Five Minutes on a
Linked Open Data TRIZ Ontology
TRIZ Future Conference 2021

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Links to More Detailed Explanations

- ▶ H.-G. Gräbe. Towards a Linked Open Data TRIZ Ontology. LIFIS Online, 13.08.2021. http://dx.doi.org/10.14625/graebe_20210813

- ▶ H.-G. Gräbe. About the WUMM modelling concepts of a TRIZ ontology. Manuscript, April 2021. https://wumm-project.github.io/Texts/WOP-Basics.pdf

- ▶ https://wumm-project.github.io/Ontology

- ▶ https://github.com/wumm-project/RDFData, subdirectory Ontologies

TRIZ Glossary Project

- Altshuller Web Site. Basic TRIZ Terms.
  `https://www.altshuller.ru/thesaur/thesaur.asp`
- V. Souchkov (2018). Glossary of TRIZ and TRIZ-related terms, version 1.2.
- N.N. Matvienko (1991). TRIZ Terms: A Problem Book (in Russian).
- VDI-Norm 4521 (2016). Inventive Problem Solving with TRIZ – Basics and Terminology (in German and English).
- K. Lippert, R. Cloutier (2019). TRIZ for Digital Systems Engineering: New Characteristics and Principles Redefined. `https://doi.org/10.3390/systems7030039`.

Towards a TRIZ Body of Knowledge

- S. Litvin, V. Petrov, M. Rubin, M. (2007). TRIZ Body of Knowledge (in Russian).
  `https://triz-summit.ru/en/203941`.
- S. Litvin, V. Petrov, M. Rubin, V. Fey (2012). TRIZ Body of Knowledge (in English). `https://matriz.org`

The TRIZ Developer Summit Ontology Project

The project was initiated in 2019 by a group around A. Kuryan and M. Rubin and develops since then. The goal is to capture the entire TRIZ conceptual system together with its relationships.

- `https://triz-summit.ru/onto_triz/` (in Russian)
- `https://wumm-project.github.io/TOP` (some links and comments on the project in English collected by WUMM)

TRIZ Ontology Meets Semantic Web

- ▶ Modelling of parts of OTSM TRIZ based on OWL in Strasbourg. See `https://wumm-project.github.io/Ontology` for a list of relevant publications.

- ▶ The TRIZ Developer Summit Ontology Project uses the OWL based ontology platform OSA for collaborative (project internal) editing.
  Main results are publicly available as web texts at their web site but the primary data is not available in digital form.
  No public interface to an RDF Store, a SPARQL Endpoint or even a public system of URIs is available.

The WUMM TRIZ Ontology Project

Hence we started within WUMM at an early stage a project to accompany these developments and to re-model parts of them in our own RDF based format using well established Linked Open Data ontologies as FOAF, SKOS and ORG.

The **objective** is to use modern semantic technologies to collect basic TRIZ concepts and their definitions given in different sources and languages and to make them available as Linked Open Data.

Further goal: Provide metadata on the widely scattered social activities in the TRIZ community in one place. This is currently done mainly for TRIZ conferences and papers presented there.

The WUMM Open Data Infrastructure

- ▶ Github organisational account
  `https://github.com/wumm-project` with several project repositories
- ▶ Github pages `https://wumm-project.github.io/`
- ▶ Demo website `http://wumm.uni-leipzig.de`
- ▶ RDF store `http://wumm.uni-leipzig.de/rdf`
- ▶ SPARQL Endpoint
  `http://wumm.uni-leipzig.de:8891/sparql`