

of web search by briefly describing Sig.ma (section 6.6), OpenCalais (section 6.7), and Schema.org (section 6.8).

6.1 GoodRelations

6.1.1 Background

e-commerce, and in particular Business-to-Consumer (B2C) e-commerce, has been one of the main drivers behind the rapid adoption of the World Wide Web in everyday live. It is now commonplace to see URLs listed on storefronts and goods vehicles. Taking the UK as an example, the B2C market has grown from £87 million in April 2000 to £68.4 billion by the end of 2009, a thousand-fold increase over a single decade.

This large e-commerce marketplace is suffering from all the deficits of the traditional web: e-commerce websites are typically generated from structured information systems, listing price, availability, type of product, delivery options, etc., but by the time this information reaches the company's web pages, it has been turned into HTML and all machine-interpretable structure has disappeared, with the result that machines can no longer distinguish a price from a product-code. Search engines suffer from this inability to interpret the e-commerce pages that they try to crawl and index, and are unable to correctly distinguish product-types or to produce meaningful groupings of products.

GoodRelations¹ is an OWL-compliant ontology that describes the domain of electronic commerce. It can be used to express an offering of a product, to specify a price, to describe a business, and the like. The RDFa syntax for GoodRelations allows this information to be embedded into existing web pages so that they can be processed by other computers. The primary benefit of GoodRelations and the main driver behind its rapidly increasing adoption is how it improves search. Adding GoodRelations to web

¹<http://www.heppnetz.de/projects/goodrelations/>.