Journal of Management Information Systems ›
Volume 35, 2018 - Issue 1

Introductions

Special Issue: Financial Information Systems and the Fintech Revolution

Peter Gomber, Robert J. Kauffman, Chris Parker & Bruce W. Weber

Pages 12-18 | Published online: 30 Mar 2018

Cite this article https://doi.org/10.1080/07421222.2018.1440778

This Spe ... eveloped to build ... ech Revo ... by the technolo ... vation, and significa ... This time around t ... nological transfor ... s we have known t ... ith bright prospect ... apabilities that refle... such as bitcoin and ethereum, and the extension of financial services to previously unbanked consumers and markets.

In October 2017, Venture Scanner (www.venturescanner.com) identified 2,307 new companies in the "Financial Technology" category they track, among which 1,490 in 16 different categories across 64 different countries have raised US$75.4 billion in venture capital funding. Some of the focal categories that are represented include: lending, microfinance and crowdfunding, retail and institutional investments, personal finance, smart contract and distributed ledger innovations, and payments and remittances. Other niche areas are represented as well: equity finance, banking infrastructure, consumer banking, blockchain project platforms, open application programming interfaces (APIs), and financial research.

Simultaneously, many other practices that are unique to financial services are undergoing fundamental changes. They include: growth toward mobile payments at scale; diminution in the use of cash in different nations and world regions; changes in how international trade is financed based on new ways to achieve stakeholder informedness in supply chain management through information technology (IT); and the use of transaction filters to comply with political sanctions on the movement of money in the global financial system. Also included are the growth of new forms of algorithmic and high frequency trading; cross border equity trading, clearing, and settleme [illegible] nding network [illegible] rtunities for innovati [illegible] parties; new encodin [illegible] rning, and artificial [illegible]

Given th [illegible] motivation to ex [illegible] ntech Revo [illegible] terests in the finan [illegible] e Journal of Manage [illegible] ssions in total, of [illegible] ential sounds weak, an [illegible]] to the phenom [illegible] s' attention. In the en [illegible] our criteria for Fintech Revolution relevance, high-quality scholarship, and meaningful results to build foundations in this emerging area of research.

The Special Issue opens with its lead article, which asks: “How Does Social Media Impact Bitcoin Value? A Test of the Silent Majority Hypothesis,” by Feng Mai, Zhe Shan, Qing Bai, Xin (Shane) Wang, and Roger H.L. Chiang. The emergence of bitcoin has brought along with it a firestorm of business issues, skepticism about whether there is a “bitcoin bubble” or new innovation-associated market adjustments, and whether bitcoin truly functions as a form of digital money, or instead, it works more like equities—only without any underlying assets on which to be able to assert that there is some intrinsic value present. We have seen the US$480 million hacking-driven demise of the Mt. Gox bitcoin exchange in Japan, along with the on-again-off-again willingness of China to permit bitcoin exchanges to operate within its borders, and the European Parliament’s reluctance to allow any totally anonymous cryptocurrencies to be exchanged within the borders of its 28 nation states.

The authors assess what drives the value of bitcoin, which is many times more volatile than most stock prices and foreign exchange rate pairs. They specify a number of hypotheses, and through a blend of machine-based methods and explanatory econometric analysis, assess the extent to which the Twitter sentiments of the larger number of active posters—their vocal majority—or the smaller number of occasional

posters– … extent. The

methods … deling

estimati … opinions

expresse … ort that

social m … Silent

Majority … that of the

vocal mi … ter.

“Che … ered and

received … ot affect the

economi … ([1], p. 186;

emphasi … mic Review,

wrote th … alk should

be uninf … information

and affe …

Related to this background theory, the second article in the issue is by Jennifer J. Xu and Michael Chau, who explore “Cheap Talk? The Impact of Lender-Borrower Communication on Peer-to-Peer Lending Outcomes.” The authors observe, through empirical analysis of peer-to-peer (P2P) lending platforms, that cheap talk may lead to rational herding behavior among P2P loan funders. They rely on a rich data set that permits two-way communication between borrowers and investors to see the extent to which richer social communication improves funding for borrowers and supports better loan payback rates. They report that borrower responses do more to enhance their funding success than lender comments and questions, and that such communication is more important when borrowers have weaker credit ratings. Lenders also seem to influence one another based on whether they share positive or negative comments, and the richness of their communication. They further report that lending performance in payback rate terms is not able to be predicted based on how much borrowers and lenders engage in direct social interaction on the P2P lending platform.

Yang Jiang, Yi-Chun (Chad) Ho, Xiangbin Yan, and Yong Tan contributed the third article, entitled “Investor Platform Choice: Herding, Platform Attributes, and Regulations.” They report on an empirical study they conducted on the extent to which P2P lending exhibits patterns that can be explained by rational herding theory. These involve the effects of observational learning, and the various kinds of information transmissions
that go t … interactions
at the pl … platform
investor … ore them.
The auth … a a large
Chinese- … planatory
and cont … ior: the
cumulat … rage
cumu … evidence
that … an-listing
level, as … model, and
also sho … s indeed
influenc … sults further
point to … ator of P2P
loan her … e since its
impleme … an-making
is observed.

The fourth article is “The Role of Provision Points in Online Crowdfunding,” authored by Gordon Burtch, Yili Hong, and De Liu. An important theoretical foundation for studies on the new fintech issues is similar to what has been relevant for financial markets, auction operations, and the innovations associated with business-to-consumer (B2C) and business-to-business (B2B) e-commerce in the past: market mechanism design theory. This research related to crowdfunding on the Internet studies the provision point mechanism. The authors refer to this as an “all-or-nothing” fundraising scheme, although overfunding is often possible with these mechanisms.

The theoretical relevance to crowdfunding platforms is threefold. First, when there is a predetermined fixed target for the capital an entrepreneur raises, this takes away the impetus for investors to gauge the likely return they will receive on the basis of how much funding interest there is in the market as a signal for likely success. Second, when the funds raised fall short of what an entrepreneur has requested, all of the investors are protected because their funds will not be provided to the entrepreneur, which protects them from loss. Third, there also is a positive contribution externality that incentivizes them to more generously contribute, since they are protected as a group. The authors employ data from a crowdfunding platform that makes the inclusion of a provision point a design choice. Thus, it was possible for them to extract empirical evidence to show the effects of this mechanism design feature at different stages in a
crowdfu … , in the
presence … ater follow-
on inves … nt in a
crowdfu … or
informat …

The fifth … s from
SWIFT’s … enau, and
Jonat … e in London,
to stu … , and North
America … ants. The
authors … , in order to
determi … that bring
them lo … .

For this … ecosystem
theory, and its key elements of underlying technologies and components, fintech

services and products, and enabling business infrastructures, to create a foundation for their analysis of firm capabilities. They employed cluster analysis to match start-ups to different clusters defined by their characteristic business activities. They also used case study methods to analyze the Innotribe firms' business models, in terms of a number observable mechanisms that are present in their business models. They include: automation of processes and hybridization of business products and services; financialization of various aspects of their operating capabilities for their clients; disintermediation or reintermediation actions related to the market in which they compete, creating new levels of competition; enhancement of client access to core processes and services involving financial services; and finally hybridization of multiple traditional financial services that are brought together so that their synergy results in new and innovative capabilities. The authors report on a number of minicases of fintech start-ups that have demonstrated how to leverage new competitive and cooperative strategies, which enabled the firms to acquire venture capital funding and niche opportunities in a highly complex global marketplace for fintech innovation. They further note the generalizability of their approach and findings to other emerging component, service, and business infrastructure innovations in the insurtech (insurance technology) and regtech (regulatory technology) ecosystems.

The sixth article of this Special Issue was contributed by Erol Kazan, Chee-Wee Tan, Eric T.K. Lim, ... "Disenta... ...t Platform... ...tforms, that leverage... ...hitectures— new con... ...logy platform... ...created and sustaine... ...mplement for its... ...in industrial econ... ...hin them.

They em... ...oratory and explanat... ...oduce insights ... in the complex... ...enables them to ... ...atforms: the direct ac... ...xplain the presence of three different platform competition strategies: the germination, orchestration, and transformation strategies for platform architecture positioning differentiation. The authors characterize their main contribution of new technology strategy and management knowledge as identifying how mobile payment technology platforms appropriate value in the marketplace. For companies with single-firm integrative approaches that are able to exert control on their own value-creation architectures, their mobile payment platform architectures are able to appropriate value by shielding their business activities from potential third-party competitors. In contrast, those that have more integratable, interorganizational mobile payment platform architectures tend to rely on extracting value from federated business networks, with reciprocal promotion and synergistic innovation.

This Special Issue's seventh and final article, by the guest editors, Peter Gomber, Robert J. Kauffman, Chris Parker, and Bruce W. Weber, offers new ideas on the core issues and potential direction of fintech research across multiple academic disciplines, and in partnership with industry organizations. Their article is entitled "On the Fintech Revolution: Interpreting the Forces of Innovation, Disruption, and Transformation in Financial Services.", presents a framework for assessing the innovation landscape that categorizes fintech initiatives into a Market-and-Competition vs. Customer Experience matrix.

Addit

Notes c

Peter Gomber

Peter Gomber (gomber@wiwi.uni-frankfurt.de) holds the Chair of e-Finance, Department of Information Systems, Faculty of Economics and Business Administration, at Goethe University of Frankfurt, Germany. He acquired his Ph.D. from the Institute of Information Systems at the University of Giessen, Germany. He is co-chairman and member of the Board of the E-Finance Lab, an industry-academic partnership between Frankfurt and Darmstadt Universities, and leading industry partners that include Deutsche Börse, IBM, DZ Bank, Finanz Informatik, and FactSet. He is a member of the Exchange Council of the Frankfurt Stock Exchange, and the Consultative Working Group of the Secondary Market Standing Committee of the European Securities and Markets Authority. His academic work focuses on digital finance and fintech, information systems in financial markets, market microstructure theory, regulatory impact on financial markets, and innovation in electronic trading systems. He serves as editor in chief of EFL Quarterly and associate editor of several other journals. His research publications have appeared in Journal of Business Economics, Journal of Information Technology, Decision Support Systems, European Financial Management, and many other journals, research monographs, and conference proceedings.

Robert J. Kauffman

Robert J. Kauffman (rkauffman@smu.edu.sg) is a professor of information systems, School of Information Systems, Singapore Management University (SMU). He holds a Ph.D. from Carnegie Mellon University. He serves as associate dean (Faculty), and previously was associate dean (Research) at SMU. He was a Distinguished Visiting Fellow at the Center for Digital Strategies, Tuck School of Business at Dartmouth; the W.P. Carey Chair in Information Systems at Arizona State, and was professor and director of the MIS Research Center at the University of Minnesota, while chairing the Department of Information and Decision Science. His research focuses on technology and strategy, the economics of information technology, financial services and technology, managerial decision-making, and e-commerce. His work has appeared in Information Systems Research, Journal of Management Information Systems, MIS Quarterly, Telecom Policy, Decision Sciences, Management Science, Review of Economics and Statistics, and many other journals. He is editor in chief of Electronic Commerce Research and Applications. He has served in senior leadership roles for conferences and has funded industry research projects, and has also served on research review panels in Canada, Singapore, the Netherlands, Finland, Hong Kong, and the United States.

Chris P

Chris Pa
profess
and Inf
State U
Technol
Co
Ma
questio
system
Manage

Bruce W. Weber

Bruce W. Weber (bweber@udel.edu) is dean of the Lerner College of Business and Economics at the University of Delaware, where he is a professor of business administration and an affiliated faculty member of the Institute for Financial Services Analytics. He serves on the Advisory Council of the SWIFT Institute. He holds a Ph.D. in decision sciences from the Wharton School of the University of Pennsylvania. He was previously a professor of information management and Subject Area Chair for Management Science and Operations at London Business School, and on the faculty of the Stern School of Business at New York University, and Baruch College, City University of New York, where he was the founding director of the Subotnick Financial Services Center. His work evaluates the economic advantages of digital markets, and highlights the new challenges facing traders, managers, and regulators in an increasingly computerized financial services industry. His research on information technology strategy, financial sector computerization, and compliance systems has been published in leading academic journals and has been cited in the Wall Street Journal and the Financial Times. His books are The Equity Trader Course (Wiley, 2006) and Mastering Equity Trading through Simulation (Wiley, 2010).

Refer

1. Farrell 0.

Web o

Relat