



European
Large-Scale Pilots
Programme

SYNCHRONICITY

"Fair and Open Smart Cities: Growing the Local IoT Data Infrastructure Partnerships"

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Switzerland



South Korea



Mexico

Can we influence the future based on what we know today?

Facts & numbers



of citizens worldwide are Generation Y & Z



of people use digital government services regularly



of citizens have problems with online public services



of public sector leaders are satisfied with their digitization



could be generated from better public digitization
\$ - USD



of governments will rework their data policies by 2019



of the public workforce could be freed up by AI within 10 years



of governments will adopt digital platforms by 2020



efficiency will be gained from human-centered design by 2021

Sources: BCG, Deloitte, Forbes, IDC

Challenges & Opportunities

-  Substantially improve citizen experience
-  Streamline service efficiency & grow agility
-  Rethink & enlarge public missions
-  Enforce global trust and regulation compliance



Are social and business benefits excluding each other?

84% of IoT deployments are currently addressing, or have the potential to address, the Sustainable Development Goals (SDGs) as defined by the United Nations. The analysis supports the intuition that many share – that **IoT has development benefits that could be maximized without compromising the commercial viability.**

*Internet of Things Guidelines for
Sustainability, World Economic Forum*

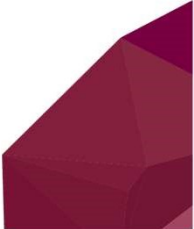


IoT Guidelines for Sustainability (World Economic Forum)

| Area | Guideline | For action by | Key opportunity | Key risk |
|---|--|--|---|---|
| Collaboration models and incentives alignment | 1. Provide structural Incentives to encourage the prioritization of sustainability objectives at the design phase of the IoT projects | Governments Private sector/ Non-profit | Maximize sustainable development Impact of the IoT projects | Sustainability continues to be an "accidental afterthought" |
| | 2. Integrate technologies and drive use cases-based growth under solid and collaborative partnerships to overcome the limitations of fragmentation | Private sector All | Deliver outcomes despite relatively Immature market and fragmented landscape | Loss of business opportunities as customers wait for Industry consolidation |
| | 3. Address Infrastructure solutions first, to enable business models and facilitate scale | Governments Private sector/ Non-profit | Unlock \$14 trillion of economic value to the global economy by 2030 | Subdued or subpar growth of an otherwise promising sector |
| | 4. Simplify legal frameworks, accelerate procurement processes and engage the experts to enhance the pace of IoT deployments and reduce the risk of political cycles | All | Streamline processes to achieve the full scale of the opportunities efficiently | Subdued or subpar growth of an otherwise promising sector |
| | 5. Establish early the data governance terms for ownership, privacy, usage and sharing as a central pillar of the partnership | All | Leverage the full potential of one of the world's most valuable resource – data | Potential conflicts and failure in delivering the promised outcomes |
| Business and investment models | 6. Exercise flexibility in designing and executing business models | Private sector All | Maximize revenue opportunities in a relatively nascent Industry | Missed revenue and growth opportunities |
| | 7. Develop cross-Industry solutions to unlock mutual benefits and enable new monetization models | Private sector | Innovation driving new revenue streams | Missed revenue and growth opportunities |
| | 8. Achieve scale by demand consolidation and bundling to attract alternative funding sources (e.g., Institutional Investors) | All | Achieve the true scale of opportunities by bringing in new class of investors | Missed revenue and growth opportunities |



What is this session about?

- (1) what it means and what is needed to design smart cities in a **fair** and open way,
 - (2) how can **open** standards and APIs contribute to a flourishing local innovation ecosystem,
 - (3) why is **interoperability** of data-driven services needed, and
 - (4) how can fair and open urban services be **scaled**?
- 

Use the present to influence the future

- The aim of the **Big Policy Canvas Roadmap** for Future Research Directions in Data-Driven Policy Making is to put forward the different research and innovation directions that should be followed in order to reach the anticipated vision for making the public sector a key player in tackling societal challenges through new data-driven policy-making approaches
- New version of the roadmap in commentable format has just been published
- The tool used is <http://roadmap.bigpolycanvas.eu/> linking to <https://www.bigpolycanvas.eu/results/roadmap>

| Research Cluster | Research Challenges |
|--|---|
| C1- Privacy, Transparency and Trust | RC 1.1 - Big Data nudging |
| | RC 1.2 - Pervasive data collection |
| | RC 1.3 - Algorithmic bias and transparency |
| | RC 1.4 – Open Government Datasets |
| C2 - Data acquisition, cleaning and representativeness | RC 2.1 – Real time big data collection and production |
| | RC 2.2 - Quality assessment, data cleaning and formatting |
| | RC 2.3 - Representativeness of data collected |
| C3 - Data clustering, integration and fusion | RC 3.1 - Identification of patterns, trends and relevant observables |
| | RC 3.2 - Extraction of relevant information and feature extraction |
| | RC 3.3 - Integration and interoperability of Public Administration datasets |
| C4 - Modelling and analysis with big data | RC 4.1 - Identification of suitable modelling schemes inferred from existing data |
| | RC 4.2 - Collaborative model simulations and scenarios generation |
| | RC 4.3 - Integration and re-use of modelling schemes |
| C5 - Data visualization | RC 5.1 – Automated visualization of dynamic data in real time |
| | RC 5.2 - Interactive data visualization |

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<https://www.european-big-data-value-forum.eu/>

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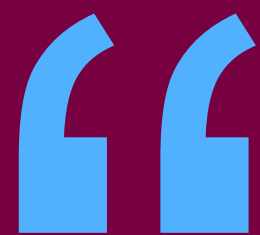
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SynchroniCity: Scaling up 51 IoT Solutions for 20 Smart Cities & Communities



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