COEL

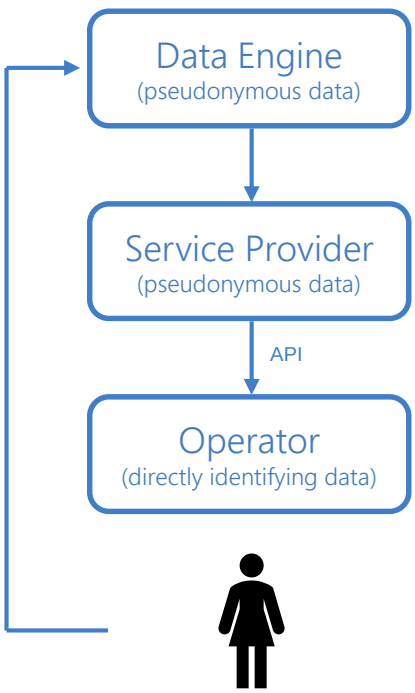
Classification of Everyday Living

COEL is a business-to-business technology specification that makes it possible to treat the distinctive patterns of what we do as humans, and what we are likely to do next, as a standard form of machine-readable data.

The specification allows easy portability for behavioural data. This portability drives innovation, supports compliance, reduces costs and maximises the value of data.

The COEL framework is transparent, open, and international by design. Applications that use it can thus be trusted by individuals, other business partners, interested non-Governmental bodies, and data privacy regulators in a wide range of jurisdictions around the world.

The COEL specification is a fundamentally person-centric IT standard. For this reason, it will be highly relevant to any organisation that wants to collect and/or analyse data about individuals - including their active or passive interactions with digital infrastructure and IoT devices. This type of interaction between humans and infrastructure is required for the provision of personalised services to the individual, public health interventions, research data collection, and for the evaluation of identity and security risks.



The COEL Behavioural Atom

What
- Semantic code from COEL hierarchical taxonomy.

Who
- Pseudonymized identifier for individual.

When
- When the event occurred and the duration.

Where
- Location information : exact or profane.

How
- How the event was observed or recorded.

Consent
- Summary of consent associated with data.

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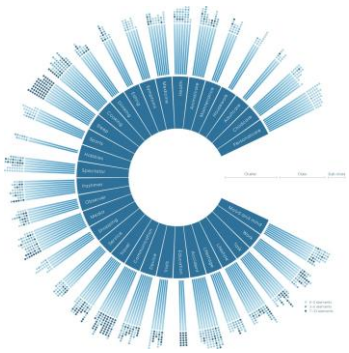
Key features of the specification:

- The COEL roles framework provides a privacy-by-design governance structure for pseudonymous data about people's real-world, observable behaviours. The purpose of both the pseudonymisation-at-source and structured role definitions is to enhance security and privacy.
- The COEL event coding (the Atom) provides a syntactic structure for recording, representing, transmitting and analysing any observable human behavioural event. The resulting data is micro-structured – preserving the insight potential of unstructured data while providing the audit and compliance benefits of structured data. Each Atom is an independent record of an event, facilitating the creation insight from multiple sources with no data transformations required. Every Atom is connected directly to an individual and can contain a summary of the consent they provided for the processing of the data. These Atoms, and the real-word events they encode, become behavioural attributes in identity systems and evidence in intelligence systems.
- The Classification of Everyday Living (COEL) data model is a unique and extensible hierarchical taxonomy of human behaviours. It provides the basis for semantic interoperability across platforms, languages and cultures.
- The interfaces defined in COEL allow platforms to integrate using JSON over HTTPS for all interactions. The specification is agnostic to the data storage construct that is implemented – centralised, personalised or distributed. The delivery of data from IoT devices and connected infrastructures using COEL is as lightweight as possible to ensure bandwidth, connectivity or local processing power are not limitations in implementation or adoption.
- The specification has a number of embodiments in the form of dedicated devices, mobile apps, web interfaces and data warehouses which provide evidence of use. Sample code in the specification is drawn from these real world implementations.



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