

Dawei (David) Zhang

470 Rauch Business Center, 621 Taylor Street, Bethlehem, Pennsylvania 18015

Email: daz215@lehigh.edu

Tel: (610) 758 - 4225

ACADEMIC EMPLOYMENT

August 2015 - Present	Assistant Professor College of Business and Economics, Lehigh University
August 2013 – July 2015	Assistant Professor Kania School of Management, University of Scranton
September 2007 - June 2013	Instructor, Research/Teaching Assistant Haskayne School of Business, University of Calgary, Canada

EDUCATION

Ph.D. Management Information Systems, 2013

Haskayne School of Business, The University of Calgary, Canada

Thesis: “Studies in IT: Capacity Utilization and Option Market Information”

Supervisor: Dr. Barrie R. Nault

M.S. Economics, 2006

The Hong Kong University of Science and Technology, Hong Kong

B.S. Computer Science, 2005

Sun Yat-sen University, China

Minor: French

RESEARCH INTERESTS

- Economics of Information Systems
- Value of IT as reflected in
 - substitution/complementarity with other production inputs such as labor
 - contribution to output as a production input
 - the financial markets perceived by the investors
 - improving healthcare outcomes

REFEREED JOURNAL ARTICLES

- Zhang. D., Lyle. M., B. R. Nault, “Trading Volume and Open Interest from Options Markets as Measures of the Effect of IT Announcements,” *Information Technology and Management*, Forthcoming.
- Zhang. D., B. R. Nault (2019), "Measuring Risk from IT Initiatives Using Implied Volatility," *Journal of the Association for Information Systems*, 20(11), 1566-1588.
- Ko. D., Mai. F., Shan., Z., D. Zhang (2019), “Operational Efficiency and Patient-Centered

Healthcare: A View from Online Physician Reviews,” *Journal of Operations Management*, 65(4), 353-379.

- Peng, G., D. Zhang (2019), “Does Information Technology Substitute for or Complement Human Labor? A Dynamic Stratified Analysis on European Countries,” *Decision Sciences*, 51(3), 720-754.
- Zhang, D., Nault, B. R., X. Wei (2019), “The Strategic Value of IT in Setting Productive Capacity,” *Information Systems Research*, 30(4), 1124-1144.
- Lin, X., Zhang, D., Y. Li (2016), “Delineating the Dimensions of Social Support on Social Networking Sites and Their Effects: A Comparative Model,” *Computers in Human Behavior*, 58, 421-430.
- Zhang, D., Cheng, Z., Mohammad, H. Q., B. R. Nault. (2015), “Information Technology Substitution Revisited,” *Information Systems Research*, 26(3), 480–495.

SELECTED WORKING PAPERS

- “Is College Education Still Enough? Explicating the Relationship between Information Technology and Human Labor” (with G. Peng, Y. Yao, and T. Browning). **Under review at *Information Systems Research*.**
- “First-party Content as a Strategic Decision for Platform Growth – Evidence from a B2B Platform” (with J. Wei, X. Wei and J. Liu). Final writing stage, targeting *Management Science*.
- “On the Relationship of IT Labor with IT Capital and IT Outsourcing in Production” (with K. Han and B. R. Nault). First draft written, further data analysis underway, targeting *Journal of Management Information Systems*.
- “Do Foreign IT Workers Substitute for or Complement the Natives?” (with G. Peng). Data analysis underway, targeting *Management Science*.
- “The Impact of Unions on Technology Investment” (with D. Mahony). Data analysis underway, targeting *Journal of Management Information Systems*.
- “Interdependence of IT Investment in Supply Chains” (with Z. Cheng, B. R. Nault, and F. Gong). Data analysis underway, targeting *Information Systems Research*.
- “Predicting the Effect of Industry Payments on Medicare Prescribing Patterns - A Social Media Perspective” (with F. Mai and Z. Shan). Data analysis underway, targeting *Journal of Operations Management*.
- “Determinants of Seller-buyer Trading Patterns on A B2B Trading Platform” (with J. Wei, J. Liu and X. Wei). Data analysis underway, targeting *Journal of Management Information Systems*.
- “Does E-visit Moderate the Relationship Between Physical Visit and Patient Satisfaction?” (With D. Ko, Z. Shan, and F. Mai). Data collection underway.
- “The Impact of Information Technology on Emergency Capacity,” Data collection underway.
- “Is Big Data Worth it? Evidence from the Financial Markets,” Data collection underway.

BOOK CHAPTERS

- Lin, X., Zhang, D., Y. Li. (2015), “On the Relationship between Online Social Support and Users’ Continuance Intention – Evidence from Social Network Sites”, *Handbook of Research on Integrating Social Media into Strategic Marketing*, pp. 140 – 152, IGI Global, USA.

RESEARCH GRANTS

- Principal Investigator, “Do Electronic Medical Records Always Increase the Efficiency of Operating Rooms?” Internal Research Grant, University of Scranton, 2014, \$2000.

PUBLICATIONS IN REFEREED CONFERENCES & WORKSHOPS

- Wei. J., Zhang. D., Liu. J., X. Wei. “Substitutive First-party Content as a Strategic Decision for Platform Growth – Evidence from a B2B Platform,” *The 2020 Americas Conference on Information Systems (AMCIS)*, Virtual Conference, August 12 – 16, 2020 (Forthcoming).
- Peng. G., D. Zhang. “The Complementarity between Foreign and Native IT Workers: Evidence from an Industry-Level Analysis” *The 2020 Americas Conference on Information Systems (AMCIS)*, Virtual Conference, August 12 – 16, 2020 (Forthcoming).
- Peng. G., D. Zhang. “Do Foreign IT Workers Substitute for or Complement the Natives?” *The 2019 Americas Conference on Information Systems (AMCIS)*, Cancun, Mexico, August 15 – 17, 2019.
- Zhang. D., Peng. G., Y. Yao. “Artificial Intelligence or Intelligence Augmentation? Unravelling the Debate through an Industry-Level Analysis,” *The 2019 Pacific Asia Conference on Information Systems (PACIS)*, Xi’an, China, July 8 – 12, 2019.
- Zhang, D., P. Gang. “Are Information Technology and Human Labor Substitutes or Complements? A Stratified Analysis on Education Groups,” *The 12th China Summer Workshop on Information Management (CSWIM 2018)*, Qingdao, China, June 23 – 24, 2018.
- Ko, D., Mai, F., Shan, Z., D. Zhang. “Improving Patient Satisfaction: A View from the Patients through User-Generated Online Physician Reviews,” *The 11th China Summer Workshop on Information Management (CSWIM 2017)*, Nanjing, China, June 24 – 25, 2017.
- Zhang, D., B. R. Nault. “Do IT Investments Impact Ex-ante Firm Risk? Evidence from the Option Market,” *The 10th China Summer Workshop on Information Management (CSWIM 2016)*, Dalian, China, June 25 – 26, 2016.
- Zhang, D., B. R. Nault. “Do IT Investments Impact Ex-ante Firm Risk? Evidence from the Option Market,” *Workshop on Information Systems and Economics (WISE)*, Dallas, TX, December 12 – 13, 2015.
- Li, W., Dai, H., D. Zhang. “The Relationship between Maximum Completion Time and Total Completion Time in Flowshop Production,” in proceedings of *The 43rd SME North American Manufacturing Research Conference (NAMRC)*, Charlotte, NC, June 8 - 12, 2015.
- Lin, X., Zhang, D., Y. Li. “The Dimensions of Online Social Support on Social Networking Sites and Their Effects,” in proceedings of *The 18th Pacific Asia Conference on Information Systems (PACIS 2014)*, Chengdu, China, June 24 - 28, 2014.
- Zhang, D., Lyle, M., B. R. Nault. “Who Reacts to IT Investment Announcements?” in Proceedings of *The 2012 INFORMS Conference on Information Systems and Technology (CIST 2012)*, Phoenix, AZ, October 14-17, 2012.
- Zhang, D., Wei, X., B. R. Nault. “The Impact of IT on Productive Capacity,” in *Proceedings of The 2011 INFORMS Conference on Information Systems and Technology (CIST 2011)*, Charlotte, NC, November 12-13, 2011.

CONTRIBUTED CONFERENCE & WORKSHOP PRESENTATIONS

- “Determinants of Seller-buyer Trading Patterns on A B2B Trading Platform,” with Wei. J., Liu. J., and X. Wei. *The 2020 INFORMS Annual Meeting* (Forthcoming).
- “Substitutive First-party Content as a Strategic Decision for Platform Growth – Evidence from a B2B Platform,” with Wei. J., Liu. J., and X. Wei. *The 2020 Americas Conference on Information Systems (AMCIS)*, Virtual Conference, August 12 – 16, 2020 (Forthcoming).
- Peng. G., D. Zhang. “The Complementarity between Foreign and Native IT Workers: Evidence from an Industry-Level Analysis” *The 2020 Americas Conference on Information Systems (AMCIS)*, Virtual Conference, August 12 – 16, 2020 (Forthcoming).
- “Interdependence of IT Investment in Supply Chains,” with Z Cheng, B. R. Nault and E. Gong. *The 2019 INFORMS Annual Meeting*, Seattle, WA, October 20 – 23, 2019.
- “Do Foreign IT Workers Substitute for or Complement the Natives?” with G. Peng. *The 2019 Americas Conference on Information Systems (AMCIS)*, Cancun, Mexico, August 15 – 17, 2019.
- “Artificial Intelligence or Intelligence Augmentation? Unravelling the Debate through an Industry-Level Analysis,” with G. Peng and Y. Yao. *The 2019 Pacific Asia Conference on Information Systems (PACIS)*, Xi’an, China, July 8 – 12, 2019.
- “The Impact of Union Density on Technology Investment,” with D. Mahony. *POMS 30th Annual Conference*, Washington D. C., May 2 – 6, 2019.
- “Are Information Technology and Human Labor Substitutes or Complements? A Stratified Analysis on Education Groups,” with G. Peng. *The 12th China Summer Workshop on Information Management (CSWIM 2018)*, Qingdao, China, June 23 – 24, 2018.
- “Improving Patient Satisfaction: A View from the Patients through User-Generated Online Physician Reviews,” with D. Ko, F. Mai, and Z. Shan. *The 11th China Summer Workshop on Information Management (CSWIM 2017)*, Nanjing, China, June 24 – 25, 2017.
- “Substitute or Complement? A Study on the Relationship between IT and Labor,” with G. Peng. *CBE Summer Research Retreat*, Lehigh University, 2017.
- “Do IT Investments Impact Ex-ante Firm Risk? Evidence from the Option Market,” with B. R. Nault. *The 10th China Summer Workshop on Information Management (CSWIM 2016)*, Dalian, China, June 25 – 26, 2016.
- “On the Relationship of Information Technology with Other Inputs,” with J. Cheng, H. Mohammad and B. R. Nault. *CBE Summer Research Retreat*, Lehigh University, 2016.
- “Do IT Investments Impact Ex-ante Firm Risk? Evidence from the Option Market,” with B. R. Nault. *Workshop on Information Systems and Economics (WISE)*, Dallas, TX, December 12 – 13, 2015.
- “The Relationship between Maximum Completion Time and Total Completion Time in Flowshop Production,” with W. Li and H. Dai. *The 43rd SME North American Manufacturing Research Conference (NAMRC)*, Charlotte, NC, June 8 - 12, 2015.
- “The Dimensions of Online Social Support on Social Networking Sites and Their Effects,” with X. Lin and Y. Li. *The 18th Pacific Asia Conference on Information Systems (PACIS 2014)*, Chengdu, China, June 24 - 28, 2014.
- “IT and Hospital Performance,” with B. R. Nault and V. Mitchell. *The 2014 INFORMS Annual Meeting*, San Francisco, CA, November 9-12, 2014.
- “Who Reacts to IT Investment Announcements?” with M. Lyle and B. R. Nault. *The 2012 INFORMS Conference on Information Systems and Technology (CIST 2012)*, Phoenix, AZ, October 14-17, 2012.

- “The Impact of IT on Economic Capacity,” with B. R. Nault. *The 2012 INFORMS Annual Meeting*, Phoenix, AZ, October 14-17, 2012.
- “The Impact of IT on Productive Capacity,” with X. Wei and B. R. Nault. *The 2011 INFORMS Conference on Information Systems and Technology (CIST 2011)*, Charlotte, NC, November 12-13, 2011.
- “Who Reacts to IT Investment Announcements?” with M. Lyle and B. R. Nault. *The 2011 INFORMS Annual Meeting*, Charlotte, NC, November 13-16, 2011.
- “Optimal Software Localization Design,” with J. Chen and B. R. Nault. *Doctoral Consortium, International Conference on Information Systems (ICIS)*, Saint Louis, December 12-15, 2010.
- “Optimal Software Localization Design,” with J. Chen and B. R. Nault. *The 2010 INFORMS Annual Meeting*, Austin, TX, November 7-10, 2010.
- “On the Relationship of Information Technology with Other Inputs,” with H. Mohammad, Z. Cheng, and B. R. Nault. *CORS-INFORMS International Meeting*, Toronto, June 14-17, 2009.

INVITED PRESENTATIONS

- “Predicting the Effect of Industry Payments on Medicare Prescribing Patterns - A Social Media Perspective” I-DISC Fintech Workshop, Lehigh University, February 21, 2020.
- “Improving Patient Satisfaction: A View from the Patients through User-Generated Online Physician Reviews” *The 29th Production and Operations Management Annual Conference (POMS 2018)*, Houston, TX, May 4 – 7, 2018.
- “Are Information Technology and Human Labor Substitutes or Complements? A Stratified Analysis on Education Groups” *Drexel University*, April, 2018.
- “Information Technology as a Production Input – A Substitute or Complement?” *Lehigh Center for Supply Chain Research Spring Symposium*, November, 2017.
- “The Strategic Value of IT in Setting Productive Capacity” *Fudan University*, Shanghai, China, June, 2017.
- “The Impact of IT on Productive Capacity and its Utilization Rate” *University of Connecticut*, April, 2017 (Presented by Barrie Nault).
- “Implied Volatility as a Measure of Risk from IT Initiatives” *Department of Management, College of Business and Economics, Lehigh University*, April, 2017.
- “Managing Paradoxical Tensions to Improve Patient Satisfaction: A View from the Patients through User-Generated Online Physician Reviews” *Cincinnati Children’s Hospital Medical Center*, Cincinnati, OH, March 17, 2016 (Presented by Z. Shan and Dong-Gil Ko).
- “The Impact of IT on Productive Capacity and its Utilization Rate” *Dalian University of Technology*, China, July 15, 2014.

TECHNICAL SKILLS

- Statistics and Econometrics: Stata, MATLAB, R, SPSS, LISREL, Minitab.
- Database: Oracle, SQL Server, MySQL, Microsoft Access.
- Programming: C++, C#, Java, Visual Basic, VB.Net, VBA.
- Business Intelligence: SAS, Weka.

TEACHING INTERESTS

- Systems Analysis & Design
- Business Analytics
- Statistics

TEACHING EXPERIENCE AND CERTIFICATES

- Managing Information (MBA core), Fall 2015 - Present, Lehigh University
- Systems Analysis and Design (BIS Undergraduate Required), Fall 2015 – Present, Lehigh University
- Statistics for Business I (Business Core), Fall 2013, 2014, University of Scranton
- Statistics for Business II (Business Core), Spring 2013, 2014, University of Scranton
- Business Database Management Systems (MBA Elective), Fall 2013, 2014, University of Scranton
- Database Management Systems for E-Business (Undergraduate Elective), Fall 2013, 2014, University of Scranton
- Business Information Management (Business Core), Fall 2013, 2014, Spring 2013, 2014 University of Scranton
- Introduction to Management Information Systems (Business Core), Fall 2011, 2012, University of Calgary,
- Instructional Skills Workshop (certificate) The University of Calgary, Spring 2011.
- University Teaching Certificate The University of Calgary, Spring 2012.

HONORS AND AWARDS

- Selected for the Doctoral Consortium at *the International Conference on Information Systems (ICIS)*, Saint Louis, December, 2010.
- Faculty of Graduate Studies Scholarship, University of Calgary, 2010 – 2012.
- Graduate Student Conference Travel Grant, University Research Grants Committee (URGC), University of Calgary, 2010.
- Marion Janet and Ian Stormont Forbes Scholarship, University of Calgary, 2009 – 2010.
- Marion Janet and Ian Stormont Forbes Scholarship, University of Calgary, 2008 – 2009.
- Graduate Research Scholarship, University of Calgary, 2009.
- Postgraduate Scholarship, HKUST, 2005 – 2006.
- Kai Si Scholarship, Sun Yat-sen University, China, 2001.

MEDIA COVERAGE

- “Understand the Complicated Relationship Between Labor and Technology,” Lehigh Research Review, May, 2020.
- “New minor will open doors for business students,” *The Aquinas*, University of Scranton, February 27, 2015.

PROFESSIONAL ACTIVITIES & SERVICES

- Associate Editor for *Information Technology and Management*, March 2020 – Present.

- Associate Editor for the *2019 International Conference on Information Systems (ICIS)*
- Associate Editor for The 24th European Conference on Information Systems (ECIS), 2016
- Associate Editor for *Business & Information Systems Engineering* Special Issue, 2014

- Chair for mini-track “Adoption and Impact of Health Information Technology”, The 27th Americas Conference on Information Systems (AMCIS 2020).
- Chair for mini-track “Impact of IT Productivity on Firm Value”, The 26th Americas Conference on Information Systems (AMCIS 2019)
- Program Committee member for CSWIM 2017, 2018, 2019 and 2020
- Program Committee (PC) member for CIST 2016, 2017, 2018, 2019 and 2020.
- Conference Session Chair for CSWIM 2018.
- Conference Session Chair for *INFORMS 2014 Annual Meeting*, 2014

- Referee for *Information Systems Research, Management Information Systems Quarterly, Production and Operations Management, Decision Support Systems, Information Systems Frontiers, Information Technology and Management, Information and Management, Business & Information Systems Engineering, Journal of Systems Science and Systems Engineering, International Conference on Information Systems, The INFORMS Conference on Information Systems and Technology, Workshop on Information Technologies and Systems, European Conference on Information Systems, The Hawaii International Conference on System Sciences, Americas Conference on Information Systems, Pacific Asia Conference on Information Systems, China Summer Workshop on Information Management, International Conference on Exploring Services Science.*

- Committee & Service Activities
 - Lehigh University
 - Business Information Systems Program Director, Fall 2019 – Present
 - Planning and organizing research seminars for the Management Department, Summer 2017 – 2019
 - Data Governance Executive Committee, Fall 2017 - Present
 - FFPOC (Faculty Financial Planning & Operations Committee), Fall 2017 – Spring 2019
 - ACIS (Advisory Council for Information Services Committee), Fall 2016 - Present
 - BIS Hiring Committee, 2016, 2018, 2019 (Chair), 2020.
 - University of Scranton
 - Graduate Program Committee, Fall 2013 – Spring 2015
 - Strategic Planning Committee, Fall 2013 - Spring 2015
 - Passport Program Committee, May 2014 - Spring 2015