

THE CONVERSATION

Academic rigour, journalistic flair



We believe in the
free flow of
information

Republish our articles for
free, online or in print,
under Creative Commons
licence.



Erman Gunes / Shutterstock

AI can boost economic growth, but it needs to be managed incredibly carefully

Published: February 7, 2025 1.11pm GMT

Ashley Braganza

Professor of Business Transformation, Brunel University of London

Asieh Hosseini Tabaghdehi

Senior Lecturer in Strategy & Business Economy, Brunel Business School, Brunel University of London

The UK government's efforts to integrate artificial intelligence (AI) into public services and stimulate economic growth represents a pivotal step in the roll out of the technology in this country.

AI offers the promise of improving public services by enabling faster, more efficient processes, personalising provision of those services for the public and optimising decision-making. However, the adoption of this technology in public systems brings inherent risks, particularly in an environment characterised by rapid technological developments.

A primary concern and challenge lies in ensuring that AI adoption builds trust in public services. Mismanagement of AI can worsen inequality, lead to job losses, and erode public confidence in government and the further rollout of AI-based technologies.

Balancing these opportunities and risks requires understanding the trade offs involved, notably the tension between job creation and displacement, unconstrained benefits from the misuse of AI, and the need for fairness, transparency, equity and a capacity to be able to explain the design of algorithms.

AI has the potential to generate employment in fields such as data science, algorithm design and system maintenance. However, automating routine administrative tasks such as form processing and record management threatens to make many public sector roles redundant.

The challenge lies in maintaining efficiency and accountability while addressing inevitable job gigification. This transition will not be uniform. Workers in roles vulnerable to automation will experience immediate consequences.

The government has rightly identified the need to invest in reskilling initiatives that prepare workers for an AI-driven future. Reskilling is necessary but insufficient to fuel economic growth.

As tasks are gigified by AI technologies, traditional full-time jobs become increasingly scarce, leading to more “white collar” workers experiencing income volatility, periods of un- or underemployment and precarious living. Yet, extant financial systems are based upon patterns of monthly income and expenditure on mortgages and rent or utilities.

Financial systems need to become significantly more flexible to enable workers to align uncertain income streams with unavoidable regular expenditure on necessities such as food and internet connectivity.

Oversight is key

The risks of AI algorithm failures are particularly apparent when systems deployed in the public sector cause harm. A glaring example is the UK Post Office scandal, where inaccurate data from the Horizon IT system led to wrongful prosecutions.

This case highlights the importance of oversight in AI deployment. Without a mix of regulations, guidelines and guardrails, errors in AI systems can lead to serious consequences, particularly in sectors related to justice, welfare and resource allocation.

Government must ensure that AI-driven systems are not only efficient and accurate but also auditable. Independent bodies should oversee the design, implementation, and evaluation of AI systems to reduce risks of failure.

AI can enhance public services, but it is important to acknowledge that algorithms reflect biases inherent in their design and training data. In the public sector, these biases can have unintended and unforeseen consequences that are invidious, as they are hidden in the depths of complex computer code.

For instance, AI systems used in housing allocation can exacerbate existing inequalities if trained on biased historical data. Fairness and trust should therefore be core principles in AI development. Developers must use diverse, representative datasets and conduct bias audits throughout the process.

Citizen engagement is essential, as affected communities can provide valuable input to identify flaws and contribute to solutions that promote equity. A key challenge for policymakers is whether AI can deliver on its promise without deepening social divisions or reinforcing discriminatory practices. Transparency in AI decision making is essential for maintaining public trust.

Citizens are more likely to trust systems when they understand how decisions are made. Governments should commit to clear, accessible communication about AI systems, allowing individuals to challenge and appeal automated decisions. While AI adoption will likely cause disruption in the early stages, these challenges can diminish over time, leading to faster, more personalised services and more meaningful work opportunities for government employees.

AI systems are dynamic, continuously evolving with the data they process and the contexts in which they operate. Governments must prioritise ongoing review and auditing of AI systems to ensure they meet public needs and ethical standards. Engaging relevant stakeholders - citizens, public sector employees and private sector partners - is essential to this process.

Transparent communication about the goals, benefits, and limitations of AI helps build public trust and ensures that AI systems remain responsive to societal needs. Independent audits conducted by multidisciplinary teams can identify flaws early and prevent harm. To fully realise AI's potential and ensure its benefits are distributed equitably, policymakers must carefully balance efficiency, fairness, innovation, and accountability.

A strategic focus on education, ethical algorithm design and transparent governance is necessary. By investing in education, AI ethics and strong regulatory frameworks, governments can ensure that AI becomes a tool for societal progress while minimising unintended adverse consequences.