# STEPHEN T. DOWNING



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Website: https://sdownin.github.io Scholar: https://goo.gl/gsRMwx

# **EDUCATION**

Ph.D. Institute of Business & Management, National Chiao Tung University (AACSB; ranked top 2 in Taiwan)

(expected) 2020

• Doctoral Candidate, advised by Jin-Su Kang

Mays Business School, Texas A&M University

Spring 2019

Visiting Research Scholar, invited by Albert Cannella

Gatton College of Business & Economics, University of Kentucky

fall 2019

Visiting Research Scholar, invited by Walter Ferrier

Dissertation: "Rivalry's Missing Links: Reframing Competitive Embeddedness in Competitor Identification, Forbearance Exploitation, and Capability Development"

Competitive embeddedness is a crucial, albeit underexplored, driver of organizational decisions and outcomes. Interdependence among firms arises from both mutual and conflicting interests; however, while the strategic role of collaborative embeddedness (e.g., alliances, JVs) is increasingly well understood, the impact of its adversarial counterpart (e.g., product and geographic market overlap) is only superficially recognized. The extant competitive strategy literature is generally limited to dyadlevel analysis and localized network structure, stopping short of conceptualizing higher network levels or pluralistic perspectives of rivalry. A consequence of this myopia is persistent blind spots both theoretical and empirical—in the competitive dynamics research streams on multimarket contact (MMC), competitor identification, and factor-market rivalry. Specifically, I theorize how realigning assumptions of competitive dynamics with phenomena-driven facets of competitive embeddedness can redress these blind spots in the contexts of multimarket competition, interindustry rivalry formation, and capability development in novel domains. Spanning three studies, I find broad support for the revelatory role of competitive embeddedness in strategic management.

M.B.A.

National Chiao Tung University (AACSB; ranked top 2 in Taiwan)

2012

• Concentration: International Business Management

B.A.

Tulane University

2008

- Majors: International Relations, Philosophy; magna cum laude, departmental honors
- Honors Thesis: An Impotent Hegemon: The post-9/11 decline of U.S. Influence

### RESEARCH INTERESTS

Competitive dynamics – especially competitor identification, market entry and acquisitions Interorganizational networks – exploring cross-industry encounters and multimarket interdependence

# MANUSCRIPTS UNDER REVIEW

Downing, S., Kang, J.-S., & Markman, G. "What you don't see can hurt you: Awareness cues to profile indirect competitors."

- 3rd review, Academy of Management Journal
- Award: An earlier version received the Best Thesis Award, 11th annual Topco Scientific Co. Thesis Symposium, Taiwan (media summary in Chinese: http://www.tmi.org.tw/2018/08/2018.html)

# WORKING PAPERS

- Kang, J.-S., Downing, S., & Markman, G. "Nonresponse Asymmetry: How Buyer Engagement Influences Attacker-Target Dynamics." *Submission preparation stage*.
- Downing, S., Kang, J.-S., & Lee, H. "Multimarket Contact and Acquisitions: A Power-Dependence Perspective on Multisided Competition." *Submission preparation stage*.
- Downing, S., Yu, T., Cannella, A.A., & Kang, J.-S. "The Coevolution of Multimarket Contact and Competition." Data analysis stage.
- Downing, S., Kang, J.-S., & Markman, G. "The Dual Embeddedness of Product and Factor Market Rivalry." Data analysis stage.
- Downing, S., Kang, J.-S., & Lee, H. "Multi-Category Contact (MCC): Status Asymmetry and Multiplex Learning in New Category Entries." *Design stage*.
- Kang, J.-S., & Downing, S. "Does Online Embeddedness Mobilize Offline Collective Action? Evidence from An E-Commerce Platform's Social Network Experiment." *Design stage*.
- Downing, S. & Kang, J.-S. "Parsing Value from Unobserved Networks: Relational Inference from Non-Relational Data." *Design stage*.

# REFEREED PUBLICATIONS

- Kang, J.-S., & Downing, S. (2015). "Keystone effect on entry into two-sided markets: An analysis of the market entry of WiMAX." *Technological Forecasting & Social Change*, 94, 170–186.
- Kang, J. S., Kholod, T., & Downing, S. (2015). "Analysis of Russia's biofuel knowledge base: A comparison with Germany and China." *Energy Policy*, 85, 182–193.
- Kang, J. S., Chiang, C. F., Huangthanapan, K., & Downing, S. (2015). "Corporate social responsibility and sustainability balanced scorecard: The case study of family-owned hotels." *International Journal of Hospitality Management*, 48, 124–134.

# **GRANTS & AWARDS**

Ph.D. Student Research Abroad Program Grant	2019
<ul> <li>One-year international research and travel stipend from National Chiao Tung Universit and Taiwan Ministry of Education</li> </ul>	-y
Best Ph.D. Thesis Award	2018
• Top prize and monetary award, 11th annual Topco Scientific Co. Thesis Symposium, Taiwan (media summary in Chinese: <a href="http://www.tmi.org.tw/2018/08/2018.html">http://www.tmi.org.tw/2018/08/2018.html</a> )	
Ph.D. Dissertation Research Grant	2016 - 2017
<ul> <li>Taiwan Ministry of Science &amp; Technology, 105-2420-H-009-012-DR</li> </ul>	
Management Research Grant	2015 - 2016
• Taiwan Ministry of Science & Technology, 104-2410-H-009-050, under JS. Kang	
Ph.D. Scholarship	2013 - 2016
Taiwan Ministry of Education scholarship	

Dimerco Corp. M.B.A. Leader Award

Monetary award for ranking top 3 in MBA class

Tulane Distinguished Scholar Award

2004 - 2008

2011

Undergraduate academic half-scholarship

# **CONFERENCE PAPERS**

- Downing, S., Kang, J.-S., & Markman, G. (2019) "Attacks, Buyer Engagement, and the Target Response-Nonresponse Spectrum." 79th Annual Meeting of the Academy of Management, Boston.
- Kang, J.-S., Downing, S., & Markman, G. (2019) "Strategic Nonresponse: The Mediating Role of Buyer Engagement." 39th Annual Strategic Management Society Conference, Minneapolis.
- Downing, S., Kang, J.-S., & Markman, G. (2017) "Emergent Awareness: Competitive dynamics beyond rivalry." 37th Annual Strategic Management Society Conference, Houston.
- Downing, S., Kang, J.-S., & Markman, G. (2017) "Competitive Dynamics: Of whom should you be aware?" 77th Annual Meeting of the Academy of Management, Atlanta.
- Downing, S., Kang, J.-S., & Hsu, C.L. (2016) "Network Risk: Assessing the threat of envelopment." 36th Annual Strategic Management Society Conference, Berlin.
- Downing, S. & Kang, J.-S. (2015) "Characteristics demand and platform competition: A game-theoretic argument for strategic CSR". 35th Annual Strategic Management Society Conference, Denver.
  - Award: SMS best student paper award nominee

# PUBLISHED TEACHING CASES

Kang. J.-S., and Downing, S. (2015). "Cconma.com in South Korea: An innovative e-commerce platform". Ivey ID: 9B15M020. Ivey Publishing.

# TEACHING EXPERIENCE

National Chiao Tung University (AACSB; ranked top 2 in Taiwan)  Section Evaluation		
2018 Summer	TA (Masters) Strategic Management 6157 (22 students)	4.81 / 5
2018 Spring	Guest Lecturer (Masters) Network Strategies: Methods and Applications "Introducing the R statistical computing language for network anal	
2017 Fall	Guest Lecturer (Masters) Network Strategies: Methods and Applications "Introducing the R statistical computing language for network anal	
Shih Chien University (Taiwan) Section Evalua		Section Evaluation
2017 Spring	Guest Lecturer (Masters) Digital Marketing	n/a
2017 Spring	Guest Lecturer (Undergrad) Research Methodology	n/a
2017 Spring	Guest Lecturer (Undergrad) International Business Management	n/a

# PROFESSIONAL & ENTREPRENEURIAL EXPERIENCE

Co-Founder & Data Science Lead, Choco.ly (Taipei; startup CEM SaaS platform)

2015 - 2018

- Designed and implemented analytics suite
- Iterated customer interviews and user observations, testing hypotheses via lean startup
- Collaborated in systems design and full-stack web development

Co-Founder & B.D.M., Choco Design (Taipei; startup digital design agency)

2014 - 2015

• Managed new business development, account prospecting, negotiations

Sales Account Manager, ACTi Corporation (Taipei; IP camera mfg.)

2012 - 2013

- Oversaw Nordic territory distributor sales during key product lines overhaul
- Transitioned channel partners onto new policy terms, nurturing key accounts to accelerate growth while minimizing cannibalization

Marketing Intern, PPG Industries (Shanghai & Taipei; fiberglass joint venture)

2011

 Completed analysis of Chinese fiberglass export data to inform APAC market development initiatives for the Pittsburgh Formosa Group joint venture

Public Finance Consulting Intern, The PFM Group (New Orleans; public finance)

2007

- Drafted budgeting for outcomes and best practices recommendations for City of New Orleans revenue structure and generation
- FY2008 budget results: Cut expenditures by \$8.1 million and eliminated \$48 million in unnecessary funding requests

# QUANTITATIVE ANALYSIS COMPETENCIES

Experienced in data science and big data methods that advance management research by facilitating greater data granularity and scope, including the following software and technologies:

### Methods:

- Network analysis (ERGM, REM, SAOM)
- Unsupervised learning and dimensionality reduction (topic models, tensor factorization)
- Agent-based modelling (discrete choice and game-theoretic simulations)
- Time series analysis (ARIMA, Markov switching models, Bayesian structural time series)
- Linear and generalized regression with extensions (OLS, GLM, HLM)

### Software & Technologies:

- Scientific / statistical computing (R, Python, SAS, Matlab, LaTeX, SGE HPC shell scripting)
- Relational and non-relational databases (MySQL; AWS DynamoDB, MongoDB, Neo4j)
- Object oriented programming (Python, PHP)
- Full-stack web development (HTML, CSS, JS/jQuery, LAMP stack, PHP Yii2 framework)
- Cloud architecture (Amazon Web Services EC2, S3, RDS, Route53, SES, Lambda, etc.)
- Version control (Git)

# **PRESENTATIONS**

- Downing, S., Kang, J-S. & Markman, G.D. 2019. Attacks, Buyer Engagement and the Target Response-Nonresponse Spectrum. *Academy of Management Meeting*, Boston, MA.
- Kang, J-S., Downing, S., & Markman, G.D. 2019. Strategic Nonresponse: The Mediating Role of Buyer Engagement. *Strategic Management Society*, Minneapolis, MN.
- Downing, S., Kang, J-S. & Markman, G.D. 2017. Competitive dynamics: Of whom should you be aware? *Academy of Management Meeting*, Atlanta, GA.
- Downing, S., Kang, J-S. & Markman, G.D. 2017. Emergent awareness: Competitive dynamics beyond rivalry. *Strategic Management Society*, Houston, TX.
- Downing, S., Kang, J-S. & Hsu, C.L. 2016. Network Risk: Assessing the threat of envelopment. *Strategic Management Society*, Berlin.
- Downing, S., Kang, J-S. 2015. Characteristics demand and platform competition: A game-theoretic argument for strategic CSR. *Strategic Management Society*, Denver.

# MEMBERSHIPS2016 – Pres.Academy of Management2016 – Pres.Strategic Management Society2016 – Pres.Beta Gamma Sigma2012 – Pres.

### LANGUAGES

English: Native

Chinese (Mandarin): Intermediate