Conceiving a Policy-Making Environment for Data-Sharing Infrastructures

Giovanni Sileno, DL4LD steering committee, 27th February 2019
Policy-making aspects

- **SITUATEDNESS** - policies are decided against existing social/normative systems
- **DIRECTIVITY** - ideally, policies are meant to maintain and promote certain business or organizational drivers (within a certain socio-institutional asset)
- **IMPACT** - policies (usually) have impact on the social system
- **RETROACTION** - social/normative systems might push a change in policies
Policy-making aspects for DL4LD

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Here, the social system is a network of data-sharing actors.

- typical business drivers aim to minimize data sharing for agreed purposes
- example of relevant legal norms: GDPR (legal requirements associated to purpose of use, consent, agreements)
observational data

use cases and scenarios of non-compliance

legal requirements
organizational regulations
contracts, agreements
policies, ...

SITUATEDNESS

qualitative models of behaviour
operational, intentional, normative agent-roles

quantitative models of behaviour
relative frequencies of behaviour; defaults; heuristics

data mining

observational data
IMAPCT

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RETROACTION
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Quantitative models of behaviour

- Relative frequencies of behaviour; defaults; heuristics

Simulation

- Social, semantic properties

Operationalization

- Distribution of monitoring and processing burdens

Data mining

- Observational data

Use cases and scenarios of non-compliance

Legal requirements
- Organizational regulations
- Contracts, agreements
- Policies, ...

Directivity

Infrastructural script + topology
- Ad-hoc coordinating network
- Monitoring + diagnosis + enforcement

Directivity

formal, syntactic properties

use cases and scenarios of non-compliance

legal requirements, organizational regulations, contracts, agreements, policies, ...

monitoring + diagnosis + enforcement

data mining

observational data

verification

operationalization

simulation

quantitative models of behaviour

qualitative models of behaviour

observational data

ad-hoc coordinating network

monitoring + diagnosis + enforcement

INFRASTRUCTURAL
SCRIPT + TOPOLOGY

distribution of monitoring and processing burdens

operational, intentional, normative agent-roles

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**PhD in federated analytics**

- **verification**
  - formal, syntactic properties

- **qualitative models of behaviour**
  - operational, intentional, normative agent-roles

- **quantitative models of behaviour**
  - relative frequencies of behaviour; defaults; heuristics

- **simulation**
  - social, semantic properties

- **operationalization**
  - distribution of monitoring and processing burdens

- **INFRASTRUCTURAL SCRIPT + TOPOLOGY**
  - ad-hoc coordinating network
  - monitoring + diagnosis + enforcement

**use cases and scenarios of non-compliance**

**legal requirements**
- organizational regulations
- contracts, agreements
- policies, ...

**observational data**
- data mining

**PhD in policy-making environment**
PhD in federated analytics

PhD student: ongoing selection.

PhD in policy-making environment

PhD student: M. Mohajeri since 1st February 2019.
Questions?

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