The responsible use of AI for Social Security

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What we will talk about

- Why and how governments should adopt AI solutions to support social security
- What AI adoption means for the tasks and skills of civil servants
Why and how governments should adopt AI solutions
AI for responsive, reliable, and accountable government

Governments as:
- Developers
- Regulators
- Financers
- Users

Use of AI in the public sector

- Enhanced engagement with citizens
- Efficient capturing and responding to user needs
- Improved speed and quality of services
- Improved decision-making
- Targeted public spending
- Free up public servants’ time & lead to higher-value work
AI case studies in OECD governments

**Public Sector Internal Processes**
- **Betto** by the Colombian Family Welfare Institute (ICBF). An AI solution to strengthen transparency, objectivity, and excellence in the bidder selection process of early childhood service providers. It evaluates and selects the best operators for providing comprehensive services aimed at early childhood in the 1,103 municipalities of the country.

**Service Design & Delivery**
- To overcome disjointed and cumbersome public services, the Finland Ministry of Finance’s AuroraAI programme uses AI to simulate potential service paths and proactively offer citizens services based on life events (e.g., marriage, beginning university, retirement).

**Designing better policies and services**
- The Information Society Foundation for the Americas (FSIA) is working with local governments in Argentina to fight gender-based violence with AI. The “SIAVIGia” system achieves this by 1) identifying women at risk of femicide, and 2) generating statistics and information to support designing better policies.

**Policymaking**
- The Disease Control and Prevention Agency developed an AI convergence system to address emerging infectious diseases. The system uses AI to analyse medical data, quarantine data, spatial data, among others, to develop policy responses to infectious diseases.
Record of employment comments

The Record of Employment Comments (ROEC) uses natural language processing (NLP) to review the free-text comments received on records of employment and assess and predict simple actions (e.g. save or ignore comments). This allows to reduce the manual workload of Service Canada officers and deliver timely payments of Employment Insurance (EI) benefits to users.

Long-term unemployment prediction

The Portuguese Public Employment Service builds on unemployment data held by the agency to predict the risk of an individual to become unemployed for long-term. With the results, the agency tailors actions to support users.

CLOVA Care Call

A number of local governments in the Republic of Korea provide AI-based CareCall service for seniors. Users receive a call once or twice per week to get check-ups on their health, eating, sleeping and medication patterns. The system can understand unstructured conversations and interact naturally with users. 95% of the users are satisfied with the service.
Establishing an enabling environment for trustworthy and human-centred AI development within the public sector

- Governing AI coherently across the public sector (AI strategies, data governance, institutional structures)
- Designing effective policy levers through guidelines, frameworks, tools, and legislation to steer the ethical and responsible development and use of AI
- Supporting implementation through knowledge sharing, competences and capacities development, and partnerships
- Monitoring AI in the public sector and measuring the impact for fostering trust and long-term viability.

Examples:
- Australia’s AI in Government Taskforce
- Colombia’s Ethical Framework for AI
- Finland’s Elements of AI free and open course
- Canada’s Algorithmic Impact Assessment tool
Governing data in government

A. Leadership and vision
E.g. CDOs, Data policy (incl. data openness, access, sharing, security and protection), Data strategy (milestones, timeframes), policy levers.

B. Capacity for coherent implementation
E.g. Data committees, task forces, data stewards, skills and training, funding, experimentation and data innovation.

C. Regulation
E.g. Rules, guidelines, guides (e.g. for data publication, data sharing and interoperability)

D. Data value cycle
E.g. Actors, roles and technical skills. Data management (e.g. data validation, process re-engineering, data sharing and integration, openness and reuse, data ownership and consent, bias and data integrity)

E. Data infrastructure
E.g. Data federation, data registers, data catalogues, data lakes, APIs, cloud-based solutions

F. Data architecture
E.g. Standards, reference data, interoperability, semantics, relationships
A preliminary framework for trustworthy use of AI in the public sector
What **AI** adoption means for the **work and skills** of civil servants
AI applications have improved and can now **perform cognitive skills**, such as expression, scheduling, and advising...

...but they are still **limited in socio-emotional skills**, such as high-level management negotiation, persuasion and active listening.

Source: [OECD Employment Outlook 2023](#), relying on a paper by [Lassebie and Quintini (2022)](#).
Skills needed for AI

Source: Adapted from OECD Employment Outlook 2023 and review of good practices in the EC-OECD project with INPS.
Implications for governments

AI applications can free up public sector staff to support more vulnerable users.

Adopting AI solutions in the public sector will require more than specialised AI skills.

Governments will need to invest in skill development to support the AI transformation.
Thank you

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http://oe.cd/employment-outlook
EC-OECD project with INPS
There is little evidence of significant employment effects of AI so far

AI impact on overall employment in company
% of employers in manufacturing and finance sectors who say that employment has increased/decreased/stayed the same

Source: OECD Employment Outlook
AI can have a positive effect on job quality

The impact of AI on performance and working conditions

% of workers who work with AI

Performance

- Improved it a lot
- Improved it a little
- Worsened it a little
- Worsened it a lot
- No effect
- Don't know

Enjoyment

- Improved it a lot
- Improved it a little
- Worsened it a little
- Worsened it a lot
- No effect
- Don't know

Physical Health

- Improved it a lot
- Improved it a little
- Worsened it a little
- Worsened it a lot
- No effect
- Don't know

Mental Health

- Improved it a lot
- Improved it a little
- Worsened it a little
- Worsened it a lot
- No effect
- Don't know

Source: OECD Employment Outlook
But there are risks to employment

Share of employment in occupations at the highest risk of automation by country, 2019

Source: OECD Employment Outlook
Many workers are worried about job loss to AI

Share of workers worried about losing their job to AI in the next 10 years

% of workers

Source: OECD Employment Outlook
Investing in skills will be important

Share of employers saying lack of skills is a barrier to adopting AI

% of employers

Source: OECD Employment Outlook
Recent advances in AI have broadened the set of skills that can be replicated by automation

More susceptible to automation

Scheduling
Fluency of ideas
Deductive and inductive reasoning
Finger dexterity
Manual dexterity
Fine arts
Reading comprehension

Bottlenecks to automation

Negotiation
Social perceptiveness
Assisting and caring for others
Management of personnel resources
Management of material resources
Complex problem-solving
Service orientation
Persuasion

Source: OECD Employment Outlook, relying on paper by Lassebie and Quintini (2022)