

# Briefing note: AI in Governments

This briefing note consists of two separate pieces of research by the Centre for Public Impact (CPI) who serves as a knowledge partner at Tallinn Digital Summit and The Boston Consulting Group (BCG).

The paper by CPI „How to make AI work in government and for people“ has been prepared specifically for the Tallinn Digital Summit 2018 by CPI. The research by The Boston Consulting Group, „2018 BCG Digital Government Benchmarks: What Citizens Think About Governments’ Use of AI“, provides additional insights to the topic.





Public sector organisations across the world are looking to AI to improve their policymaking and service delivery, but there is a lot of hype around the technology. We need to be realistic about AI and recognise that it is not a panacea for the world's problems. In 2017, we published our report, *Destination unknown: Exploring the impact of Artificial Intelligence on government*, in which we considered its potential in the public sector. Building on this and our 2018 report, *Finding a more human government*, we are now looking at how to unlock the potential of AI in government. Our main conclusion is that to be a valuable tool for government and citizens, AI needs legitimacy, by which we mean the reservoir of support government requires to achieve public impact. This will be the focus of CPI's presentation at the 2018 Tallinn Digital Summit.

While AI can currently automate well-defined, repeatable tasks, augment human decision-making, and enhance our understanding of data, governments need to take the greatest care over its future direction. As AI expands into more sensitive and contentious domains, citizens are beginning to worry about the implications of such a far-reaching technology. We believe that AI can be used in government to improve outcomes for citizens, and that even against a backdrop of mistrust and uncertainty, legitimacy is an achievable aim. However, in order to build citizens' trust in government institutions, they must believe that those institutions will act ethically, rigorously, and with careful consideration of their interests. So, how can this be achieved?

## Part 1: An action plan for public sector AI

In order to support governments' decision-making, we have defined a five-point action plan for developing public sector AI, viewed through the lens of legitimacy.

### 1. Empathise with the real needs of end-users and build your objectives around them

As with all policymaking and public service design, government AI interventions should be shaped by an understanding of the needs of the end-users, who might be frontline workers or citizens themselves. Such interventions must reflect the diversity of frontline staff's experiences and perspectives, ideally involving them as codesigners from the very beginning of the process. Delivering AI systems requires tough prioritisation and tradeoffs, in order to satisfy the often conflicting needs

of different stakeholders and to meet any budgetary and scheduling constraints. It is essential, therefore, to build an authentic connection with end-users for this process to succeed, which means involving them early, listening well and not allowing the communication channels to dry up.

### 2. Focus on specific and doable tasks

Practitioners should identify the tasks that meet specific needs, and then decide which of them are the preserve of people and those in which AI might usefully assist. These tasks can then be examined for feasibility, such as whether high-quality training data exists. Governments must collaborate with technology experts and public sector professionals in building a shared vision of an AI-augmented workplace. They need to emphasise to end-users that these systems will very rarely replace existing jobs, but instead reshape roles for the better. Some applications will free staff up for more creative, problem-solving work that improves service delivery and helps them realise their own personal goals. Many newly-created AI applications are decision support systems, such as those that identify likely tax frauds, vulnerable children in need of protection, or criminals' propensity to reoffend. They perform well-defined and well-bounded tasks with real-world validity, and help end-users to analyse the problem at hand, ideally alleviating the stress of making important and potentially life-changing decisions.

### 3. Build AI literacy in the organisation and the public

The opportunities and challenges of AI require public sector workers and citizens to develop new skills. We see AI literacy as having three main aspects: firstly, civil servants should be trained to spot potential applications

in their work in government. Secondly, frontline workers should enhance their AI collaboration skills – they need to be able to work with systems and their developers and constantly assess whether the systems' conclusions can be trusted. And thirdly, governments need to foster education and debate about AI more widely, engaging with the media, educational organisations, cultural institutions, civil society groups, and individual citizens.

### 4. Keep maintaining and improving AI systems

Maintaining and enhancing AI systems is a vital function and takes time, resource and effort, and therefore must be properly considered at the onset of a project. The very features that differentiate AI systems – their speed, ability to integrate many data sources, and potential to change rapidly – also create significant challenges. Governments will be developing such systems within a constantly changing environment – legislation and enforcement patterns are constantly modified in the public sector, and the nature of policy problems, particularly the stubborn or complex ones, is equally fluid. As a result, AI systems can be fragile and prone to fail in unexpected ways. Governments must anticipate and manage these risks, so that the legitimacy of individual systems and the technology as a whole is not undermined.

### 5. Design for and embrace extended scrutiny

An important aspect of ensuring legitimacy is engaging with, and listening to, the voices of individuals and civil society groups. Governments should be resolutely open and transparent about AI systems, making them available online to civil society and opening them up to extended peer review wherever possible. Governments and developers should invite close external scrutiny of the design and low-level code of their systems, to ensure they are seen as technically sound and free of discrimination or bias.

## Part 2: Creating an institutional strategy for AI in government

Implementing an action plan for delivering legitimate AI in government can only succeed if the right institutional conditions exist.

Governments should enable individuals to meet and share expertise with each other, and build a **community of AI practitioners**. This may mean setting up a coordinating AI agency that serves as a convening point and takes account of relevant expertise and opinions across departments. This agency should also be in charge of creating and maintaining a handbook and training programme on AI in government.

Governments should **develop specific competences and training**, especially in technologies such as machine learning, which have great potential in the public sector. AI project teams need to know how their systems can operate within the context of national legislation – such as equality, freedom of information, and data protection laws – and the processes by which they are built, tested and documented.

From the technology point of view, governments should **prioritise interoperable and open AI technologies during procurement**, and impose rigorous standards for all new digital public sector tools. These tools need to be technically viable, based on high-quality data, and compatible with existing systems.

The technical infrastructure should **promote transparency and facilitate external audits and other forms of scrutiny**, so that citizens and communities have access to the data and reasoning of any AI systems that may affect them. A way of doing this would be via model repositories, consisting of a list and specifications of AI tools deployed within government.

To build capacity in public sector AI, governments should create **challenge-based research programmes**. They should build their own capacity to create working pilots and prototypes, so they can sustain substantial AI projects in-house and engage vendors on an equal footing.

Only by creating an enabling environment for the application of AI technologies in the public sector can governments ensure a fruitful and legitimate use of AI on behalf of their citizens.

*This is an executive summary of the Centre for Public Impact's new paper, How to make AI work in government and for people, which will be available on the CPI website [www.centreforpublicimpact.org](http://www.centreforpublicimpact.org) along with four examples of how AI is being used in government.*

*For more insights on public trust and perception of AI in government across countries, see also 2018 BCG Digital Government Benchmarks: What Citizens Think About Governments' Use of AI'.*



# 2018 BCG Digital Government Benchmarks: What Citizens Think About Governments' Use of AI

Executive Summary

Artificial Intelligence (AI) offers a wide range of opportunities for governments to match the quality and customizability expected by citizens today by automating repetitive tasks and augmenting complex decision-making by humans. Despite the plethora of opportunities, government's approach to, and use of AI remains a contentious issue.

The Boston Consulting Group (BCG) surveyed more than 13,000 Internet users across 30 countries to better understand citizens' sentiments on the use of AI by government. The survey results provide useful guidance for how governments should approach the adoption of AI in internal processes as well as in delivering services to their citizens.

## Key Findings on Citizens' Views on the Use of AI by Government

- Citizens' support for governments' use of AI is strongly correlated with their level of trust in government institutions. This finding is aligned with the Centre for Public Impact's new paper "How to Make AI Work in Government and for People," which posits that AI needs legitimacy in order to be a valuable tool for governments and citizens.
- 35% of respondents are very concerned about the potential impact of AI on jobs, and 37% strongly believe that governments should regulate the use of AI to protect jobs.
- Citizens in emerging markets such as India, China and Indonesia, are more receptive to the use of AI by government compared to citizens in more developed markets such as Estonia, Austria, and Switzerland.
- Millennials and urban dwellers are more supportive of the use of AI by government compared to other cohorts.
- Citizens are more supportive of governments using AI for process-heavy administrative tasks than in areas where significant discretion is currently given to human decision makers, such as health diagnoses or criminal justice penalties.

## Implications for Governments

AI and other digital innovation provide tremendous opportunities for governments to improve the quality and efficiency of their services and operations. But governments need to be very careful in their adoption of AI. Citizens are clearly worried about the removal of human discretion in certain areas, and governments need to address these fears head on by focusing their attention on educating citizens, creating transparency, and putting in place programs and policies to support government roll out of increasingly advanced applications of AI to their services. 30% of citizens are strongly concerned that the moral and ethical issues of AI have not been resolved.

Citizens' fears associated with loss of jobs need to be addressed through public dialogue and policies that provide a safety net for those most severely affected. If left unaddressed, these citizen concerns will create significant barriers to AI's development in general and its use by government specifically.

Government leaders can use the benchmarks developed by the Boston Consulting Group to shape their approach. Governments can also begin building internal capabilities by piloting AI uses in thoughtful ways and



soliciting feedback from citizens in the journey to build public support for AI. The Boston Consulting Group has been helping a variety of government entities capitalize on AI and other digital approaches to dramatically improve the quality and efficiency of government services. In addition, The Centre for Public Impact's new paper "How to Make AI Work in Government and for People" describes ways governments can incorporate AI approaches.

This is an executive summary of The Boston Consulting Group's "2018 BCG Digital Government Benchmarks: What Citizens Think About Governments' Use of AI"

For more insights on Digital Government go to [www.bcg.com](http://www.bcg.com)