https://docs.google.com/document/d/18ycI4SzuZywjTAVaLyk-00U4zTfX48y mFuaTqtpAzGw/edit#heading=h.k621biyoh9tuAttendees

- Kris McGlinn [TCD-Adapt]
- Georg Ferdinand Schneider [Fraunhofer IBP]
- Martin Hepp [Uni BW Munich]
- Markus Rickert, Alexander Perzylo, Anahita Nafissi [fortiss]
- Emilio Sanfilippo, ISTC-CNR Laboratory for Applied Ontology
- Walter Terkaj [ITIA-CNR]
- Aaron Costin, University of Florida
- Maxime Lefrançois, Mines Saint-Etienne
- Elke Sauter, Twente University
- Gonçal Costa [LaSalle University]

Excused

- Pieter Pauwels [Ghent University]

Date and time

- 05/10/2017
- 17:00 CEST

Agenda

1. Presentation by Prof. Martin Hepp about the GoodRelations ontology
2. Open discussion - integration with product ontology / ontologies

Minutes

1. Presentation by Prof. Martin Hepp about the GoodRelations ontology

Martin Hepp: Research area - categorisation and classification of data. Background e-commerce.
One outcome - good relations ontology: 28 classes, 15 years effort to develop and maintain, OWL 1.
Used by schema.org. Google, bing, yahoo, yandex, etc. this should be the data model for all e-commerce related information at web scale.
Covers - Places where you can get goods/services/ product features
Does not include process related information
First release 2008
One of the few(only) ontologies that has become a commercial success
Schema.org is quite light weight, goodrelations is more focused, but deeper in content.
Originally 5 classes overlapped. Agreed to integrate with schema.org fully.
Basic structure of offers: Agent-Promise-Object principle (Location may also be involved)

Includes "transfer of rights", i.e. the object has a "bundle of rights" associated with it.
Core Conceptual Model:

      Someone (gr:BusinessEntity)

          person/group, corporation, state/country

      Something (gr:ProductOrService)

          Any object or happening on which rights can be obtained or which can be
effected for the utility of someone

          Camcorder, haircut, transportation service, apple, planet, etc.

          Range of objects is not constrained by the conceptual model

      Promise (gr:Offering)

          promise to transfer some rights for a certain compensation

          "I sell the moon for good karma", "Soho apartment for rent", "haircut for children"

          gr:BusinessFunction for bundle of rights
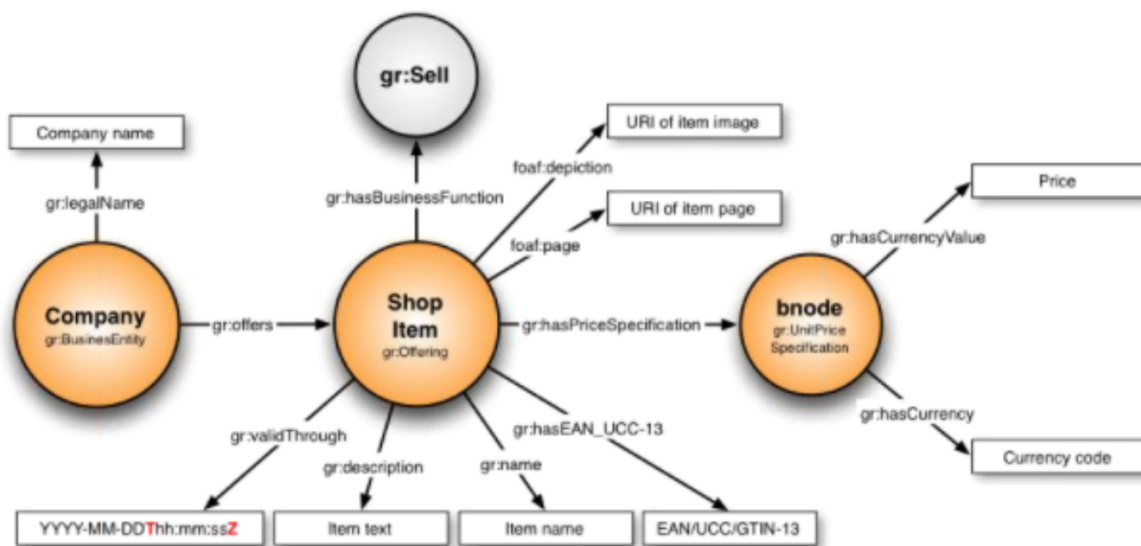
          gr:PriceSpecification for compensation

      Location (gr:Location) from which the object or happening is available

          Shop, bus-stop, resort, airport, ship (geolocation may change) etc.

          Distinct from legal agent

http://purl.org/goodrelations/

Distinction between product model and products
Product Modes: "Datasheet"

Intangible object

e.g. "Ferdinand Porsche created the VW Beetle"

Products: What you buy, possess and use

(Mostly) tangible object that can be owned and used

e.g. "My VW Beetle has a mileage of 42,000

Two parts of GoodRelations

Model for commercial information

Price, Location, Opening Hours, Payment, etc.
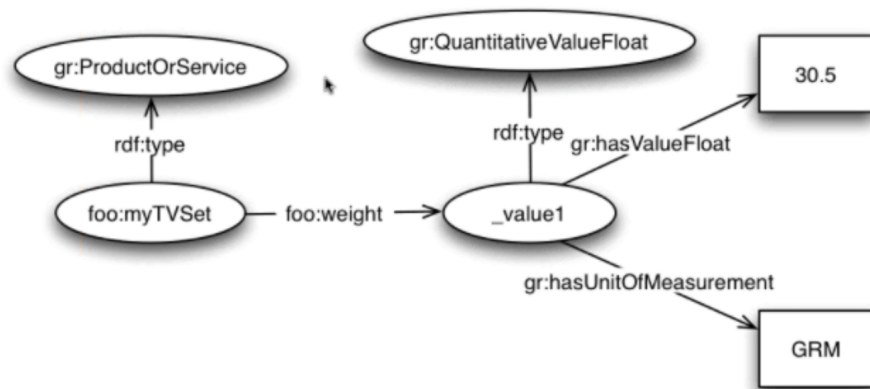
Meta-model for Product Features

Product Properties

Gr:qualitative ProductOrServiceProperty

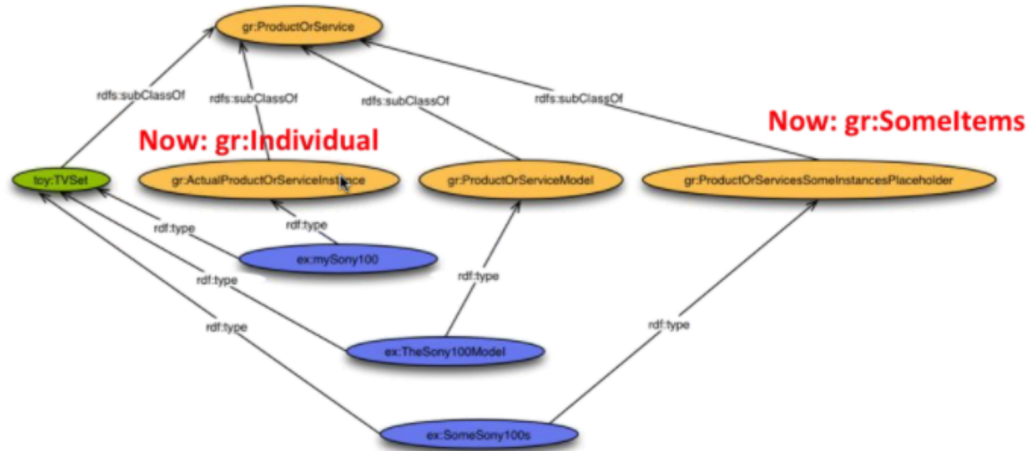gr: quantitative

Quantitative Values in GoodRelations

Gr:datatype

Units of measure: UN/CEFACT

Using GoodRelations with Product Ontologies

1 - Specify the Product Type

Instances, Placeholders, Models

> 2 - Specify Product Features
>> gr:color, gr:depth, gr:height, gr:weight, gr:width
>> Gr:

Available Product Ontologies:

> www.productontology.org
> PCS2OWL
> FreeClass (Building Materials)
> Opdm

Georg: What would you suggest when developing product ontologies, focus on schema.org, or goodrelations?

Martin: No difference really, you can use either. The question is, are you operating in LD or rdfs environment? To date, there are ways to derive rdfs from schema.org, but it uses a proprietary meta-model

Use meta-model for goodrelations when developing product models

Mads: You make a distinction between the product and the product model. What I find is that we build a requirements document for a product model to begin.

Martin: Product model may be too narrow a term. When you are talking about specifications, you model a prototype that has certain characteristics, you can use goodrelations to model an abstract product or service model.

You could say "I need a lawnmower than needs less than 2 amperes" or "I need a certain oven with certain energy usage" and with the product feature relation, you can model intervals. So we can model an "ideal" of a product in goodrelations.

Mads: Yes, and we do this as designers. Stakeholders specify their requirements for a particular component.

Martin: Once this has an identity via its URI, and different requirements (cost, safety, energy efficiency, etc.) can be associated to this. May be done in a quad space with contradicting graphs.

2. Open discussion - integration with product ontology / ontologies

1. Open issue regarding the alignment with BOT and PRODUCT and GoodRelations:

   Georg: about the definitions for the bot:Element and product:Product, we should consider looking at the GoodRelations definition at
   http://wiki.goodrelations-vocabulary.org/Documentation/Product_or_Service. GoodRelations distinguishes between three kinds of products:

   1. *A real product like my laptop, my car with this VIN and mileage, a particular item on an eBay auction -* ***gr:Individual****.*
   2. *A product model, i.e. a datasheet, like "Nikon T90", "iPod Nano 16 GB", or similar. -* ***gr:ProductOrServiceModel****.*
   3. *Then we have a third case, in which the entities exposed on the Web are neither products nor product models, but instead "black boxes" of products. -* ***gr:SomeItems****.*

   These three subtypes are powerful, but it is of course also allowed to use the common abstraction gr:ProductOrService.

   Pieter: In that case, we should probably opt to align bot:Element and product:Product to a number of these subClasses. Likely, bot:Element should then align with gr:Individual, while product:Product should align with **gr:ProductOrServiceModel**. => To be checked with Prof. Martin Hepp [call 5th October]

Previous minutes

https://docs.google.com/document/d/14PVSFSXDnoJ3c9LN9UVNQpNiJs1nAhC03uSdZ4jVvjA/edit#

Next Calls

Monday 16 October, 5-6PM CEST

Monday 30 October, 5-6PM CEST

Monday 6 November - Friday 10 November: TPAC meeting