NICHOLAS J. SWITANEK

2530 Bennett Avenue ◦ Evanston, Illinois 60201 ◦ 650.823.3886 ◦ nswitanek@gmail.com

EDUCATION

2003-2008	Ph.D., Organizational Behavior, Stanford University Graduate School of Business
2005-2007	M.S., Statistics, Stanford University
1994-1999	B.S., Mathematics, *magna cum laude*, University of Arizona
1994-1999	B.A., Philosophy, *magna cum laude*, University of Arizona
Spring 1999	Visiting Scholar, Peking University, Beijing, China
Fall 1998	Visiting Scholar, Fudan University, Shanghai, China
Summer 1998	Summer Fellow in Ocean Physics, Woods Hole Oceanographic Institution
1996-1997	Visiting Scholar, University of Freiburg, Freiburg im Breisgau, Germany

EMPLOYMENT

2008-present	Visiting Assistant Professor of Management & Organizations, Kellogg School of Management
2002-2003	Research Assistant, Stanford University Graduate School of Business, Stanford, CA
2001-2002	Business Analyst, Guofuwang Technology, Beijing, China
2000-2001	Assistant to CEO, Xin De Telecom, a Siemens joint venture, Beijing, China
1999	Summer Associate, U.S. Department of Commerce, U.S. Embassy, Beijing, China

HONORS AND AWARDS

2007-2008	Levi Stevens Memorial Scholarship
2006-2007	Stanford Center for Philanthropy and Civil Society PhD Fellowship
2005-2006	Werner P. Geigenmuller Fellowship
2004-2005	Arthur L & Lenna T Dahl Fellowship
2003-2004	Robert K. Jaedicke Award, Stanford University Graduate School of Business
1999	Phi Beta Kappa, University of Arizona

RESEARCH PROJECTS

The Impact of News Readability on Financial Market Response Times

Financial economists note that stock prices compound information within minutes of the arrival of news. My work is the first to examine the variance in market response times to news. For a random sample of 1000 firms, I used JavaScript to collect the 320,000 firm-relevent news events published between 1994 and 2010 on key newswires and press release clearinghouses, all time-stamped to the minute. For the treatment sample of 90,000 items published during trading hours, I used UNIX and SAS to extract from the TAQ database all trades of the firm's equities for 2 hours from the onset of the news stimulus. In 64-bit R across several processors, I aggregated trading activity in 15-second intervals to assess order imbalance, a signed measure of trading volume. For each treatment event I created an empirical distribution of expected order imbalance. Using R and Python natural language processing packages, I cleaned and extracted features from the article texts, including readability and time- and tf-idf-weighted cosine similarity to measure news familiarity. I analyzed the variance in times to first abnormal order imbalance using a non-parametric time-to-event regression model. I am preparing this study to resubmit to the finance division of *Management Science*.

How Externalized is Carbon? Financial Market Estimates of Life-Cycle CO2 Emissions

Using market response time metrics as described in the study above, along with the network of inter-industry trade from U.S. Economic Input-Output (EIO) tables and the industry-associated carbon emissions derived using EIO-based life-cycle assessment, I assess how quickly news of the recent SEC carbon disclosure interpretive guidelines was integrated across the network. From these measures I examine how accurately financial market participant trading reflected the underlying reality of life-cycle carbon emissions. I will deliver a talk on this research at the Northwestern University Law School Roundtable on Climate Adaptation in April, and am preparing the paper for submission at *Science*.

Psychological Cover for Corporate Social Action: Marshaling Evidence of Altruism and Self-Interest for Social and Economic Critics
Using articles scraped from the web, data from Compustat, First Call, and KLD databases, and mixed effects regression models, I exploit temporal and regional variation to test my hypotheses that the prior empirical relationship between environmental and financial performance interacts with local stakeholder pressure to constrain or liberate managers to pursue environmentally benign managerial practices. I will present this paper at the Academy of Management meetings in August, and submit it to *Administrative Science Quarterly*.

The Costs of Improvement and Rewards of Decline: State and Change in Corporate Environmental Performance
I use a difference-in-differences model with a propensity-score matched sample of U.S. firms between 1992 and 2008 to estimate the hitherto unexamined time path of effects of changes in environmental performance on profitability. I am responding to reviewers and preparing the work to submit to *Academy of Management Journal*.

A Behaviorist Theory of the Firm: Operant Conditioning of Publicly Traded Companies
This paper examines how financial markets condition shareholder attentiveness in firms by meting out punishment and reinforcement to firms via market returns each quarter. In a random sample of publicly traded firms I model market attentiveness as a function of prior market treatment consistency and intensity. I am preparing this paper for *Administrative Science Quarterly*.

The Effect of Institutional Investor Attention on Corporate Carbon Disclosure
In this study I exploit a unique feature of the firm sampling criterion of the Carbon Disclosure Project, the most influential of the investor consortia focused on carbon emissions, that randomly selects some firms to receive the "treatment" of institutional investor attention. I use this treatment assignment feature to estimate a local average treatment effect (LATE), an unbiased estimate of the causal effect of investor attention on carbon disclosure. I am preparing the paper for submission to *Administrative Science Quarterly*.

Confront or Collaborate? Ideological Competition among Modern U.S. Environmental Movement Organizations over Green Business Strategy (dissertation)
Drawing on research in organizational strategy and sociology, I developed theory and hypotheses about the ecology of ideology-based competition, and tested my expectations empirically with a unique longitudinal dataset I collected on more than 14,000 environmental nonprofits in the United States.
Reading Committee: Dr. William Barnett (Chair), Dr. Hayagreeva Rao, Dr. Walter Powell

INVITED AND CONFERENCE PRESENTATIONS

2010	"Market Response Times," Strategic Management Society 2010, Rome, Italy
	"The Competitive Contexts of Corporate Environmental Performance," Academy of Management 2010, Montreal, Canada
2009	"Ideological Competition in Modern U.S. Environmentalism" Language, Politics, and Culture Conference (Northwestern University)
2008	"Ideological Competition and the Rise of Business Collaboration among U.S. Environmental Nonprofits" McGill University (Desautels), University of North Carolina at Chapel Hill (Kenan-Flagler), Santa Clara University (Leavey), Stanford University (SCANCOR), Sacred Heart University (John F. Welch), Green Mountain College
2006	"Shocks Drive Rules" James G. March Festschrift, Organization Science Winter Conference XII, Steamboat, Colorado
2005	"Abundance and Adversity: Organizational Rule Making in Response to Threats to the Status Quo" London Business School Trans-Atlantic Doctoral Conference, London, England

STATISTICAL METHODS and PROGRAMMING EXPERIENCE

Data Acquisition and Management
> R, Python, SAS, Unix, SQL, JavaScript

Statistical Techniques and Visualization (in R)
> t-tests and contingency tables
> analysis of variance (ANOVA and MANOVA)
> principal components, cluster analysis, and multi-dimensional scaling
> learning & classification methods (e.g. Naïve Bayes, discriminant analysis, support vector machines)
> propensity score matching
> generalized linear models (for continuous and discrete outcome variables)
> smoothing methods (e.g. nearest neighbor, regression splines, generalized additive models)
> survival or time-to-event models (both non- and parametric models)
> mixed effects models (for hierarchical or cross-classified data)
> time series models (autoregressive models)
> network models
> grammar of graphics (ggplot2)

Natural Language Processing (in R and Python)
> regular expressions
> corpus creation
> frequency lists
> concordances
> collocations
> tf-idf weighting

TEACHING

2010-2011   <u>NUvention Energy</u>, *Initiative for Sustainability and Energy at Northwestern & Farley Center for Entrepreneurship and Innovation, Northwestern University*
In NUvention Energy, a course I designed and co-teach, graduate students from schools across campus come together in interdisciplinary teams to develop a product or service in sustainable energy or energy efficiency based on a technologies I sourced from Northwestern labs. They pitch their ideas to investors and to energy and sustainability experts.

2010-2011   <u>Advanced Statistical Methods for Organizational Research</u>, *Kellogg School of Management*
I designed and teach this practice-based course in applied statistics. I introduce two modern families of methods with application to organizational research at both the micro and macro levels: event history analysis and hierarchical/multilevel regression models.

2008-2011   <u>Business Design for Environmental Sustainability</u>, *Kellogg School of Management*
I designed and teach this MBA elective in strategic issues in managing for environmental sustainability. It interweaves insights from the strategic management, environmental, and social sciences to help students navigate a path towards competitive and environmental flourishing.

2008   <u>Environmental Science for Managers and Policy-Makers</u>, *Stanford Graduate School of Business*
I wrote learning modules and taught methods tutorials for this new course, led by GSB Prof. Erica Plambeck with Stanford ecologists Chris Field and Gretchen Daily.

As course assistant, I graded papers and advised students for the following:
2007   <u>The Global Context of Management,</u> *Stanford GSB*, Prof. William Barnett
              <u>MBA Core Strategy</u>, *Stanford GSB*, Prof. William Barnett
2006   <u>MBA Core Strategy</u>, *Stanford GSB*, Prof. Chip Heath
2003   <u>How to Make Ideas Stick</u>, *Stanford GSB*, Prof. Chip Heath

PROFESSIONAL SERVICE

2008-2011	Kellogg Faculty Steering Committee for Kellogg Sustainability Roundtable
2008-2011	Faculty Affiliate of Social Interaction & Organizing at Northwestern (SION)
2005-2008	Graduate Student Steering Committee, Methods of Analysis Program in the Social Sciences
2005-2007	Founder and Student Director, Social Science Methodology Colloquium Series, sponsored by the Institute for Research in the Social Sciences at Stanford (IRiSS)

PROFESSIONAL REFERENCES

Dr. William Barnett
Stanford University Graduate School of Business
655 Knight Way
Stanford, CA 94305
Phone: 650.723.1421
Email: barnett_william@gsb.stanford.edu

Dr. Klaus Weber
Northwestern University Kellogg School of Management
2001 Sheridan Rd., Ste. 386
Evanston, IL 60208
Phone: 847.491.2201
Email: klausweber@kellogg.northwestern.edu

Dr. Brayden King
Northwestern University Kellogg School of Management
2001 Sheridan Rd., Ste. 386
Evanston, IL 60208
Phone: 847.497.6950
Email: b-king@kellogg.northwestern.edu