Policy Awareness in the World of Virtual Goods

The PhD Colloquium of the Virtual Goods Workshop 2012

`http://virtualgoods.org/2012/`

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Preface by Rüdiger Grimm and Jean-Noël Colin

This is the 10th international workshop for technical, economic, and legal aspects of business models for virtual goods incorporating the 8th ODRL community group meeting. This year we did not call for completed research results, but we invited PhD students to present and discuss their ongoing research work. In the traditional international group of virtual goods and ODRL researchers we discuss PhD research from Belgium, Brazil, and Germany. The topics focus on research questions about rights management in the Internet and e-business stimulation. In the center of rights management stands the conception of a formal policy expression that can be used for human readable policy transparency, as well as for machine readable support of policy conformant systems behavior up to automatic policy enforcement. ODRL has proven to be an ideal basis for policy expressions, not only for digital copy rights, but also for the more general "Policy Awareness in the World of Virtual Goods". In this sense, policies support the communication of virtual goods, and they are a virtualization of rules-governed behavior themselves.

The virtual goods and ODRL workshop series have worked on the progress of ODRL language development and usage. The PhD workshop 2012 follows this line of research tradition.

In three of the research works discussed, policy usage plays an important role, namely for usage rights management (D. Pähler's work), purpose management (A. Rath's work), and communication regulation (A. Kasten's work):

1. Security modeling of usage rights management
2. Purpose Management and Enforcement for Sensitive Private Data
3. Policy-based Internet communication regulation

1. The work of Daniel Pähler on "Security modeling of usage rights management" is supervised by Prof. Rüdiger Grimm, University in Koblenz, Germany. While following the strict rules of an IT security model, it looks on usage rights from the viewpoint of real costs, rather than the usual approach of legal permission and prohibition. Consequently, it "bridges the gaps between reality, security modeling and software".

2. The research of Annanda Thavymony Rath is supervised by Prof. Jean-Noël Colin in the University of Namur, Belgium. This work looks on one of the hard challenges of privacy management, that is, how to bind personal data on the agreed purpose of their processing. In particular, the goal of the research is to investigate the role and impact of purpose in the authorization process and in usage control for virtual goods, and to define a mechanism to manage and enforce them.

3. Andreas Kasten's research is embedded in the research environment of the IT risk management group of Prof. Rüdiger Grimm in the University of Koblenz, Germany. It looks on the phenomenon that the Internet is the information source number one of the modern world, not only for private communication, but even more for business. The Internet interconnects different countries and thus different jurisdictions. Although each Internet user can generally access any content from any country, the country's laws in that the user is located may prohibit

her from doing so. A. Kasten develops an ontological policy language for regulating Internet-based communication on both a technical and a legal level.

In two of the PhD works discussed, the stimulation of business in the Internet is in the focus of research.

F. Zimmermann's and J. Nützel's work investigates semantic sentiments for business communication, and Miguel Said Vieira's work looks for turning sharing into market behavior:

4. Real-time language independent sentiment analysis in social network
5. Intellectual commons, commodification and new business models

4. The research work of Frank Zimmermann and Jürgen Nützel is embedded in the market driven research of the "4FriendsOnly.com Internet Technologies AG" in Ilmenau, Germany. According to Jürgen Nützel's close relationship with the University of Technology in Ilmenau, this work is on a high academic level. In order to assess the meaning of mass communication across the Internet for any pragmatic purpose, especially for business, it is essential to understand the semantic sentiments behind this communication. Micro blogging systems like Twitter aggregate 24 hours a day a huge amount of user generated content. The authors develop an algorithm which extracts the sentiment of many different topics from these data. They filter out special regions which allow comparing the calculated sentiment values from different regions with each other.

5. The research work of Miguel Said Vieira on "Intellectual commons, commodification and new business models" is supervised by Prof. Barbosa de Oliveira, University of São Paulo, Brazil. This research project analyzes the possible relationships between immaterial commons and commodification. Immaterial commons refer to the practice of open sharing of intellectual or cultural goods. Commodification refers to the process of turning something into a commodity: a private good produced to satisfy market needs. This research analyses ways to turn so-called "open business models", which live in a world of sharing, into real market business of virtual goods.