

<https://w3id.org/dpv>

Data Privacy Vocabulary (DPV) & Solid

Harsh(vardhan J. Pandit)

Research Fellow @ ADAPT Centre, Trinity College Dublin

Email: pandith@tcd.ie | Twitter: @coolharsh55

<https://harshp.com/research/presentations>



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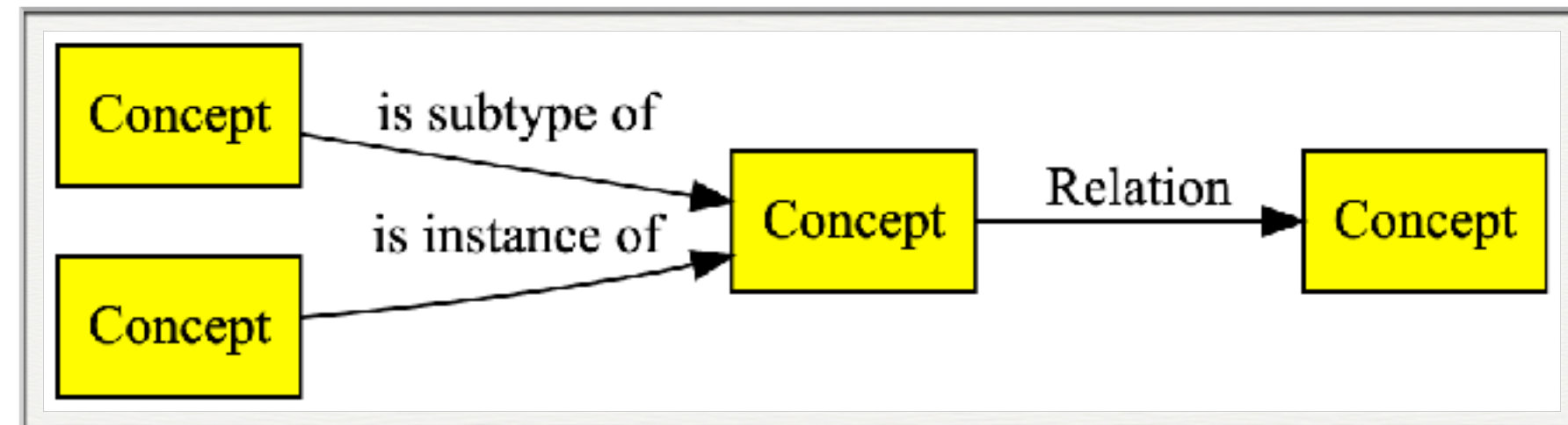
DPVCG: W3C Data Privacy Vocabularies and Controls Community Group



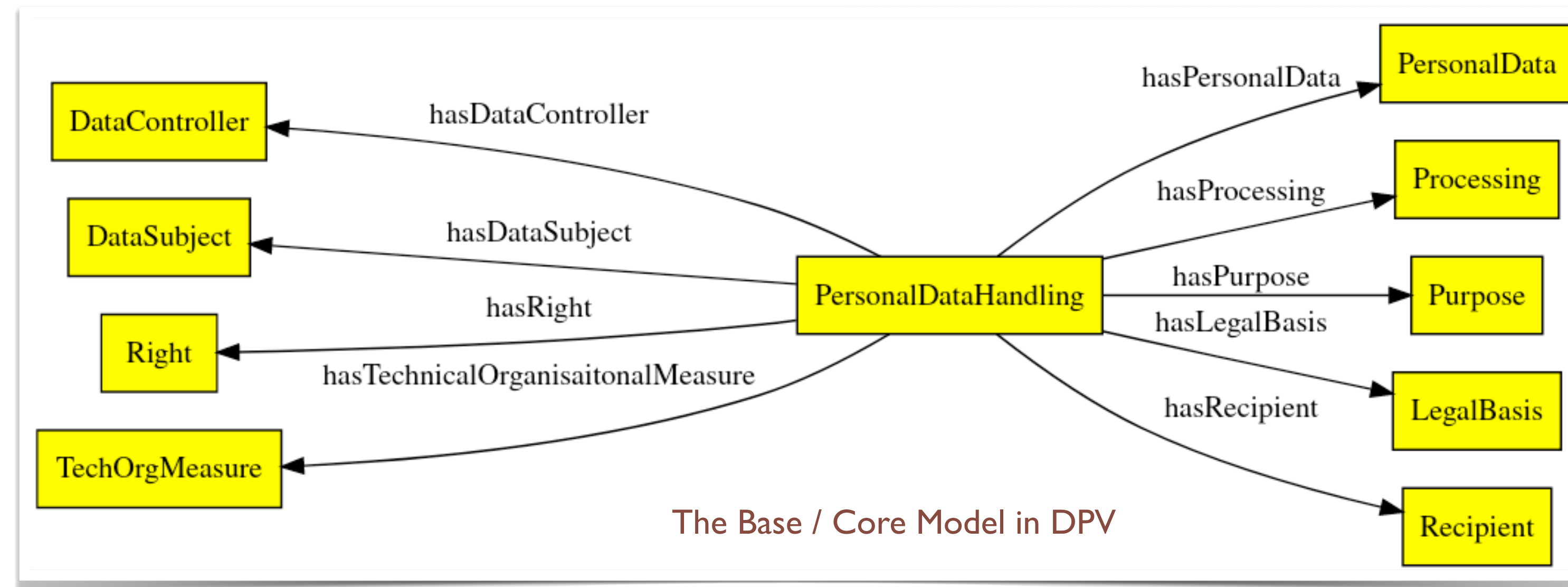
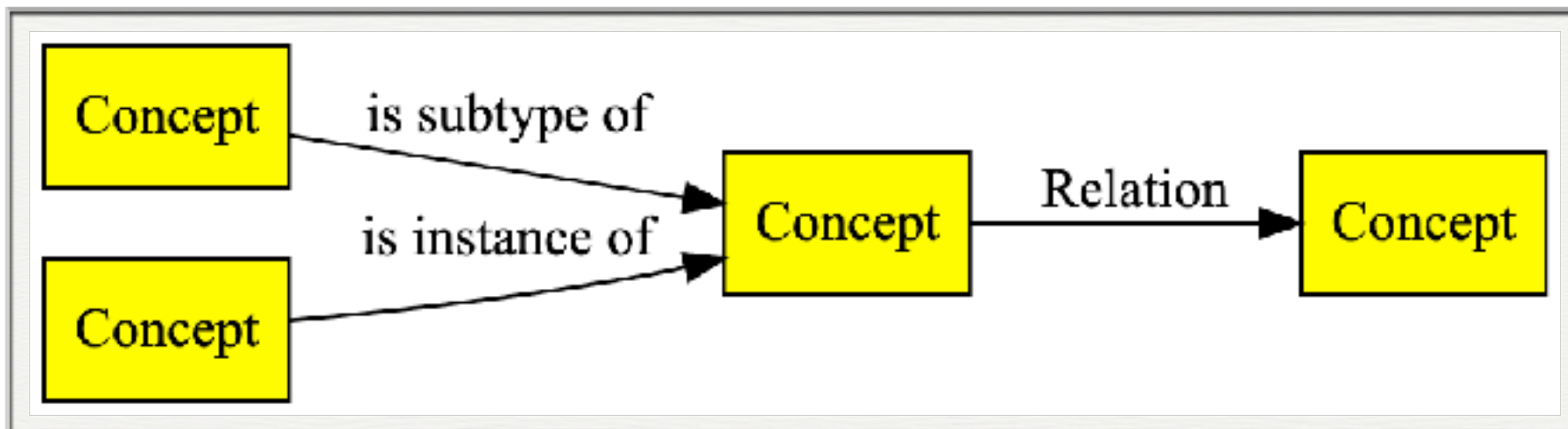
<https://www.w3.org/community/dpvcg/>

- Initiated by SPECIAL - A European H2020 project in May 2018
- Started with focus on GDPR, Expanded scope to global vocabulary
- Open Membership
- Mission: Provide a machine-readable vocabulary for describing who/what/why/where/how/when stuff related to Personal Data & Privacy

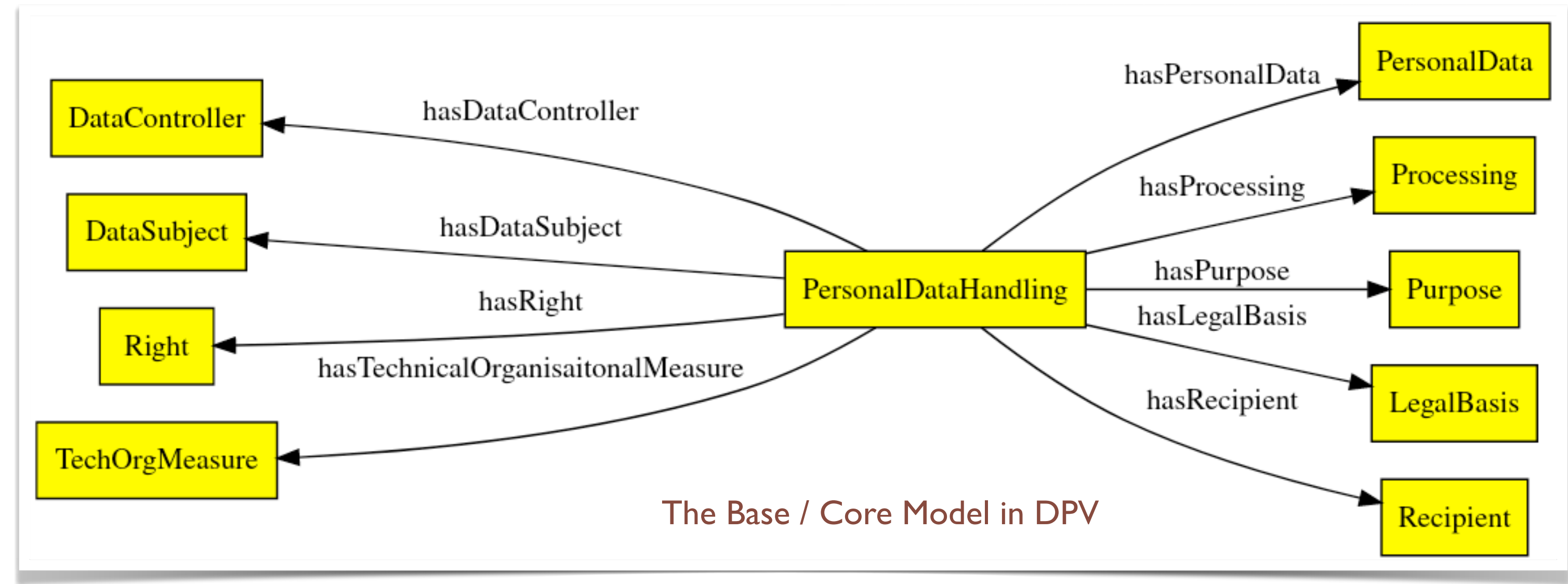
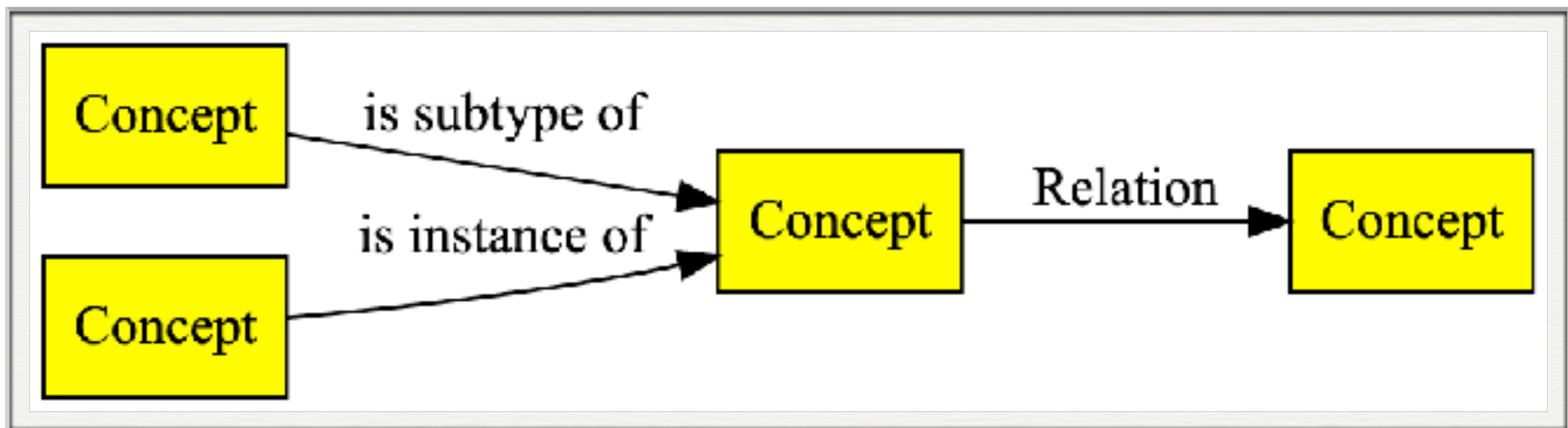
Knowledge & Semantics



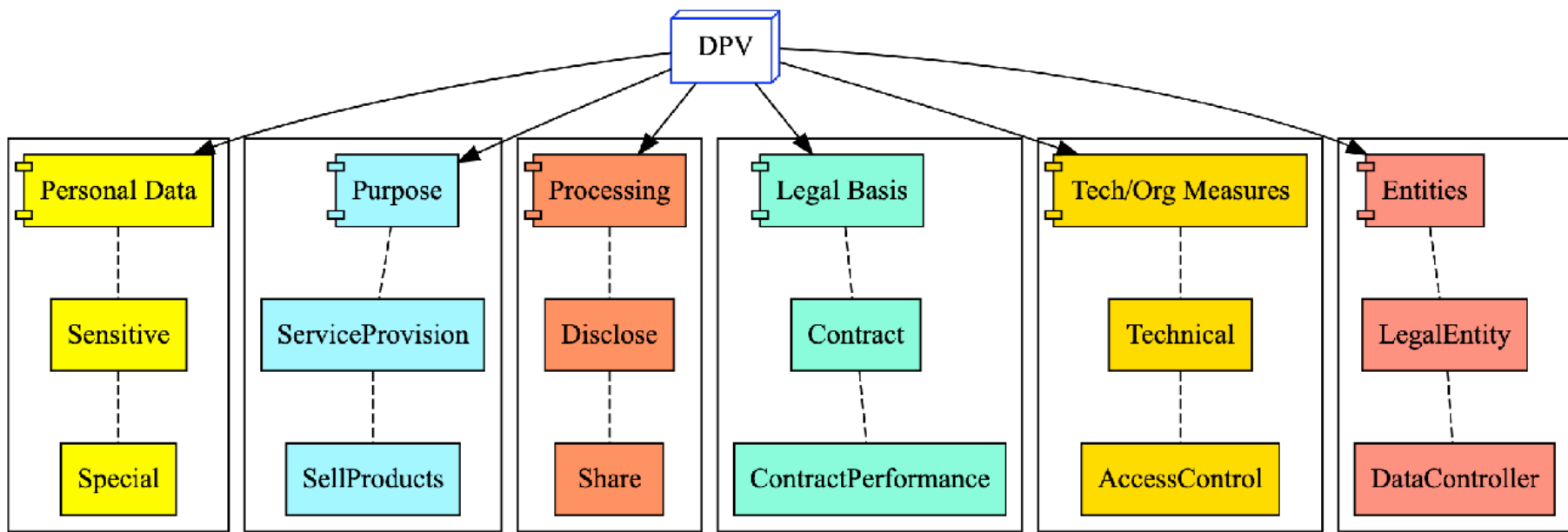
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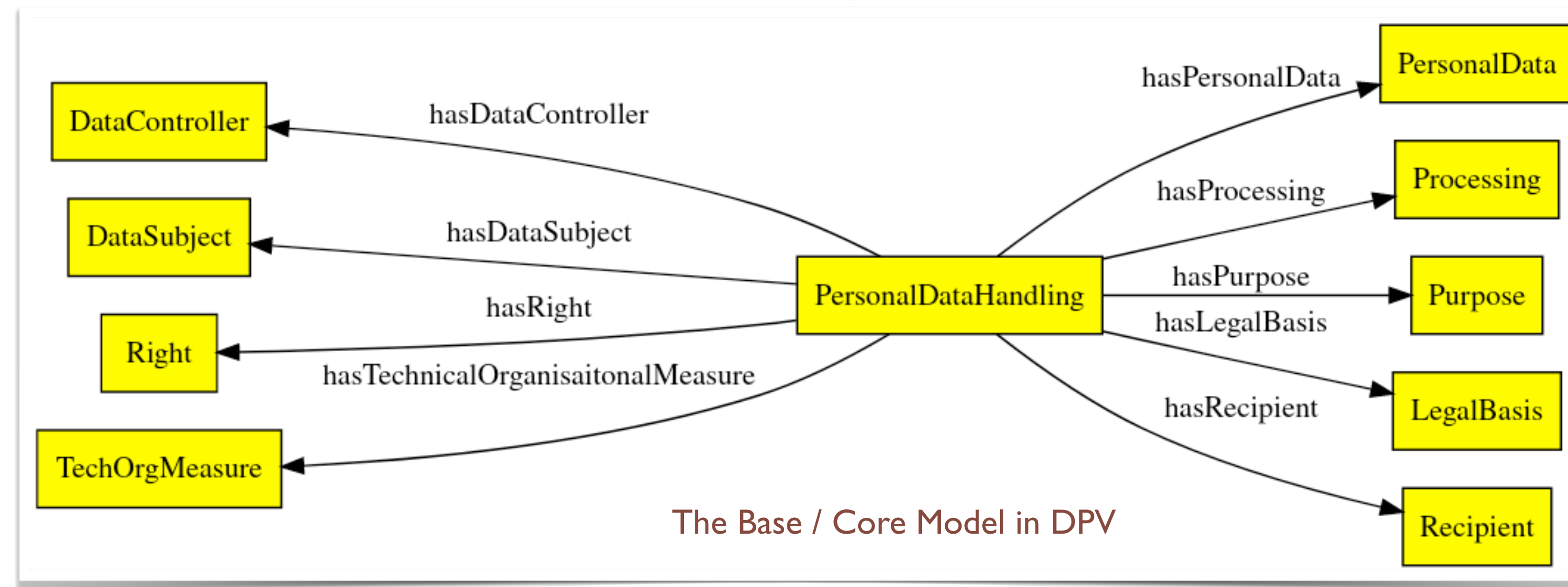
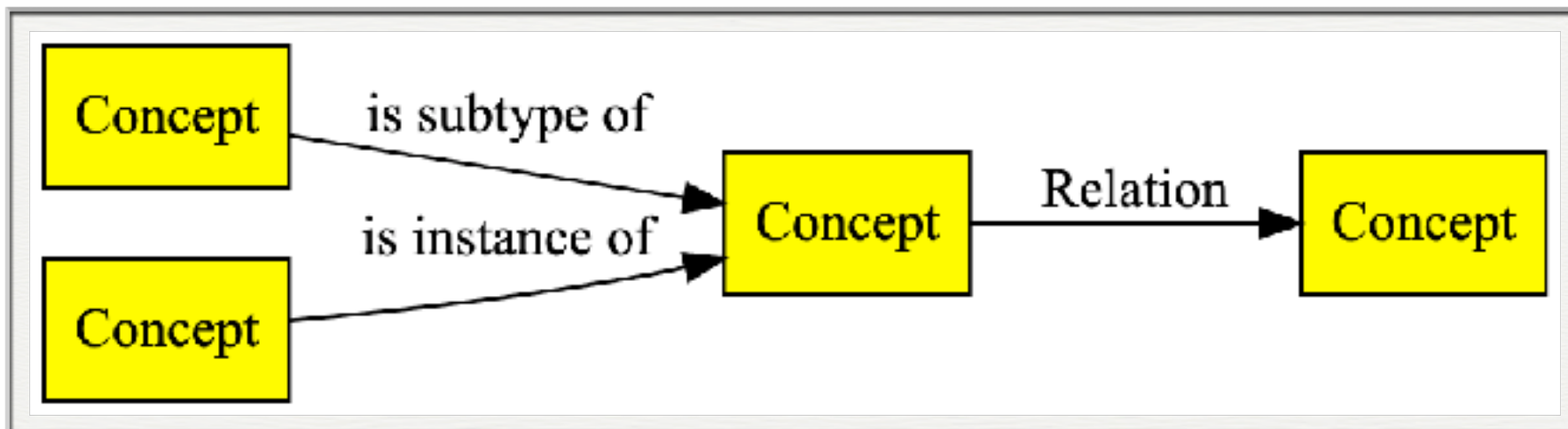
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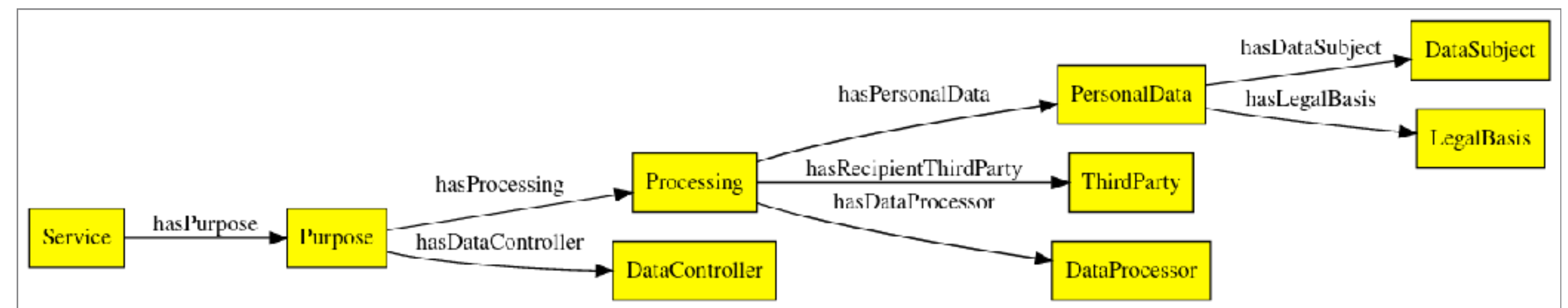
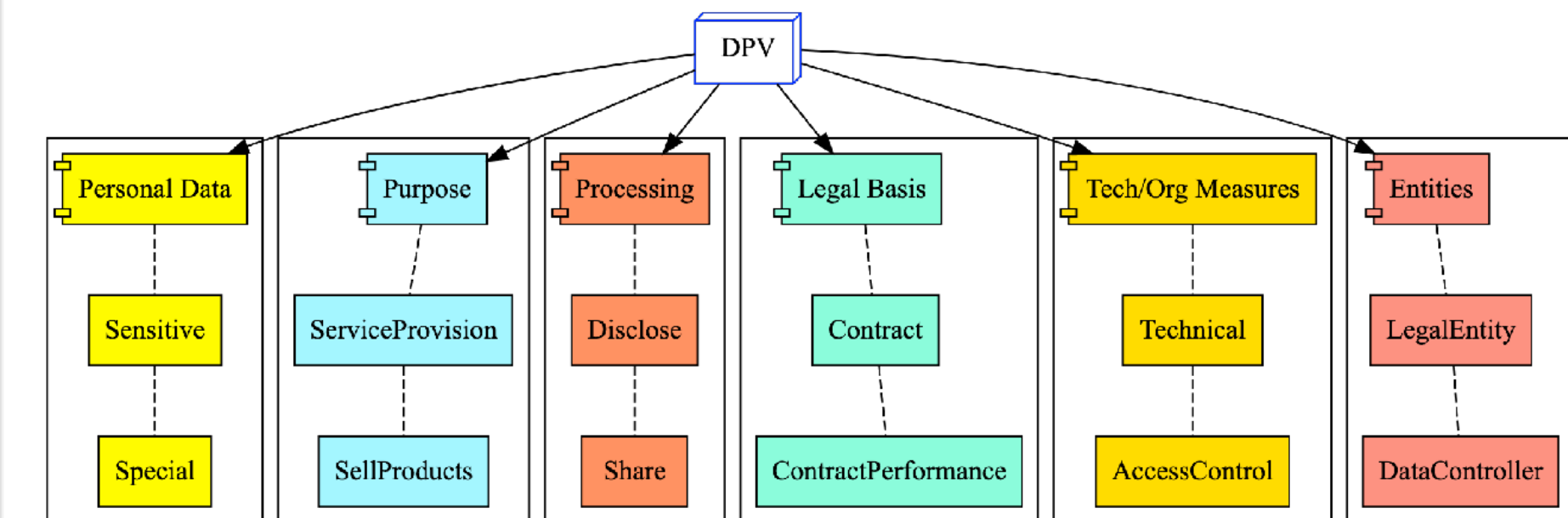
Taxonomies for Core Concepts



Knowledge & Semantics

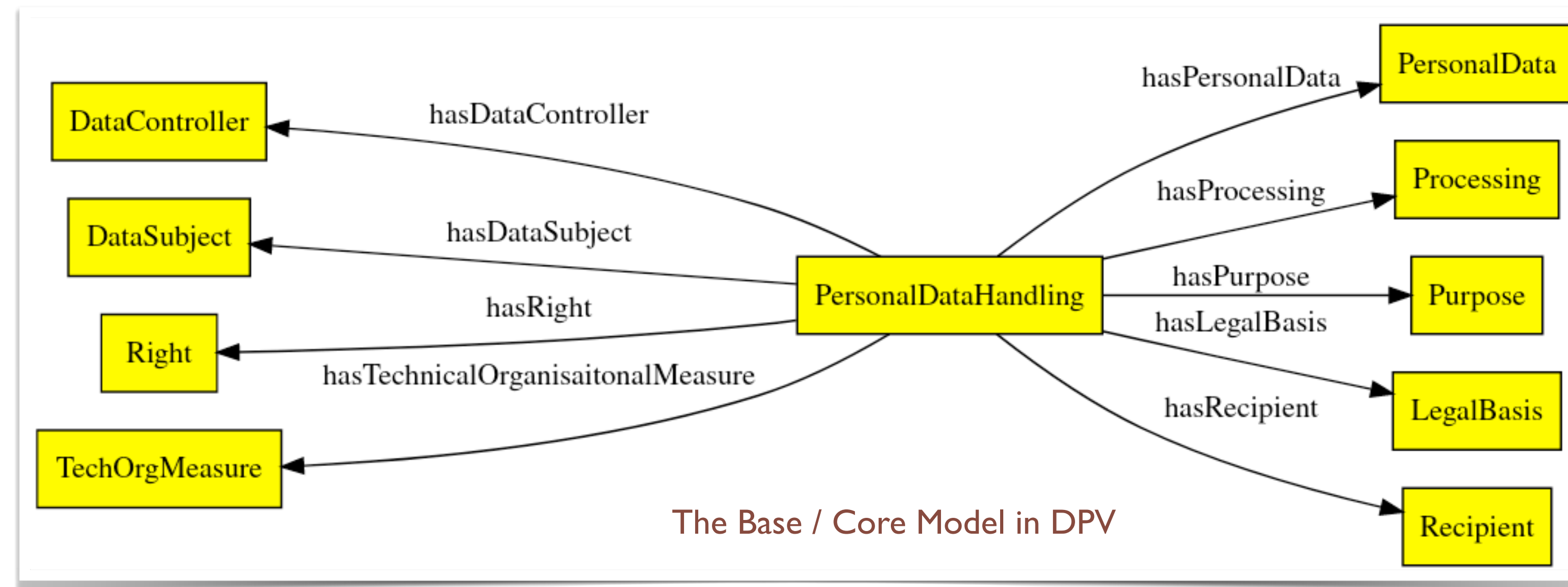
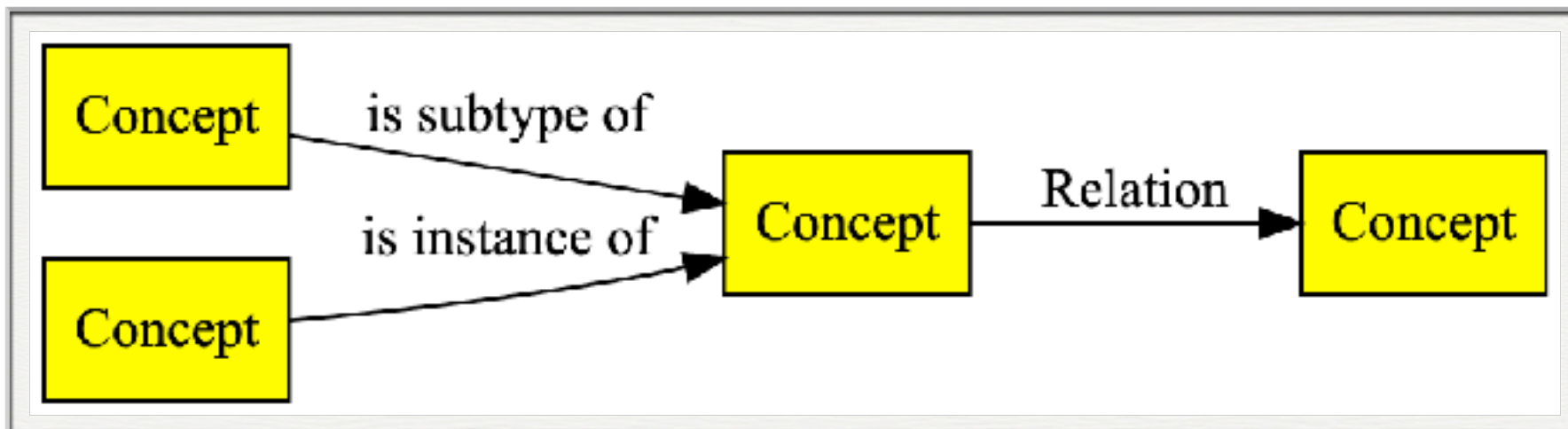


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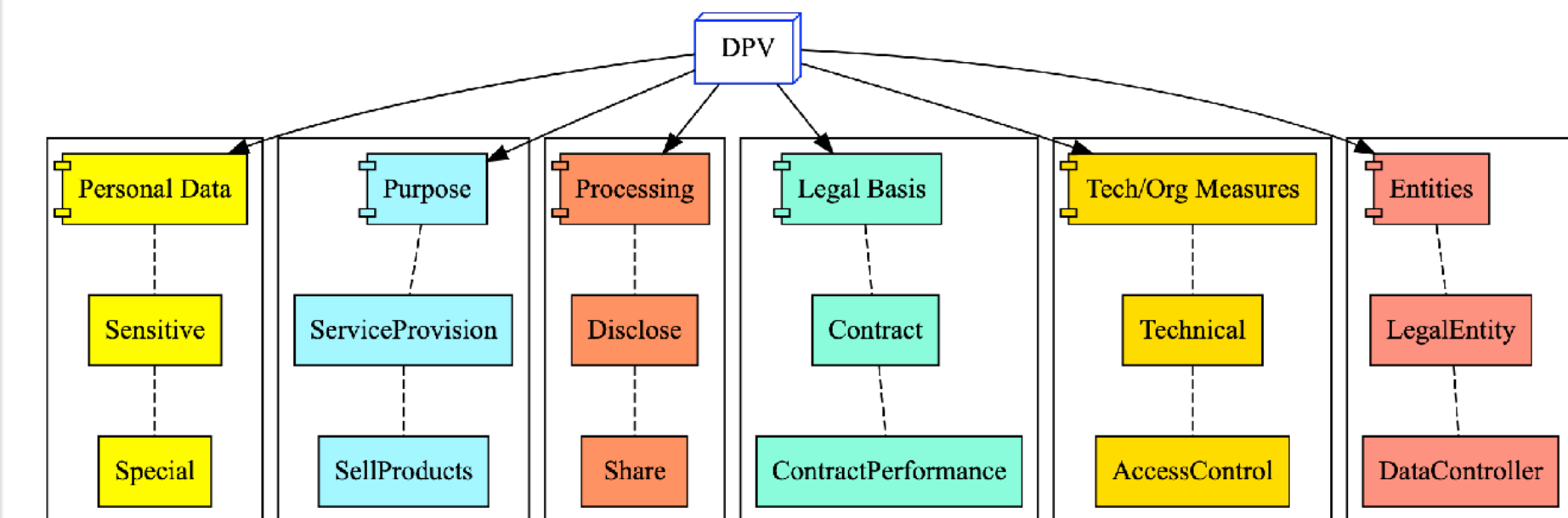


Alternate Models that suit YOUR use-cases

Knowledge & Semantics



Taxonomies for Core Concepts



DPV-GDPR: GDPR Extension for DPV

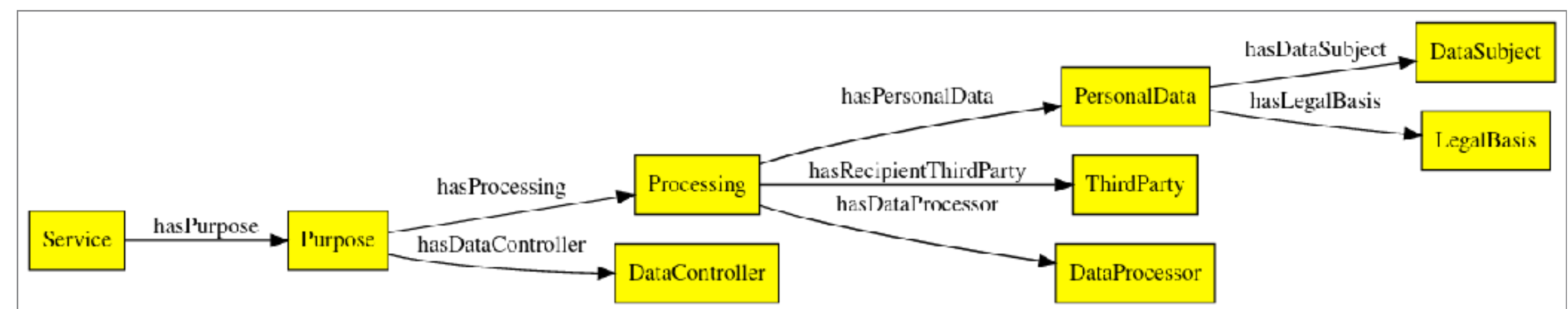
version 0.7

Draft Community Group Report 25 May 2022

Latest published version:

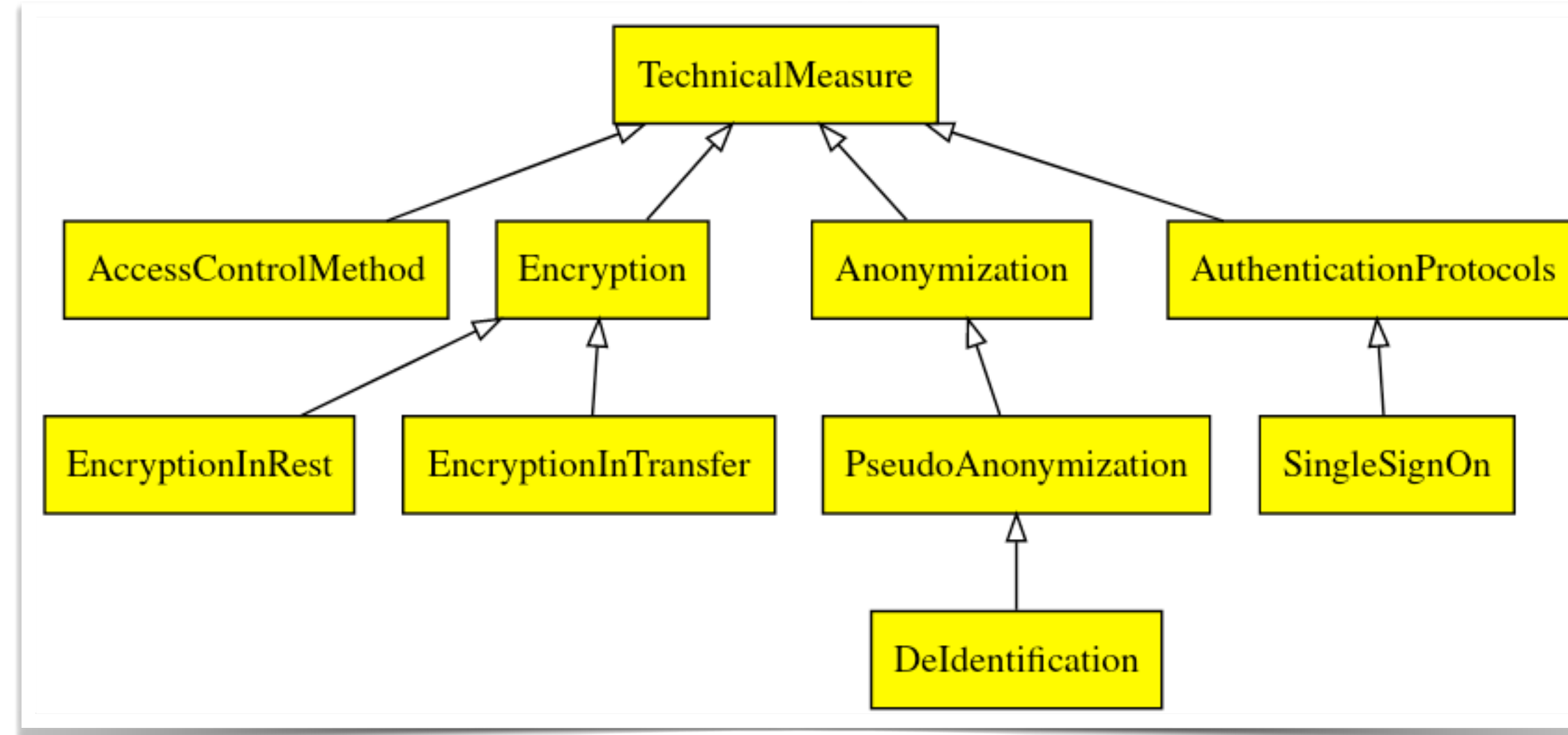
<https://w3id.org/dpv/dpv-gdpr>

Extend for Domains / Jurisdictions

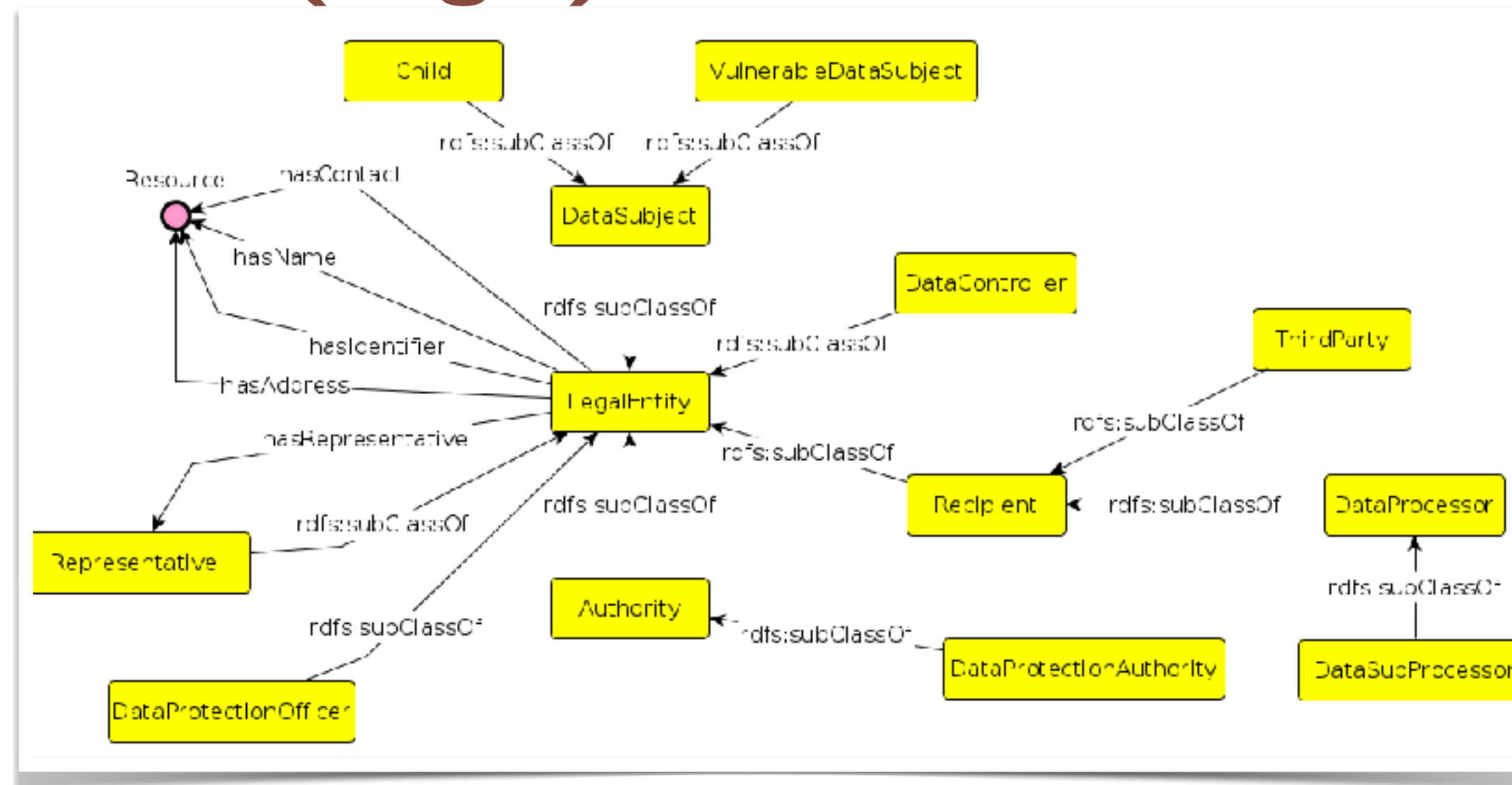


Alternate Models that suit YOUR use-cases

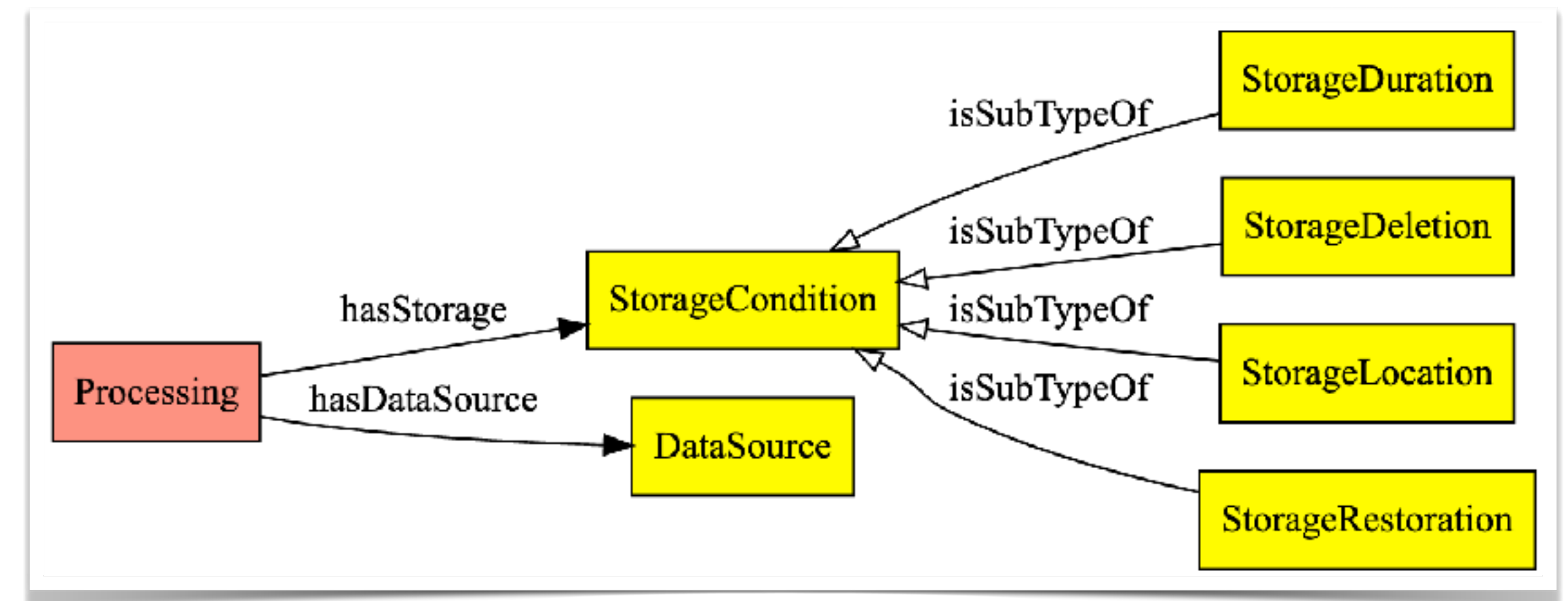
Technical & Organisational Measures - How? Where?



(Legal) Entities - Who?



Processing - How? Where?

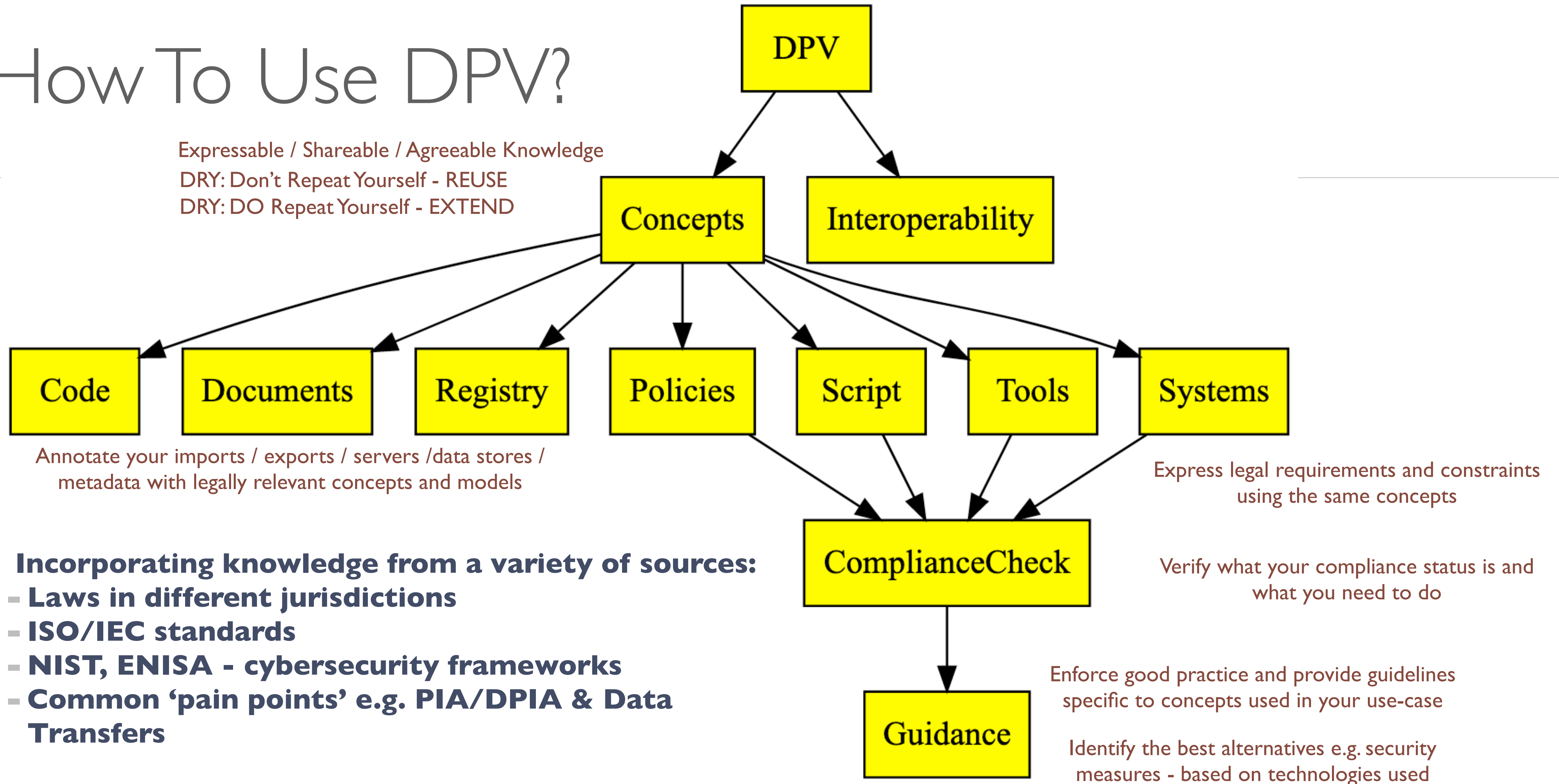


How To Use DPV?

Expressable / Shareable / Agreeable Knowledge

DRY: Don't Repeat Yourself - REUSE

DRY: DO Repeat Yourself - EXTEND



Incorporating knowledge from a variety of sources:

- **Laws in different jurisdictions**
- **ISO/IEC standards**
- **NIST, ENISA - cybersecurity frameworks**
- **Common ‘pain points’ e.g. PIA/DPIA & Data Transfers**

Information...

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Information ...

- Policies
- Privacy Policies — End-User
- Internal Organisational Policies
- Service/Agent Negotiation

- Permission Management
- Consent
- Access Control

Government

Universities

Browsers

Personal Devices

Banking

eHealth

Medicine

- Legal Compliance
- Documentation of Use-Case
- Input to Assessment Tools

Dialogue Dashboard

- Transparency in Use & Sharing
- Apple Store Labels
- Internet Communications
- Dataset Publishing

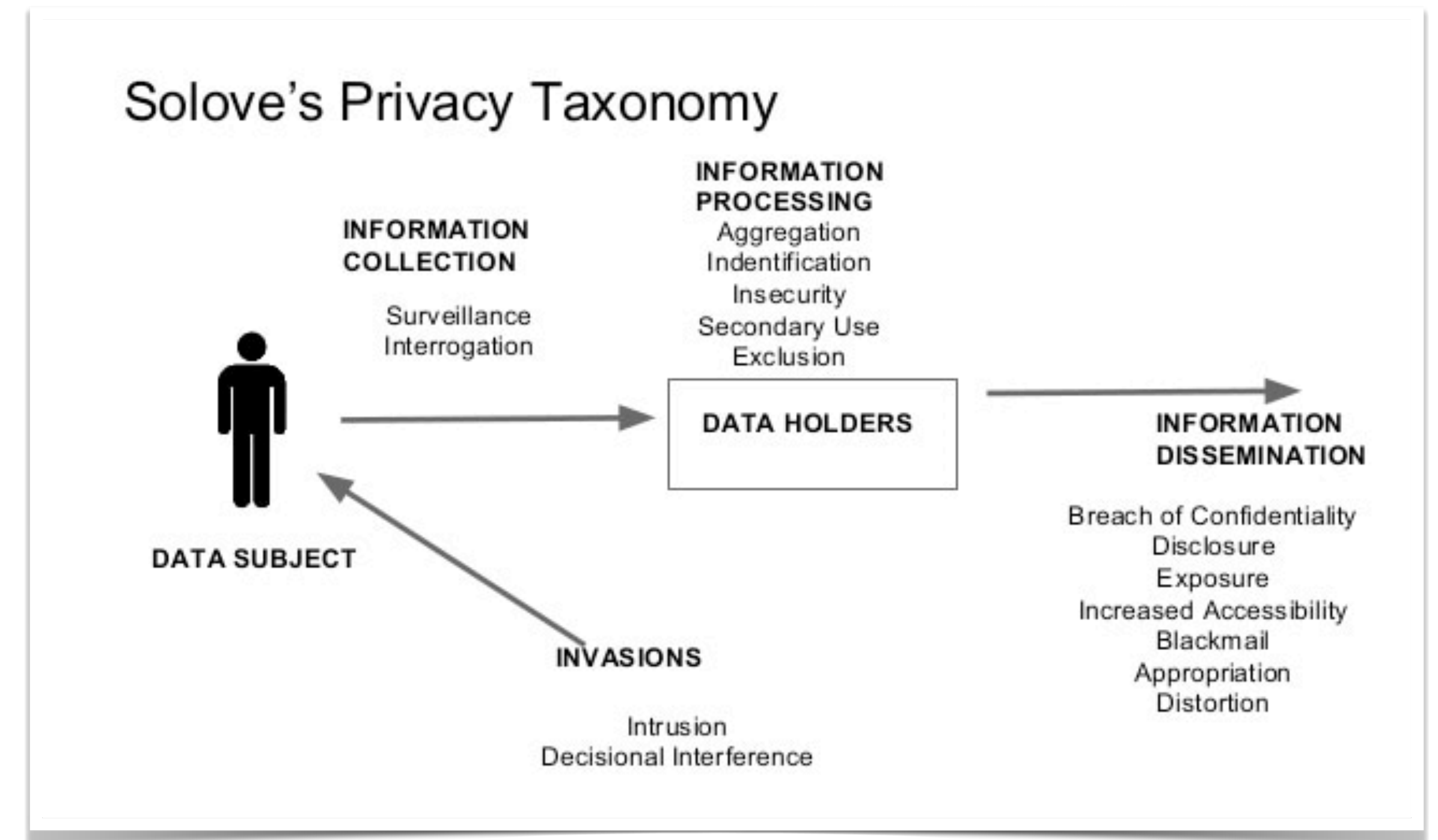
Smartphones

IoT

Open Data

Challenges to DPV

- Deontic Logic is not expressed by this audience
- Too much variation in Global concepts for uniformity e.g. 'Sell' in CA/USA vs EU
- Legality ≠ Privacy
- Learning curve and barriers to adoption
- Integration of standards e.g. ISO
- Technologies e.g. cookies, databases, algorithms
- Prove completeness and correctness in real-world use-cases



The scope of DPV is in a progressive flux
It needs a *diverse multi-disciplinary* cohort
of experts to finalise concepts

Lessons Learned From Applying DPV to Solid

STANDARDS?
INTEROPERABILITY?
LAWS?

(a) see EU Data Act and Data Spaces <https://digital-strategy.ec.europa.eu/en/policies/strategy-data>

(b) GDPR Art.4-7 Controller definition, and Belgian DPA Decision on IAB's controllership <https://www.dataprotectionauthority.be/citizen/iab-europe-held-responsible-for-a-mechanism-that-infringes-the-gdpr>

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Public Benefit?
Legal Obligation?

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STANDARDS?
INTEROPERABILITY?

Data Sharing beyond Pods?
Sticky Policy?
Provenance of Data Chains?

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How much is the user's responsibility?

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Non-EU >> Data Transfer >> EU

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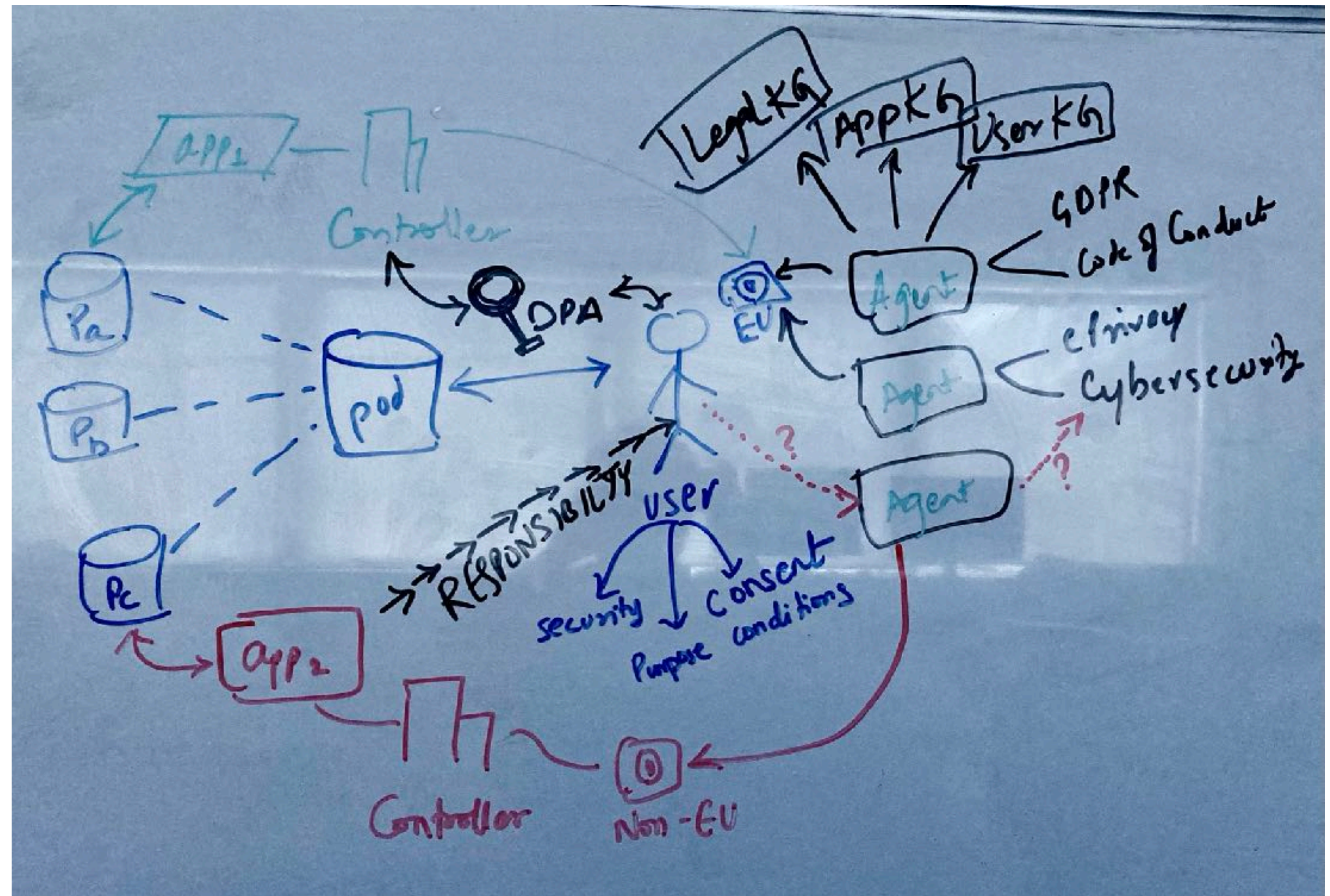
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Transparency Obligations ?
Notices? Consent Request?
Rights?

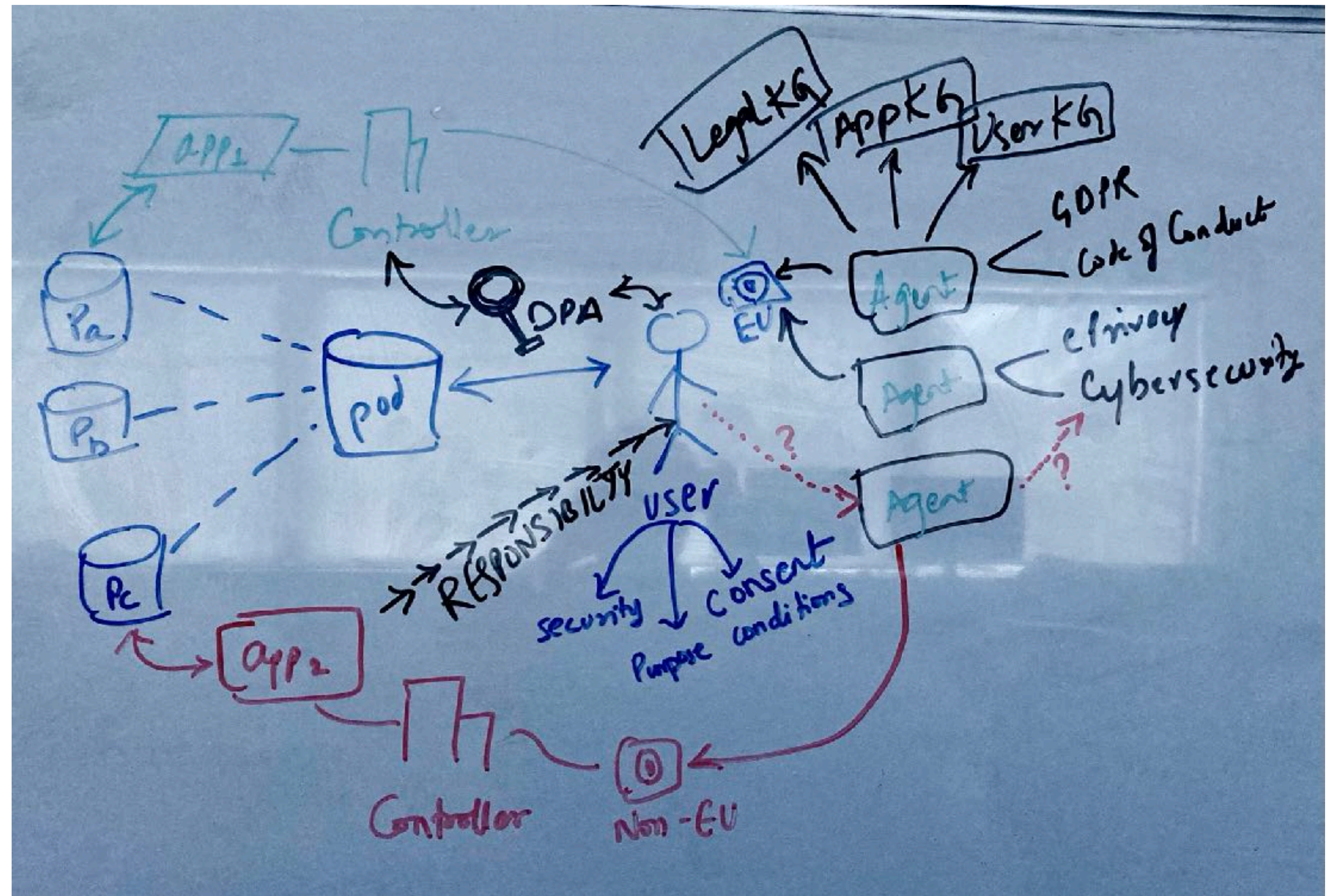
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Lengthy terms & conditions, deceptive practices, re-emergence of wild wild west (puns intended).

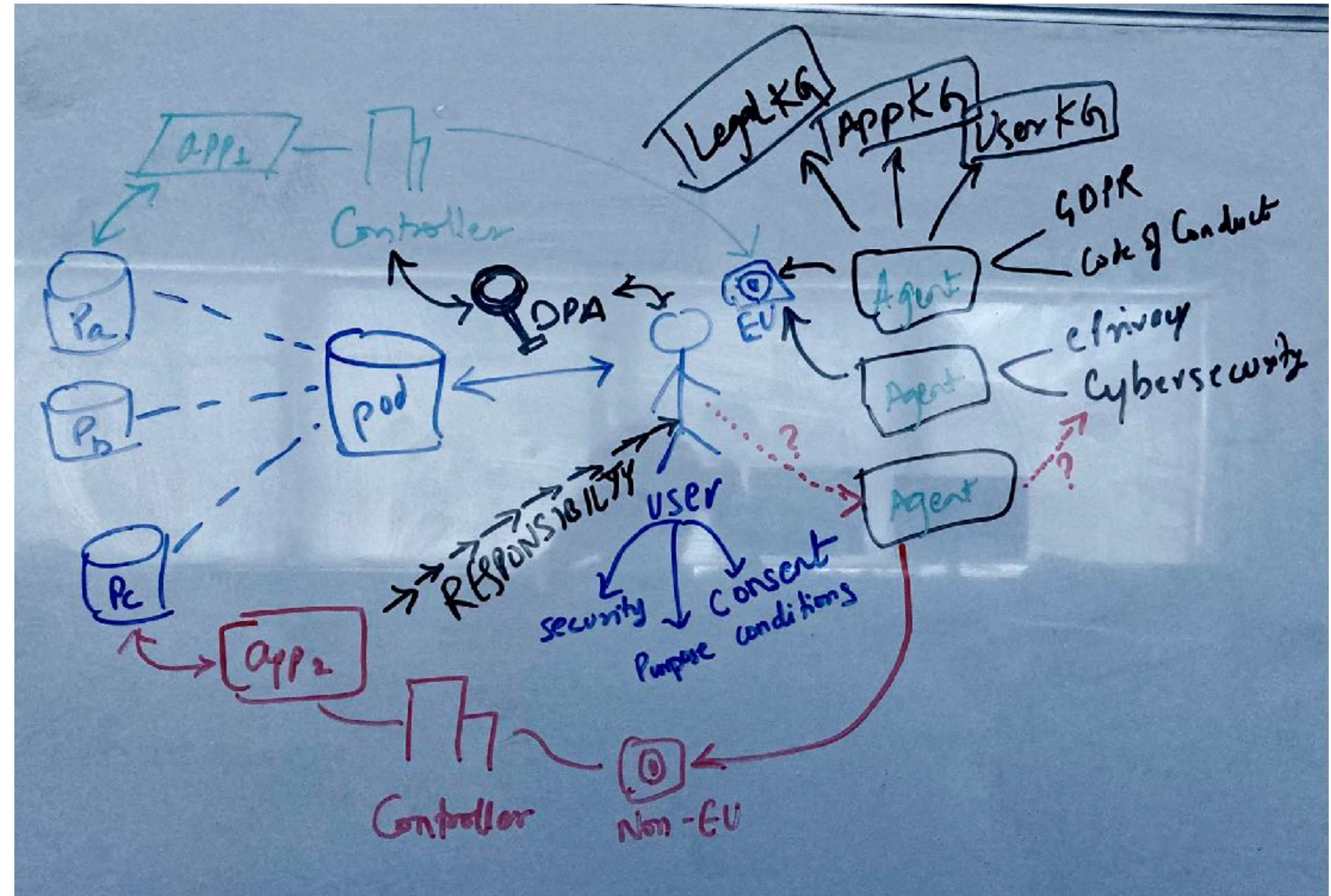


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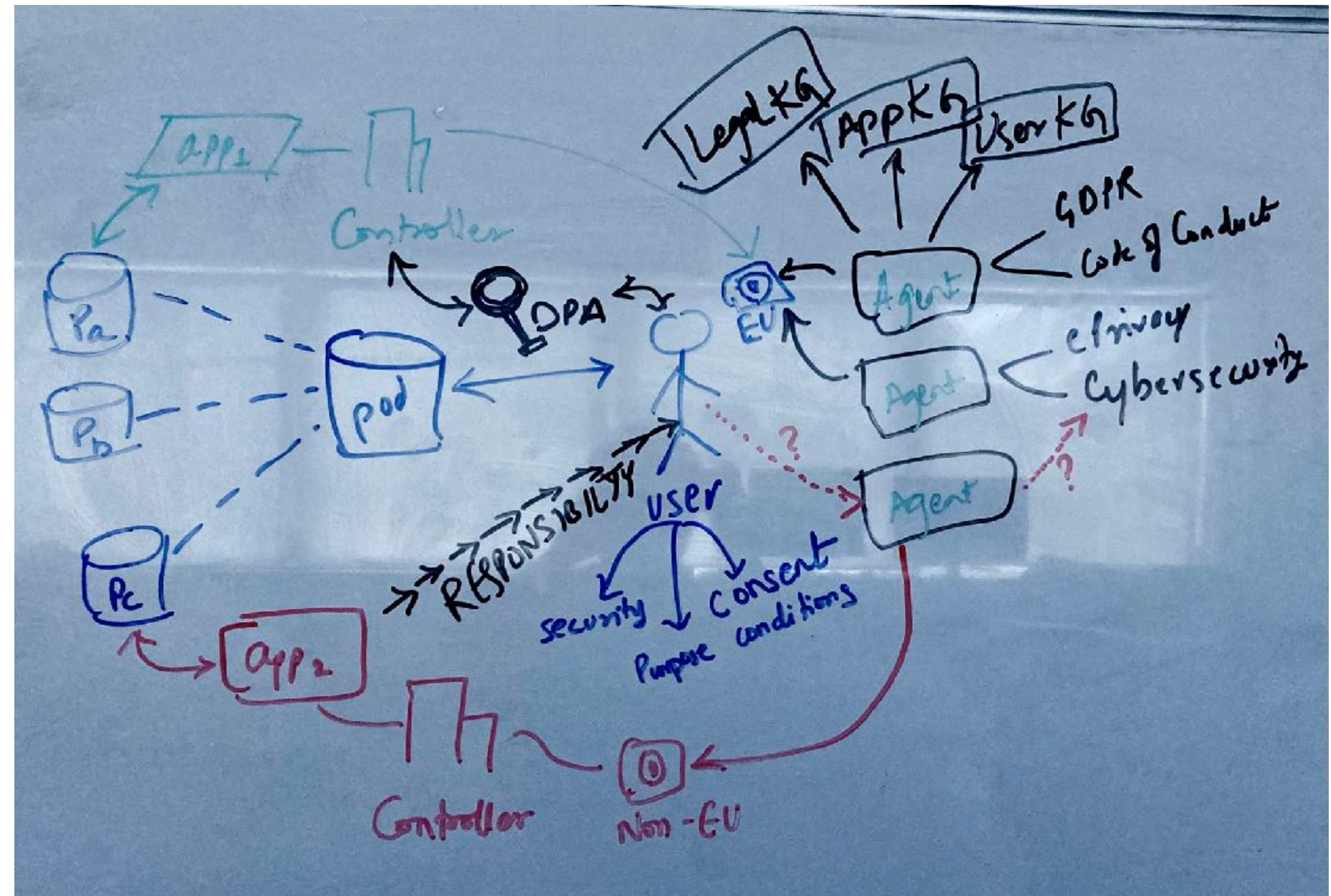
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What data do Agents need to operate? Who creates these Agents? Will they encode the *correct values*??? How to choose Agents?



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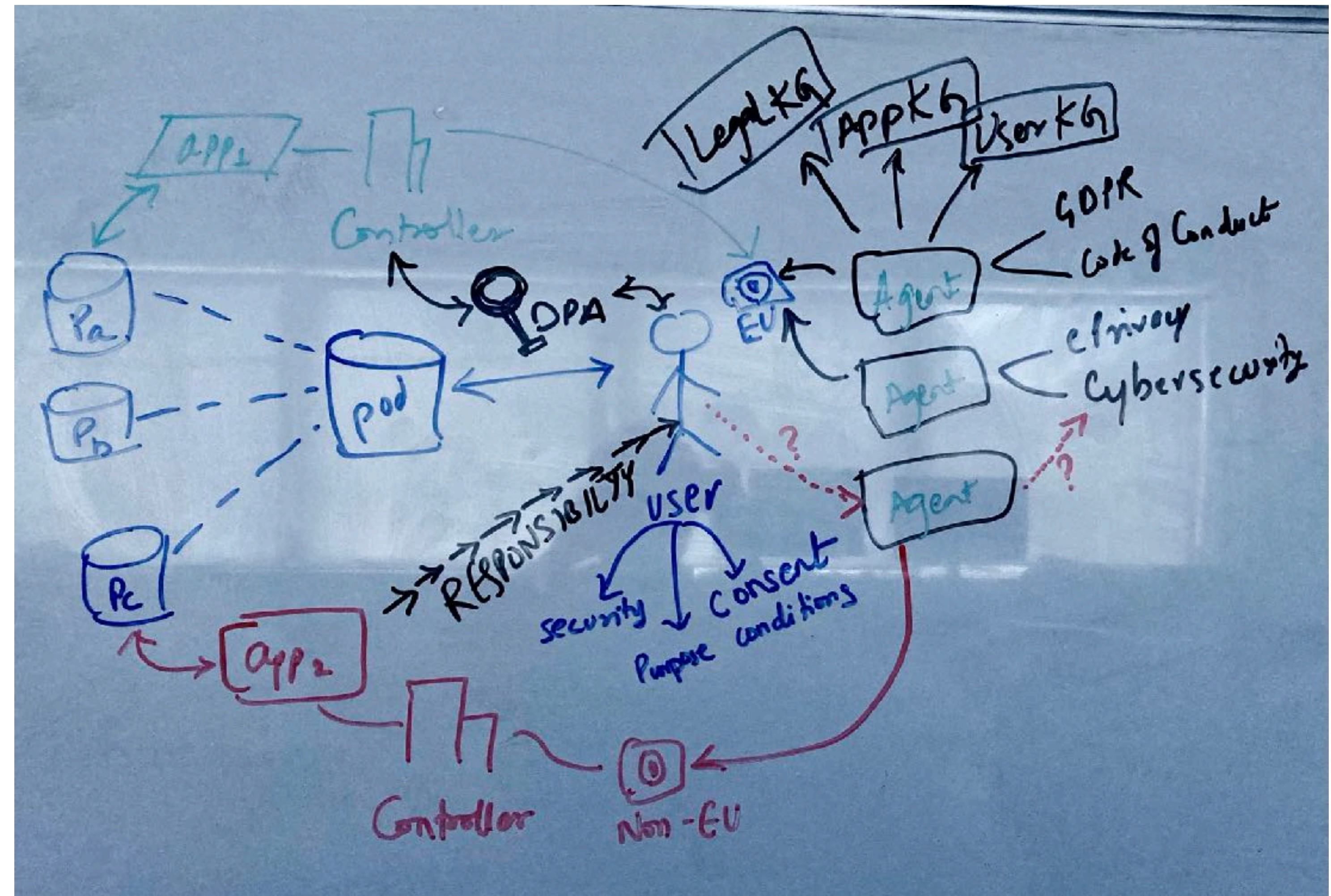
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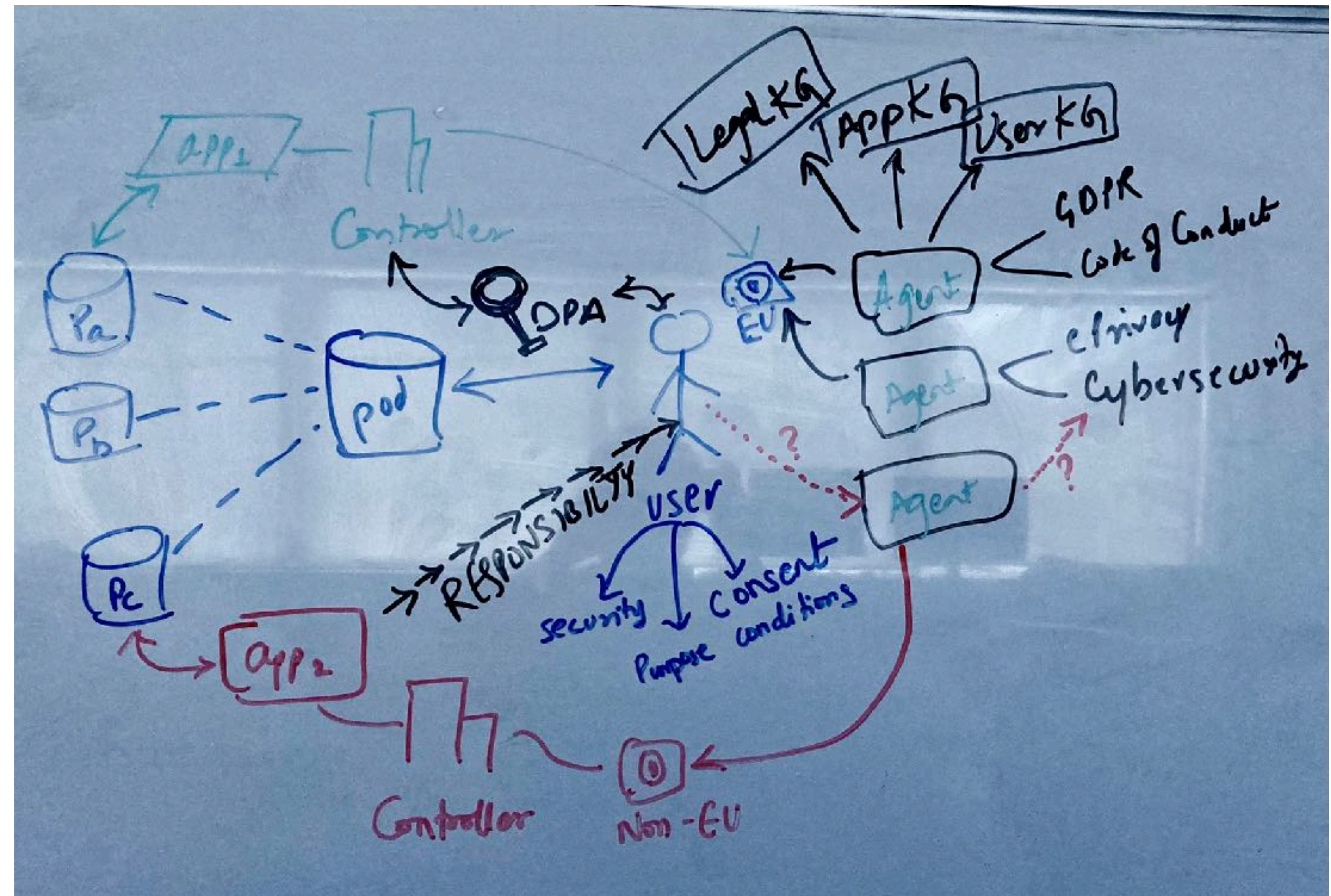
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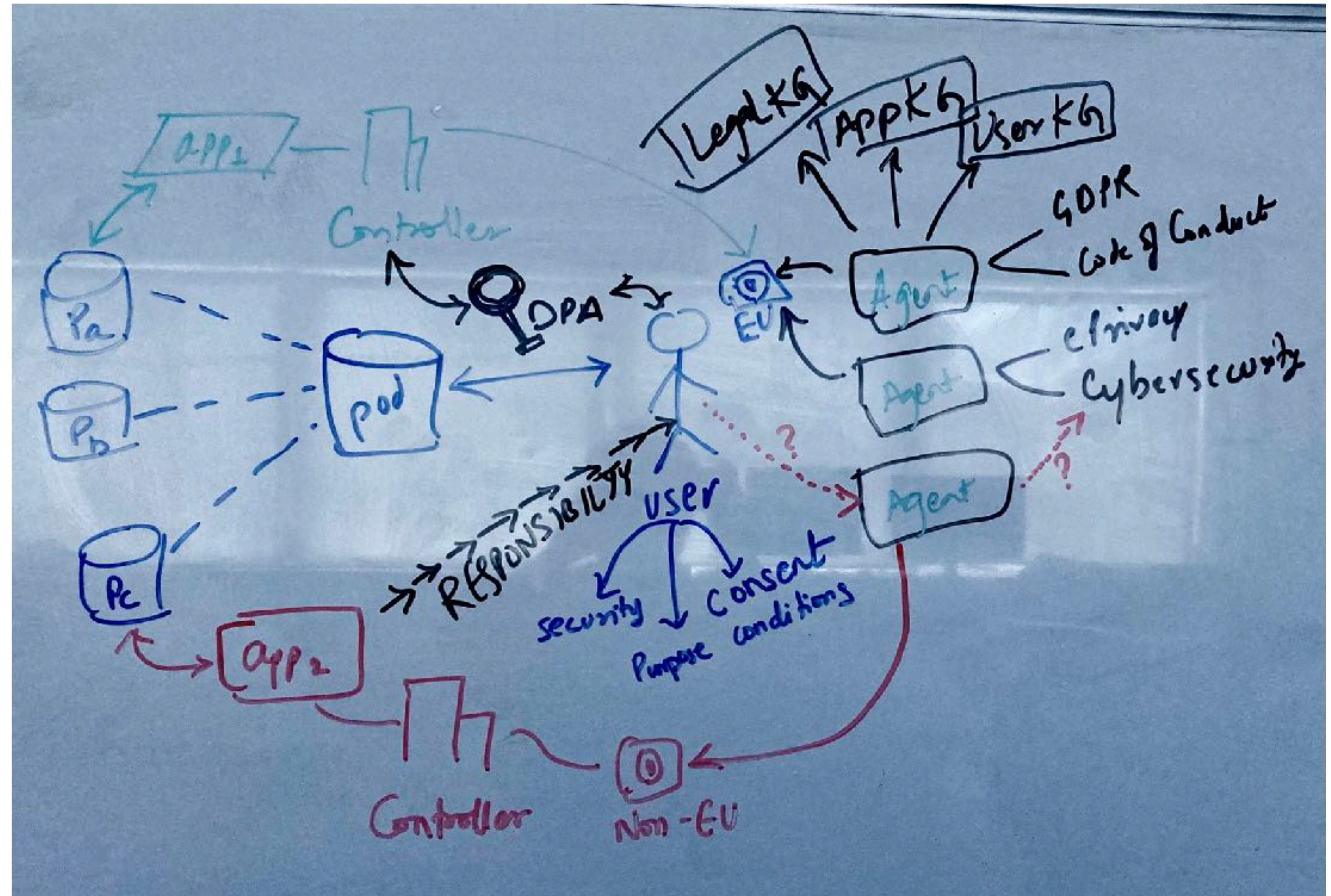
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Throw away the existing model, don't replicate the *evils* and start with a clear model of how responsibility functions. Too much effort to get right and very very difficult to have "buy-in" from companies. But not unrealistic - see Apple's heavy-handed push regarding fingerprinting in iOS.



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Presented by Harshvardhan J. Pandit

for COST EU Workshop on Privacy Issues in Distributed Social Knowledge Graphs (PIDSKG)

pandith@tcd.ie | @coolharsh55

Links

This presentation: <https://harshp.com/presentations>

DPV: <https://w3id.org/dpv>

DPVCG: <https://www.w3.org/community/dpvcg/>

Github: <https://github.com/w3c/dpv/>

Adapter from prior presentations: FAIRPoints2022, PEPR2022