



# Data Driven Policy Cluster

Co-creating digital tools for better governance

# Evidence Based Policymaking in Europe Summit 2021

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A post event report with main  
takeaways and recommendations

# Introduction

The convergence of Cloud, Big Data and AI has already resulted in major transformation across Government services, yet the process of policy making itself is often left behind. Five EU-funded projects: **Policy Cloud**, **Decido**, **AI4PublicPolicy**, **DUET** and **Intelcomp** joint forces in creating the virtual Evidence Based Policy Making in Europe event to explore major challenges, trends and opportunities to improve public sector decision making that will deliver healthier, happier places to live and work.

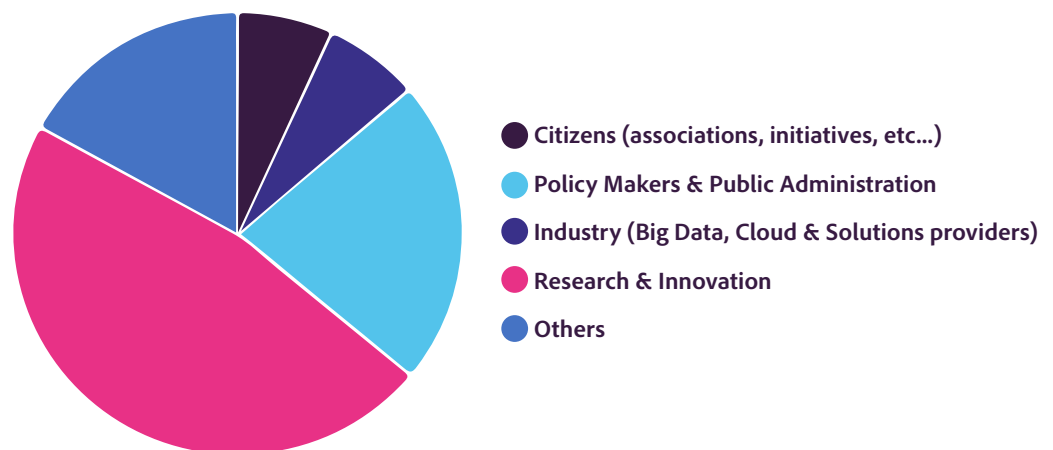
Digital technologies have changed the world. Today people expect faster, seamless, on-demand services from their providers, and the Government is no exception. For effective urban operations which make life easier for residents, workers and visitors, Public Sector decision making needs to become more agile, breaking down data silos to combine day-to-day tactical decisions with longer term policies and strategies. Disruptive technologies such as Digital Twins, Artificial Intelligence (AI) and High Performance Computing (HPC) unlock new opportunities for sustainable decision making through visualisations, simulations and predictions that enhance transparency, increase public support and involvement, and optimise resources.

To support this transformation, the aforementioned pan-European projects dedicated to using cloud for data-driven policy in the premier conference for government that focused purely on data and tools for decision making. Together with leading change agents from the European Commission and Local Government the event explored the new decision-making ecosystems being built by cities and administrations, including the use cases being adopted, and the innovative data and tools being adopted for modern policy making.

The event, free of charge and open to all interested stakeholders, took place virtually on the 9th and 10th of December, 2021, and the main points were:

- **Use Cases:** The speakers brought real-life examples of how they are transforming the traditionally slow deliberative policy making process in the fields of health, climate change and mobility, to one that is more agile and responsive. We heard directly from cities themselves on how they are developing better evidence-based policies which adapt as new data comes to light, and which are trusted and contributed to by relevant stakeholders who feel engaged in the process.
- **Tools:** We saw how city managers and policy makers are co-creating data-driven decision-making ecosystems with cutting edge tools which enable them to visualise, analyse and even predict the complex impact of decisions across multiple domains, time and space. The event was hands-on with AI, big data and digital twin demos and was inspired by what stakeholders could potentially achieve for their administration.
- **Strategies:** Learned how to manage legal, ethical and standards challenges and constraints in our increasingly digital world. From best practices to principles and legislation our speakers helped the audience understand and navigate the complex environment in pragmatic ways that helped them start their own journey.

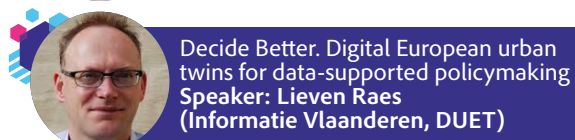
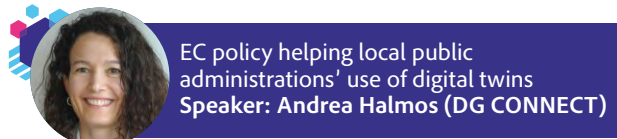
## Stakeholders



On day 1 the cluster engaged a total of 112 participants. The plenary session showed us how public authorities transform the usually slow, deliberative policy making process to one that is more agile and responsive, which develops better evidence-based policies that adapt as new data comes to light, and which are trusted, understood and contributed to by relevant stakeholders. Day 1 focused on policymakers in the domains of Climate Change, Health and Social Well Being and Urban Mobility.

The second day was characterised by the Innovative Tools for Evidence Based Policy. With citizens demanding better experiences as their expectations shift towards quick, seamless and personalised services, now is the time for Public Sector decision makers to embrace digital disruption and new innovative technologies to make more sustainable policy based on real-time information, predicted impact and citizen input. On day 2, 64 participants were present. They followed the Stakeholder Engagement, Policy Prediction and Governance Ethics sessions. From each of these three sessions a policy brief was created and these are presented in Section 5 of this document.

# Evidence Based Policy Cases - from data to decision making



## Abstract

Given the complexity of our societies and the rapid generation of data, how can public authorities transform the usually slow, deliberative policy making process to one that is more agile and responsive, which develops better evidence-based policies which adapt as new data comes to light, and which are trusted, understood and contributed to by relevant stakeholders.

## Main Takeaways

- Use of the open data in general for the activity of the institutions at local and national level has increasing benefits and works out for the administration. This has been proven during the pandemic;
- Digital twins of cities support the activities of cities;
- Operational decisions;
- Strategic decisions (long-term);
- Active involvement of citizens (citizen science);
- Rational analyzes;
- More information - analysis - good solutions;

## Session recommendations

- More data can be added to work on improving the urban environment - it can be public information, personal or administrative, in order to use all the information that the administration stores anyway, but to use it effectively, not just in storage;
- More data spaces - for a modern community;
- Improving the urban environment;



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# Evidence Based Policy Cases - from data to decision making

Health & social wellbeing-  
The tight connection between people and government in co-creating new and targeted policies



## Abstract

Covid 19 has highlighted the importance of people's health and social needs and the need to address some long standing challenges. It is more and more urgent and evident that efficient public services can make people's lives easier. The way citizens make use of public services must be easy and efficient. There must be a tight connection between people and government in co-creating new and targeted policies.

## Policy challenges identified in the session

- Use of uniform data security policies
- Imposing legal restrictions on the use of data
- There are too many questions for the community regarding the use of open data and big data in general. There are too many questions and too few answers.

## Session recommendations

- Secure the necessary resources (financial, infrastructure, personnel) for effective and evidence based policy making
- Invest in continuous capacity building
- Capitalise on the vast potential of technologies towards assisting policy makers' activities
- Disseminate best practices stemming from successful projects



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# Evidence Policymaking for Climate Change



## Abstract

We are in the midst of a climate crisis which is contributing to public health problems. Governments need to reduce and eliminate emissions fast. Environmental policies exist but have largely failed to make a difference as measures have mainly focused on making emission reductions profitable for business, think carbon credits, energy saving bulbs. For more sustainable outcomes which make cities happier and healthier places to live for all, creative and innovative policies and tools need to be co-created by the whole value chain. Digital enablers such as IoT, Cloud and Big Data ensure stakeholders can work together with a common-view/visualisation of the situation so they can simulate and predict the impact of differing policy choices.

The Policy Landscape presented in this session focused on the data- and evidence- powered climate change activities. More specifically, the following examples were presented and detailed through the respective projects:

- Urban planning in metropolitan cities
- Crisis (related to climate change: wildfires, power outages, floods) management

## Policy challenges identified in the session

- Cost effectiveness needs to be considered at all times, regardless of the context
- New technologies initiatives should be smoothly and effectively blended with the "traditional" policy making processes
- Lack of open, quality data
- Adequate resources (e.g., in terms of budget, personnel, infrastructure) should be ensured prior to implementing any initiative
- Ensure compliance with GDPR and national/international legislation

## Session recommendations

- Secure the necessary resources (financial, infrastructure, personnel) for effective and evidence based policy making
- Invest on continuous capacity building
- Capitalise on the vast potential of technologies towards assisting policy makers' activities
- Promote/Disseminate the experience and best practices stemming from successful projects



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# Mobility - Mobility policies, a new era for cities and citizens



DUET project  
Moderator: **Susie McAleer**  
(Founder & Managing Director at 21C Consultancy)



Pilsen Digital Twin City  
Speaker: **Jiri Bouchal** (InnoConnect, DUET)



Policy Cloud Urban policy making through analysis of crowdsourced data  
Speaker: **Ana Georgieva**  
(Sofia Municipality, Policy Cloud)



The experience of the Pilots in mobility in AI4PublicPolicy project  
Speaker: **Alessandro Amicone**  
(GFT, AI4PublicPolicy)

## Abstract

Transport forms the backbone of all urban economies. The ability to move freely, cost-effectively and easily is one of the most important drivers of economic and societal development. Its policies are interdisciplinary with a direct impact on urban development and the environment so European cities require effective strategies to help overcome these challenges.

The mobility track took us through how three different cities are using new technologies and data to improve smart mobility. Pilsen explained how by focusing on specific use cases rather than just technology they've been on a journey from simple data visualisation to a point where they have a (DUET) digital twin for interactive, real-time traffic simulations and predictions. They can now focus on encouraging green transport policies such as micro-mobility. Sofia showed how the cloud (Policy Cloud) is a gamechanger for them in integrating data from fixed environmental sensors with crowdsourced city contact centre data to identify challenges with road use that can be explored with city managers and policymakers. Nicosia introduced us to the potential of Artificial Intelligence (AI4PublicPolicy) in moving cities to a new era of personalised transport services with their creation of a central mobility platform that will help address individual accessibility and inclusion needs. The north star for all the cities was the execution of their public sector mission to keep improving the current mobility experience for residents and visitors, whilst nurturing innovation for the future.

## Policy challenges identified in the session

- Mobility is a complex, multi-disciplinary area and it can be difficult to know where to focus energy
- It's not just a case of introducing a new mobility tool or policy, cities need to drive continuous innovation to keep up with people's needs and market pace
- Policy makers and city managers can be concerned about data interpretation and the impact on their work
- Focus must be put on full value-chain engagement for new policies to be sustainable and not leave any member of society behind
- As we are forging a new era of data-driven policy need to share knowledge and good practices more

## Session recommendations

- **Start small, then scale fast.** Start by focusing on smaller use cases then build up to tackle larger city-wide problems. If you begin with the complex big picture you may never get started.
- **Don't be afraid of data or technology.** We are forging a new area of mobility policy so flip your view point and see the technologies and tools as an opportunity to create new possibilities
- **Keep experimenting with data.** Look at data that already exists and see how it can be used and integrated with other data sources for new scenario and solution development
- **Unlock innovation through co-creation.** Take your stakeholders with you, get them excited about by visually showing them examples of the new tools and involve them in innovation



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# Innovative Tools for Evidence Based Policy - from digital disruption to digital adoption



## Abstract

The convergence of Cloud, Big Data and AI has already caused considerable transformation across Government. With citizens demanding better experiences as their expectations shift towards quick, seamless and personalised services, now is the time for Public Sector decision makers to embrace digital disruption and new innovative technologies to make more sustainable policy based on real-time information, predicted impact and citizen input. The Data Driven Policy Cluster is consulting with stakeholders for a tailored and user-centric development of tools for evidence-based policymaking while keeping a close eye on legal compliance and interoperability.

## Main Takeaways

- The success of data sharing activities revolves around the key concept of trust.
- Data sharing needs to guarantee individual privacy
- Availability of vast and heterogeneous data ecosystems for AI is increasing
- Well-being and quality of life benefits from personal data sharing in key sectors.
- Cities everywhere are setting up local data ecosystems -but this is not easy.
- Access to open content and resources facilitates collaborations across disciplinary and language boundaries
- Stakeholders into scientific projects must be involved, thus enhancing citizens' trust towards science.
- It is necessary to streamline the big data, AI-assisted policy modelling approach to augment human judgement for evidence-informed policy making.

## Session recommendations

- More organisations (business, research and governments) need to rethink their strategy to fully embrace a data culture
- Invest more in R&D and relevant technology.
- Do campaigns for organisations to place data sharing at the centre of their data strategy.
- Consider new challenges such as climate, extreme weather conditions, ageing population, rapid technological change etc.
- Identify the next disruptive technologies and sciences and create innovation for societies at large .
- Address the societal challenges by providing useful and relevant services for the societies.



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# Policy Brief



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# Next Steps

The Data Driven Policy Cluster will continue to raise awareness about their cross cutting work on data and co-created cloud-based tools for data-driven decision making. The joint roadmap published in November 2021, aims to describe how the Data Driven Policy Cluster contributes to using the European cloud infrastructure for public administrations, encouraging the public sector decision makers to embrace digital disruption and new innovative technologies in order to make more sustainable policy based on real-time information, predicted impact and citizen input. Read the full roadmap [here](#).



The cluster will continue to raise awareness with a joint voice, check our activities here: <https://policycloud.eu/data-driven-policy-cluster>

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# Join the Community!

**Contact us**

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