**What is Ontology?**

Ontology shows properties and relations between a set of concepts and categories within a  subject area or domain. It is a branch of linguistics called [semantics, the study of meaning](https://www.expert.ai/blog/introduction-to-semantics/?&). With ontology, a machine can accurately interpret the meaning of the word “diamond” in relation to a baseball player, jeweler, or card suit. It can also help interpret the word “chicken” as either food or an animal or differentiate between “bank” as a place of business or land alongside a river or lake.

Ontologies provide a framework for knowledge to be represented and shared across a domain. They organize concepts to show how they relate within a domain. They are graph-based structures that describe a binary relationship between two concepts or entities. Entities, relations and roles are all components of ontology.

**How Ontology Impacts NLU**

While NLU gives NLP programs the ability to learn and understand language, ontology disambiguates language by defining word relationships. Ontologies are instrumental in semantic analysis for understanding text so machines can understand language like humans do.

Ontologies provide precise understanding of natural language so businesses can take the next step in their NLU journey. They make language processing and analysis more efficient and accurate so AI technologies can apply advanced linguistic capabilities. The benefits of ontology on NLU include:

* Improved entity analysis
* Increased use, reuse, and maintainability of domain information
* Domain knowledge sharing

**Scaling Ontology with AI**

As NLU demands increase, creating ontologies at scale becomes a challenge. Manual buildouts of ontologies are time-consuming and error prone. However, the most robust AI platforms can help you create ontologies at scale by extracting domain terms from text and identifying relationships between them. This enables you to leverage your experts’ domain knowledge continuously without compromising their time.