1. **Commenders: A recommendation procedure for online book communities.** By: Hyea Kyeong Kim, Hee Young Oh, Ja Chul Gu, Jae Kyeong Kim, Pages 501-509
   
   **Abstract:** We propose a recommendation procedure for online book communities called “Commenders.” Its purpose is to enhance the effectiveness of community recommendation and also the satisfaction of individual members. The basic idea of our proposed approach is collaborative filtering (CF). It adapts a content-based (CB) filtering algorithm by representing items with keyword features. The proposed recommendation procedure consists of two steps. During the first step, Commenders finds neighbors using community preferences for books and their feature information, and then it generates a CF-based recommendation list. The second step removes irrelevant books from the CF-based list using the keyword preferences of individual members. Commenders is designed to reduce individual member dissatisfaction with the process of finding desired books within an online community. To evaluate the procedure, we built a prototype system and performed experiments. Our experimental results show that the proposed system offers higher quality recommendations than the traditional collaborative filtering system. The proposed system has consistently higher precision, and individual members are more satisfied using this system.

2. **Reputation inflation detection in a Chinese C2C market.** By: Weijia You, Lu Liu, Mu Xia, Chenggong Lv, Pages 510-519
   
   **Abstract:** In consumer-to-consumer (C2C) markets, sellers can manipulate their reputation by employing a large number of puppet buyers who offer positive feedback on fake transactions. We present a conceptual framework to identify the characteristics of collusive transactions based on the homo economicus assumption. We hypothesize that transaction-related indicators including price, frequency, comment, and connectedness to the transaction network, and individual-related indicators including reputation and age can be used to identify collusive transactions. The model is empirically tested using a dataset from Taobao, the largest C2C market in China. The results show that the proposed indicators are effective in identifying collusive traders.

3. **Loyalty intelligence and price discrimination in a duopoly.** By: Aris M. Ouksel, Ferdi Eruysal, Pages 520-533
   
   **Abstract:** Business intelligence tools have enabled novel and relatively low-cost capabilities to collect and analyze vast amount of customer information. Accumulation of customer specific information along with transactional data empowers firms to categorize customers into segments and offer customized prices. We study the impact of price discrimination and market segmentation on competition and consumer purchase behavior in a game-theoretic model with two asymmetric firms. At equilibrium, both firms price discriminate and segment the market. Contrary to previous price discrimination and market segmentation findings, the game is not necessarily a prisoner’s dilemma. The firm dominating the industry is likely to improve its profits at the expense of the rival firm, and consumer welfare will increase with...
segmentation. We define two fundamental parameters, market dominance and the technology cost to industry dominance ratio, to drive segmentation technology adoption decisions, as a basis for our analytical approach.

4. **Pricing e-service quality risk in financial services.** By: Michel Benaroch, Ajit Appari, Pages 534-544
   
   **Abstract:** E-service quality is crucial for differentiating e-commerce offers and gaining competitive advantage. E-service quality risk is the risk that a firm’s e-service quality will drop, or improve, relative to competitors. There is evidence that benchmark ratings of e-service quality that are published regularly by third-parties can impact the market value of rated firms. Firms therefore continue investing in IT-related determinants of e-service quality. However, they do so without knowing: (1) the cost or return associated with a unit relative deterioration, or improvement in e-service quality ratings, and (2) how this cost or return may vary across firms. To answer these questions, we adapt a well-established financial risk pricing approach for the case of pricing a single idiosyncratic IT investment risk, where an event study is used to generate the market data needed to price risk (). We then apply the approach with Keynote’s bi-annual e-service quality ratings for firms in six financial services sectors. We find that firms’ sensitivity to e-service quality risk depends primarily on the sector to which they belong, and also on their size and growth potential. Our results suggest a cap on the amount that different firms ought to spend to achieve a unit improvement in relative e-service quality ratings. The risk pricing approach presented can be applied for other important IT investment risks, and the risk pricing information it yields may open up new ways to approach fundamental IT investment problems.

5. **Provably-secure electronic cash based on certificateless partially-blind signatures.** By: Lei Zhang, Futai Zhang, Bo Qin, Shubo Liu, Pages 545-552
   
   **Abstract:** We extend the partially-blind signature approach into certificateless public key cryptography to eliminate the key escrow problem that occurs with identities in public key cryptography. We also formalize conditions for security for certificateless partially-blind signature schemes. We also present a practical certificateless partially-blind signature scheme to make electronic cash untraceable. We prove the scheme to be unforgeable in the face of message attacks under the computational Diffie–Hellman assumption.

6. **Economic incentives for protecting digital rights online.** By: N. Boris Margolin, Brian Neil Levine, James D. Miller, Matthew Wright, Pages 553-564
   
   **Abstract.** Once electronic content—such as a password to access a website’s resources—has been released, it is very difficult to prevent it from being shared. This disclosure often represents economic harm to the content’s owner and others. Most attempts to prevent unauthorized sharing of digital content have been based on technology or legal punishments, but these approaches are not always applicable (as with passwords) or fast enough to prevent harm (as with the use of legal punishments). We propose the use of economic incentives to both limit and detect unauthorized sharing. This approach has the advantage of not requiring watermarking, encryption, or other traditional digital rights management techniques. Our protocol, called SPIES, is applicable to content that is shared to a limited extent and that meets several economic conditions. These conditions apply for many forms of content that are currently protected using technological sharing-prevention
techniques. Such applications include passwords, trade secrets, pre-release content, and many others. We formalize this protocol using game theoretic analysis, and we show how to set the specific parameters under which SPIES can be useful.

7. **Pricing of spectrum reservation under overbooking.** By: Loretta Mastroeni, Maurizio Naldi, Pages 565-575

Abstract: Reservations represent an alternative implementation of secondary markets for spectrum with respect to spot selling through auctions. In a previous paper we have shown that reservation mechanisms may be profitable to mobile operators, be they virtual or endowed with a network, assuming the reservation price as a parameter. Pricing reservations, when the owner of spectrum usage rights applies overbooking and pays a penalty if the reservation is not honoured, is still an open issue. Here we propose an iterative algorithm, based on tools derived from the field of financial markets, to set prices for reservations under overbooking. We analyse the sensitivity of the reservation price to a number of parameters (the purchase price, the expiration time of reservation, the overbooking probability, and the penalty value), and show that the reservation prices decay fast with the overbooking probability, and increase with the penalty value, but short expiration times may make the penalty ineffective.

8. **Impacts of organizational assimilation of e-government systems on business value creation: A structuration theory approach.** By: Md. Dulal Hossain, Junghoon Moon, Jin Ki Kim, Young Chan Choe, Pages 576-594

Abstract: Governments worldwide are eagerly anticipating a digital future with the proliferation of information system applications, but assimilation of such enterprises could be a potentially formidable challenge. Assimilation of e-government systems by organizations is important for business value creation. Despite significant investments in e-government systems, the extent to which organizations have been able to assimilate and leverage these systems varies widely. We develop a theoretical model grounded upon structuration theory and the literature on organizational information systems assimilation to investigate the impact of organizational assimilation of e-government systems on business value creation by conceptualizing the notions of IS in organizations. Based on our model, we argue that the organizational meta-structures of signification, domination, and legitimation determine aspects of organizational e-government systems assimilation behavior that may affect its value creation potential. We experimentally validate our model using a total of 367 surveys collected from public organizations currently utilizing an e-governmental system. Our results largely support the proposed model and shed new light on the factors associated with organizational assimilation of e-government systems. Finally, we isolate the organizational, technological, and inter-organizational factors that shape the meta-structures for the assimilation of e-government systems. Our findings indicate that assimilation of e-government systems has a substantial impact on business value creation. We conclude by discussing the theoretical and practical implications of our findings.

9. **Do males and females differ in how they perceive and elaborate on agent-based recommendations in Internet-based selling?** By: Hersen Doong, Hui-chih Wang, Pages 595-604

Abstract: Managers are eager to know whether they should use gender-specific strategies to communicate
with male and female consumers differently to recommendation services in Internet-based selling, as both groups are worthwhile and profitable to target. This issue has been overlooked in the literature, despite its importance and the fact that recommendations have become a major online advertising tactic in recent years. This study is diverse from existing studies in three ways: testing recommendation agent acceptance in the information context, revealing gender effects and applying a new lens of cognition-conation. By proposing a theoretical model based on the advertising hierarchy of effects model, this study investigated consumers’ elaboration processes towards recommendation agent advices. Based on 432 members randomly selected from a database of a well-known Internet-based sellers, the study finds that women consider perceived usefulness of recommendation agent advices to a greater extent than men while making decisions about the usefulness of recommendations. Further, consumers’ perceived usefulness is more strongly influenced by their perceived shopping task uncertainty than by involvement, while more-involved consumers have lower levels of perceive shopping task uncertainty.