

eCl@ss Data on the WWW: Visibility for your Business The GoodRelations Vocabulary

<http://purl.org/goodrelations/>

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2000 - 2009



01.04.2009

Division of Labor and Specialization Gains



Adam Smith:
*The Wealth of
Nations*, 1776

Where are we heading to?

Germany, 2020

Growth in Specificity!

Reason # 1: Division of Labor

Growth in Specificity!

Reason # 2: Technical Advancement and Innovation

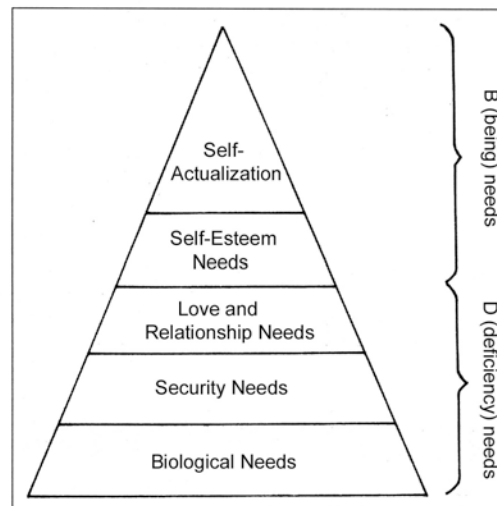
Growth in Specificity!

Reason # 3: Logistics

Temporal Constraints etc.

Growth in Specificity!

Reason # 4: Wealth



Abraham H. Maslow (1908-1970)
A Theory of Human Motivation (1943)

Examples



01.04.2009

Examples



Examples



MERCK'S WARENLEXIKON

für Handel, Industrie und Gewerbe

Beschreibung der im Handel vorkommenden Natur- und Kunst-
erzeugnisse unter besonderer Berücksichtigung der chemisch-
technischen und anderer Fabrikate, der Drogen- und Farbwaren, der
Kolonialwaren, der Landesprodukte, der Material- und Mineralwaren

herausgegeben von

Prof. Dr. A. Beythien, und Ernst Dreßler,
Direktor des chemischen Untersuchungsamtes Drogist und gerichtlicher Sachverständiger
der Stadt Dresden für das Landgericht u. Amtsgericht Dresden

unter Mitwirkung von

Max Arnold, Verbandstoff-Fabrik-Chemnitz, Privatdozent Dr. Paul Bohrisch-Dresden,
Heinrich Ernemann A.-G.-Dresden, Dr. Hans Hempel, Stellvertreter des Direktors am
Städtischen Untersuchungsamt-Dresden, Photochemiker und Fabrikbesitzer Richard Jahr-
Dresden, Schimmel & Co., Fabrik ätherischer Öle und Essenzen-Militz b, Leipzig, Vereinigte
Fabriken photographischer Papiere-Dresden

1920: ca. 5,000 Types of Goods

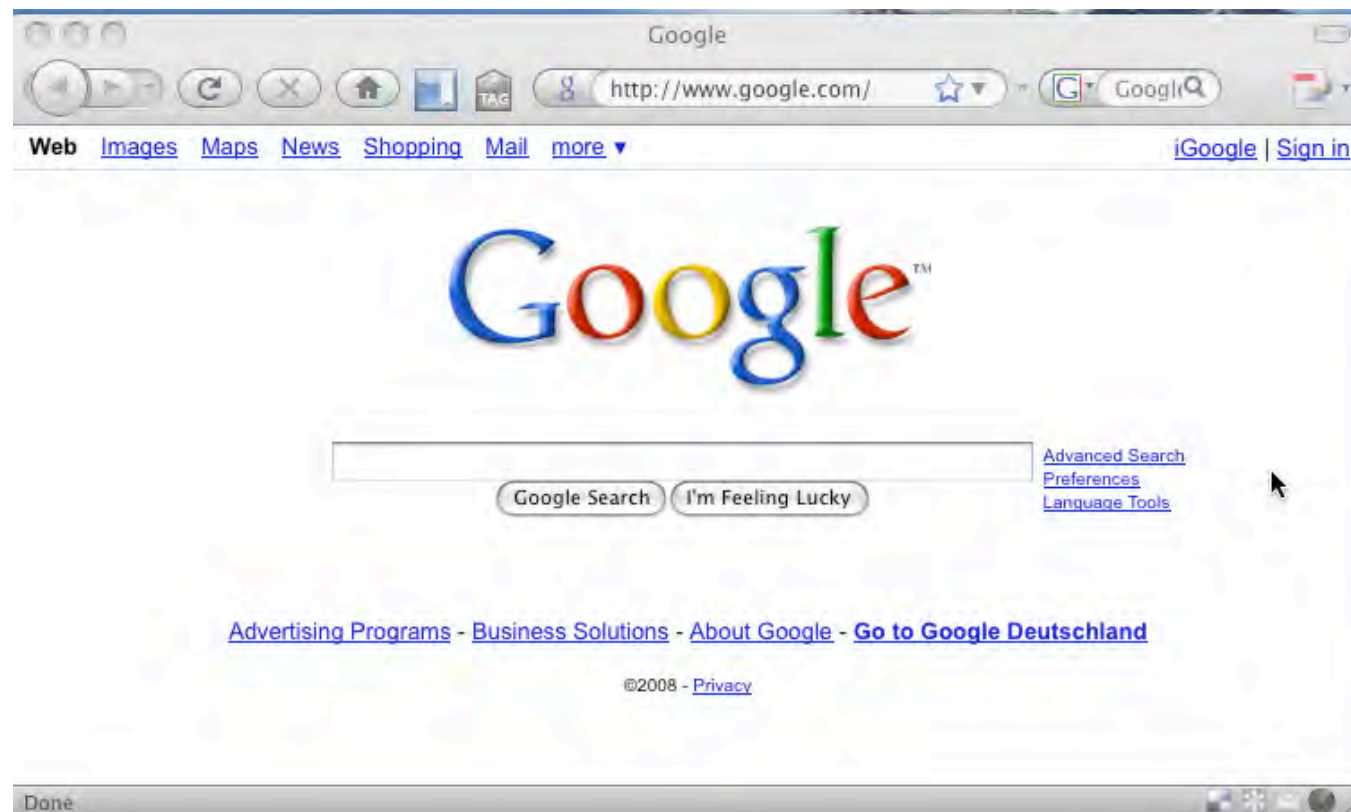


Search for Suppliers, ca. 1992

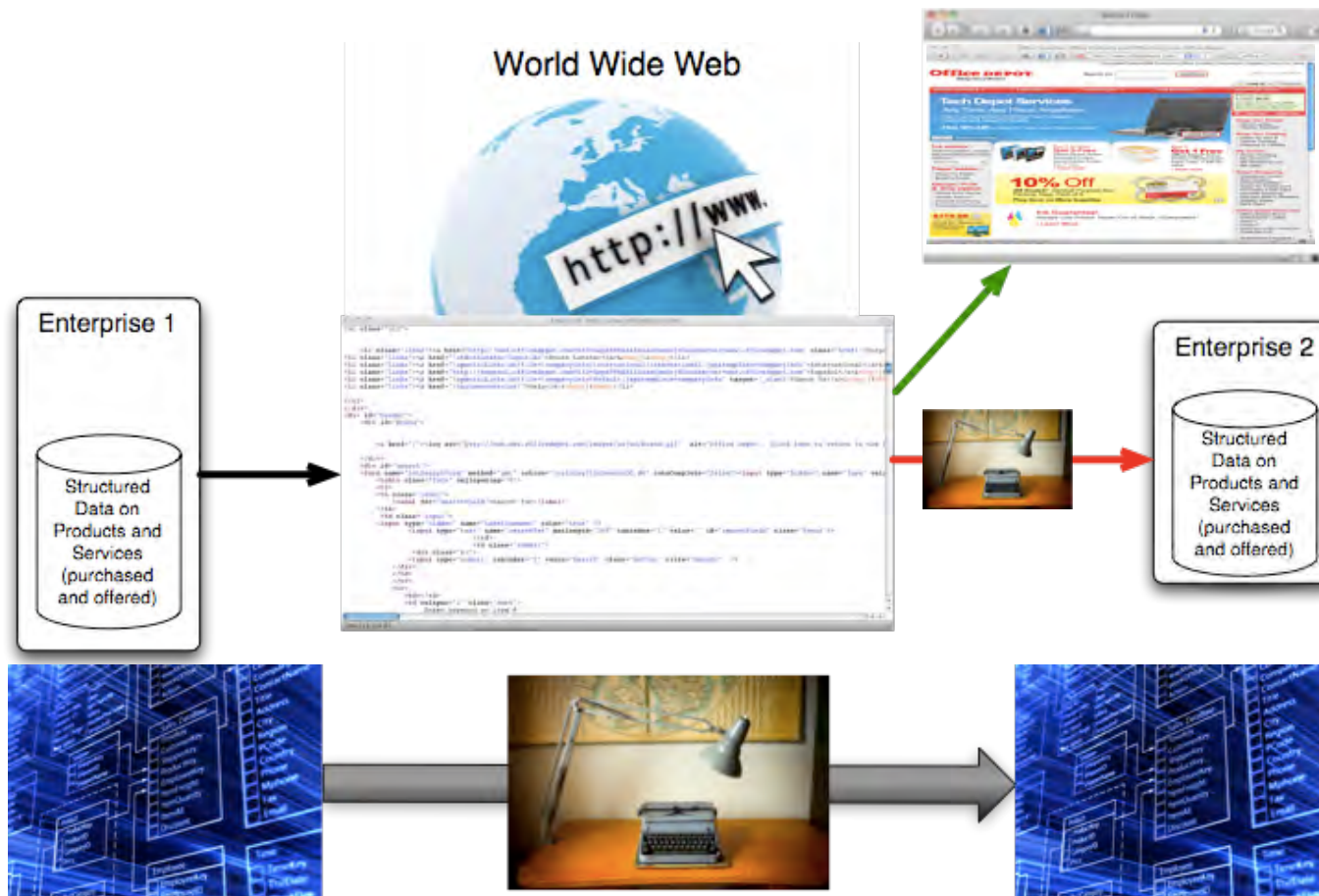


01.04.2009

Search for Suppliers, 2009



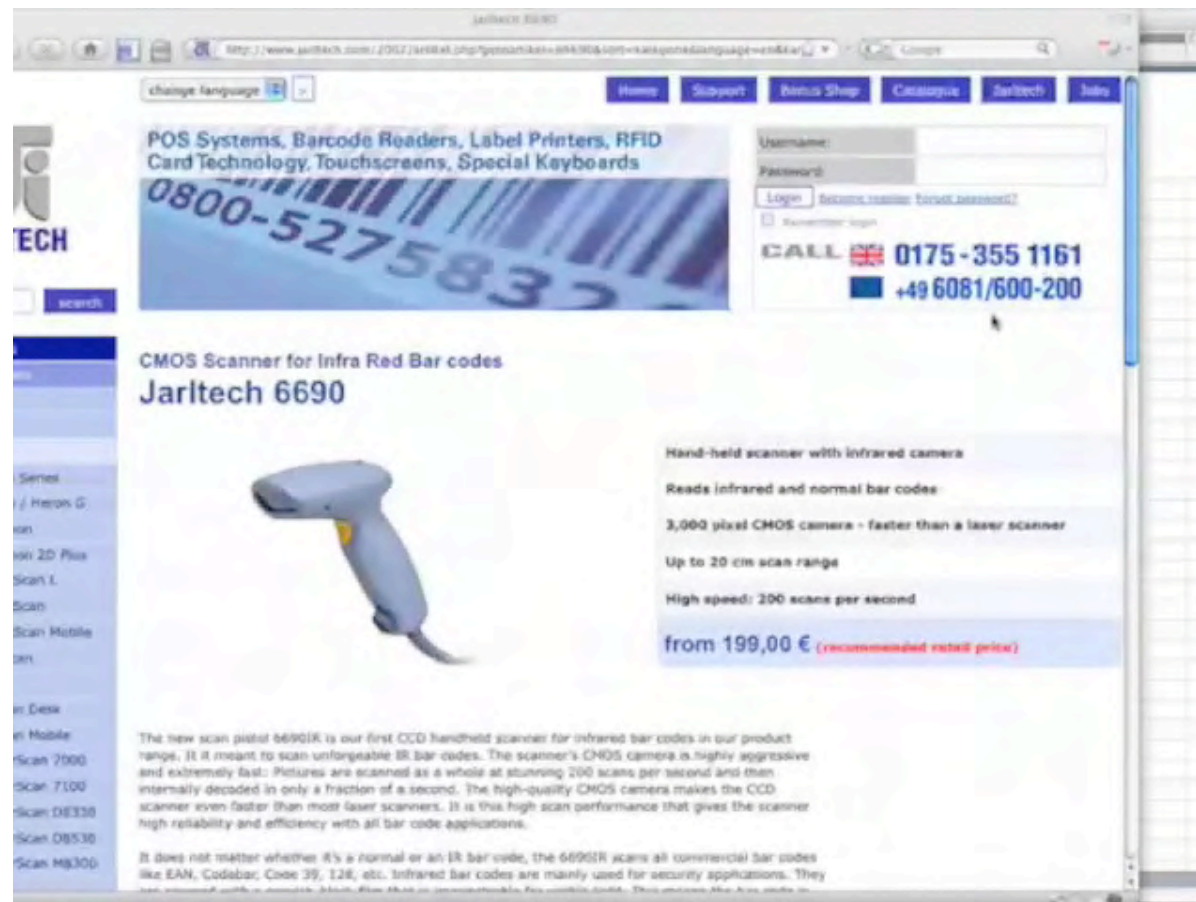
E-Commerce on the Web



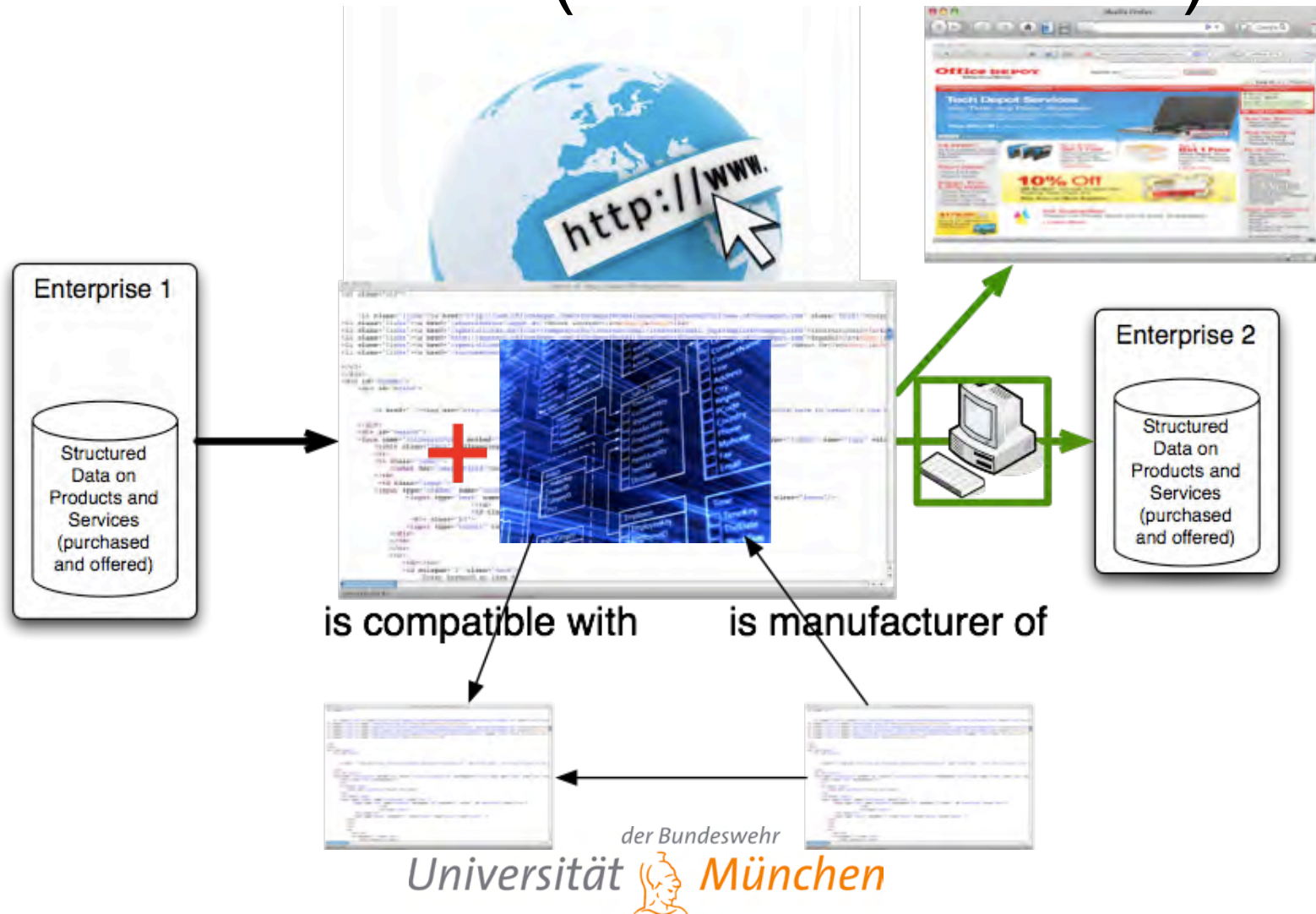
The Web as a Bottleneck for Product Search

- Who sells solar panels with at least 12 A output?
- Who can repair my Sony TV set?
- Who sells Volkswagen cars?
- etc.

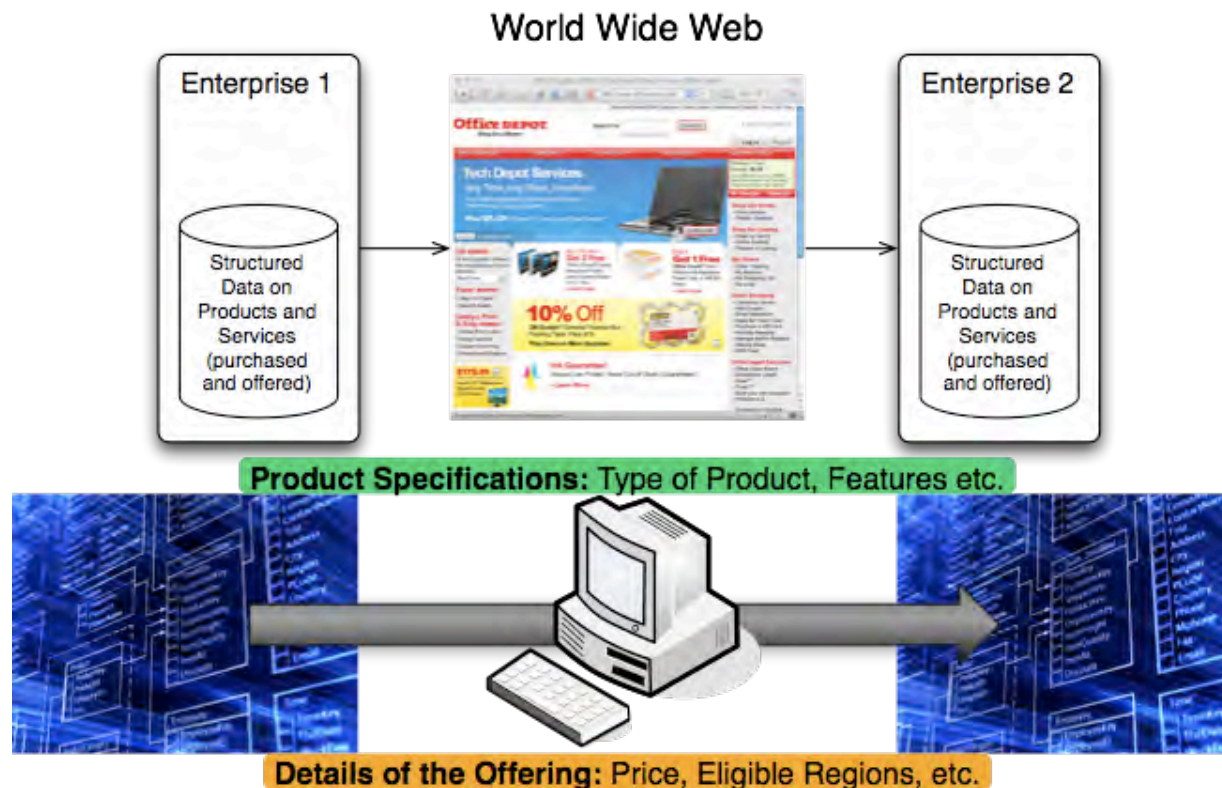
The Web as a Bottleneck for Sharing Product Data



Web of Data (“Semantic Web”)



E-Commerce on the Web of Data (“Semantic Web”)



Why Should I Bother?

- **Web Shops:** Better visibility in latest generation of search engines (e.g. Yahoo)
 - **Same holds for any business that has a Web page,** from A as in Amusement Park to Z as in Zoo.
- **Manufacturers:** Allow your retailers to reuse product feature data with minimal overhead at both ends.
- **Software Developers:** Help your customers to use and generate Semantic Web data. It's easy!

Others Do Care: Pick-up in Industry

- Smart Information Systems
- ebSemantics
- Yahoo! SearchMonkey
- Virtuose Sponger Catridges for Amazon, eBay, and others expected
- Major German mail order companies
- etc.

smart *information* systems



YAHOO!



SearchMonkey

The Web of Data for E-Commerce and E-Procurement

The GoodRelations Vocabulary

- A universal and **free Web vocabulary for** adding **product and offering data** to your Web pages.
- Compatible with all relevant W3C standards and recommendations
 - RDF
 - OWL



<http://purl.org/goodrelations/>

The GoodRelations Vocabulary

- **Permanent,
royalty-free access**
for commercial and
non-commercial use.



<http://purl.org/goodrelations/>

Required Vocabularies

- An vocabulary for **product types and features**
 - by function, usage, or nature
- An vocabulary **for offer specifications**
- An offer is basically a relation between
 - an agent,
 - a set of objects,
 - a set of property rights,
 - an audience, and
 - a set of terms and conditions.



eClassOWL and GoodRelations

eClass^{OWL}

The Products and Services Ontology

- eClassOWL

foo:myTVSet instanceOf eclassowl:TVSet



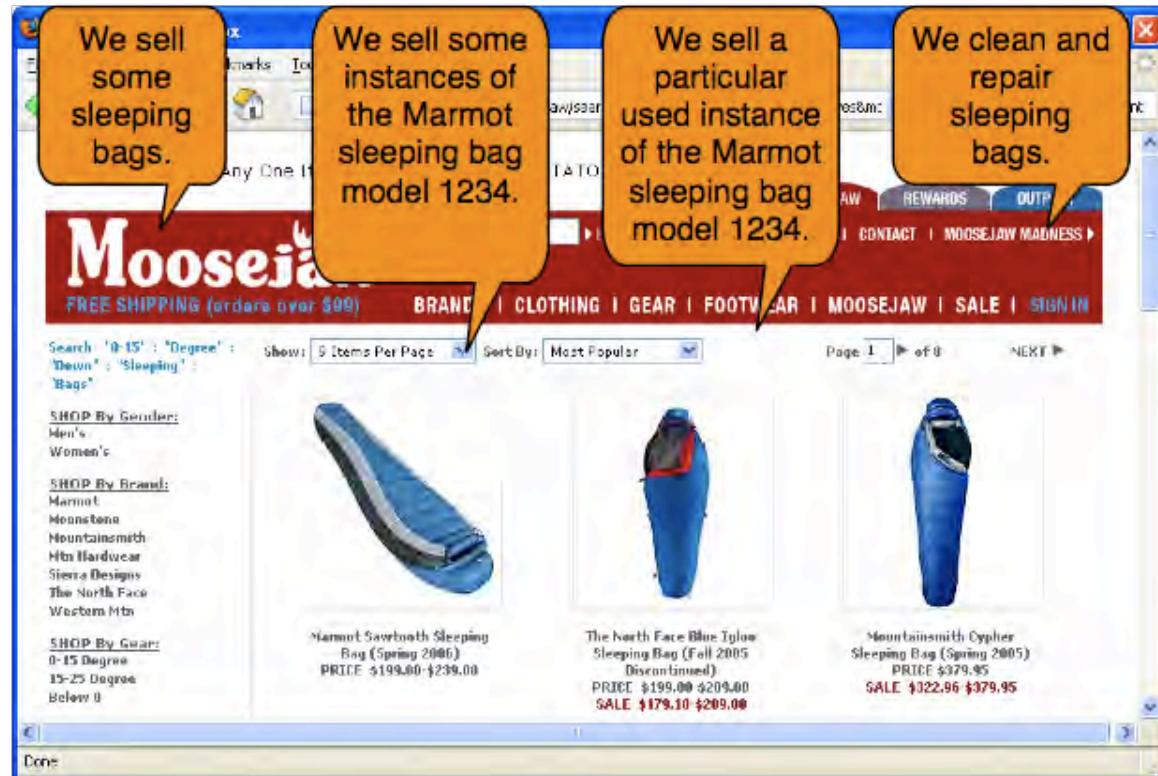
- GoodRelations

foo: MillerInc goodrelations:offersToSell

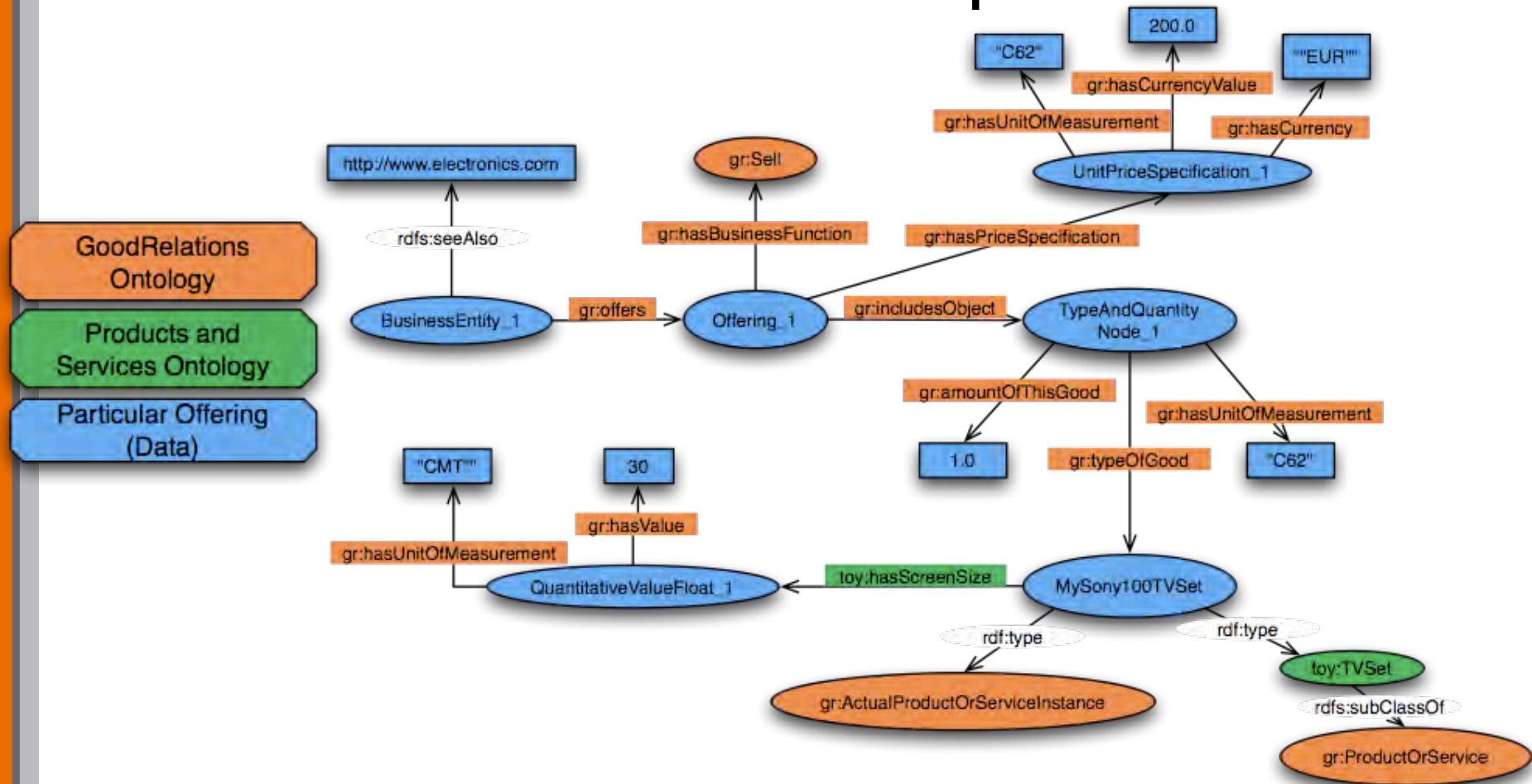
foo:myTVSet

Use Cases

- Commodity offers
- Services offers
- Product model data interchange



Minimal Example




What Should I Do?

- **Web Shops:** Create a GoodRelations data dump of your range of offers (rather simple)
- **Vendors of Web Shop Software:** Create GoodRelations import and export interfaces (we can help you with that)
- **Every Business:** Ask your webmaster to create at least a basic description of your range of products or services
- **Entrepreneurs:** Invent new business models based on GoodRelations data

GoodRelations Annotator

GoodRelations Annotator



GoodRelations Annotator: Describe your business on the Web of Data

With this on-line service, you can create a machine-readable description of your business and your range of products using the [GoodRelations vocabulary for e-commerce](#). Such meta-data will be considered by leading-edge search engines and recommender systems.

Step 1: Describe your business

Step 1a: Describe your company

URI of the main Web page:	<input type="text" value="http://"/>	mandatory
Legal name of your business:	<input type="text"/>	mandatory
Street Address:	<input type="text"/>	mandatory
Post code:	<input type="text"/>	mandatory
City:	<input type="text"/>	mandatory
Country:	<input type="text" value="Germany"/>	
Phone Number:	<input type="text"/>	mandatory
Sales e-mail:	<input type="text"/>	
Technical contact e-mail:	<input type="text"/>	mandatory

Important: This will not be included in the public dataset but is useful for us to contact you in case of problems with your description.

Step 1b: Describe your shop or point of sale

☐ The contact details of our point of sale are the same as above.

Name of your branch or office:	<input type="text"/>	(Example: Miller Electronics NYC)
Street Address:	<input type="text"/>	(Example: 1234 GoodRelations Avenue)
Post code:	<input type="text"/>	(Example: A-6020)
City:	<input type="text"/>	(Example: Innsbruck)
Country:	<input type="text" value="Germany"/>	
Phone Number:	<input type="text"/>	(Example: +43-512-507-6365) include international phone prefix!

eClass Web Search Engine

The screenshot displays the eClass Web Search Engine interface. At the top, there is a banner with the text 'Chair of GENERAL MANAGEMENT and E-BUSINESS' and 'E-BUSINESS+ WEB SCIENCE RESEARCH GROUP'. Below this, the main header features the eClass logo and the text 'INTERNATIONALER STANDARD ZUR KLASSIFIZIERUNG UND BESCHREIBUNG VON PRODUKTEN UND DIENSTLEISTUNGEN'. The navigation bar includes links: 'Home', 'Was ist eClass?', 'eClass für den Mittelstand', 'Dienstleistungen', 'eClass-Praxis', 'Info-Material', and 'Organisation'. The left sidebar contains a 'Direktzugriff' section with links to 'Suche in eClass', 'DownloadPortal', 'ServicePortal', 'Mitglieder', 'Veranstaltungen', and 'Forum'. Below this is a 'Navigator' section with a search icon and a language dropdown set to 'Deutsch'. The main content area shows a search result for '19-01-02-90 Notebook (nicht klassifiziert)'. The search filters include 'eClass 6.0.1', a language dropdown set to 'Deutsch', and a 'Klassifikation' dropdown. The search results section shows 'Treffer: 1' and a list of classification codes and their descriptions. A red button labeled 'Click here for suppliers' is overlaid on the page.

Home » Suche in eClass
Suche nach Klassen, Merkmalen und Werten

eClass 6.0.1

Klassifikation

Treffer: 1

Klassifikation: 19-01-02-90 [ACL457001]
Bevorzugte Benennung: Notebook (nicht klassifiziert)
Definition:
Schlagworte: Laptop, Mini Notebook, Sub-/Ultra-Portable-Notebooks, Sub-Notebook, Subnotebook

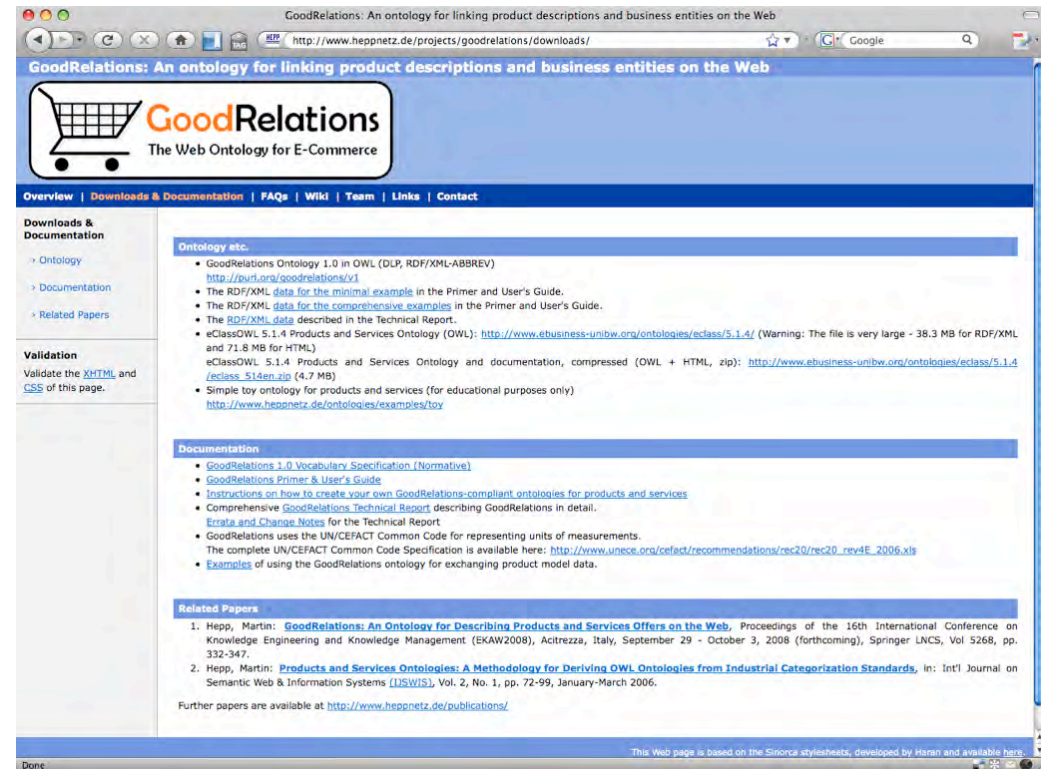
Merkmaaleiste:

- BAE156001 - Abmessungen
- BAE830001 - Anzeigeformat
- BAF502002 - Art der Datenübertragung
- BAF458001 - Art der integrierten Peripheriegeräte
- BAE711001 - Art des Anschlusses
- BAF141001 - Art des Eingabeperipheriegerätes
- BAF580001 - Art des Leistungsmerkmals
- BAE636001 - Art des Prozessors
- BAA261001 - Art des Supports
- BAA316003 - Artikelbezeichnung
- BAE862002 - Audioausgang vorhanden
- BAE864002 - Audioeingang vorhanden
- BAE604002 - Betriebssystem vorhanden
- BAF046002 - CD und DVD vorhanden
- BAE688001 - Datenübertragungsrate

Click here for suppliers

Additional Information

- Web Page
 - Ontology
 - Language Reference
 - Primer
 - Recipes
 - Wiki



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Contact us!

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