

The future is NOW...

Digital disruptions are driving innovation and new organizational models



Next Gen Security



Internet of Things





Robotics



AR/ VR



Blockchain



Cloud







... and puts growing pressure on governments

Do more with less

Meet citizens' growing expectations

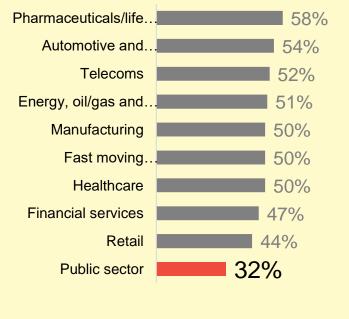
Respond to ongoing industry disruption

Enhance economic competitiveness

Rebuild public trust



Business leaders understand the importance of AI, but the public sector is lagging behind in AI adoption







Use of AI in governments has two big opportunities that don't apply to the private sector

✓ It allows them to structure and analyze the huge amount of data they hold on citizens - and use it for social good.

✓ It gives them a unique chance to drive how citizens use and benefit from these technologies.



Al represents an opportunity for countries of all sizes

Pressing Challenges





High admin burdens





Backlogs & long wait times

Citizen / Employee satisfaction



Complex



Business

Indicative domains of Al application in the government and public sector

Transport & Urban planning

Defense & Security

Environmental Management

Public Administration

Justice and **Public Safety**

Health

Education

Disaster Planning and Management



There are though barriers to overcome...





Budget constraints



Organizational Silos



Lack of integrated ICT infrastructure



Gap in core skills and competencies



Narrow focus of implementation



Risk averse cultures



Governments will have a critical role to play in promoting wider AI adoption and use

Ensure legal accountability and liability

Ensure legal certainty on how existing laws and policies apply to Al and autonomous systems Promote open, transparent and inclusive governance across the wider eco-system Adopt policies to clarify liability in event of problems arising from Al

Tackle privacy and security issues

Provide guidelines for testing AI systems to ensure they function as intended Create information governance policies to ensure AI systems collect, use, store and share data in accordance with privacy and personal data laws

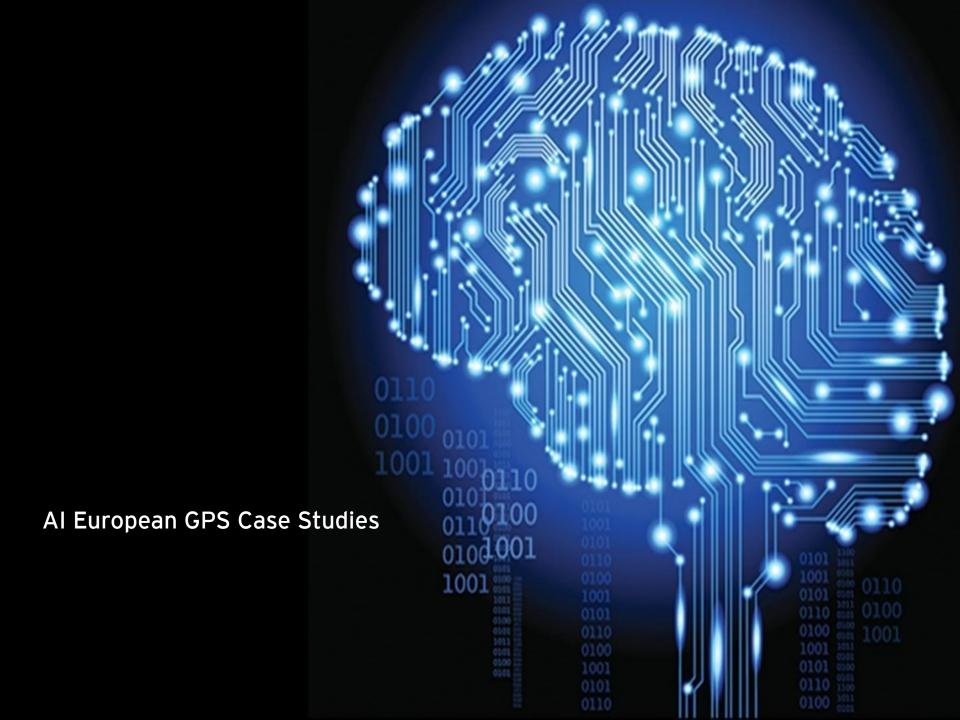
Promote policies addressing ethical challenges

Promote research into safe development of AI Adopt ethical standards in the design of AI systems Promote concept of "machine ethics" - giving machines the ability to make appropriate choices and to tell right from wrong.

Empower the public to understand AI - Address societal implications

Provide competency-based education programs to provide users with a basic understanding of AI systems Ensure laws applicable to AI systems put users' interests at the center Increase funding for studies on societal impacts Invest in education and skills training to prepare workforce for digital age Rethink models of social support. e.g. guaranteed universal income for every citizen





European Government & Public Sector: AI in action!



Accelerating subsidy payments. As part of its E-stonia is deploying a number of Al initiatives; from checking sat images to confirm farmers activities when the received hay cutting subsidies.

Finding work to unemployed. Matching laid-off workers skills with new employers. Plans to use AI in basic judicial system decision making.



Helping vulnerable citizens such as children, the homeless and substance abusers. We've worked with a London borough to pilot an Al-

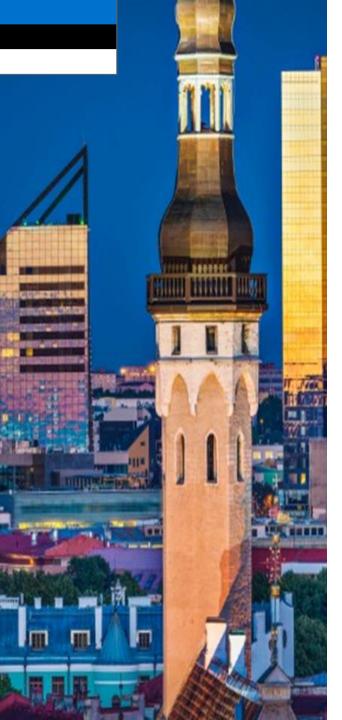
based system to identify children in need of safeguarding. The system had an 85% success rate, and in just seven months, it identified 1,700 families that would benefit from targeted services. Public Finance 2018 Award Winner: EY - Solution Partners of the Year



Giving citizens a better experience, analyzing social

network feeds. Government in Denmark is using AI to analyze posts by citizens on their social networks and identify the biggest issues they face. This allows them to respond to issues proactively and use predictive analytics to address problems before they emerge.





"How do we **both benefit and protect** our country from the impacts of AI?"

The public sector aims to take a trailblazing role in pushing the development of AI as a whole in Estonia

Al Strategy addresses (not exhaustive list):

- Use of open source components / "tools"
- ✓ Data science & Al collaboration network
- ✓ Guidelines on how to manage AI projects
- ✓ Knowledge transfer and experience exchange
- ✓ For the sustainable development of Estonian language and culture it is important to use natural language processing
- ✓ New positions of Chief Data Officers at least on Ministerial levels
- ✓ Flexibility in funding e-state developments
- Creation of "sandboxes" for testing & developing public sector solutions
- ✓ Data governance

