Explainer



The Entopy ontology.

A branch of philosophy called ontology examines the nature of existence and the different kinds of entities that exist in the world. Ontology is a term used to explain the organisation and structure of knowledge in a particular domain in the fields of technology and artificial intelligence. Concepts, connections, and attributes of the entities that make up that domain can all be included in this information.

The practice of organising and coordinating information from different sources to increase its usefulness and accessibility is known as intelligent data orchestration. This can involve tasks like data integration, data cleaning, and data governance.

An improved method of managing and using data is possible when ontology and intelligent data orchestration are combined. Understanding the connections and interconnections between various pieces of data is made easier by utilising ontology to organise and arrange the knowledge inside a particular topic. When working with huge and complex data sets, this can be particularly useful.

Ontology is the science that sits behind the digital twin. It is the way that data is structured and organised in a way that allows true reflection of the real world, delivering true meaning from data. It is somewhat of an emerging concept and there are many variations and interpretations, but if delivered correctly, it is enormously powerful.

A worked example – looking at data through 'the lens of the entity':

By looking at the data through the lens of the entity, each datum belongs to some 'thing'. It is attributed. By treating data in this way, you create a natural framework that can organise data in real-time, at a highly granular level. But it goes further...

In the real world, things have relationships with other things. A person has a relationship with another, mother, father, son, or daughter; a person has a relationship with a house; a house with a street; a street with a city. Within relationships, 'things' have defined roles and functions. A house is the home of a person. Or one person is the father of another. Of course, the relationships can change over time, but whilst they exist, they create links between real-world things, and critically, they create meaning. It is this meaning that helps to uncover insights hidden in large datasets in real time.

The Entopy ontology:

Ontologies are everywhere. Every e-commerce website will have an ontology of sorts, helping to categories products and drive order and payment systems. But ontologies are not all the same. In most cases, ontologies are rigid and hard to change. This leads to lengthy change request, difficulty changing systems or maintaining interoperability with partners.

Entopy's ontology is the secret sauce, creating huge flexibility, and enabling multidimensional entity relationships to be captured across simultaneous contexts, changing in relation to both space and time. Entopy uses a 'top-level' framework which allows greater flexibility within the ontology leveraging the concept of abstraction.

It's Entopy ontology that generates the highly effective insights that the platform delivers and allows the forward flexibility to introduce new data, introduce new models, and ultimately, generate new insights. It also supports iterative deployment, enabling us to get to value quickly whilst maintaining absolute flexibility to introduce new data and models as the environment or requirements change.