
Sustainability of Ontologies (Track D) 2021 Ontology Summit

An overview by Leia Dickerson & Mark Underwood
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Questions

This track seeks to address **four main questions**.

- **Why do organizations decide to generate ontologies?**
Different motivations push groups to ontology development.
- **With what knowledge structures do organizations choose to harmonize their ontologies?** What ontologies, vocabularies, and information sources are used?
- **What the most effective methods for ontology maintenance?**
Maintenance begins when development ceases.
- **Which strategies are most successful in sustaining ontology use?**
Encouraging long-term use of ontologies can be challenging. What works best?
 - ◆ Elements also in Track A

The 3 Pillars of Sustainability

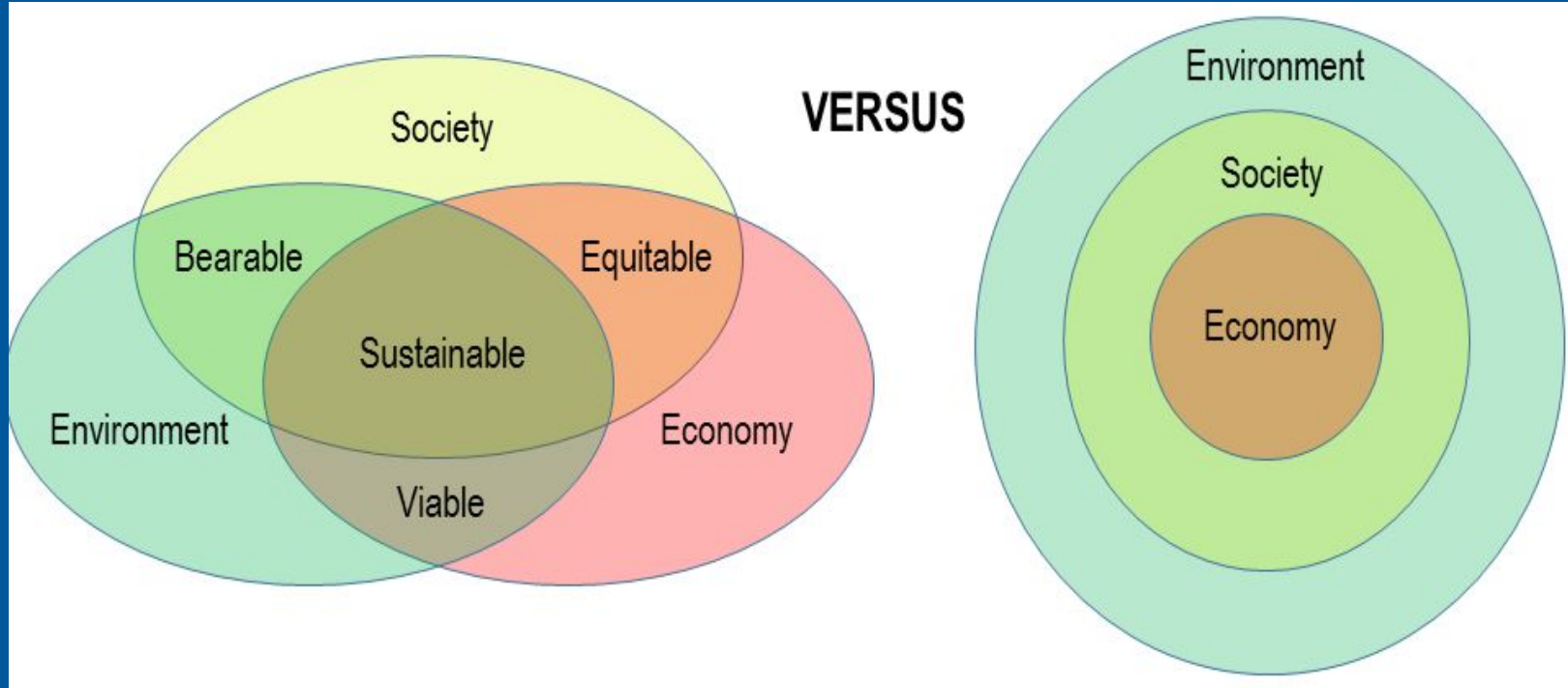


Image from Penn State's College of Earth and Mineral Sciences' OER Initiative, adapted from Gidding et al. (2002)

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Examples of Sustainability Issues

→ **Economic Viability (Supported)**

- ◆ Sources of support: commercial, government, nonprofit
- ◆ Engagement with the supported communities

→ **Social Equity (Unbiased)**

- ◆ Fair and impartial
- ◆ Engagement with other communities
- ◆ Appropriate documentation and harmonization
- ◆ Standards

→ **Environmental Protection (Maintainability)**

- ◆ Responsiveness to community needs for change
- ◆ Repositories, version control, and related issues

Organization Track Dates

**This track will
have two
dedicated
sessions.**

14 April 2021

Speaker(s) to be
determined

12 May 2021

Speaker(s) to be
determined

Speaker Inquiries

Presentations are being sought from various sectors which have embraced ontologies.

→ **Standards Development & Industry Specific Organizations**

- ◆ ISO (16739 Building Information Ontology, ISO 15926 Oil and Gas Ontology ISO 21127 for cultural heritage information)
- ◆ IEEE Ontological Standard for Ethically Driven Robotics & Automation Sys (draft)
- ◆ OMG Knowledge Discovery Metamodel
- ◆ EDM Council Financial Business Ontology (FIBO)
- ◆ Cyber-investigation Analysis Standard Expression (CASE)
- ◆ MITRE Ebiquty Unified Cybersecurity Ontology (UCO)
- ◆ DMTF Common Information Model

→ **Government Agencies**

- ◆ NIST Vulnerability Ontology (draft)
- ◆ UK Parliament Ontologies
- ◆ U.S. Government Accountability Office

→ **Commercial Entities**

- ◆ AWS Healthlake

Thank you.
