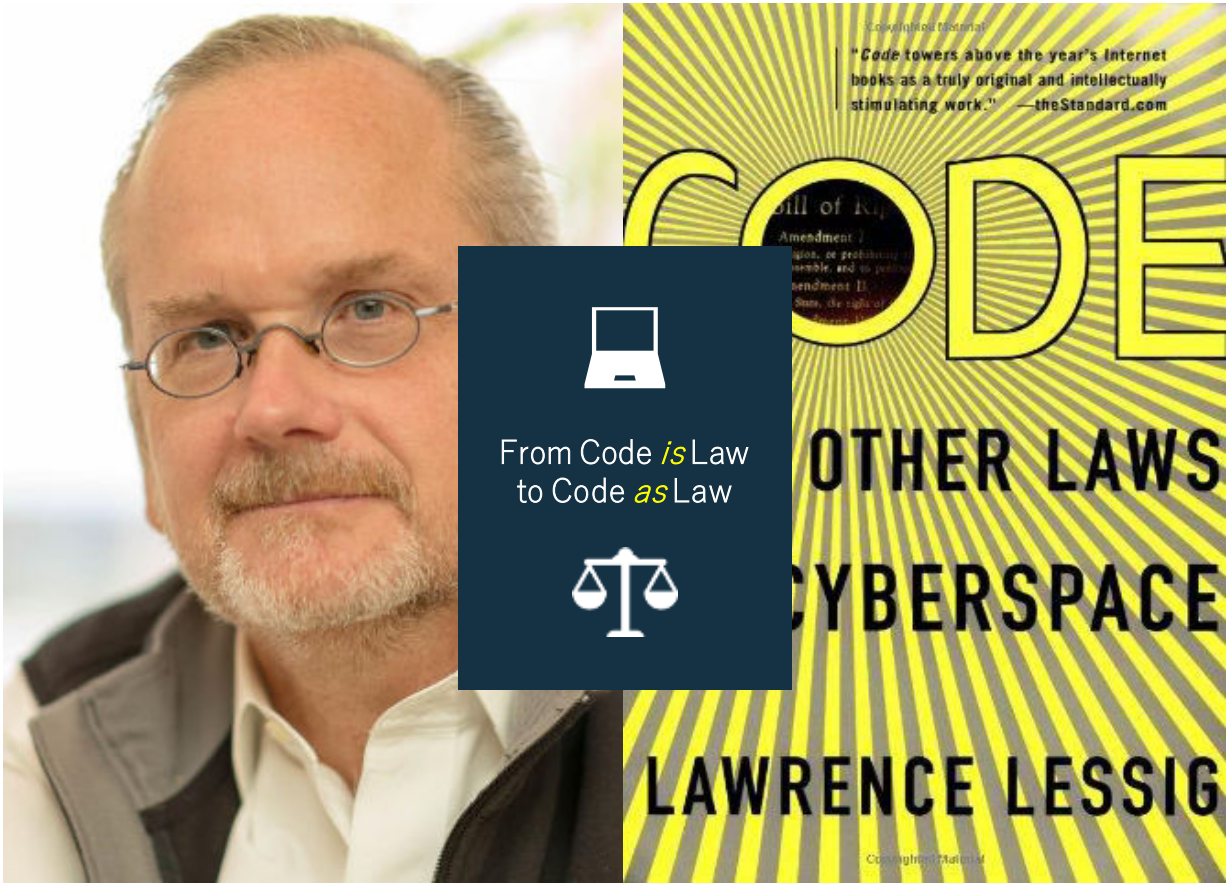
6th Data Privacy & Protection Conference

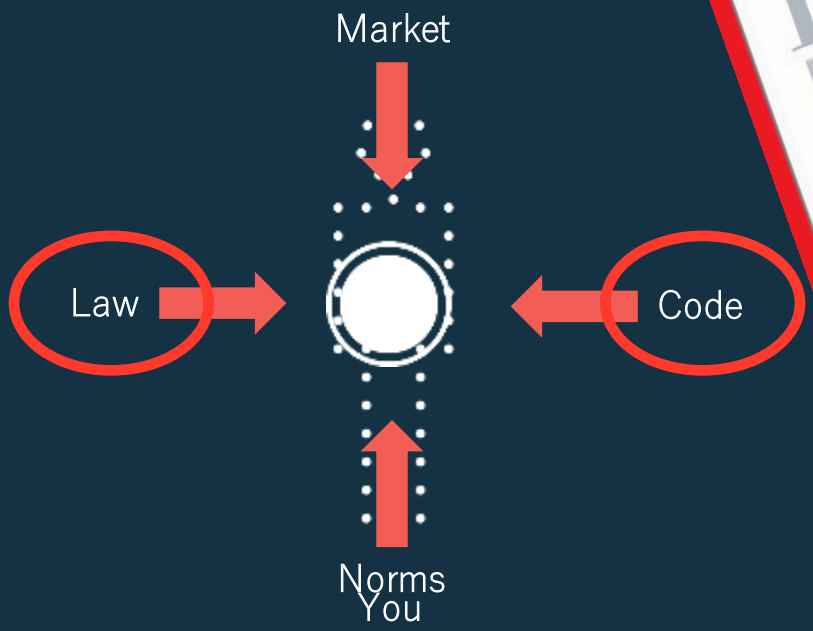
Alexandros Nousias, NCSR – Demokritos, MyData Greece [2021]

Code: And Other Laws Of Cyberspace (1999, 2006) Lawrence Lessig.

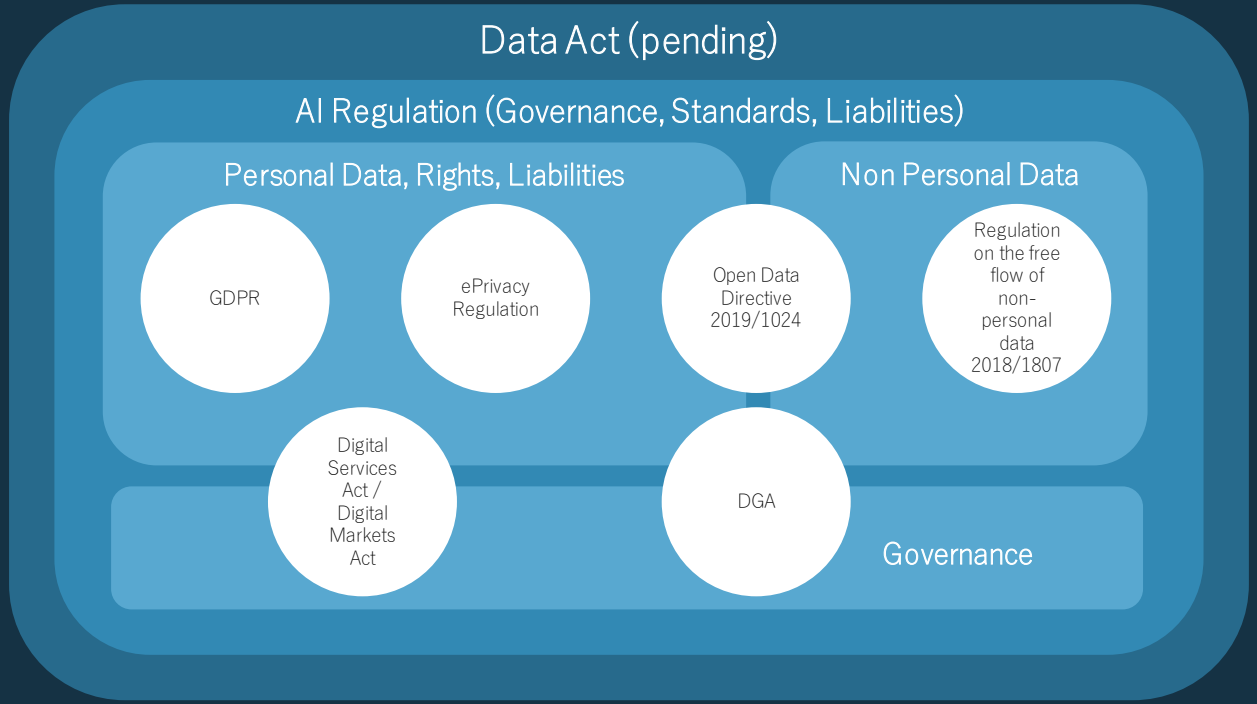
"We can -we must- choose what kind of cyberspace we want and what freedoms we will guarantee. These choices are all about architecture: about what kind of code will govern cyberspace, and who will control it. In this realm, code is the most significant form of law, and it is up to lawyers, policymakers, and especially citizens to decide what values that code embodies"



4 Modalities of Regulation



Legal Taxonomy



Directive (EU) 2019/790 on copyright and related rights in the Digital Single Market (IP)

NIS Directive on Security

Data as an Infrastructure

Market

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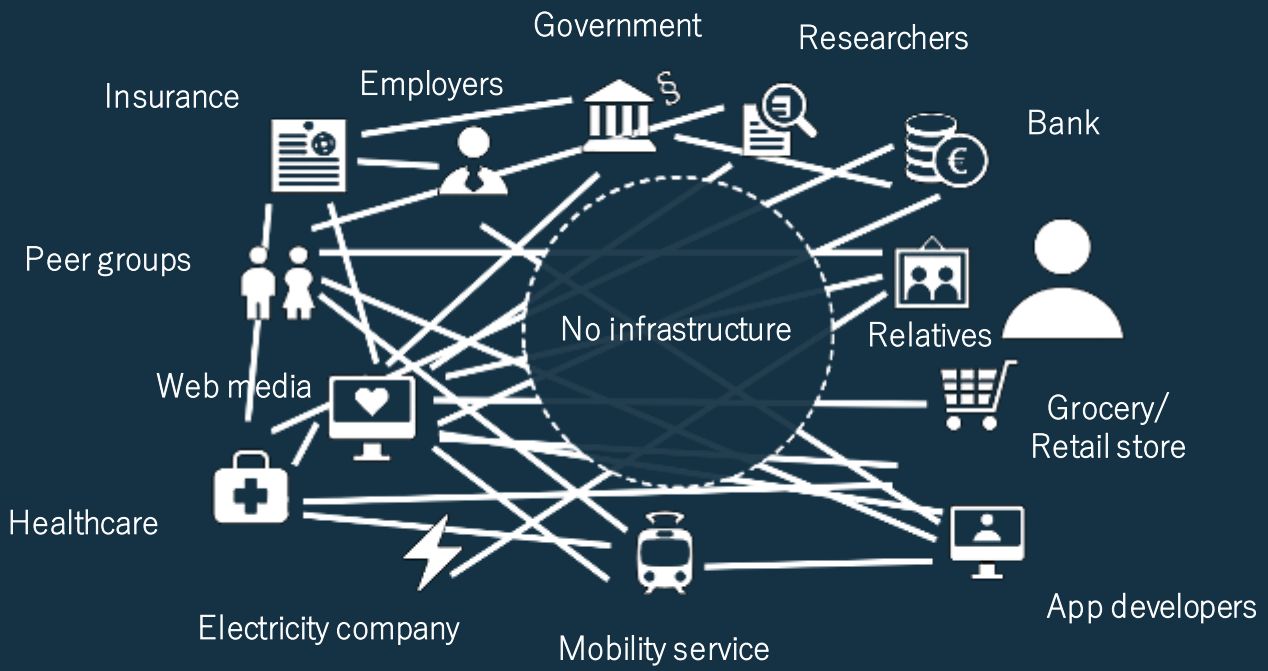
API ecosystem

In the current structureless API economy, if the number of services grow, then the number of connections between them grow at a faster rate



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Aggregator Model

Aggregating data control is easier, but different aggregators do not have a built-in incentive to develop interoperability between them

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MyData Model

Compared to the aggregation model, MyData is resilient system
because it is not dependent on a single organization or technical infrastructure

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Questions to reflect upon

Code as Law

WHY?

Law & Hard Ethics
(Privacy, Governance
& Values)

HOW (macro)?

Code &
Legal Informatics

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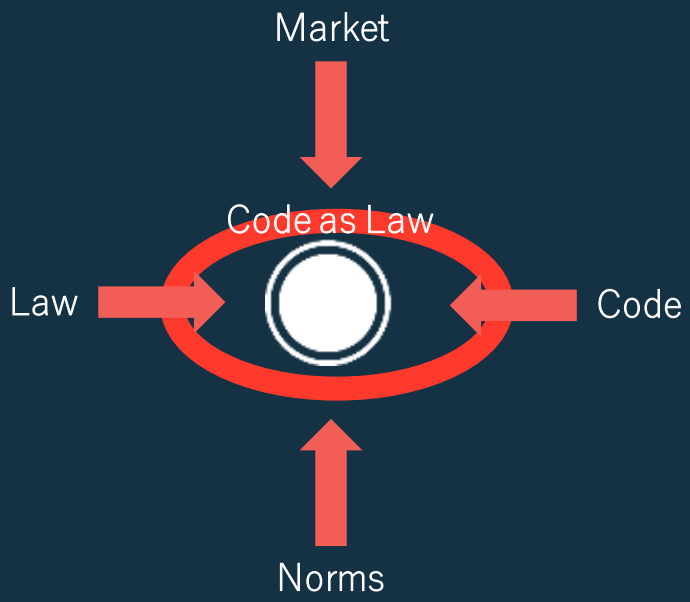
Code as Law



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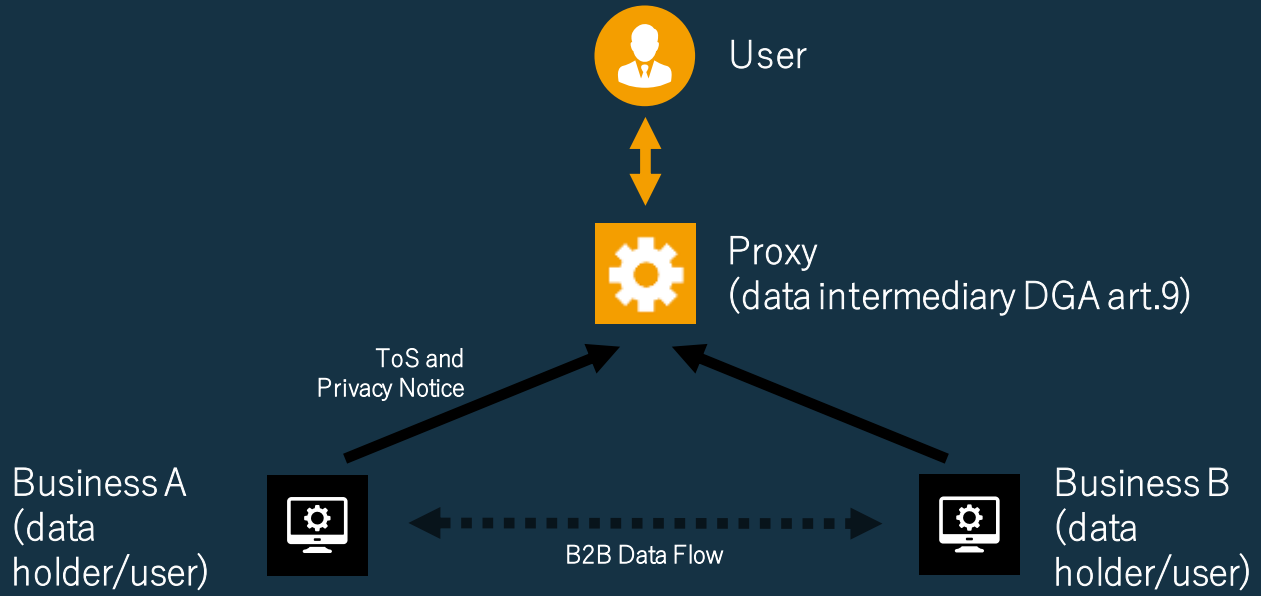
The Paradigm of ***Now***



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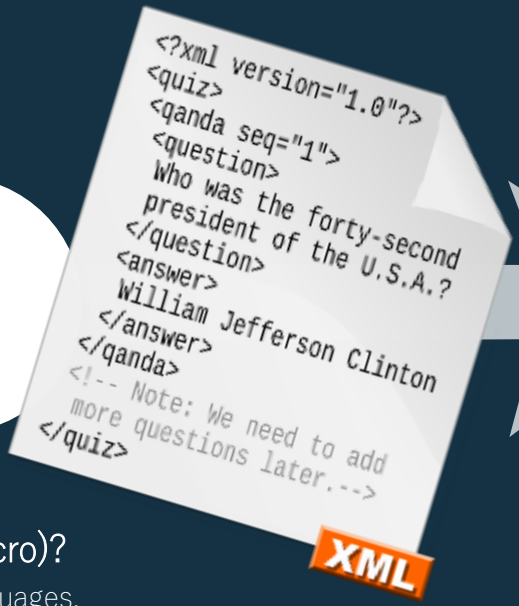
Questions to reflect upon

Code as Law

?

?



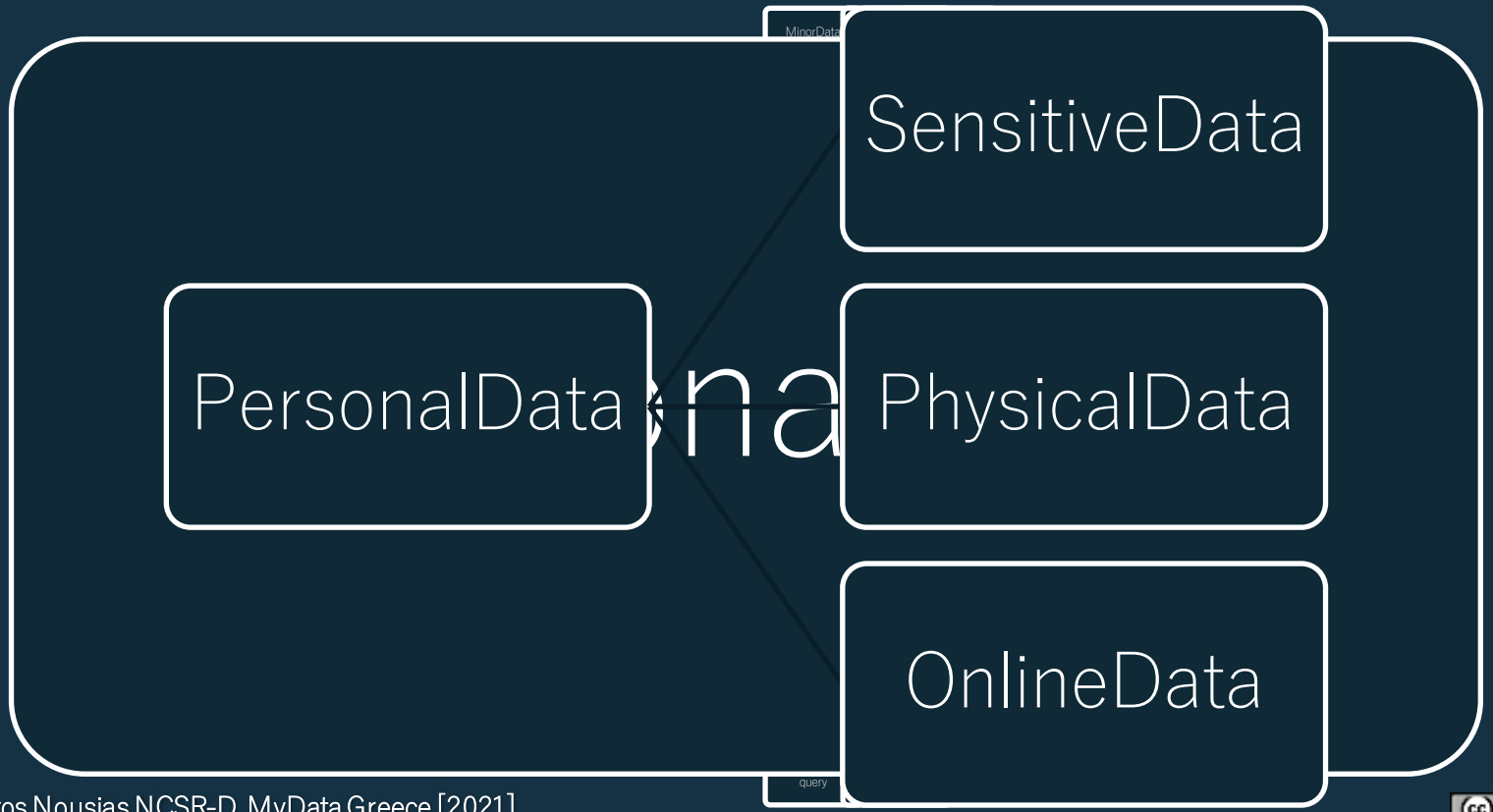
WHY Legal Informatics?

How can you assess the quality of a source if you are not already familiar with similar data?

HOW (micro)?

Markup Languages, XML & Schemas

LegiCrowd personal data schema



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LegiCrowd privacy schema

How?

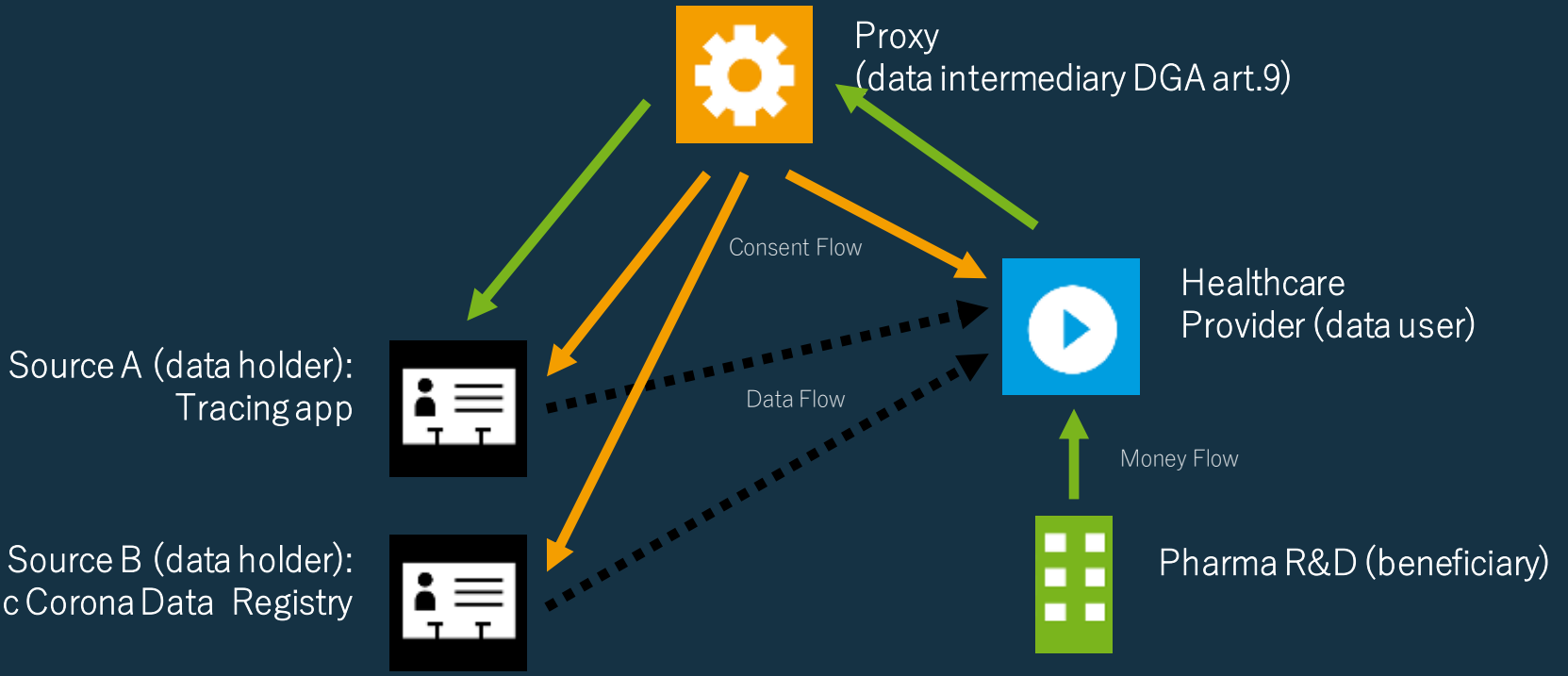
Questions (legal experts input)

Integrate with existing schema (schema.org, ToS:DR)

Annotate (legal experts input)

- Segments
- Questions & Answers
- Tags/Value pairs

(My)Data Flows



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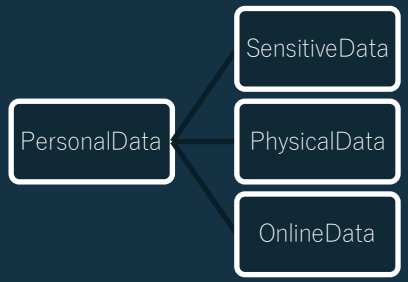
Legal Informatics

LegiCrowd



Collect OLDs

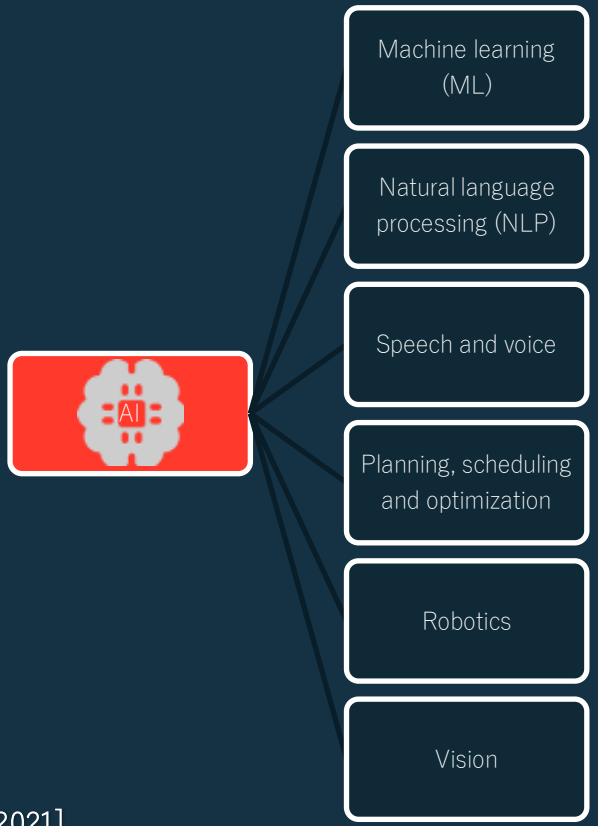
Annotate

Evaluate
- infer

Render
- DataViz
- Icons
- Grades
- simplified language
Etc.

AI Taxonomy

Subfields within Artificial Intelligence



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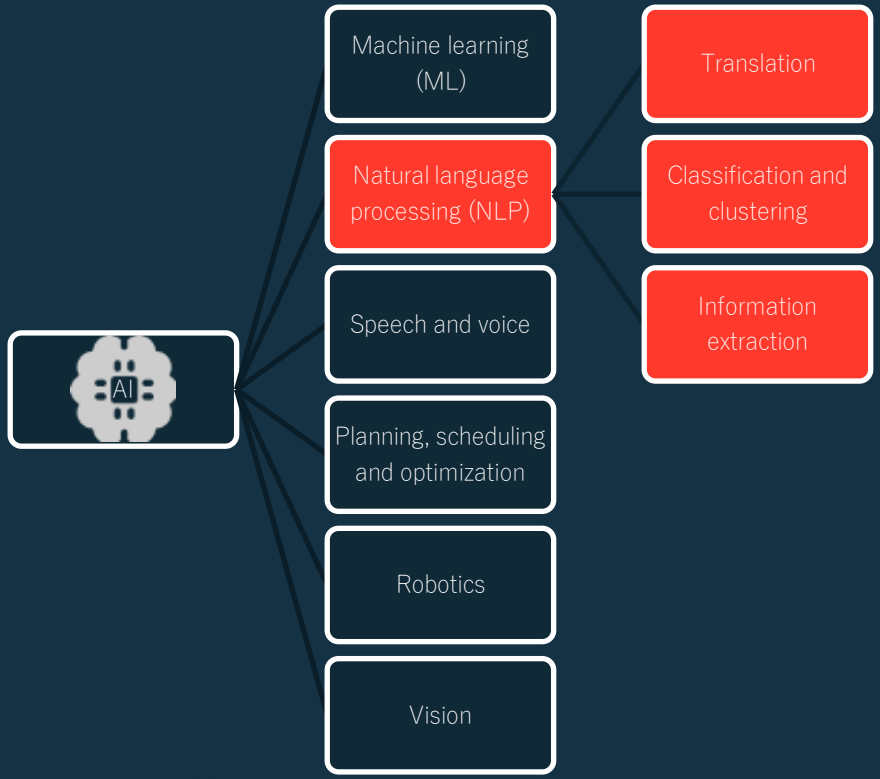
AI and the Law

- e-discovery
- Contract analytics (identify semantic patterns)
- Legal expert systems (a set of ‘as-if’ requirements, e.g. chatbots)
- Legal prediction models

AI Taxonomy

Subfields within Artificial Intelligence



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NLP for Legal Texts

NLP converts unstructured text into a formal representation that computers can understand and analyze

Repositories of digitized machine readable legal text (legal input)

Algorithmic improvements (legal input)

Legal inefficiency in its current practice (legal optimization)

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The logic of (legal) information

Logic of design as a logic of requirements

{R1,...Rn} = System

Identify the requirements of a system and how these requirements 'sufficientize' our model:

- Context
- Level of Abstraction
- Purpose

{seat, one-person} = Stool

{seat, one-person} = Retro

{seat, one-person} = Electric chair

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NLP for Legal Texts

NLP tasks & tools relevant to legal informatics


Summarizing content


Extracting content


Retrieving documents


Predicting outcomes correlated with text


Answering questions

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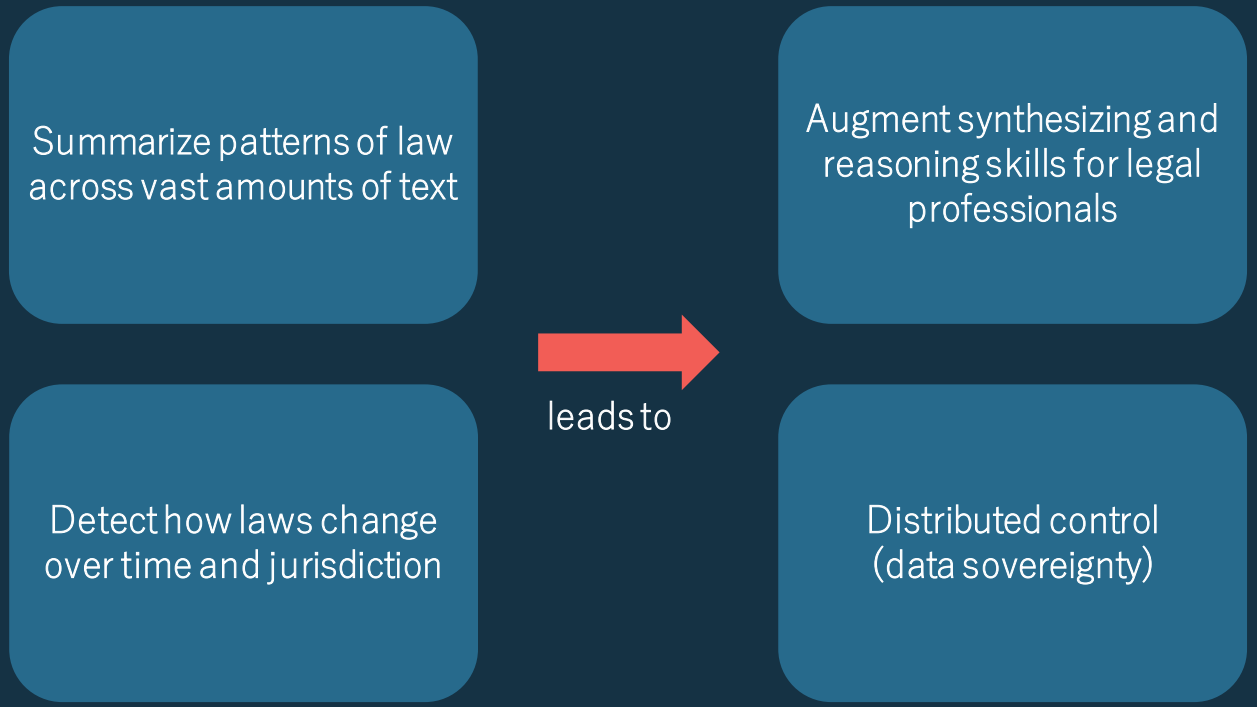
Legal Informatics Objectives



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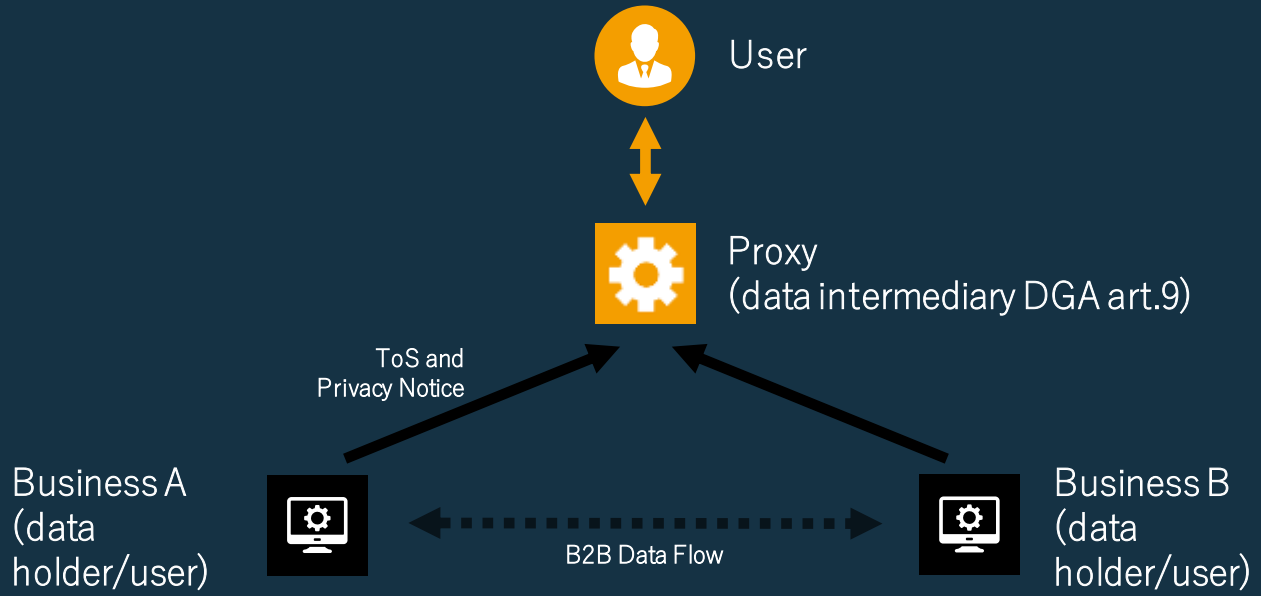

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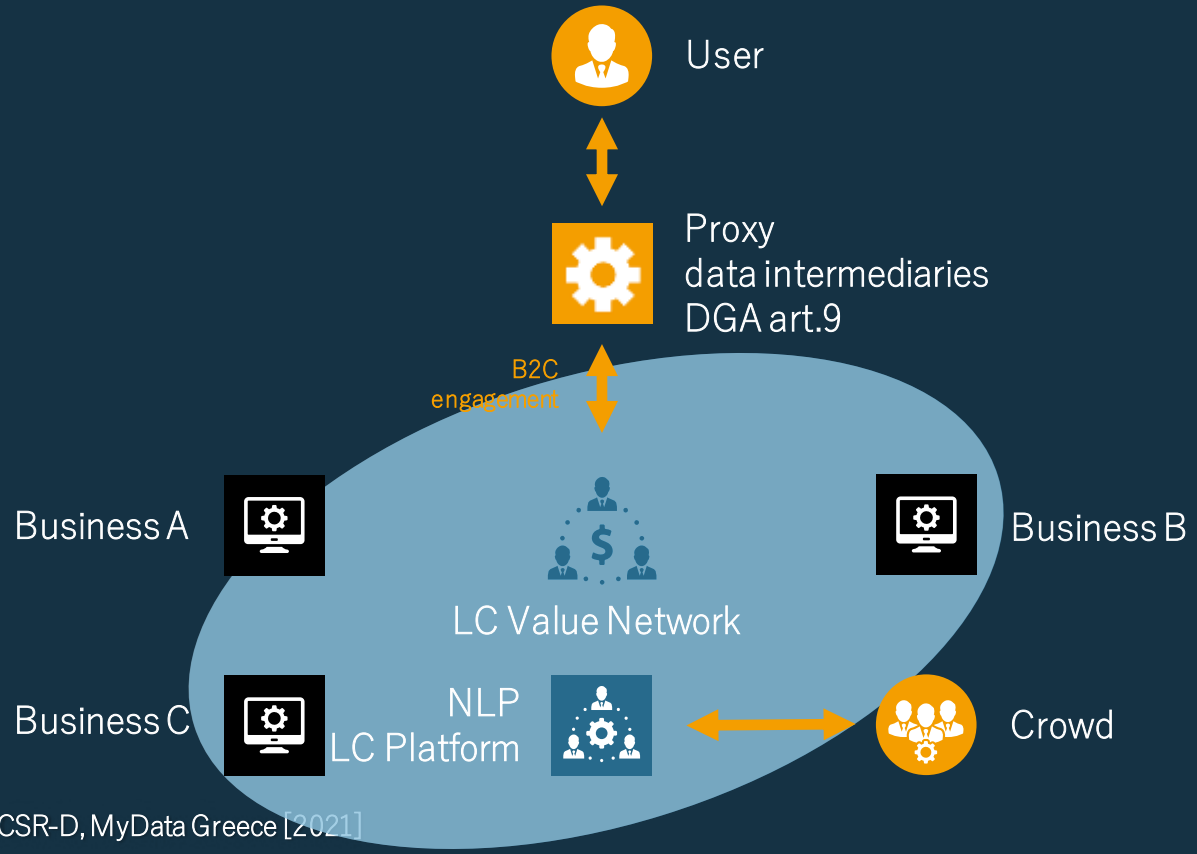
The LegiCrowd Network Effect

From crowdsourced annotation to automation (NLP)



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Partners

The LegiCrowd initiative is a collaboration of the following partners

Alexandros Nousias

Alain Couillault

Sofia Almpani
Theodoris Mitsikas
Petros Stefaneas

Supporters

The LegiCrowd initiative has been originated and is supported by the following actors

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Thank You

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