SEMANTIC WEB FOR E-COMMERCE

E-commerce is one of the main reasons for the tremendous growth of the Internet, if not the most crucial one. Thus in consequence**, the development of Web-based business can be deemed one of the driving forces behind the remarkable growth of the global economy of the recent decades**. It has opened new areas of financial activity unimaginable before, and undermined many of our presuppositions as to what, for instance, retail could consist in. Virtually any business activity conceivable is now conducted online, and for the vast majority of enterprises, ignoring online presence is simply not an option.

It is an area in which the Semantic Web finds one of its most spectacular applications. This is due to the enormous range and number of products and services being offered online, or by means of online mechanisms. In the face of this growth, traditional mechanisms of structuring of data are obsolescent – they are simply not powerful enough.

Semantic categorization of products and services offers an entirely new approach, one that is far more transparent, visible and accessible to clients and businesses alike. This is of particular importance when one considers the crucial role that search engines play today. Visibility is often the determining factor as to whether a business is successful or not, and in the enormous tangle of information contained in search engines, it is very difficult to reach potential clients.

The most important part of a business website consists in the offer. As in other areas of online presence, traditional, document-based organization of the Web involves chaotic and purely arbitrary models of sites, from which it is often difficult to distinguish structure from content (i.e. offer) for human users, let alone search engine mechanisms. A huge portion of search results pertains to aspects irrelevant to a company's offer. And that is just a tip of the iceberg, as there is even less space for discovery of product details such as pricing, features, availability etc – the most important aspects a customer is looking for.

The semantic approach enables companies to come forth with their products and services directly to the client. Using semantic markup, it is possible to describe one's offer in a clear and transparent manner, highlighting features which are crucial to the decision made by the potential customer. Each product is supplied with a systematic set of properties that otherwise would be completely invisible without further investigation, or difficult to find at best. And, keeping in mind the enormous scale of the Internet, this is of vital importance.

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No longer is a product's visibility dependent on strings of characters, it obtains its online presence as a **real, user accessible object**, with dimensions, descriptions and prices.

GoodRelations

One of the most prominent e-commerce ontologies available is **GoodRelations**. Since November 2012, GoodRelations has been integrated as a part of the schema.org vocabulary, designed by **Bing, Google, Yandex** and **Yahoo!** as a markup language proposal for HTML sites. This enables search engines to better interpret the meaning of the content present on a site.

With a single vocabulary containing many kinds of specific information (features, pricing, availability, delivery options, opening hours and so on), specific products become present in various sources independently. **Since GoodRelations is recognized by Google, this information appears directly among its search results**, becoming far more visible to potential customers than ever before. Moreover, being compatible with major standards in e-commerce technologies, **GoodRelations is extremely easy to adopt in a business.**

RESOURCES

Read about how BestBuy implemented semantic mechanisms and observed a **30% increase in traffic in their pages:** http://chiefmartec.com/2009/12/best-buy-jump-starts-data-web-marketing/

GoodRelations official website: http://www.heppnetz.de/projects/goodrelations/

GoodRelations wiki with comprehensive information pertaining to the ontology and its adoption: http://wiki.goodrelations-vocabulary.org/Documentation

Article in Computer World: "The semantic Web gets down to business": http://www.computerworld.com/s/article/9209118/The_semantic_Web_gets_down_to_business