

Mini Track: ‘Ethical, Legal and Economic Issues in the Digital Economy: Intellectual Property Rights, Piracy, Trust, Security and Privacy’

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While the intellectual property rights, consumer privacy, and trust are not new issues, the emergence of the Internet as a sales, storage, and collaborative sharing environment has led to unique problems as well as opportunities in the digital economy. Proliferation of new and sophisticated digital technologies makes it a challenging task to protect content for sellers and private information for consumers. In addition, new technology presents new facets of problems, never encountered before. For example, some of the following questions have arisen purely due to new technological attributes: Should information in meta-tags be truthful? Does it have intellectual property rights associated with it? What information density could I keep regarding a third-party products? How much information should a consumer provide to a given service provider? This is the first time for this mini track at HICSS. However, this mini track is an extension a previous mini track titled “Intellectual Property Rights in the Digital Economy: Issues, Economics, Law and Ethics,” in HICSS-35 and HICSS-36. The scope of the mini track was extended because we believe that many of intellectual property rights, privacy, and trust issues go hand-in-hand.

The mini-track includes researchers relevant to intellectual property rights, piracy, privacy, and trust in the digital age. The papers present technical, analytical, empirical, prototype descriptions, and conceptual research. The papers span diverse research areas and methodologies including the social, behavioral, and international issues.

The paper by Kannan, Telang, and Xu develops a market-based mechanism where an infomediary rewards identifiers vulnerabilities disclosed to it and the article analyzes if movement towards such a market-based mechanism for vulnerability disclosure leads to a better social outcome. Wang and Leung develop a new protocol where both the anonymity of traders and the traceability of false offers are achieved and while the identities of normal traders and their bidding behaviors are protected, the identities of malicious traders can be revealed. In their paper, Li, Ward and Zhang analyze how product attributes, traders’ characteristics and payment attributes affect the payment choice. They find

that certain product attributes, e.g., uncertainties associated with the product quality, appear to have stronger effect in affecting payment choices than traders’ characteristics.

Vikram, Chennuru, Rao, and Upadhyaya develop a concept that uses neural networks to correlate information from a variety of technological and database sources to identify suspicious account activity to help banks and other financial institutions. In evaluating the pros and cons of personalization, Madlberger, Treiblmaier, Knotzer and Pollach suggest that users can be classified into different groups that vary significantly in terms of data sensitivity thus adding a new dimension to the implications ethical theories have for personalization and customization. They find that customization is ethically less questionable than personalization. Teo, Wan and Li examine the effectiveness and applicability of prior privacy measures in the context of a firm’s reputation through an experimental design. They examine the effects of reputation, fair information practices, and reward on the online consumer behavior of volunteering two types of personal information - demographic and personal identifiable information.

Trust in online communities, particularly in the healthcare domain, provides a foundation for a successful implementation and operation of a virtual community (VC). Ebner, Leimeister and Kremer describe how trust-enabling functionalities can be systematically designed and implemented in a virtual community for cancer patients. Kim and Suthaharan present a new watermark design tool for digital images and digital videos that are based on human visual system (HVS) characteristics. They show that their entropy-masking model provides watermark scheme with increased transparency and henceforth increased robustness. In studying the use of government information Pas and De Vuyst analyze the conceptually different approaches in Europe and the United States towards a legal framework for the commercial use of public sector documents and government information. The commercialization by governments of their own information and the arguable difficulties it creates for fair competition with the private sector are discussed.