Colleagues,

I am excited to present our 2019 Faculty Research Report. The body of outstanding scholarly work listed in this report speaks directly to the “create knowledge” aspect of our mission statement. It’s truly exciting to see the breadth, diversity and quality of scholarly work of our faculty. Perhaps, most importantly, as you read the listing you can imagine the impact this body of knowledge would have in advancing theory and practice.

Our faculty continue to have work accepted for publication in highly regarded journals in their fields. I very much look forward to sharing them with you annually.

Sincerely,

Balaji Rajagopalan
Dean
“The Takeoff of Open Source Software: A Signaling Perspective Based on Community Activities”

*MIS Quarterly*

**NIU Author:** Balaji Rajagopalan

**Additional Author(s):** Pankaj Setia and Barry Bayus

**Impact of Article:** A few open source software (OSS) products exhibit an abrupt and significant increase in downloads. However, the majority of OSS products fail to gain much interest. Identifying early success is important for catalyzing growth in OSS markets. However, previous OSS research has not examined early product success dynamics and assumes adoption to be a continuous process. We propose OSS takeoff in adoptions as a measure of eventual product success. Takeoff is a nonlinear inflection point separating the early development from the growth phase in the product life-cycle. Using arguments from the signaling literature, we propose that community activities send signals about product quality and reduce information asymmetry faced by potential adopters of OSS products. Estimating a Cox proportional hazard model using a large sample of OSS products from SourceForge, we find that takeoff times are significantly associated with signals of quality deficiency and improvement. Further, we find that target audience and product innovativeness moderate this relationship.
“Taming Complexity in Search Matching: Two-sided Recommender Systems on Digital Platforms”

MIS Quarterly

NIU Author: Onkar S. Malgonde

Additional Author(s): He Zhang, Balaji Padmanabhan and Moez Limayem

Impact of Article: We study digital multi-sided platforms as complex adaptive business systems (CABS) where multiple sides have different and evolving objectives, preferences and constraints. CABS are characterized by irreducible uncertainty which cannot be reduced by the traditional approaches of collecting and processing data. Irreducible uncertainty in the system gives rise to a complex search matching problem between agents and value enhancing transactions. This paper presents a recommender systems-based approach for taming the complexity by allowing agents to co-evolve and learn in the system. We propose a novel two-sided recommender system framework that considers emergence on both sides of the platform and adapts to the changing environment to influence agents. An agent-based simulation model is developed based on popular internet-based educational platforms to study this complex system and test our hypotheses. Our results show the value of a two-sided recommender system to tame complex search matching in platforms. We discuss implications for information systems and complexity science research.
“Provisioning Interoperable Disaster Management Systems: Integrated, Unified and Federated Approaches”

*MIS Quarterly*

**NIU Author:** Yipeng Liu

**Additional Author(s):** Hong Guo and Barry R. Nault

**Impact of Article:** In this paper, we analyze the choice of interoperability approach for the provision of disaster management systems (DMS) when resources are distributed across districts and, in times of disaster, resources can be shared. The degree to which sharing (a spillover) can be coordinated efficiently depends on resource interoperability. In this public sector setting, we model the provisioning of DMS as the choice between interoperability approaches; in decreasing order of centralization they are integrated, unified and federated. A unique feature of our setting is that the interoperability approach is a collective decision by districts. Districts choose their own DMS resources and interoperability effort, and face different interoperability efficiency and technology misfit costs depending on the interoperability approach.

We find that any approach can be an equilibrium depending on interoperability efficiency, and that when the social optimum deviates from the equilibrium, the socially optimal approach is more centralized. When subsidies and taxes are implemented, the socially optimal interoperability approach can be achieved with budget balance. When only subsidies can be used, the socially optimal approach can be achieved, but only under certain interoperability efficiency and misfit cost conditions is there a net social gain. Having an initial level of interoperability causes the equilibrium interoperability approach to shift toward a less centralized one. Our results generalize to other settings characterized by interoperability concerns, collective decisions and spillovers.
“Innovative Accounting Interviewing: A Comparison of Real and Virtual Accounting Interviewers”

The Accounting Review

NIU Author: Matthew D. Pickard

Additional Author(s): Ryan Schuetzler, Joseph S. Valacich and David A. Wood

Impact of Article: Recent technological advances have made it possible to create automated, virtual interviewers called embodied conversational agents (ECAs). We study how an ECA compares to a human interviewer in three experiments. In experiment one, we show that two theoretically motivated factors — making the ECA facially and vocally similar to the interviewee — result in the ECA performing similarly to or better than human interviewers for six antecedents of disclosure quality. In two additional experiments, we show that employees are on average between 21 and 32% more likely to disclose violating internal controls to an ECA than to a human interviewer, even if the human interviewer has significant interviewing experience. These findings contribute to the ECA design literature by showing that similarity-enhancing features of ECAs increase the antecedents of disclosure. The findings also contribute to the accounting literature by demonstrating that ECA technology can increase the scope of interviewing in accounting without reducing interview quality.
“Can Social Norm Activation Improve Audit Quality? Evidence from an Experimental Audit Market”

Journal of Business Ethics

**NIU Author:** Mark Mellon

**Additional Authors:** Allen D. Blay, Eric S. Gooden and Douglas E. Stevens

**Impact of Article:** We assert that audit quality can be improved to the extent that social norms for honesty and responsibility are activated in the auditor. To test this assertion, we use an experimental audit market setting found in the literature and manipulate factors expected to activate honesty and responsibility norms in the auditor. We find that auditor misreporting is reduced when the investor is another participant in the experiment rather than computer simulated, and thus, the interests of third-party investors are salient to the auditor. We also find that auditor misreporting is reduced when the auditor is required to sign off on the audit report, but only when the investor is another participant in the experiment. Consistent with our underlying theory, we find that pre-experimental measures of sensitivity to honesty and responsibility norms help explain the effects of our manipulated variables. Finally, we find that these measures of social norm sensitivity are associated with the moral judgment that auditor misreporting is unethical. Our study helps explain previous anomalous findings in the literature and answers the call in Blay et al. (J Bus Ethics 2017. DOI: doi.org/10.1007/s10551-016-3286-4) for empirical researchers to use social norm theory to develop stronger tests of moral reasoning in the market for auditing services.
“The Frugal Entrepreneur: A Self-regulatory Perspective of Resourceful Entrepreneurial Behavior”

Journal of Business Venturing

NIU Author: Timothy L. Michaelis

Additional Author(s): Carr, J.C., Scheaf, D. Pollack, J.M.

Impact of Article: The present research complements extant perspectives of resourcefulness, which assert that resourceful behaviors arise out of responses to environmental constraints, by developing a model illustrating that entrepreneurs self-impose constraints on resource acquisition and deployment for differing reasons. Specifically, we introduce a novel conceptualization of frugality and differentiate it from self-control to develop a set of hypotheses that frugality predicts resource use behaviors based on long-held preferences (e.g., effectuation and bricolage) and self-control predicts resource use behaviors based on known end states or goals (e.g., causation and pre-commitments). After accumulating evidence of reliability and validity for a new measure of frugality contextualized for entrepreneurship research, the results support our self-regulatory theoretical framework. Our study contributes to research on resourcefulness by making multiple theoretical insights, and we outline numerous future research opportunities for applying the construct of frugality to explain entrepreneurial behavior.
“Hybrid Entrepreneurs’ Self-efficacy and Persistence Change: A Longitudinal Exploration”

Journal of Business Venturing Insights
NIU Author: Timothy L. Michaelis
Additional Author(s): Carr, J.C., Marshall, D., Pollack, J.M.

Impact of Article: Hybrid entrepreneurship — where an individual simultaneously engages in startup activities as well as wage-based employment — is an increasingly common career transition path. Yet, relatively little research has explored entrepreneurial characteristics during these unique career transitions. We provide exploratory insight into the longitudinal relationship between self-efficacy and persistence for hybrid entrepreneurs’ \( N=29 \) across a 20-week period during which aspiring entrepreneurs engaged in activities related to venture startup while maintaining wage employment. As such, we propose that entrepreneurial self-efficacy (ESE) and entrepreneurial persistence are malleable concepts that change over time. Using our longitudinal sample, we find evidence that ESE predicts entrepreneurial persistence change over time. Perhaps more importantly, we model how changes in ESE over time affect changes in entrepreneurial persistence for hybrid entrepreneurs. In sum, our work provides a foundation from which future research can examine the longitudinal transition of nascent entrepreneurs moving from an occupational setting as an employee to launching their own venture.
Faculty Recognition and Awards

Professorships

Tim Aurand — James E. Thompson Professorship in Marketing
Meghann Cefaratti — Grant Thornton Foundation Professorship in Accountancy
Natalie T. Churyk — William F. Doyle Endowed Professorship in Accountancy
Bradrick Cripe — Gaylen and Joanne Larson Professorship in Accountancy
Charles Downing — Dean’s Distinguished Professor
Ann Dzuranin — Dean’s Distinguished Professor of Accountancy
Mark Groza — The Enterprise Professorship and Professional Sales
Chih-Chen Lee — William and Dian Taylor Professorship in Accountancy
Chang Liu — Dean’s Distinguished Professor
Young Lee — Dean’s Distinguished Junior Professor
Yipeng Liu — Dean’s Distinguished Junior Professor
Katrina Mantzke — Donna R. Kieso Endowed Professor
Linda Matuszewski — Dean and Brenda DuCray Professorship
Kathleen McFadden — Dean’s Distinguished Professor
Christine Mooney — Dennis and Stacey Barsema Professorship in Social Entrepreneurship
Charles Petersen — Dean’s Distinguished Professor
Robert Peterson — Dean’s Distinguished Professor of Sales
Mark Riley — Dean and Brenda DuCray Professorship
Denise Schoenbachler — Douglas and Cynthia Crocker Endowed Professor
Andrew Setterstrom — Dean’s Distinguished Junior Professor
Barton Sharp — Mike and Christina McGrath Professorship in Entrepreneurship
Rebecca Shortridge — Donald E. Kieso Endowed Chair in Accountancy
Pamela Smith — KPMG Endowed Professorship in Accountancy
Donald Tidrick — Deloitte Professorship in Accountancy
James Young — PwC Professor
Lei Zhou — Jones Diedrich Mennie Endowed Professorship in Finance

Fellowships

Brian W. McCormick — David and Joanne Weick Faculty Research Fellow
Mark Groza — Dean’s Instructional Innovation Summer Fellow
Federico Bassetti — Dean’s Instructional Innovation Summer Fellow

College of Business Research Spending — more than $1.02 MM in 2019

Research Fellowships and Research Grants — $370,000
Conference Presentations and Research Collaboration — $150,000
Graduate Assistantships for Faculty Research — $500,000

Faculty Editorial Positions

Accountancy

Meghann A. Cefaratti
Editor, American Accounting Association (AAA) Journal of Forensic Accounting Research.

Natalie T. Churyk
Editor, Journal of Accounting Education.
Editorial Review Board Member, Journal of Forensic & Investigative Accounting.
Bradrick M. Cripe

Ann C. Dzuranin
Editor, Journal of Accounting Education. Guest Editor of a special issue of Journal of Accounting Education: Preparing Accounting Students for Careers Using Big Data.

Chih-Chen Lee

Linda J. Matuszewski
Editorial Review Board Member, Journal of Accounting Education. Editorial Review Board Member, Advances in Accounting Behavioral Research.

Management

Jon P. Briscoe
Editorial Review Board Member, Career Development International.

James P. Burton
Editorial Review Board Member, Journal of Business and Psychology.

Sarah J. Marsh
Editorial Review Board Member, Journal of Management.

Brian W. McCormick
Editorial Review Board Member, Human Resource Management.

Daewoo Park
Editorial Review Board Member, Journal of Business Inquiry.

Devaki Rau
Associate Editor, Group and Organization Management. Editorial Review Board Member, Strategic Management Journal.

Barton Sharp

Mahesh Subramony
Associate Editor, Journal of Service Research. Associate Editor, Journal of Service Management.

Marketing

Mark Groza

Robert Peterson
Journal Editor, Journal of Selling.

Ursula Y. Sullivan
Editorial Review Board Member, Marketing Management Journal.

Elina Tang
Editorial Review Board Member, Journal of the Academy of Marketing Science.
Operations Management and Information Systems

Chang Liu
Editorial Review Board Member, Communications of IIMA.
Editorial Review Board Member, Journal of Electronic Commerce in Organizations.

Yipeng Liu
Associate Editor, Business & Information Systems Engineering Journal.
Associate Editor, Information Technology Management.
Associate Editor, Electronic Commerce Research and Applications.

Kathleen L. McFadden
Associate Editor, Journal of Operations Management.
Editorial Review Board Member, Quality Management Journal.

Faculty Awards

Accountancy
Meghann A. Cefaratti — Outstanding Service Award, American Accounting Association Forensic Accounting Section.

Natalie T. Churyk — Best Teaching Innovation Award, American Accounting Association Forensic Accounting Section.
Nominated for Cook Prize, American Accounting Association.
Nominated for an ICPAS IL Accounting Educator Award, Illinois CPA Society.

Pamela A. Smith — Outstanding Graduate Faculty, Administrative and Loan Accounting Center.

Finance
Sina Ehsani — 2019 Jack Treynor Prize Winners, Q Group (The Institute for Quantitative Research in Finance).

Management
Jon P. Briscoe — Best International Symposium Award, Academy of Management.

Charles R. Gowen III — The 2019 Gryna Award, American Society for Quality.

Eric J. Michel — Best Doctoral Student Paper in the Organizational Behavior Track, Southern Management Association.
Best Overall Conference Doctoral Student Paper, Southern Management Association.

Christine H. Mooney (with Denise D. Schoenbachler, Marketing) — NSF Grant ($2,377,707) Broadening the Fusion of STEM and Business Curricula in Undergraduate Sustainability Education.

Operations Management and Information Systems
Jungyoung Lee — The 2019 Gryna Award, American Society for Quality.

Kathleen L. McFadden — The 2019 Gryna Award, American Society for Quality.

Faculty Peer Reviewed Journal Articles

Accountancy
Meghann A. Cefaratti
https://store.tax.thomsonreuters.com/accounting/Finance/Internal-Auditing/p/100201298

Natalie T. Churyk


Bradrick M. Cripe

Ann C. Dzuranin


Chih-Chen Lee


Katrina L. Mantzke

Linda J. Matuszewski

Mark J. Mellon


Matthew D. Pickard


Mark E. Riley


Rebecca Shortridge


James C. Young


Suzanne Youngberg


Shaokun Yu


Finance

Eric Osmer


Yao Zheng
https://link.springer.com/journal/volumesAndIssues/11156

https://doi.org/10.1016/j.qref.2019.02.006

Lei Zhou
https://doi.org/10.1016/j.jbankfin.2019.08.001

Management
Jon P. Briscoe
https://doi.org/10.1016/j.jvb.2019.02.009

https://onlinelibrary.wiley.com/loi/17488583/year/2019


James P. Burton

Amanda J. Ferguson
https://doi.org/10.1016/j.jvb.2019.02.009

https://doi.org/10.1016/j.jgb.2019.02.009

Wayne E. Finley
http://www.na-businesspress.com/jhetpopen.html

Furkan A. Gur
https://doi.org/10.1016/j.lrp.2019.101951

https://onlinelibrary.wiley.com/loi/19364490

https://www.emerald.com/insight/publication/issn/1355-2554#all

Timothy L. Michaelis


Christine H. Mooney

Devaki Rau

Mahesh Subramony


Marketing
Timothy W. Aurand


Mya P. Groza

Charles H. Howlett

Michele Kaczka
Operations Management and Information Systems

Xinyan Cao

Charles E. Downing

Chang Liu

Yipeng Liu

Onkar S. Malgonde

Kathleen L. McFadden

Biagio Palese

Balaji Rajagopalan

Andrew J. Setterstrom

Jiao Wu
Elina Tang, Ph.D., Assistant Professor, Marketing

Elina Tang’s research interests include: Networked knowledge sharing and team learning, innovation, sustainability, sales and big data analytics. Her publications have appeared in the Financial Times’ top business journals such as Journal of the Academy of Marketing Science, Marketing Science, Journal of the American Statistical Association (FT-45), and other academic journals such as Industrial Marketing Management, and Psychology & Marketing.

Tang is a founding member of the Adweek Academic Council. She serves on the editorial review board of Journal of the Academy of Marketing Science, a Financial Time Top 50 (FT-50) business journal. She is the recipient of the 2013 Best Paper Award in Journal of Interactive Marketing, the 2015 Best Paper Award in the Sustainability Track at the American Marketing Association (AMA) Educators’ Conference, and the 2017 Best Paper Award in the Market Research Methods and Innovative Research Approaches Track at AMA Educators’ Conference. Tang brings nearly two-decades of market research experience, as well as new product development experience in the biopharmaceutical industry. A multi-disciplinary scholar, Tang holds graduate degrees in marketing, statistics, molecular biology and microbiology, administration and management, as well as a B.S. in biochemistry.
Timothy Michaelis, Ph.D., Assistant Professor, Management

Timothy Michaelis received his Ph.D. from North Carolina State University in 2017. Michaelis changed careers from strategic consulting in innovation management to focus on research related to the human side of technology commercialization and entrepreneurship. Michaelis’s research focuses on developing theory around the topics of resourcefulness and the efficient (i.e., frugal) use of resources in entrepreneurial ventures. Additional research interests include, A) Developing a clinical model for entrepreneurship teaching, research and practice; B) Advancing quantitative methodologies in management research; C) Self-regulation in entrepreneurial decision making; and D) The role of physical and mental health in association with new venture creation. Michaelis’s research has been published in the Journal of Business Venturing, Journal of Business Venturing Insights, and Entrepreneurship Education & Pedagogy, among others.
Wenlin Gao, Ph.D., Assistant Professor, Finance

Wenlian Gao earned her Ph.D in finance from the University of Wisconsin in Milwaukee. She also holds an M.S. in finance from Wudaokou School of Finance in Tsinghua University (formerly known as the Graduate School of People’s Bank of China) and a B.S. in economics from Peking University in China. Her teaching interests include corporate finance, international finance and financial markets and institutions. She has published articles in finance journals such as the *Journal of Corporate Finance, Financial Management, Journal of Banking and Finance, International Review of Finance, Pacific Basin Finance Journal*, and *Annals of Operations Research*. Her research covers a range of topics in international finance and corporate finance, with an emphasis on international financial markets, corporate diversification and capital structure.
Reza Rajabi, Ph.D., Assistant Professor, Marketing

Reza Rajabi is an assistant professor of marketing at Northern Illinois University’s College of Business. Rajabi’s academic research interests lie at the intersection of marketing/sales and analytics. Applying various data analytics methods, his primary research focuses on sales analytics, sales force performance and salespeople’s turnover. He also examines the role of marketing/sales capabilities at early stages of startups where new ventures are not equipped with conventional marketing assets or capabilities. He received his B.S. in industrial engineering and M.S. in socio-economic system engineering. He also received his Ph.D. in marketing from University of Massachusetts, Amherst, where he won the Harold E. Hardy Award in 2015, and University of Massachusetts Research Fellowship Award in summer 2017. Rajabi was also nominated for the University of Massachusetts’s 2017 Distinguished Teaching Award for designing and teaching a digital marketing course.
Biagio Palese, Ph.D., Assistant Professor, OMIS

Biagio Palese is currently an assistant professor in the Department of Operations Management and Information Systems. Palese earned his Ph.D. in business administration with a concentration in information systems at Louisiana State University. He also has an undergraduate degree in economics and master’s degree in international business and economics from University of Pavia (Italy) and speaks Italian. Palese teaching and research interests embrace introduction to management information systems, data analytics, effective use, customer service, digital data streams and text mining.

Palese’s research has appeared in journals such as MISQ Executive, the International Journal of Information Management, the European Journal of Information Systems, Information & Management and in conference proceedings, including the International Conference of Information Systems and Americas Conference of Information Systems. The potential of his research has been recognized with the selection at the ICIS 2018 Doctoral Consortium.
Sina Ehsani, Ph.D., Assistant Professor, Finance

Sina Ehsani is an assistant professor of finance at the College of Business at Northern Illinois University. Ehsani’s research focuses on investments and asset pricing. His most recent work on momentum in equity factor returns has received media coverage in major news outlets such as the Wall Street Journal. Ehsani is the recipient of the 2018 RAPS Rising Scholar Award and the 2019 Jack Treynor Prize. Ehsani’s research is published in journals such as Review of Asset Pricing Studies and Financial Review. He earned his Ph.D. in finance at University of Texas at San Antonio.