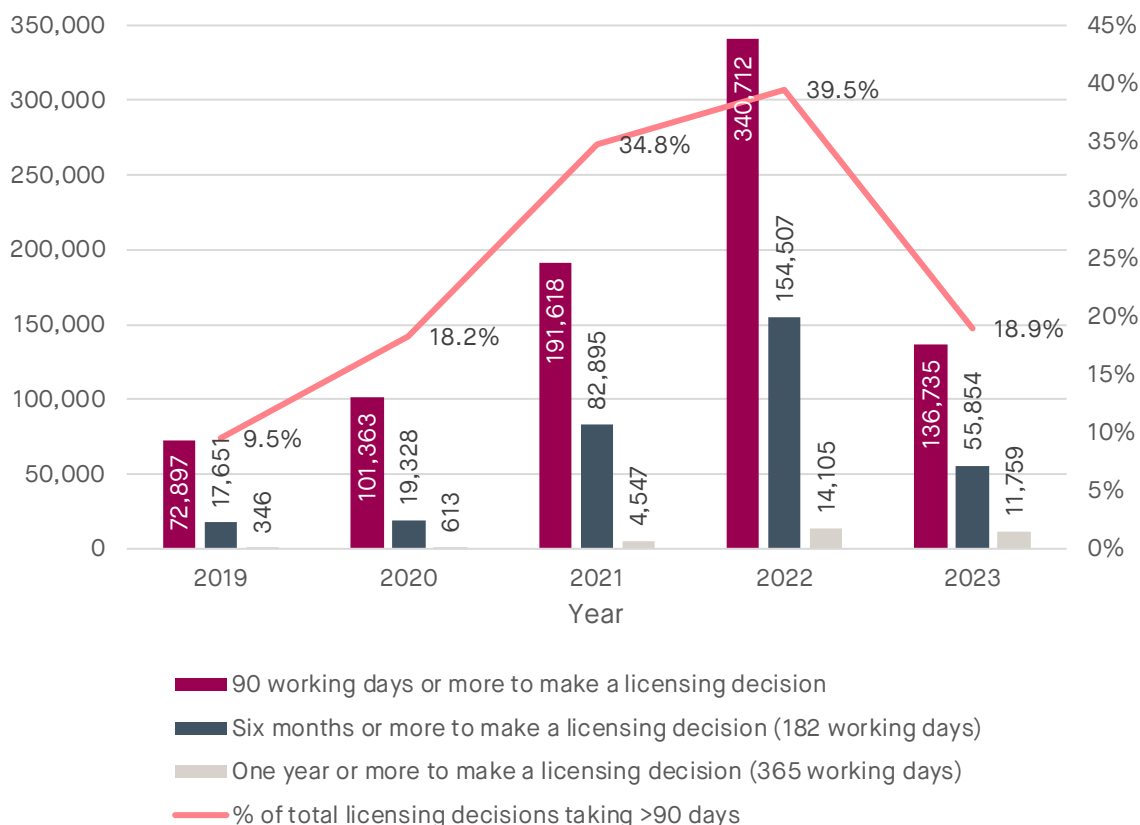
Such advancements are not theoretical. In 2023, the Norwegian Tax Administration introduced a GenAI chatbot to assist employees who take calls from taxpayers. While the employees still interact with customers, the AI provides solutions to questions and problems, while other cases will be automated to a greater extent.⁶¹ This builds on four years' worth of AI-focussed advancements at the Norwegian Tax Administration which have reduced the time to process individual tax rates from 14 minutes to two minutes, and saved 55,300 employee hours.

Driver and Vehicles Licensing Agency (DVLA)

The DVLA is responsible for issuing new driving licenses and updating existing licenses after significant changes to a driver's medical situation. It issued around 11.9 million driving licenses in 2022-2023 alone, of which 887,000 had related medical licensing decisions.⁶² Most standard driving license applications are relatively straightforward, with the majority being sent to customers within three working days following an application.⁶³

Medical decisions on licenses, however, take considerably longer as they require information from medical professionals and largely depend on the nature of the medical condition of the driver in question. For these applications, the waiting time can be extensive: the average time taken to make a licensing decision for medical purposes was 55 working days in May 2024.⁶⁴ However, many applicants have had to wait longer than this: in 2023, more than 204,000 medical decisions took longer than 90 working days. To put this figure into context, the DVLA's official target is to make a licensing decision within 90 working days in 90% or more of cases. However, as Figure 3 below shows, in recent years the DVLA has been considerably behind this target; although there has been substantial improvement since the pandemic, approximately 20% of cases are taking longer than 90 working days to resolve. Strikingly, the number of cases taking longer than a year to resolve has ballooned from just 346 in 2019 to nearly 12,000 in 2023.

Figure 3: Proportion of medical licensing decisions taking longer than 90 working days to resolve



Source: Department for Transport written question⁶⁵

Overall, 31% of applications for driving licenses are paper-based, while almost 9 in 10 medical licence applications start on paper.⁶⁶ This leads to a heavy reliance on inputting information from physical documents and issuing letters to request information. Notably, during the COVID-19 pandemic this led to a significant backlog, as DVLA staff were unable to be physically present to process documents at the organisation’s site in Swansea.⁶⁷

With the extensive reliance on physical documents, we see strong potential for automation in the medical licensing process to save time. On the simple side, this could involve more extensive use of OCR to categorise and extract documents internally. More radically, there is a potential role for AI to assist with prioritisation so that DVLA employees and medical professionals can identify and work on the most complex applications pertaining to medical licence renewals from the start. There are potentially a lot of savings to be made through this channel: for example, National Crime Agency analysts used AI tools to point investigators to the most relevant evidence in a case, achieving a roughly 90% increase in productivity in the process.⁶⁸

However, much of the delay experienced for medical licence applications is due to the DVLA relying on external organisations, particularly medical professionals, to provide input. While DVLA’s internal processes could be improved, automating this element of the process could be more challenging and require more comprehensive

solutions such as ensuring data interoperability. For this reason, producing a single estimate of the potential time savings that could result from an overhaul of the medical licence application process is challenging, and we have therefore focused on outlining pathways to get results rather than specific estimates of what could be achieved.

CHAPTER FOUR – RECOMMENDATIONS

Changing the machinery of government

There is an abundance of government departments and personnel tasked with guiding AI adaptation and automation policy. Historically, these institutions have included:

- The Incubator for Artificial Intelligence (i.AI) which includes technical experts and works to improve public services by improving AI capability, skills, and personnel in the public sector
- The Central Digital and Data Office (CDDO) which has worked within the Cabinet Office to upskill civil servants and improve government efficiency and security through shared data and tech
- The Department for Science, Innovation and Technology (DSIT), which is a wide-ranging government department designed to accelerate innovation and productivity through new and existing technologies and develop a modern digital government
- The Government Digital Service (GDS), as part of DSIT, works to make digital government simpler, clearer, and faster
- Departmental technology officers and teams working to implement AI and Automation within their departments

Each of the above institutions seeks to advance AI and automation within the public sector, and while they use different methods and benchmarks, their similar ambitions encouraged the government to merge GDS, CDDO, and i.AI into one body working under DSIT.

The move to ensure DSIT is the centre for digital innovation in government provides an unusual opportunity to redesign government priorities and learn from other examples. In Singapore, a similar body works not only within the civil service but extends its portfolio to include engagement with the private sector and research institutions, coordinating a cross-sector national AI strategy. They provide long term benchmarks for public servants to follow and work with outside partners in government, the private sector and research institutions to ensure these are met.

Singapore: How long term planning helped drive AI uptake

From 2019 to 2023, Singapore followed a National AI Strategy (NAIS), which was recently replaced by the National AI Strategy 2.0 (NAIS 2.0). This required a central body to coordinate AI across a broad range of sectors, following organisational approaches similar to the UK government's mission-oriented strategy.

NAIS 2.0 has three elements. The first are activity drivers – a catch-all term the government uses to refer to itself, industry, and public research organisations with technical capacity regarding AI and automation. These bodies are brought together and designed to act as trailblazers, leveraging

recent innovations to catalyse economic growth in select sectors. They are also meant to work across sectors, experimenting with and strengthening AI programmes. Importantly, these bodies are meant to work towards improving public service productivity, for instance, by bringing private finance institutions which have implemented AI into contact with public finance agencies to learn and adapt.

Secondly, NAIS 2.0 sought to cultivate talent by gathering tight-knit communities with the skills and knowledge that could cultivate AI systems. This required the government to pass policies aimed at attracting AI talent from industry and academia, including creating a team dedicated simply to identifying and engaging individuals, enticing them to come to Singapore or set up overseas working arrangements. At the same time, it increased its home-grown talent by designing AI apprenticeship programmes and working with the private sector to expand the number of placements available in the AI space. Finally, the government provided continuing education and training programmes related to AI and data analytics.

Thirdly, NAIS 2.0 devoted funding for infrastructure. This meant securing and deepening partnerships with private chipmakers and cloud service providers to ensure steady access to strategic necessities, as well as ensuring there was a sufficient budget to power datacentres. In addition, the strategy plans to develop green data centres powered by renewable energy. At the same time, it opened up access to public and private sector datasets provided certain privacy-enhancing technologies were deployed.

Each of these elements interacts with the others and would not be effective without the other two. For instance, activity drivers rely on talent, which itself depends on infrastructure. Each also requires long term commitments in all three areas to properly function.

While this strategy has enabled AI growth across Singapore, the successes were forcibly transplanted directly to the public service. AI tools were made available to civil servants who were encouraged to experiment with them, particularly in real-world scenarios. For instance, a government chatbot was deployed to assist with emails and other communications, and another was given to research teams to help with innovation. Importantly, it was made clear to civil servants that any interaction they had with these tools would be kept completely confidential from the government and other staff to ensure each person would feel free to use the tools and experiment as much as they wished. Websites were also made available for civil servants to create their own GenAI chatbots customised to their own department, given each sector's various roles and duties. Training was made available for those who wished to upskill and they were encouraged to innovate in their own departments.

In the immediate term, there is a clear role for DSIT to use its expertise to reduce duplication of effort across government departments and provide greater clarity on implementing automation and AI. Initially, this would involve synthesising evidence around evaluations of AI and automation that have already been implemented across the UK government or in other, similar, jurisdictions. This information should be made available as a central resource to leaders in government departments and public bodies. DSIT should also provide guidance on best practice for evaluating such interventions, including approaches to benchmarking and monitoring.

More importantly, the expert team within DSIT can play a crucial role as a coordinating body that is able to take an overview of AI and automation deployment across government – able to both proactively advise departments on promising areas of opportunity, and to push back on automation proposals from departments that are either too unambitious or too unrealistic.

There is an opportunity to develop these strategies as civil servants acclimatize to changes in the machinery of government. As the new department is established, a roadmap should be developed capable of delivering on government missions related to public service skills, cooperation, and regulations.

Funding and risk appetite

Alongside providing information and guidance to departments, there is a strong case for simplifying the business case process for government spending on AI and automation projects. Though there is a need for business cases to be rigorous and ensure value for money, the process can be extensive and time-consuming. Given the fast-moving nature of digital technology, particularly AI, this risks departments and public bodies not making the most of opportunities to modernise. A key focus should therefore be on getting digital projects off the ground quicker.

Lord Willett’s Independent Review on reforming the business case process for DSIT provides a number of practical steps to streamlining the business case process, such as capping the length of business cases at 12 pages (rather than the current 40-page template) and encouraging fewer, but more comprehensive, business cases.⁶⁹ A streamlined and reformed business case process could help to strengthen a culture of “invest to save” by facilitating capital investment where returns on in-year Resource Departmental Expenditure Limits – essentially, ‘current’ or day-to-day spending – can be demonstrated.

In addition to introducing a more streamlined process, DSIT could help other departments to quickly build business cases by sharing model business cases for a range of automation/AI use cases and consulting with departments on building their business cases.

A move to expedite business cases should be accompanied by efforts to adjust attitudes to risk when it comes to implementing AI and automation. There are several ways to encourage a more proportionate risk appetite that does not inhibit adoption in the public sector, but we highlight two here.

Firstly, a ‘parity of risk principle’ should be developed whereby as part of risk assessments and internal processes, departments and public bodies are obliged to give consideration to the risks of *not* automating processes as well as to the risks of adopting new automation/AI approaches.

Secondly, the risk/reward calculus for civil servants, ministers and other officials who propose and manage AI and automation projects should be adjusted. There are, rightly, controls through institutions such as the National Audit Office on officials to ensure that proposals represent good value for taxpayer money. However, making the most of new and emerging technologies in the public sector will require some tolerance of failure. To encourage the kind of calculated risk-taking that can maximise the potential of new technologies, institutions such as the NAO should adopt more of a ‘portfolio approach’ to evaluating some spending programmes relevant to AI and automation, judging investments as an overall package rather than each investment in isolation.

North America: How American and Canadian regulations pushed public servants to adopt AI

North America’s federal systems prevent central governments from having the same level of control available to the Singaporean (or British) government. But this has not prevented administrations at various levels of power from incentivising public servants to deploy AI and automation technology.

North American policymakers have made a special effort to integrate private sector expertise into the public sector. Canada streamlined this process when the federal government provided a list of publicly certified AI suppliers who have signed procurement contracts or worked with the country’s treasury in the past. There are currently 135 suppliers on the list who are pre-approved to supply government with AI services. The suppliers are broken into three bands based on the cost of the projects for which they are approved. First level vendors are approved for projects up to CAD \$1 million, second level for projects up to CAD \$4 million, and the third for projects up to CAD \$9 million. This allows public servants to avoid the painstaking, long, and costly bureaucratic process required to approve vendors for procurement projects, expediting them and lowering costs.

The state of California developed a similar list called the “pre-qualified vendor pool for agile development – digital services” who are allowed to offer staff to key state agencies to help with consulting, design, and development services. This reduces solicitation time and administrative costs for both the government and the vendors, while giving public servants the ability to review the vendors’ previous work for the state.

At the same time that governments are speeding up the approvals process, they are also attempting to reassure the public and civil servants who may feel concerned about decision-making and accountability. In Canada, the

Directive on Automated Decision-making demanded civil-servants who use data to automate decision-making undertake pre-emptive impact assessments which, based on information on the project, provides a risk scale alongside mandatory governance and oversight requirements. This is designed to offset algorithmic biases while securing public trust in AI and automation initiatives.

The city of Boston charted a similar course when the chief information officer outlined to city officials different scenarios in which they might use AI and automation, such as translation and coding. In these cases, public servants are encouraged to proof any work accomplished with GenAI in order to understand and correct emerging biases. Similar approaches can be found in Washington DC, Memphis, San Francisco, and others. These reassure the public of the efficacy and ethicality of AI tools, minimising backlash, while taking steps to encourage uptake within the civil service by mitigating the risks involved.

Scaling pilots

There are encouraging signs that the public sector is already actively exploring the potential of AI. While this is welcome, there is a temptation for public sector bodies to get stuck in a loop of trying out small pilots, while neglecting the groundwork needed to scale up solutions – something that Reform think tank has dubbed ‘pilotitus’.⁷⁰ While there is a lack of aggregated data on AI spending in government, recent indications suggest that the number of public procurement contracts mentioning AI has increased, while the median value of these contracts has decreased, suggesting a focus on pilots.⁷¹

At best, getting stuck in a loop of pilots means that new technology is not used to its full potential in the public sector. At worst, it can mean that public bodies run pilots simply for the sake of it. In this report we have showcased numerous solutions which are already having real impact where they have been implemented; it is often the case that the technology to deliver better outcomes is already there and what is now needed is to scale projects up.

To prioritise areas for scaling up, DSIT should use their oversight of AI/automation adoption to shortlist the implementations and use cases of these technologies that have the most extensive evidence base and the strongest potential to achieve significant performance gains. In essence, this shortlist would focus on areas where the technology has a proven track record and a plausible route to widespread implementation. Ideally, as others have recommended⁷², DSIT should be given control of a ‘transformation fund’ that it is able to disburse to projects on this ‘scaling shortlist’. Short of this, DSIT should further work with the Treasury and NAO to identify ways to fast-track shortlisted projects – for example, by accrediting certain off-the-shelf products – to speed up their implementation.

Building capacity

While changing the machinery and processes within government is important to maximise the potential of automation in the public sector, this on its own will not be enough. Departments themselves need to be better equipped to make the most of the opportunities afforded by new technology.

Key to ensuring the success of AI and automation rollout will be establishing clear points of contact in departments who are responsible for the implementation of new AI and automation solutions. Central government bodies should appoint Automation Leads to work with DSIT to proactively identify opportunities to use automation, as well as oversee and monitor the implementation of new automation projects. These Automation Leads should report to a Head of Citizen Experience, based in the DSIT Digital Centre, who can ensure that automation efforts are working horizontally across government.

In addition, establishing a central hub where public servants can learn from experts, upskill their teams, and receive educational feedback could be extremely helpful. Estonia has developed a central body dedicated to improving the skills of its public servants and, by extension, the user experience.

Realistically, we cannot rely solely on DSIT and a select few officials at the top of government bodies to drive forward progress on AI and automation; their capacity will necessarily be limited. Many jurisdictions, such as Estonia and the San Francisco city government, have implemented 'data academies' to provide their staff with skills in data use, management, process improvement and other basic skills relevant to harnessing AI.

Estonia: The importance of in-house skills and training

Like Singapore, Estonia established and followed clear AI strategies, known as the Kratt Strategy, from 2019 to 2021, and a second iteration from 2021 to 2023. These were specifically geared towards the public sector and sought to enhance civil servants' skills in order to increase AI procurement, eventually spurring growth in the nascent sector.

This has included practical training courses and guides which are designed to improve the social capital available within the civil service, known as the AI Support Toolbox. Morning seminars are held with civil servants as well as institutions interested in data economy, AI, and data governance, which includes brief overview of the field and existing projects. Further workshops are available to improve awareness of cybersecurity requirements. Workshops are also made available for those interested in launching their own AI project which includes overviews of project lifecycles and the necessary starting points, preconditions, and potential risks, to build capacity and speed up decision-making.

In addition, the AI Support Toolbox offers customised support services, such as brainstorming sessions, and deep dives between public and private

agencies. Further, more in-depth support is available where needed. Algorithmic impact assessments are available for institutions looking to implement AI or data science but wish to receive personalised feedback and recommendations or want to ensure they are acting in accordance with administrative law. More long-term support can be provided over three to six months to help institutions implement complex AI projects and receive practical support throughout the process. An expert team helps test recommendations and ensures data processing remains ethical and responsible.

In Estonia, the state effectively works with civil servants to ensure they can apply AI in their own departments and supports them to do so throughout the process. Civil servants are expected to do so on their own – the central body will not write a GenAI programme or implement automation policy – forcing each department to build up AI skills in-house.

For instance, take the Estonian state's virtual assistant, Bürokratt, which is designed to act as a user interface assisting citizens in accessing public services. Bürokratt is designed to be flexible, and can be deployed at different departments, but each will need to input their own processes and information before it can be deployed. Departments can receive a comprehensive overview of Bürokratt, learn how to train the chatbot, and understand how to create services using the interface to streamline the accessibility of various public services. This is developed in-house, with the guidance of a centralised body, and built on the technical skills of their employees.

APPENDIX – CASE STUDIES

Below are the case studies we have used throughout this report to illustrate the potential of AI and automation. In the 'time savings' section below we have listed the case studies most relevant to our estimates, which we have used to estimate the potential time savings that could be achieved in UK government agencies. In further sections we have included notable case studies that were not directly relevant to our estimates, but still showcase the ability for automation to reduce backlogs and expedite lengthy processes.

Time savings and call resolution

Organisation	Key results
DEFRA	50% reduction in agent call times for the public.
Missouri Dept of Social Services	70% reduction in call answer time; blocked calls reduced from 60% to 10%.
Telefonica	80% reduction in average call handling time; 300% increase in calls handled per hour
IRS	Voice bots handled over 4.8 million calls since they were deployed, and 40% were contained within the voice bot without the need to escalate to a live assistor. Increased number of calls answered by 30%.
DVSA	ServiceNow Virtual Agent has helped deflect 55% of calls.
Texas A&M	Ticket resolution time reduced by 30%.
Aramex	Ticket resolution time reduced by 35%.
Elsevier	7% increase in self-service.
Hamilton County	40% reduction in application processing time and increased service capacity.
Norfolk Council	60% reduction in payroll processing times.
DfE's "Barney"	75% reduction in EU Social Fund claim processing times
Dept of Veteran Affairs	95% reduction in time spent sorting claims
Government agency	75% time savings on fraud investigation evidence gathering, with 99% accuracy
Lloyds refunds	70% automation of failed payment process
Norwegian tax administration	86% time saving to process individual tax rates
Brent Council	75% time saving in processing rent changes
Lithuanian traffic police	83% time reduction in fine issuance
Groves Medical Centre GP practice	Patient waiting times reduced by 73%, from 11 to 3 days, for pre-bookable appointments. 47% fewer phone calls at peak hours, 58% reduction in the maximum number of calls; only 18% of patient requests initiated over the phone versus 88% previously; 91% of appointments automatically allocated without staff intervention.
Winn Solicitors	Document extraction and classification is automated, saving 3 minutes per case or 62 hours per week for the organisation.

Mid and South Essex NHS Foundation Trust	30% fall in non-attendances for appointments.
South Warwickshire University Hospital NHS Foundation Trust	28.8% fall in non-attendances for appointments.

Improving processing and reducing backlogs

Organisation	Key results
Peapod deliveries	Order processing time reduced from ~12 hours to seconds.
Arizona Dept of Economic Security	Processed 4.3 million claims in hours.
Wisconsin Dept of Workforce Development	Processes 157,000 claims weekly, payments in 2-3 days vs. weeks/months previously.
Logistics company	Processes reduced from 3-4 hours to 2-3 minutes, 99% accuracy. 432 hours saved in the first month.
Latin American government agency	40% reduction in processing time, 30% decrease in error rates.
Luton Council	90% of benefits VEP alerts processed automatically; digital technology 5x faster than human workers.
Norfolk Council	Reduced payroll processing from five days to two.
Suffolk Council	Police welfare process fully automated with a 60% faster referral process.
Thames Valley Police	Automation saved force 390,000 hours of filing work a year.
DfE's "Arnold"	4 minutes to complete tasks that previously took 2.5 days.
Surrey Council	Aggregate savings of 40,000 hours of work from automation initiative.
DEFRA	Issuance of water abstraction licenses reduced from 65 minutes to about 7 minutes.
DWP	Clearing of pension claims backlog.
HM Land Registry	Around 30% of applications are automated
Mid Lancs NHS	helped trusts within two integrated care systems (ICSs) contact over 80% of their waiting lists, with about 10% of patients coming off them.
NHS Blood and Transplant	650 hours of time saved from automation
Malaysian courts	c.80% reduction in pending cases. Filing and processing of new cases down from 3 days to just 4 hours and significant savings in case hearing duration, from 32 days in 2009 to 10 in 2011.
Old Bailey	Used AI to analyse over 10,000 documents prior to the trial of Rikki Neave. A 20-person team was able to shave an entire month off evidence review time, saving £50,000 in costs.
Pension agency	Automation eliminated 230,000 hours of manual reviews annually.

Productivity and efficiency

Organisation	Key results
UCL	An AI tool developed by UCL was able to outperform traditional methods of predicting hospital bed demand.
DHI Group	Major IT incidents reduced by 70%. Licence costs reduced by 75%.
Skyscanner	44% increase in IT team efficiency.
Various	Developers have 55% faster task completion rate when using GitHub Copilot.

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