Data Privacy Vocabulary (DPV)

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https://harshp.com/research

https://w3.org/ns/dpv
DPVCG: W3C Data Privacy Vocabularies and Controls Community Group

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

https://www.w3.org/community/dpvcg/
Purposes - Why?

- Commercial Interest
- Research And Development
- Security
- Service Optimization
- Service Personalization
- Service Provision
- Legal Obligation

Personal Data Categories - What?

Processing Operations - How?
Technical & Organisational Measures - How? Where?

(Legal) Entities - Who?

Specific Legal Basis - Consent
- Taxonomy of concepts :: Purposes, Processing, Personal Data Categories, Legal Bases, Technical & Organisational Measures, Legal Entities

- Freedom to use, mix, adopt, change :: E.g. Use only Purposes and Legal Bases

- Formal spec using RDF :: Consistency in representation

- Expanding, we’re (only) v0.3 :: Here v1.0 means its ‘stable’ for real-world use-cases

- State of the Art :: Most exhaustive general vocabulary for data protection and privacy. Only domain-specific vocabularies are more refined e.g. FIBO for Banking.

- DPV provides extensions for GDPR. More are possible :: jurisdictions (e.g. CCPA), domains (Government, Health)
Relevance of Concepts in Across Use-Cases

Concepts in Privacy Policies

- Legal Basis
- Purpose
- Processing
- Personal Data

Concepts in GDPR

- Legal Basis
- Purpose
- Processing
- Personal Data

Concepts in CCPA

- Legal Basis
- Purpose
- Processing
- Personal Data

Concepts in ISO

- Legal Basis
- Purpose
- Processing
- Personal Data
Where Can You Use DPV?

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

- Permission Management
  - Consent
  - Access Control

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

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

- Government
  - Universities
  - Browsers
  - Solid Pods

- Banking
  - eHealth
  - Medicine

- Dialogue
  - Dashboard

- Smartphones
  - IoT
  - Open Data
Challenges to DPV

- Permissions, Prohibitions aren’t expressed
- Too much variation in Global concepts for uniformity e.g. ‘Sell’ in USA vs EU
- Legality ≠ Privacy
- Learning curve and barriers to adoption
- Integration with vocabs e.g. DCAT
- 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
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Presented by Harshvardhan J. Pandit @ DCMI 2021
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Links
This presentation: https://harshp.com/presentations
DPV: https://w3.org/ns/dpv
DPVCG: https://www.w3.org/community/dpvcg/
Github: https://github.com/w3c/dpv/