

A DOZEN REASONS TO PAY ATTENTION TO JINDAL SCHOOL RESEARCH

“Research is an important part of a business school,” Naveen Jindal School of Management Dean Hasan Pirkul said when the predecessor to JSOM Research Ventures debuted as a regular feature in *MANAGEMENT* nine years ago. “A critical part of our mission is to conduct research that will improve and forward the state of the art in management.”

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Since then, his view has not changed, nor has the steadily climbing productivity of Jindal School researchers (see *JSOM Holds Steady in UTD Top 100 Rankings* on page 37). What is different is that JSOM tries harder to publicize researchers' efforts. In that try-harder spirit, this installment of Research Ventures brings you a dozen studies undertaken by 23 researchers who are faculty members, PhD students or PhD alums of the Jindal School.

RETAIL

Gonca Soysal, Assistant Professor of Marketing

As the fastest-growing segment of the retail industry, outlet stores generated \$22.4 billion in retail sales in 2010.

More customers are turning to this lower-quality, lower-price channel, and Dr. Gonca Soysal wanted to know how shopping at outlet stores influences customer behavior at retail stores.

She and co-author Dr. Lakshman Krishnamurthi of Northwestern University investigated how adoption of a retailer's factory outlet channel affected customers' spending in the retailer's traditional retail store channel.



“When retailers introduce these lower-quality, lower-price channels, they worry about something called cannibalization: when customers switch away from the more expensive channel and then replace their purchases with purchases from the cheaper channel,” Soysal said.

Retailers also worry about brand dilution, which is when customers experience a product at a lower quality and a lower price point and reduce their valuation of the brand, Soysal said.

Published by *Management Science* online last November (pubsonline.informs.org/doi/pdf/10.1287/mnsc.2015.2262), their study, “How Does Adoption of the Outlet Channel Impact Customers' Spending in the Retail Stores: Conflict or Synergy?” did not find evidence of cannibalization or brand dilution. The researchers were surprised to learn that once customers adopted the outlet channel, they started spending even more at the retail stores.

Soysal said the study strongly suggests that retailers should not be scared to expand into dual distribution with higher-quality, higher-price retail stores and lower-quality, lower-price outlet stores.

Read the full story at: jindal.utdallas.edu/outlets-effect.

WEB ADVERTISING

Varghese Jacob, Vice Dean, Lars Magnus Ericsson Distinguished Professor of Information Systems

Suresh Radhakrishnan, Constantine Konstans Distinguished Professor of Accounting

Young Ryu, Associate Professor of Information Systems

Payment-per-click is one of the most popular pricing models for online advertising, but the rate of click fraud is staggering. In 2014, marketers lost \$11.6 billion in advertising because of fraudulent clicks.

Three Jindal School researchers, along with a former PhD student, examined the process of identifying click fraud. In their study, published in the

December issue of *Information Systems Research*, they proposed a way to support technological improvements.

In the pay-per-click model, advertisers pay the service provider each time someone clicks their ad. Although it is the most prevalent model, it is susceptible to click fraud, a practice of imitating a legitimate user clicking on an ad to generate a charge.

The study, "Can Payment-Per-Click Induce Improvements in Click Fraud Identification Technologies?" (pubsonline.informs.org/doi/10.1287/isre.2015.0598) considers identifying click fraud as a three-stage process. The service provider — for example, Google or Yahoo — classifies clicks as fraudulent or not. Then, the advertiser does the same using his own technology. If there is a disagreement, the service provider examines further, and its conclusion is considered binding.

The researchers suggest that an independent third party investigate and flag fraudulent clicks when a conflict arises. Co-author Dr. **Min Chen** earned a master's degree in information technology and management and a doctorate in management science from the Jindal School. Chen is a faculty member at George Mason University.

Read the full story at: jindal.utdallas.edu/study-pay-per-click.



VARGHESE JACOB

Loss of profit due to not knowing what is in stores is huge, Sethi said, "but people don't recognize it because there's no benchmark. A benchmark requires more research."

Businesses are motivated to curb profit losses, but the benefits of their new model have not been demonstrated yet, Sethi said. The researchers aim to connect with a business so they can investigate how much can be saved by applying this model.

Dr. **Meng Li**, PhD 2013, now at the University of Massachusetts Dartmouth, also is a co-author of the study.

Read the full story at: jindal.utdallas.edu/jpwim.



SURESH RADHAKRISHNAN



YOUNG RYU

INCENTIVE PAY

Joyce Cong Ying Wang, International Management Studies

PhD Candidate

Incentive compensation is becoming an increasingly popular practice, with firms offering managers incentive pay in the hopes of improving company performance. But not all managers respond to performance-based pay, according to research from doctoral candidate Joyce Cong Ying Wang.

The study, "An Experimental Study of the Interaction Effects of Incentive Compensation, Career Ambition, and Task Attention on Chinese Managers' Strategic Risk Behaviors," (onlinelibrary.wiley.com/doi/10.1002/job.2062/abstract) was published online last November in the *Journal of Organizational Behavior*. The research examined differences in individual characteristics — specifically career ambition and task attention — and business context to see how they affected managers' responses to incentive pay.

"The thought is that if companies provide managers with incentive pay, which is closely related to firm performance, then managers will be willing to take more risks," Wang said. "We asked ourselves, 'Does this always work? Do all managers always take more risks when offered incentive compensation?'"

Wang began the research more than two years ago while working at China Europe International Business School with co-author Dr. Daniel Han Ming Chng.

The researchers created a model and tested it using a computer-based simulation with part-time MBA students who work as managers in companies.

"We found that managers with higher career ambition will be more responsive to incentive pay by taking more risks," Wang said. "We found that task attention more consistently affects managers' response to incentive pay. When managers are offered incentive pay, if they are very attentive to tasks, they will take more risks."

The study also found that when a company's performance grows, incentive pay does not work as well as when a firm's performance declines.

"Incentive compensation is not one-size-fits-all," Wang said. "Companies need to provide this kind of compensation

INVENTORY MANAGEMENT

Suresh Sethi, Eugene McDermott Chair of Operations Management

Alain Bensoussan, Ashbel Smith Professor of Risk and Decision Analysis

Metin Cakanyildirim, Professor of Information Systems

Inventory inaccuracy is common for many businesses. While cash registers track incoming orders and outgoing sales, inaccuracy arises because of unrecorded issues including spoilage, damage and theft.

Three Jindal School professors have researched inventory management for more than 10 years, and, in their latest study, published in the January issue of *Production and Operations Management*, they developed a new mathematical model to apply to inventory problems.

Dr. Suresh Sethi said the study of inventory management has been around for more than 100 years. "All these years, one thing was assumed — I know my inventory. I came up with this idea, 'What if I don't know my inventory, and how do I go about solving that problem?'" Sethi said.

Sethi, Dr. Alain Bensoussan and Dr. Metin Cakanyildirim began their work, "Managing Inventory with Cash Register Information: Sales Recorded but Not Demands," (onlinelibrary.wiley.com/doi/10.1111/poms.12511/abstract) by building simple models.

Cakanyildirim said there are several reasons for incomplete inventory information, including employee theft, improper handling of damaged merchandise, misplaced inventory and incorrect recording of sales.



SURESH SETHI



ALAIN BENSOUSSAN



METIN CAKANYILDIRIM



JOYCE CONG YING WANG

package according to individual characteristics and also according to context.”

Read the full story at: jindal.utdallas.edu/study-incentive-pay.

CONSUMER BEHAVIOR

Ryan Freling, Management Science PhD Candidate

In 2014, product returns totaled about \$280 million across all U.S. retailers. New research from JSOM doctoral candidate Ryan Freling examined existing studies on return policies to quantify the policies’ effect on consumers’ purchase and return behavior.

Freling, who is studying marketing and has taught marketing courses, conducted the analysis with Dr. Narayan Janakiraman, of UT Arlington, and Holly Syrdal, UT Arlington doctoral candidate.

The study, “The Effect of Return Policy Leniency on Consumer Purchase and Return Decisions: A Meta-Analytic Review,” (sciencedirect.com/science/article/pii/S0022435915000822) was published online last November in the *Journal of Retailing*.

The meta-analysis is the first attempt to understand the return policy literature quantitatively and prove that lenient policies positively affect purchase and return decisions, Freling said.

“In general, firms use return policies to increase purchases but don’t want to increase returns, which are costly. But all return policies are not the same,” Freling said.

The study challenges the underlying assumption that all return policies affect purchases and returns in a similar manner. Their study suggests that this is not the case, as retailers tend to impose restrictions to dissuade returns or offer leniency to encourage purchases by manipulating five return policy elements: time, money, effort, scope and exchange.

Overall, lenient return policies led to increased purchases, the study found. The researchers also found a positive effect — smaller, but still significant — of policy leniency on returns.

Read the full story at: jindal.utdallas.edu/study-return-policies.

CEO COMPENSATION

Mike Peng, O.P. Jindal Distinguished Chair of Global Strategy and Organizations, Strategy and International Management Area Coordinator

Zhiang (John) Lin, Professor of Organizations, Strategy and International Management

Steve Sauerwald, MBA 2008, PhD 2014, Assistant Professor of Management at the University of Illinois at Chicago

Jindal School researchers examined how boards face pressures when trying to control issues associated with CEO compensation.

Excess CEO returns are the financial returns from a CEO’s firm-related wealth and compensation that exceed the shareholders’ financial returns, Dr. Mike Peng said. “CEOs deserve to



RYAN FRELING



MIKE PENG



ZHIANG (JOHN) LIN



STEVE SAUERWALD

enjoy the returns that shareholders are getting. The problem is that a lot of CEOs seem to be getting returns disproportionate to what shareholders are getting.”

The paper, “Board Social Capital and Excess CEO Returns,” (onlinelibrary.wiley.com/doi/10.1002/smj.2339/abstract), the joint effort of Peng, Dr. Zhiang (John) Lin and Dr. Steve Sauerwald, was published in the March issue of *Strategic Management Journal*, (Volume 37, Issue 3, March 2016: 498-520).

Sauerwald spearheaded the study as part of doctoral dissertation research that Lin and Peng supervised.

Using data from a sample of U.S. corporations listed on the Standard & Poor’s Composite 1500 index from 1999 to 2010, the researchers found that boards face two competing normative pressures: corporate elite norms and monitoring norms.

The trio also determined that social capital affects how boards conform to those pressures. Social capital refers to social network resources that benefit board directors, Peng said.

“If a board enjoys a lot of external capital — good relationships with the corporate elites outside the company — then the board is more willing to let CEOs enjoy higher returns,” Peng said. “On the other hand, if a board enjoys a higher degree of internal social capital — the board members themselves have worked together for a long time — then they’re more comfortable putting the CEO on a shorter leash so that the CEO compensation does not go out of whack too much.”

The researchers argued that powerful CEOs and institutional investors might facilitate or constrain the normative pressures in the social network and alter the effects of board social capital on excess CEO returns.

Read the full story at: jindal.utdallas.edu/excess-ceo.

INTERNET TV

Stan Liebowitz, Ashbel Smith Professor of Managerial Economics

Alejandro Zentner, Associate Professor of Finance and Managerial Economics

The option of watching television online will not influence the amount of time a person spends viewing TV, but it does make the experience more pleasurable, according to a study from Drs. Stan Liebowitz and Alejandro Zentner.

“Some media reports predict that because people now have access to watch anything they want, anytime they want, they will spend more time watching TV,” Liebowitz said.

He and Zentner examined television consumption during the switch from broadcast TV to cable TV. Because data of current trends in Internet TV viewing will not be available for another 10 to 15 years, the authors prognosticated what is going to happen based on what has happened in the past.

The study, “The Internet as a Celestial TiVo: What Can We Learn From Cable Television Adoption?” (link.springer.com/article/10.1007%2Fs10824-015-9245-6) recently published in the *Journal of Cultural Economics*, found that viewing time essentially



STAN LIEBOWITZ



ALEJANDRO ZENTNER

stayed the same, regardless if the variety of available TV shows increased. Liebowitz said consumers have only 24 hours in a day, so giving them more variety does not mean they are going to spend more time watching television.

Because the variety of programs does not impact the amount of television consumption, the researchers determined that on-demand Internet-streaming media companies should not expect to make additional revenues through increased viewing.

Read the full story at: jindal.utdallas.edu/economists-say.

DIVERSITY'S IMPACT ON SALES

Orlando Richard, Associate Professor of Organizations, Strategy and International Management

Matching levels of racial diversity between store employees and the surrounding community impacts the store unit's sales performance, according to a study from Dr. Orlando Richard.

The study merges two opposing views on diversity in the workplace, said Richard, lead author. Social identity theory predicts that diversity is negative because people cannot identify with one another, while the information-based perspective argues that diversity is positive because it leads to more creativity.

"We tried to find a context in which diversity within the organization would lead to more creativity and problem solving, but the employees could also identify with the customers," Richard said. "This way, both of the theories are working simultaneously, and you have the highest level of performance."

For the paper, "The Impact of Store-Unit-Community Racial Diversity Congruence on Store-Unit Sales Performance," (jom.sagepub.com/content/early/2015/04/01/0149206315579511.abstract) published online in the *Journal of Management*, the researchers collected demographic and performance data from a large retailer that operates more than 200 stores in small communities throughout the greater Midwest and West. They also used community demographic data from the U.S. Census Bureau.

The study found that having diversity within a store can have positive implications for performance. If the community is also diverse, that can increase the positive effects even more.

Richard said hiring managers should take a close look at the communities they serve as a way to have higher identification between employees and the community at large.

Dr. Marcus M. Stewart of Bentley University, Dr. Patrick F. McKay of Rutgers and Timothy W. Sackett of HRU Technical Resources are study co-authors.

Read the full story at: jindal.utdallas.edu/research-shows-diversity.

ADD-ON PRICING

Xianjun Geng, Associate Professor of Information Systems

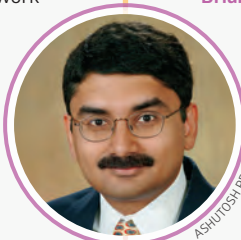
When Dr. Xianjun Geng traveled to a conference in San Francisco in 2009, he booked a four-star hotel on a discount travel website for \$80 a night. Upon his arrival, he learned of some unexpected add-on fees, including \$40 for parking and \$18 for Internet per day.



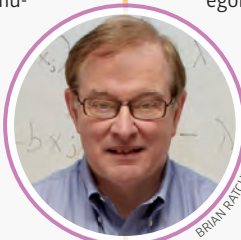
ORLANDO RICHARD



XIANJUN GENG



ASHUTOSH PRASAD



BRIAN RATCHFORD

The experience inspired Geng to conduct a study examining the increasingly popular add-on pricing model of hotels, airlines and banks. He and co-author Dr. Jeffery Shulman of the University of Washington built a new model to see if cost savings can trigger more intense competition among firms. And the study also contributes a tool that managers can use to identify if add-on pricing will make or lose money.

Their paper, "How Costs and Heterogeneous Consumer Price Sensitivity Interact with Add-On Pricing," (onlinelibrary.wiley.com/doi/10.1111/poms.12400/full) was published in *Production and Operations Management* (Volume 24, Issue 12, December 2015: 1870-1882).

The add-on concept is not new, nor limited to a particular industry, Geng said. "It's just getting more and more intense."

According to the study, firms often cite savings as a reason why they charge separately for add-ons, rather than adopting all-inclusive pricing, in which add-ons are included for free.

Nevertheless, Geng's study suggests that cost savings from add-on pricing may result in profit loss for firms when compared to all-inclusive pricing when consumers are diverse in price sensitivity. Price sensitivity is the degree to which price affects the sales of a product or service.

Read the full story at: jindal.utdallas.edu/study-cost-savings.

PREDICTING CONSUMER SPENDING

Ashutosh Prasad, Professor of Marketing

Brian Ratchford, Charles and Nancy Davidson Chair in Marketing

Sungha Jang, PhD 2011, Assistant Professor of Marketing at Kansas State University

When a business wants to predict consumer expenditures at a competing company, the task can be difficult. A recent study from two marketing professors and a PhD alumnus uses a new methodology to predict consumer spending at competitors' firms.

The study, "Consumer Spending Patterns Across Firms and Categories: Application to the Size- and Share-Of-Wallet," (sciencedirect.com/science/article/pii/S0167811615000890) was published last July online in the *International Journal of Research in Marketing*.

The work examines share-of-wallet, a measure of how much of a customer's spending in a defined category is captured by a retailer. For example, if a customer spends \$100 per month on fiction books — \$80 at Amazon.com and \$20 at Barnes and Noble — then Amazon's share-of-wallet would be 80 percent.

"Share-of-wallet is related to untapped customer potential, effectiveness of marketing activities and competitive benchmarking. It also has been used as a loyalty measurement," co-author Dr. Ashutosh Prasad said. "It's a useful metric to track because you can determine the spending at the level of the individual. Then you can ask questions like, 'Which customers should we target with our marketing activities?'"

Measuring share-of-wallet is problematic because expenditures at competing stores are not easily available, Prasad said. But marketers can use past information, obtained from surveys or information aggregators, and sales at their own store, to predict it.

The researchers propose a better methodology for prediction. For example, if Amazon has data of expenditures on not only fiction books at Amazon and Barnes and Noble, but also nonfiction books, then the inter-relationships between spending on fiction and on nonfiction can be studied to make a better prediction.

The new methodology also can be used to determine the order of cross-selling — promoting one category that then has an effect of encouraging sales in another category; and it can reveal segments of customers.

Read the full story at: jindal.utdallas.edu/jrmhp.

PRIZE-LINKED SAVINGS PRODUCTS

Kyle Hyndman, Associate Professor of Finance and Managerial Economics

People are more willing to save money when offered the chance to win a prize, according to a study by Dr. Kyle Hyndman, who examined the possibility of using lotteries to induce savings.

The study, "Do Lottery Payments Induce Savings Behavior? Evidence From the Lab," (sciencedirect.com/science/article/pii/S0047272715000298) published last June in the *Journal of Public Economics*, examined Prize Linked Savings (PLS) products.

For example, a PLS savings account adds a randomly determined element to an otherwise standard savings account. Instead of receiving a typical fixed-interest rate, depositors periodically receive a chance to win a specified, and potentially large, prize in accordance with their deposit amounts — that is, larger deposits mean a higher chance of winning.

This is the one of the first papers to provide evidence that PLS products are more effective at inducing savings compared to a standard interest-bearing account.

Hyndman and his co-authors conducted an experiment to compare the success of a PLS account to that of a standard interest-bearing account. They found participants were more likely to save money when they were offered the possibility of winning large cash prizes, instead of smaller fixed-interest rates.

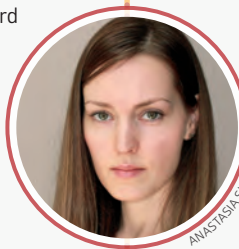
The appeal of the PLS product appears to be greatest among men, self-reported lottery players and those who reported relatively low amounts in their existing bank accounts.

"One of the things that separates this from an actual lottery is that if you buy a lottery ticket and you lose, your money is down the drain," Hyndman said. "Here, you always maintain your principal. You never lose money."

Dr. Emel Filiz-Ozbay, Dr. Melissa Kearney and Dr. Erkut Y. Ozbay of the University of Maryland, and Dr. Jonathan Guryan of Northwestern University



KYLE HYNDMAN



ANASTASIA-SHCHERBAKOVA

were co-authors on the study.

Read the full story at: jindal.utdallas.edu/lure-of-prizes.

CLIMATE CHANGE AND INVESTOR BEHAVIOR

Anastasia Shcherbakova, Clinical Assistant Professor of Finance and Managerial Economics, Director of the MS in Energy Management Program

A study from Dr. Anastasia Shcherbakova examined the differences in climate change perceptions in the United States and Europe by looking at investor behavior.

Shcherbakova and her research colleagues used the 2011 Fukushima crisis in Japan to evaluate responses of U.S. and European investors to a shifting view of nuclear power.

The study, "Revealing Climate Change Opinions Through Investment Behavior: Evidence From Fukushima," (sciencedirect.com/science/article/pii/S0095069615000054) was published last year in the *Journal of Environmental Economics and Management* (Volume 70, March 2015: 92-108). The research was the first to use investors' actions, rather than self-reported opinions, to investigate the trans-Atlantic difference in public opinion on climate change and the environment.

In the aftermath of the Fukushima earthquake and subsequent tsunami and nuclear disaster, there was worldwide pessimism about nuclear energy, Shcherbakova said. Many countries took their nuclear power plants offline for safety inspections, and some countries announced they were getting out of nuclear power.

The study examined the behavior of investors in U.S. and European financial markets that reflected their perceptions about future profitability of fossil fuels and renewable energy.

The researchers used 2010-2011 stock market data from the Center for Research in Security Prices, the New York Stock Exchange and the Bloomberg database.

Results show that investment behavior reflects investors' environmental perceptions. The researchers observed a significant increase in returns to coal in the U.S., implying that investors put more money into coal stocks, Shcherbakova said. This suggests that they perceived cost efficiency and reliability of energy supply to be more pertinent issues than climate change.

In Europe, investors put significantly more money into renewable energy stocks, suggesting that they reflect the region's environmentally conscious attitudes and willingness to pay for environmental outcomes, relative to investors in U.S. markets, Shcherbakova said.

Dr. Zhen Lei of Penn State University co-authored the study.

Read the full story at: jindal.utdallas.edu/study-shift. 🏆