IoT for Policy: Five Evolutionary Stages

In the coming years, the Internet of Things will provide an enormous wealth of high-variety data.

How can governments develop to maximize the potential societal value of IoT data?

Variety is the real challenge

Volume, variety and velocity

- IoT-data gathered on a micro level within specific contexts within specific populations and within specific time frames.
- Translation to policy includes [1] interpreting a large variety of sources, processes and results, [2] combining various sources, and [3] facilitating different processes in a wide range of domains. Also demand-driven: find data sources relevant to societal issue.
- Volume and velocity will pose a challenge, but are, to a high extent, technical problems in nature. The variety poses the real challenge: it calls on the creativity, flexibility and adaptability of public organizations.

Developing an IoT strategy

1. Identify IoT opportunities
- Approached from organizational role and position (pull)
- Approached from the data (push)

2. Integration of data-supply and policy demand

3. Specify action plan to achieve goals

5

The leading government

- Law and regulation aimed at exploiting the full social and economic potential of IoT data
- Partner/launching customer of IoT platforms
- Design and installation of own IoT-elements and/or IoT-systems (e.g. smart meters)
- In-house data-analyses, including IoT data, for policy development

4

The acting government

- Takes leading role in (international) standardization Supports R&D&I in the field of IoT.
- Incorporates IoT-data in a (new) public data-clearing-house
- Involves external parties for data-analyses
- Includes IoT-data for policy development

3

The supporting government

- Supports standardization of IoT data formats, exchange methods, …
- Active involvement in sharing of 'best practices'
- Makes public IoT-data (publicly) available
- Uses existing (external) IoT-reports in policy development

2

The perceptive government

- Active identification of needs for regulation
- Agenda-setting for policy relevant to IoT data usage
- Informs actors about existing IoT data
- No use of IoT data for policy

1

The sceptic government

- **Facilitation/framing** Minimal involvement, no specific and/or limiting laws/regulations
- **Encouraging** No explicit encouragement for IoT data gathering/sharing
- **Data gathering & sharing** No involvement in the production, gathering and distribution of IoT-data
- **Active usage** No use of IoT-data for policy

Tommy van der Vorst MSc
I am a researcher and consultant at Dialogic. I provide public and private organisations with advice on how to adopt and implement big data, particularly in the domain of telecommunications. My deep and technical knowledge of software, networks and data analysis allows me to approach strategical questions with an eye for detail, and to quickly develop proof-of-concepts.

vandervorst@dialogic.nl @tommyvdv +31 30 2150593

Arthur Vankan MSc
I am a researcher and consultant at Dialogic. My expertise lies mainly in the area of (innovation) policy, big data strategy and ICT. I have broad experience with analysing policy measures, conducting data analyses, and applying innovative data sources and methods to support policy development. Combining knowledge about societal/policy contexts, data strategy and data analytics allows me to deal with complex problems.

vankan@dialogic.nl +31 30 2150589

dialogic
innovation • interaction

Strategy and policy for innovation in the (semi-)public domain.

www.dialogic.nl/en