Accelerators of Digital Transformation in Public Administration

Preliminary Results from the workshop of the DG EUPAN Meeting |17 June

Introduction

Within the scope of the Portuguese Presidency of the Council of the European Union, the Directors-general of the European Public Administration Network (EUPAN) met on the 17th of June 2021. The Administrative Modernisation Agency (AMA) in collaboration with the Directorate General for Administration and Public Employment (DGAEP), leads the first pillar of the EUPAN Strategy Paper, focused on Digitalization and Innovation.

As part of the meeting, the Agency's LabX (Experimentation Lab for the Public Administration) promoted a workshop on "Accelerators of Digital Transformation in Public Administration", with the aim of encouraging the EUPAN leaders to think about the future of Public Administration in what regards to digital transformation and disruptive innovation.

In this perspective, AMA sent a previous questionnaire, conducted break-out sessions in the workshop, and will deliver a report that, based on this collaborative work, will show the insightful views of the EUPAN concerning the opportunities and challenges of emerging technologies, as well as what actions should be taken to accelerate digital transformation of the EU governments to deliver a more innovative and efficient public service.

A complete report is being prepared. Nonetheless, this preliminary report intends to foster the political momentum around the digital transformation of the EU public administrations, which was consensually praised by the participants in the Informal Meeting of EU Ministers of Public Administration, organized by the Portuguese Presidency of the EU on the 22 June.

Questionnaire - Emergent technologies

The first contact with the EUPAN Network was made through a questionnaire that sought to know the perspective of the participants and their position towards the application of emerging technologies in the public administration.

The questionnaire was divided into ten technologies – Artificial Intelligence, Blockchain, Virtual and Augmented Reality – Big Data & Analytics, 5G, Drones and Autonomous Vehicles, IOT, Robotics, Biometrics and Wearables & Implantables - and for each one a card was presented with a description of the technology, some of its applications in the public sector and risks.
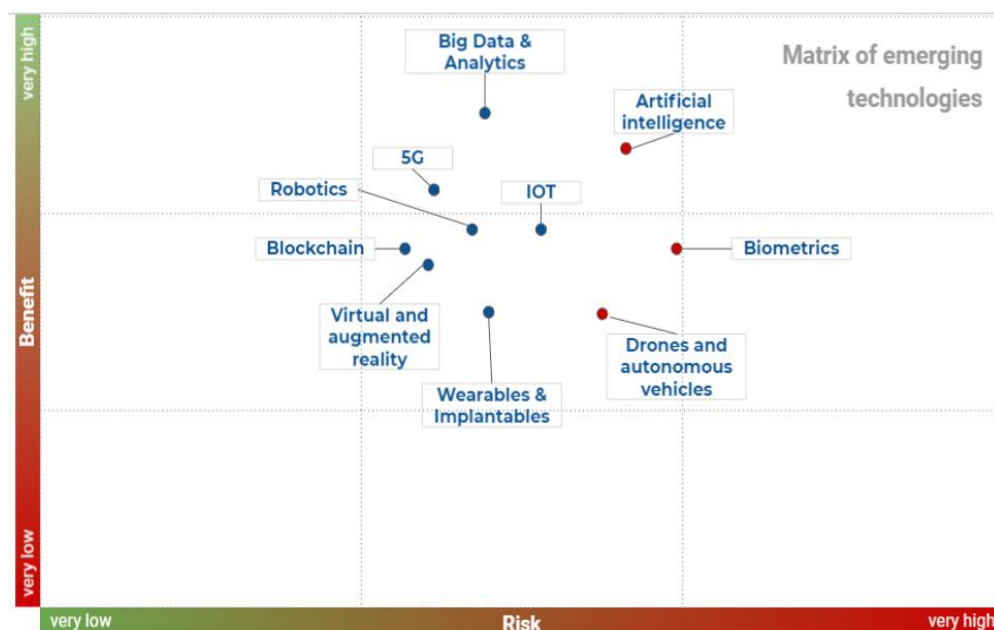

Figure 1. Risk-benefit matrix.

As preliminary results, it can be pointed out that all participants revealed that they knew the ten technologies.

Through the classification of risk and benefit of each technology, it was possible to verify that respondents anticipate more benefits than risks associated with their use. On the vertical axis of the matrix below, it is possible to see a positioning closer to the high benefit, but on the horizontal axis the dispersion is greater, not highlighting a specific trend (Figure 1).

It is also possible to stand out the three technologies that were classified with high risk, however – Biometrics, Artificial Intelligence (AI) and Drones & Autonomous Vehicles - but it is noteworthy that their benefit was also considered to be high, mainly in what regards to AI. This led AMA to explore and deepen these three technologies in the workshop.

Faced with the question of the current and expected 2030 adoption rate, there is the below read belief that the adoption rate will increase (Figure 2).
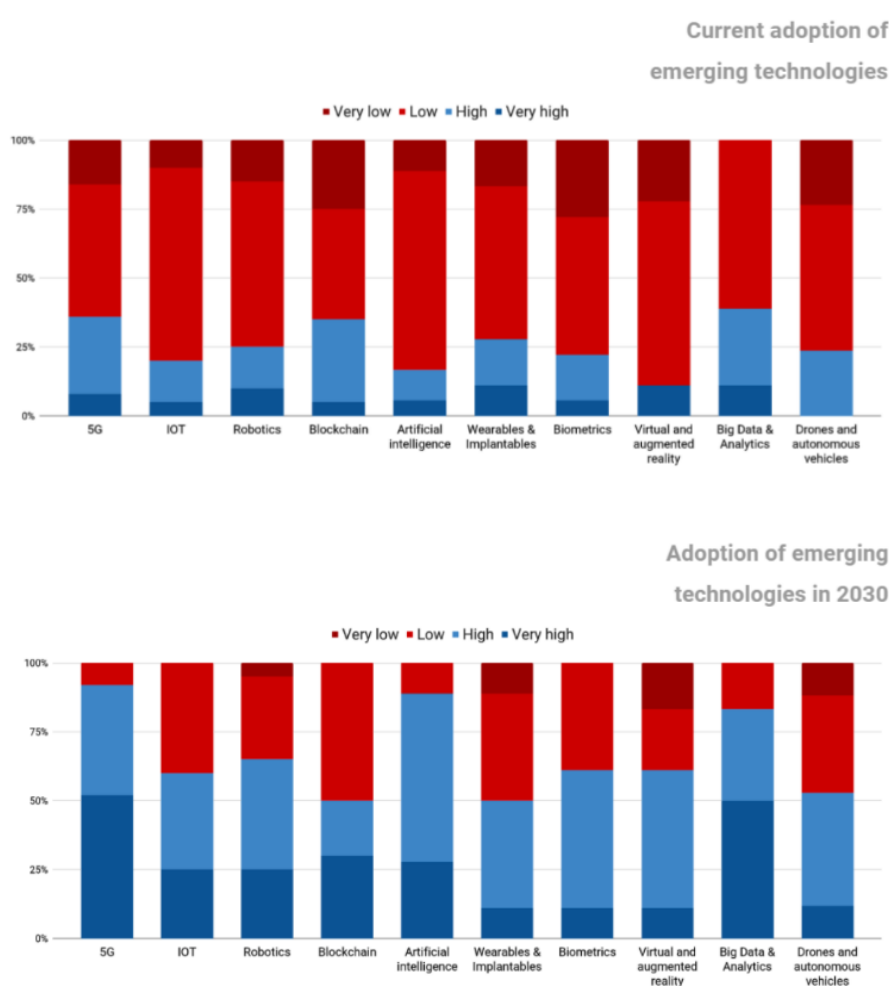

Figure 2. - **Current adoption vs Adoption in 2030**

In the view of EUPAN DGs, there is a low rate of adoption of almost all technologies, all of which are below 50%. On the other hand, in 2030 the prospect of adoption of all technologies is above 50%.

5G and artificial intelligence stand out, with an expected adoption rate of over 90%. It is also noteworthy that the lowest adoption rate is expected for blockchain, wearables and implantables, and drones and autonomous vehicles.

Workshop "Accelerators of Digital Transformation of Public Administration": Collaborative break-out sessions

The collaborative break-out sessions were held online. As previously mentioned, they focused on the three technologies considered as high risk in the questionnaire – Biometrics, Artificial Intelligence (AI) and Drones & Autonomous Vehicles – to better understand the EUPAN views regarding their usage and possible actions to lower their risk and take the most benefit out of them, even if in the medium or long term.

Faced with these technologies, the group was divided into three breakout rooms and each room addressed a technology. In the first part, the discussion explored the consequences that these technologies could have for the public administration and its services. Participants were also asked to rate the consequences as positive or negative.

Please see the preliminary results bellow:

Highlighted Positive Consequences		
Artificial Intelligence	**Biometrics**	**Drones and Autonomous vehicles**
Replacement of heavy, complicated tasks by machine	Streamline identification means and processes (Civil Servants and Users)	Need to requalify public administration employees (part of them)
Provide faster services and with lower costs	Redesign of processes	Less traffic on our streets, more ecological transport
Better quality of decisions and better access to e-services	Easier to use public services, both face-to-face and online	Regulation (new rules for drones, transport, etc.)

Table A - Highlighted Positive Consequences

Highlighted Negative Consequences		
Artificial Intelligence	**Biometrics**	**Drones and Autonomous vehicles**
Threats of biased criteria	Security threats, including strict access rules/restrictions	Unemployment
Danger of ethical breaches	Privacy concerns, data protection, and ethical challenges	Protection of data

Table B - Highlighted Negative Consequences

After this first moment of discussion, a second exercise was launched that sought to find actions that the public administration can take until 2030 to implement the technologies.

Artificial intelligence - actions
Develop and implement ethical guidelines/framework for the use of AI
Analyze the right activities to be supported by AI
Fast internet connections in the most remote rural areas
Improving communication channels with the citizens (social media, phone, etc.) and management of databases to provide information and decisions faster and with more quality.
Collect good practices and assess risks

Table C.1 - Artificial intelligence - actions

Biometrics - actions
Full SWOT analysis
Adapt legislation in the light of SWOT
Replace passwords with biometrics identification
Research to identify developments as well as understanding the citizen's expectations
Compare to the private sector, where biometrics becomes kind of natural

Table C.2 - Biometrics - actions

Drones and autonomous vehicles - actions
Technical solutions that comply with our high safety standards and are reliable
Foster public-private partnerships for concrete use cases
Define, under the leadership of the State, the rules for sharing data
Training of public servants and improving the tools
Support innovation and experimentation - Following up and keeping improving technologies, tools, and skills
Develop digital infrastructures and road network connectivity
Encouraging the acceptability of this technology

Table C.3 - Drones and autonomous vehicles - actions

Conclusions

One of the main results of the session is the focus on the need for adaptation and redesign of public administration, which was considered by the majority to be a positive aspect. Providing a better service and being more efficient was also highlighted by the groups, who see technology as the path to achieve this change.

The biggest concerns revealed by the participants were regulation and legislation to ensure a rigorous and beneficial use of these transformative opportunities. It was also established as a prior action, to assess where the technologies can act and what their scope will be. Another concern was how this type of technology is communicated to citizens who use the services, and how to increase their trust in public services.

There is an interest in innovating and elevating how public services are provided, with the workers' component often mentioned mainly because of the need to adapt their skills to the fast-evolving society, with citizens increasingly demanding more efficient and innovative public administrations.

As a final point, not only civil servants need to be trained to keep up with new technologies and forms of public service, but also a mindset or an organizational change might be needed to address the rapid transformation of society, so that public institutions are more agile, collaborative, and transparent.

EUPAN representatives consider there is a need to step up collaboration among EU Member States and within each one to perfectly align change of the three components - People, Organization and Technology - to meet the Digital Decade vision while assuring compliance with the Berlin and Lisbon Declarations principles.

AMA is drafting a final report in which these insights and conclusions will be further explore and presented to the EUPAN Network, the CIO Network, and other related.