# Former government director predicts up to 30% productivity boost from agentic AI in UK civil service



The potential transformation of the UK's civil service through the adoption of artificial intelligence is garnering increasing attention from policymakers and experts alike. Michael Jary, the former lead non-executive director of the government, has proclaimed that "agentic AI"—forms of artificial intelligence capable of functioning with limited human intervention—could yield productivity gains of 20% to 30% across government departments. Speaking at an event hosted by the Institute for Government, Jary underscored a vision of a more interconnected civil service, whereby automated tools could help streamline operations and enhance departmental collaboration.

Jary’s perspective resonates with wider trends observed in the public sector, where the UK government is actively trialling generative AI tools to support ministerial workflows. With initiatives spearheaded by Deputy Prime Minister Oliver Dowden, the government aims to employ AI technologies for drafting policy responses and managing public consultations, all while ensuring robust oversight to maintain accuracy. This agenda aligns with Prime Minister Rishi Sunak's broader goals of leveraging technology to boost productivity amid fiscal constraints. The intentional expansion of the Cabinet Office’s AI 'Incubator for AI', which plans to double its staff and substantially increase its budget, further highlights the urgency to keep pace with the commercial sector's rapid AI adoption.

Moreover, new research suggests that a significant proportion of government transactions could be automated. A study indicates that approximately 143 million citizen-facing interactions in the UK are complex yet repetitive, with a staggering 84% deemed highly automatable. Even modest efficiencies in these processes could result in saving around 1,200 person-years of work annually. This underscores an opportunity not just for enhanced productivity but also for rethinking the structure and function of government operations.

Despite these promising projections, concerns remain around the implementation of AI within the public sphere. A survey of public service professionals found that while there is optimism around generative AI's potential to alleviate bureaucratic burdens, challenges persist. Many respondents expressed a lack of clear guidance on AI usage in their roles, with only a third feeling they had adequate operational directives. The transition to a more tech-savvy civil service will also necessitate a shift in skill sets, as demand grows for profiles such as product managers and data scientists, in addition to the need for government to recalibrate its approach beyond traditional departmental boundaries.

Jary also highlighted the pressing need for devolution of power back to local authorities, advocating for a system that grants greater autonomy to regional governments. He pointed out the detrimental effects of centralisation on local governance, arguing that more empowered local bodies could respond more adeptly to the needs of their communities. This is particularly crucial in the face of government funding initiatives that compel local councils to compete for resources from the central government.

In advocating for a reimagined organisational model, Jary referenced the successful implementation of India’s Aadhaar digital identification system, which services a population of 1.4 billion with a relatively small workforce, suggesting that similarly ambitious projects could be realised in the UK context. The Aadhaar initiative has seen significant uptake and growth in transactions, with recent figures revealing billions of authentications and digital KYC transactions carried out, reflecting both efficiency and security in public service delivery.

Ultimately, the challenges ahead for the UK government are considerable; however, the integration of AI technologies holds the promise of facilitating a more responsive, transparent, and interconnected civil service. As Jary articulated, a paradigm shift involving agile development teams and multi-disciplinary collaboration could pave the way for a government better suited to meet contemporary societal challenges. With the right strategy and commitment, it is plausible that the transformation of the UK's public sector could indeed reflect the capabilities of modern technology, addressing both operational inefficiencies and the pressing needs of the population.

### Reference Map

* Paragraph 1: [[1]](https://www.publictechnology.net/2025/05/16/education-and-skills/whitehalls-former-top-ned-forecasts-30-productivity-boost-from-agentic-ai-adoption/)
* Paragraph 2: [[2]](https://www.ft.com/content/f2ae55bf-b9fa-49b5-ac0e-8b7411729539)
* Paragraph 3: [[3]](https://arxiv.org/abs/2403.14712)
* Paragraph 4: [[4]](https://arxiv.org/abs/2401.01291)
* Paragraph 5: [[1]](https://www.publictechnology.net/2025/05/16/education-and-skills/whitehalls-former-top-ned-forecasts-30-productivity-boost-from-agentic-ai-adoption/), [[6]](https://www.biometricupdate.com/202503/aadhaar-authentications-surge-as-indias-digital-transformation-drive-advances)
* Paragraph 6: [[1]](https://www.publictechnology.net/2025/05/16/education-and-skills/whitehalls-former-top-ned-forecasts-30-productivity-boost-from-agentic-ai-adoption/)
* Paragraph 7: [[6]](https://www.biometricupdate.com/202503/aadhaar-authentications-surge-as-indias-digital-transformation-drive-advances), [[7]](https://www.biometricupdate.com/202501/india-registers-over-1b-aadhaar-face-authentications-as-adoption-grows)

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

1. <https://www.publictechnology.net/2025/05/16/education-and-skills/whitehalls-former-top-ned-forecasts-30-productivity-boost-from-agentic-ai-adoption/> - Please view link - unable to able to access data
2. <https://www.ft.com/content/f2ae55bf-b9fa-49b5-ac0e-8b7411729539> - The UK government is trialing generative AI tools to enhance ministerial efficiency under the leadership of Deputy Prime Minister Oliver Dowden. These tools, including government-hosted versions of ChatGPT and open-source models, aim to draft responses for parliamentary questions and freedom of information requests, as well as analyze public consultation inputs. Human oversight will ensure accuracy and source verification. The initiative, part of Prime Minister Rishi Sunak’s agenda, addresses fiscal constraints by promoting productivity through technology. Dowden announced the AI 'red box' tool to streamline routine policy tasks and AI applications in the NHS for diagnostics, personalized medicine, and prescription management. The Cabinet Office's AI cell, known as the 'Incubator for AI,' will expand from 30 to 70 staff and increase its budget to £110 million. Dowden emphasized the urgency for the public sector to keep pace with private sector AI adoption, while maintaining a stringent error tolerance. Early AI tools have reportedly yielded significant returns on investment.
3. <https://arxiv.org/abs/2403.14712> - This study explores the potential of artificial intelligence (AI) to improve public service productivity by automating complex but repetitive bureaucratic tasks within UK central government. The authors estimate that approximately 143 million citizen-facing transactions per year are complex and repetitive, with 84% of these being highly automatable. Even a modest time saving per transaction could equate to approximately 1,200 person-years of work annually. The paper also develops a model to estimate the volume of transactions a government service undertakes, providing a way for government to avoid conducting time-consuming transaction volume measurements. The study concludes that AI has a significant potential to transform the structure and functioning of modern government.
4. <https://arxiv.org/abs/2401.01291> - This survey examines the current use and potential of generative AI in the public sector. A study of 938 public service professionals within the UK found that 45% were aware of generative AI usage within their area of work, and 22% actively used a generative AI system. Public sector professionals were optimistic about the technology's potential to enhance efficiency and reduce bureaucratic workload. For example, those working in the NHS believed that time spent on bureaucracy could drop from 50% to 30% if generative AI was properly exploited. The survey also found a high level of trust (61%) in generative AI outputs and a low fear of replacement (16%). However, concerns included the lack of clear guidance on generative AI usage in workplaces, with only 32% feeling they had clear guidelines.
5. <https://arxiv.org/abs/2502.09479> - This field experiment assesses the impact of generative AI on complex knowledge-based tasks in a public sector context. After establishing a baseline level of performance, the study found mixed evidence for two types of composite tasks related to document understanding and data analysis. For the Documents task, the treatment group using generative AI had a 17% improvement in answer quality scores and a 34% improvement in task completion time compared to a control group. For the Data task, the generative AI treatment group experienced a 12% reduction in quality scores and no significant difference in mean completion time compared to the control group. These results suggest that the benefits of generative AI may be task and respondent dependent.
6. <https://www.biometricupdate.com/202503/aadhaar-authentications-surge-as-indias-digital-transformation-drive-advances> - In February 2025, India recorded a 14% year-on-year growth in Aadhaar authentication and digital KYC transactions, with at least 2.25 billion Aadhaar-based authentications and at least 430 million digital KYC checks completed by the end of the month. The government attributes this growth to the increasing adoption of the Aadhaar system in sectors such as banking and finance, making processes more seamless, secure, and efficient. The face biometric authentication service, launched in 2021, has seen significant uptake, with 125.4 million face biometric authentications recorded, representing a cumulative total of 1.15 billion. The service is also being opened up to the private sector, with 97 different businesses and organizations having signed up to the face authentication service.
7. <https://www.biometricupdate.com/202501/india-registers-over-1b-aadhaar-face-authentications-as-adoption-grows> - India's Aadhaar face authentication system has surpassed one billion transactions, reflecting its growing adoption across government and private sector services. Launched in 2021, the face authentication service was developed by the Unique Identification Authority of India (UIDAI) to provide an alternative for users facing challenges with fingerprint authentication. As of July 2024, approximately 1.38 billion Indians had an Aadhaar digital ID. The UIDAI emphasizes the importance of the Aadhaar digital ID in enhancing digital trust services and facilitating access to services, with a vision to make life easier for Aadhaar number holders by facilitating smooth service delivery.