

▼ Introduction to Market Structures and Business Models for Web-Based Information Goods Minitrack

Axel Hochstein
University of St. Gallen
axel.hochstein@unisg.ch

Jie Wang
Stanford University
jiewang@stanford.edu

Alexander Schwinn
eBay International
alexander.schwinn@ebay.de

Triggered by the increasing number of internet user, the growing digitalization of physical information as well as the web 2.0 phenomena, in recent years more and more data are becoming available on the web. RFID is used to digitalize information from the physical world, organizations (especially e-commerce provider) open their databases to the public via web services or APIs, and internet user enter a variety of personal and non-personal information. By combining this data via mash-ups or composed services, value is added and more complex, individualized, or richer information is generated.

In this growing data market, research has to be done on typical market structures, the players of the data market (user, intermediaries, supplier et cetera), their interactions, their business models, their strategies as well as other inter- and intra-organizational questions, that are relevant for an efficient production, vending, and usage of web-based information goods. This minitrack focuses on several aspects presented in the following papers:

The first paper proposes a new business model which adopts a reselling mechanism to distribute contents on P2P networks. Users who have downloaded contents from peers other than the author peer can resell them by paying a portion of reselling gains as the royalty to the author. Content providers and consumers may re-price shared contents dynamically via incremental learning. This study aims to verify that authors can gain more through P2P reselling model than through client/server architecture, and it investigated into the factors which influence this possibility.

The second paper presents a continuous, stochastic model for the monetary flow in multi-level markets allowing for the quantitative assessment of the incentive accruing to market participants through resale revenues. The main application of the model is for novel business models for the marketing of information goods, which purport to yield alternatives to technical copyright protection and DRM. The authors show analytically that within the scope of the model free-riding can be mitigated by employing multi-level marketing, and that multi-level markets are open markets for competing information goods.

In the third paper, the authors examine the problem of pricing different product lines of digital content in the context of a publisher who sells books in print and PDF forms online. The decision depended on the relative

preferences of customers for these different forms, their willingness to pay for these forms and the trade-offs involved. In order to examine these issues, a novel choice experiment was conducted online at the publisher's website, and a model was developed to analyze the data and provide pricing recommendations. The paper provides useful insights into how online content providers can develop pricing models for their content.

The fourth paper analyses the impact of ICT on credit risk management of commercial banks. After presenting a general analysis about ICT impact on value creation in the financial industry, the paper provides a state-of-the-art analysis of ebusiness tools for credit risk management emphasizing their value proposition with respect to credit risk management. The analysis is based on the hypothesis that only by innovative e-business solutions traditional loan business can convert into active credit risk management. As a result the research comes up with three categories of tools which are valuation platforms, rating tools, and trading platforms. It can be shown that ICT leads to the deconstruction of the traditional loan business model.

In the fifth paper, by applying the triangulation method, the authors created and experimentally tested and evaluated a prototype equipped with Superdistribution and Domain Sharing implementations as well as a revenue sharing incentive scheme. Results indicate that Superdistribution by itself is likely not the remedy for legal content dissemination and revenue sharing does not work well as an incentive within social networks consisting of close friends.

The authors of each of the five papers, which made it through the rigorous review into this minitrack, make valuable contributions to research and practice alike. The co-chairs also wish to thank the anonymous reviewers for their input and guidance to improve the quality of the paper even further.