

Supply Chain Management Director's Conference at Santa Clara University Agenda (March 4 – 6, 2015)

The conference will be held in the Leavey School of Business building, Lucas Hall. All sessions will be in Lucas Hall 126 (also known as the Forbes room). The opening dinner on March 4th is outside campus at Maggiano's Little Italy, Santana Row, San Jose. The conference dinner on the 5th is on campus at Nobili Hall, which is a 5 minute walk from Lucas Hall.

Wednesday, March 4

5 - 9 PM

Dinner at Maggiano's Little Italy Santana Row, San Jose

Thursday, March 5 8.00 – 8.30 AM Breakfast Lucas Hall 126

8:30 – 8:45 AM Welcome Ram Bala, Shawn Alborz, Naren Agrawal

8.45 – 9 AM
Opening remarks by Dean Starbird

9 – 9.45 AM Industry Keynote Perspectives on Supply Chain and Operations Management at Internet Scale Jim Miller, VP Worldwide Operations, Google

9.45 – 10.15 AM Coffee Break & Networking

10.15 - 11.30 AM

Panel: Marketing supply chain programs to industry

Participants:

Joy Bhadury, University of North Carolina at Greensboro Judy Jacobs, Michigan State University Janet Hartley, Bowling Green State University Moderator:

Apurva Jain, University of Washington, Seattle



11.30 AM - 12.15 PM

Industry Keynote

How the Internet of Things is related to Big Data and Business Use Cases in Supply Chain Speaker: Prakash Darji, SVP & GM, SAP Platform as a Service

12.15 - 1.15 PM

Lunch

1.15 - 2.45 PM

Panel: Incorporating Big Data into the SCM curriculum

Participants:

Jack Jensen, University of South Carolina James Campbell, University of Missouri – St. Louis Burak Kazaz, Syracuse University *Moderator:* Andy Tsay, Santa Clara University

2.45 - 3.15 PM

Coffee break & Networking

3.15 - 4.00 PM

Industry Keynote

Global supply chains: Challenges and opportunities Speaker: John Kern, SVP Supply Chain Operations, Cisco

4.00 - 5.30 PM

Panel: Recruiting students for graduate supply chain programs

Participants:

Nancy Taylor, Michigan State University Arash Azadegan, Rutgers University *Moderator:* Gangshu Cai, Santa Clara University

5.30 - 8.30 PM

Conference dinner at SCU Nobili Hall Friday, March 6

8.30 - 9.00 AM

Breakfast

9.00 - 9.45 AM

Trends in Supply Chain University Programs and Their Implications for Industry Speaker: Dana Stiffler, Managing Vice President, Gartner Inc.

9.45 - 10.15 AM

Coffee break & Networking

10.15 - 11.45 AM

Panel: Innovation in supply chain curricula

Participants:

Roberto Perez-Franco, MIT Nick Vyas, University of Southern California Simon Greathead, Brigham Young University

Moderator:

Ram Bala, Santa Clara University

11.45 - Noon

Closing remarks

Ram Bala, Shawn Alborz, Naren Agrawal

Box lunches will be provided

Transportation Itinerary: Supply Chain Conference 3/4/15 – 3/6/15

Wednesday Evening 3/4/15:

Dinner served 5pm-9pm

- Pick up guests from Hotel DeAnza, Fairmont and Candlewood Suites at 4:30pm
 Drop off at Maggiano's
- Pick up at Maggiano's at **9:00pm**
- Drop off at Hotel DeAnza, Fairmont and Candlewood Suites

Thursday Morning 3/5/15:

Guests staying at Candlewood Suites can walk to SCU

Pick up guests from Hotel DeAnza and Fairmont at 7:30am
 Drop off at Santa Clara University

Thursday Evening:

Dinner served 5pm-9:30pm Guests staying at Candlewood Suites can walk back from SCU

Pick up from Santa Clara University at 8:30pm
 Drop off at Hotel DeAnza and Fairmont

Friday Morning 3/6/15:

Guests staying at Candlewood Suites can walk to SCU

Pick up guests from Hotel DeAnza and Fairmont at 8:00am
 Drop off at Santa Clara University

Friday Afternoon:

Pick up guests from Santa Clara University <u>12:30pm</u>
 Drop off at San Jose Airport and San Francisco Airport

Want to explore the Silicon Valley? Here is a list of transportation options:

- Cal Train- located across from Santa Clara University
- Uber App- available to download on iOs and Android devices
- Yellow Cab Taxi: 408-469-0284

Supply Chain University Program Trends: Implications for Industry

Dana Stiffler March 6, 2015

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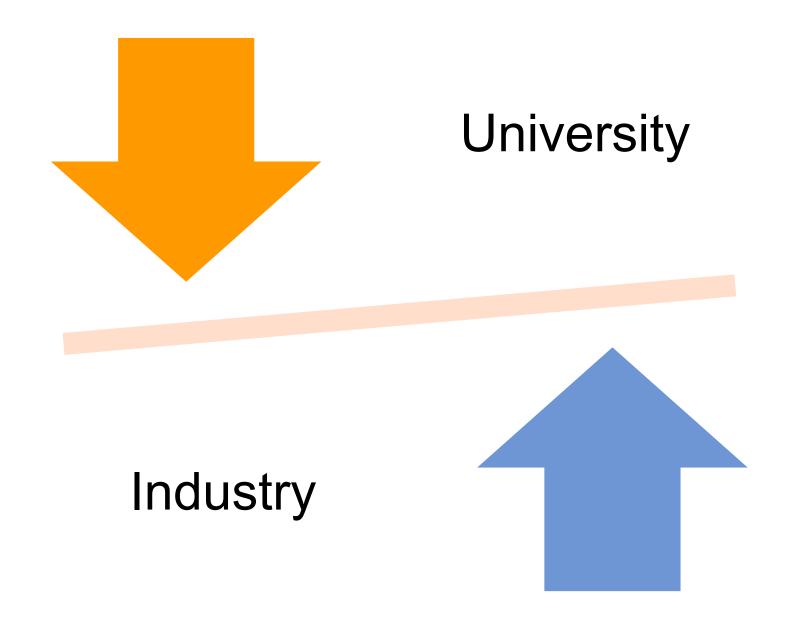




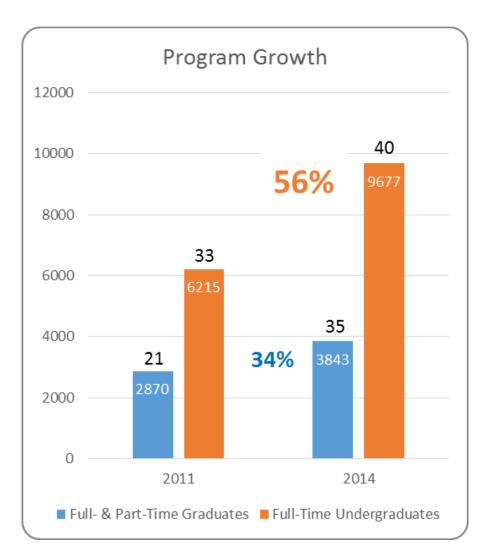
Tops Trends for the CSCO

- Supply Chain for Growth
- New Business Models
- Technology Matters
- Digital Disrupts
- Workforce Rethink



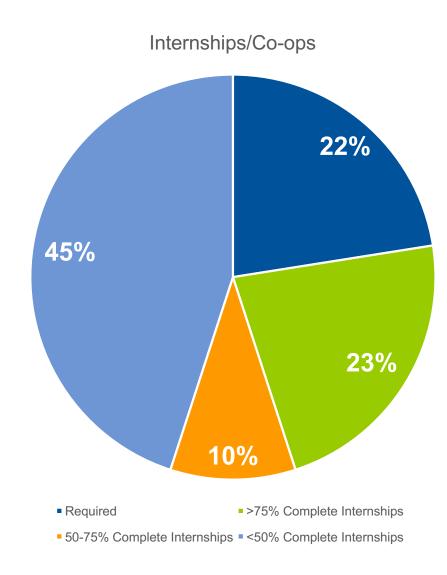


Program Growth



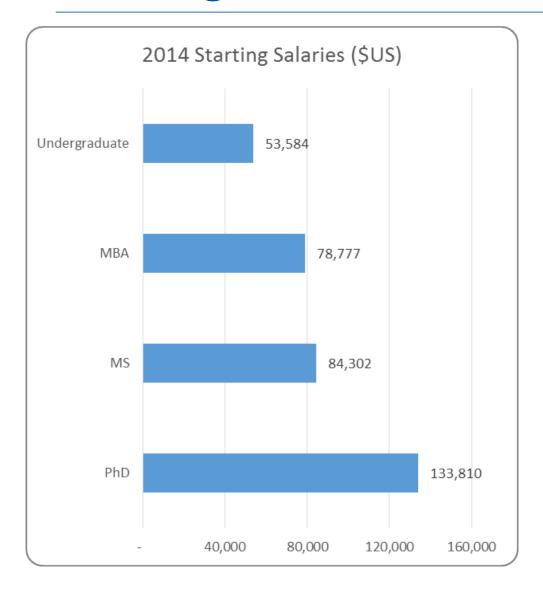
- Importance of SC career brand
- Refocus portfolio recruiting approach
- Executive alignment
- Don't rely too much to HR

In-Program Job Experience



- Deeper alignment with university partners
- Program great internships and coops
- Integrate with onboarding, rotations, career paths
- Treat as investment in SC brand
 Gartner

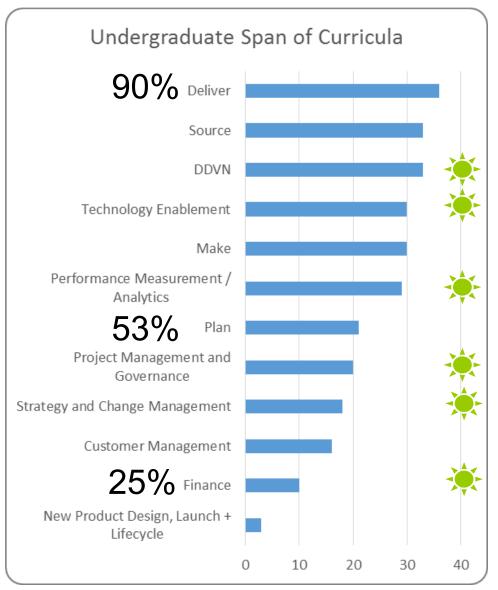
Starting Salaries



- Re-evaluate supply chain salaries
- Or...
 - Growth story?
 - Great mission?
 - Equity?
 - Career path and development opportunities?

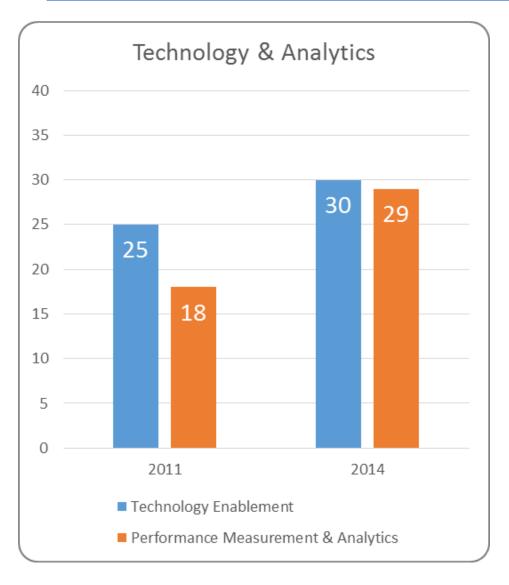
Expanded Curricula





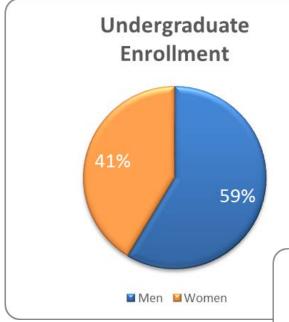
- Entry level has better understanding of end to end
- Expectation of doing cool, relevant work
- Ever increasing focus on career paths and development

Technology-Enabled Capabilities

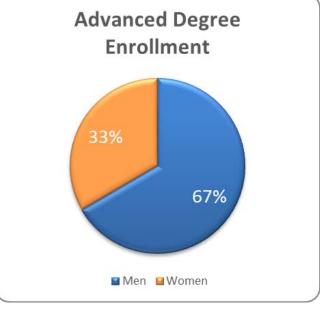


- Technology fundamentals covered
- Analytics and modeling on its way
- MIS faculty adjacencies promising

Diversity



- Supply chain can do better
- Professional services firms have an edge



 Involve diverse workforce in leading internship and recruiting activities



What's Next?

New Product Design, Launch & Lifecycle

New Competitive Sets

Project Partnerships



Impacts on Traditional University Programs

Virtual Learning



We Made It!

dana.stiffler@gartner.com

Michigan State University Supply Chain Management Council

Judy S. Jacobs

Director, Corporate and Student Relations

SCM offerings

- Academic
 - BA with concentration in SCM
 - MBA with concentration in SCM
 - MS in SCM
 - Ph.D. in Operations and Logistics
- Certificate
 - Executive Education
 - Logistics
 - Purchasing
 - Customized
 - Online

Rankings

- US News and World Report has ranked Michigan State as the #1 Supply Chain Management program in the country for the fourth consecutive year.
- Ranked #1 undergraduate program in Supply Chain Management by Gartner.
- #1 ranking by SCM World

SCM Undergraduate Program

- Approximately 1300 students
- Integrative Curriculum Approach
 - Operations
 - Logistics
 - Supply Management
- 1-3 internships
- Over 150 companies recruit for supply chain
- Over 90% full-time placement rate (domestic students)

Role of the SCM Corporate & Student Relations Office:

- to act as the liaison between corporate contacts and students seeking internship, co-op and full-time employment opportunities
- to organize and manage the activities of the MSU Supply Chain Management Council
- to serve as advisor to the undergraduate student Supply Chain Management Association (SCMA)
- to act as a liaison between corporate contacts and SCM Faculty for academic endeavors

MSU Supply Chain Management Council

- Established over 30 years ago
- Membership dropped off
- Revitalized in 2014
- 30 companies
- Three year membership

Supply Chain Management Council Mission

The Council supports SCM undergraduate education and academic activities through:

- funding,
- advice on curriculum,
- classroom case development,
- undergraduate leadership development,
- career readiness,
- job-search skills,
- internship and co-op recruitment,
- full-time employment opportunities.

Questions

SUPPLY CHAIN MANAGEMENT

Bowling Green State University

Janet L. Hartley
Professor and Director
Supply Chain Management Institute

Presented at the SCM Directors' Conference, Santa Clara University



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Source: www.smart-traveler.info

Program Overview

- * 40 years of history
- 5 full-time faculty members
- » 220 undergraduates
- New Full-time MBA specialization



Integrate Theory and Practice

- » 85% of students complete internships
- » APICS Platinum Chapter
- Company partnerships





Supply Chain Management Institute Members



























Marathon Petroleum Corporation

















Marketing Approach

- » Focus on internships and placement
 - Create "brand loyalty"
 - » Network at career fairs
 - Engage alumni
 - Involved in APICS/ISM
 - Participate in company sponsored competitions



Incorporating analytics and big data in supply chain curricula

The Global Supply Chain and Operations
Management (GSCOM) Program
University of South Carolina

Fourth Annual SCM Director's Conference

March 4-6, 2015

Santa Clara University

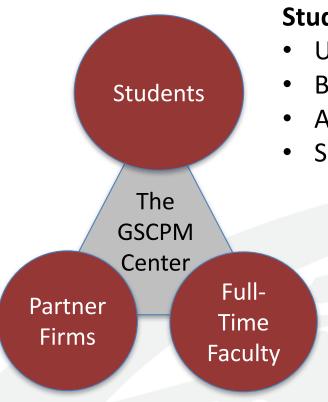


Global Supply Chain and Operations Management Program Mission

We are committed to producing students with stateof-the-art knowledge and practical applied experiences in the twin competencies of "operations and business process improvement" and "global supply chain design, analysis, and improvement". We prepare our students for specific GSCOM careers in global manufacturing firms in production, purchasing, quality control, distribution and supply chain management; in service firms for general operations management and logistics/supply chain management; and in consulting firms as business process and quality improvement consultants.



The Program Represents an Academic and Industrial Collaboration



Students

- Undergraduate & MBA
- Broad academic experiences
- Analytical
- Serious-minded / Hard-working

Faculty

- Capacity to Lead 12-15 Industry Projects per Semester
- Heavy Industry Involvement
- Teaching Cutting-Edge Curriculum
- Producing Top-Ranked Applied Research

Partner Firms

- Diversified by Industry
- Can identify, Resource, and Manage 2 Projects/year
- Desire to Hire Students as Interns and Full-Time Employees
- Look to Moore School for Management Training



The GSCOM Program Broad-based and Analytical

InternalOrganizational
Supply Chain and
Internal Operations
Management

Business Process Excellence Management
Science and
Industrial
Engineering and
Analytics



Academic Curriculum

Business Core Computer Information Systems

Probability and Statistics

Survey of Operations Management

GSCOM Major Business Process Management

Service Operations Management

Strategic Sourcing

Supply Chain Analytics

Supply Chain Planning and Control

Capstone GSCOM Consulting Project

Electives Advanced Quantitative Methods

Data Mining

Revenue Management



The CAPSTONE Consulting Project

- Formally structured team consisting of a faculty consultant, five-six student analysts and client team consisting of project sponsor/process owner, and process participants
- Conducting front-burner operations and supply chain consulting.
- Projects are undertaken on a semester time-table and require multiple site visits, primary and secondary data collection, regular tele-conferencing, piloting and implementation of recommendations during the project and follow-up after the project.
- Formal client presentations using DMAIC framework.
- Projects utilize whatever required methods are required to solve the problems at hand. Most projects blend multiple techniques from different technical domains.



The Evolution of a GSCOM Consulting Project

A. Project Scoping

- a. Scoping begins at the Company with the Company Sponsor collecting and evaluating potential supply chain and process improvement or development projects.
- b. Written descriptions of potential projects are delivered to the assigned faculty mentor(s)
- c. On site or remote meetings are held between company representatives and faculty mentor to select and then refine one project.
 - i. Project must address a strategic need
 - ii. Project must be implementable in 14 weeks
 - iii. Projects must use the Lean Six Sigma (LSS) methodology to ensure greenbelt compliance
- B. Team Formation



The Evolution of a GSCOM Consulting Project

- C. Project Launch Typically at Company site
- D. Project Execution: all projects are executed using the LSS methodology.
- E. Project Presentation
 - a. To Corporate Partner
 - b. To The General Public
- F. Project Certification for Greenbelt
 - a. Peer Evaluation
 - b. Evaluation of all projects by USC Master Blackbelt:Dr. Sanjay Ahire
 - c. Team interview by Sonoco Products Company Master Blackbelt Team



Industry Partners

Organizations that have strategically collaborated with the Center and Program include:

Avaya Carolinas Healthcare System

Coca-Cola Bottling Colonial Life

Continental Tire Cummins Engine

Cummins Turbo Technologies Eaton

EZGO-Textron Flextronics

Harvest Hope Hilex Poly

Johnson & Johnson Kaiser Aluminum

MeadWestvaco Michelin

Palmetto Health Richland Pfizer-Capsugel

Price Waterhouse Coopers Siemens

Snider Tire Sonoco

Trane-Ingersoll/Rand Walmart

Westinghouse-Nuclear Fuels



CAPSTONE CONSULTING - Big Data Analytics Methodologies

Logistic Regression:

Colonial Life New Business Development Process – Evaluating Factors Impacting Balks

Optimization:

- Production Planning Optimization Mixed Model Schedule for J&J (NJ) Plant
- Production Planning Optimization- Kaizer Aluminum
- Tires Return Network Optimization Michelin
- Sonoco Paper Mills Network Capacity Allocation
- Continental Tires international logistics
- Siemens Inbound Logistics

Knapsack and Custom Algorithms:

- Walmart Internal Logistics and Inventory Positioning for breakpack items
- Walmart Dot.Com carton mix Optimization



CAPSTONE CONSULTING Sample Big Data Analytics Projects

Multiple Criteria Decision Making:

Supplier scorecards for CTT, Westingouse, PwC

Simulation:

PHR ED, CHS ED, Coca-Cola Bottling warehouse capacity analysis,
 CHS Urgent Care, PHR Women's Health Center; Trane Ingersoll
 Rand Header cell analysis

Inventory Modeling:

- PHR Heart Cath Lab, Radiology Labs, Pharmacy
- Coca-Cola Bottling Consolidated

GIS/MapPoint Location and Network Optimization:

- PHR Imaging Centers Network Analysis
- Harvest Hope Network Logistics Optimization

Forecasting:

- Harvest Hope ARIMA Modeling
- Eaton Subassemblies Copper Regressions-base Modeling



Project Outcomes - Benefits to Industry Partner Firms

- Over 140 projects with client firms in the last eight years have identified aggregate cost savings of more than 125 million dollars for member firms.
- Projects have direct implications for bottom-line savings and growth due to their impact on revenue, customer service, market share and revenues.
- Firms benefit from application of sophisticated analytic modeling capabilities of faculty consultants and student analysts.
- Projects have led to direct student placement in client firms.



Students Outcomes

- Students receiving national recognition
 - Gene Richter Supply Chain Leadership Award
 (Awarded to Top 10 undergraduate students nationally): Our program has produced a winner in 2011, 2012, 2013, and 2014.
- Graduates successfully compete against engineers and with peers from leading business schools.
- Average compensation of BS-GSCOM in mid-60K range; several IMBA-GSCOM graduates received compensation in the \$100-\$120 K range.
- Over the past 6-years, 90-100% of graduates were placed within 3 months of graduation.
- Current push and placements into leadership programs and consulting firms.



Faculty Consulting Expertise

- Sanjay Ahire: Lean Six-Sigma; Supply Chain Analytics;
- Bob Courtney: Lean Six Sigma, Inventory, Process
 Management
- Mark Ferguson: Sustainable supply chain design;
 Pricing and Revenue Management
- Pearse Gaffney: Lean Six-Sigma; Quality
- Jack Jensen: Manufacturing control; Resource planning
- Manoj Malhotra: Manufacturing flexibility; Buyer Supplier relationships in Supply Chains, Supply chain integration, Process Improvement



GSCPM Center: *Advisory Board*

Advisory Board Chairperson: Randy K. Kesterson, Vice President of Global Operations, Doosan

- Avaya: Rick Lee, VP Global Logistics and Supply Chain
- Carolinas Healthcare System: John Knox, EVP, CAO
- Coca-Cola Bottling: Brett Frankenberg, VP of Supply Chain Planning and Procurement
- Continental Tire the Americas: Todd Pearce,
 Business Unit Controller
- Cummins: Todd Dodson, Director Global Planning and Logistics



Advisory Board

- **EZGO/Textron:** Jason Alford, Vice President Integrated Supply Chain
- Michelin: Deborah Whatley, VP of the Supply Chain for the Small Tire Division
- PricewaterhouseCoopers: William F. Owens, Jr., Deputy Tax Leader
- Siemens: Gregory Schmidt, Vice President Logistics
- Sonoco Products Company: Keith J. Holliday,
 Director, Supply Chain & Operating Excellence
- Trane/Ingersoll Rand: Todd Wyman, Senior Vice President Global Operations and Integrated Supply Chain



GSCPM Center: Contact Information

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Incorporating Analytics & Big Data in the SC Curriculum

4th Annual SCM Director's Conference Santa Clara University March 2015

James F. Campbell

College of Business Administration University of Missouri-St. Louis St. Louis, MO



Background at UMSL

- Very senior faculty.
- Analytical heritage in department.
- Links to IS.
- Current focus more at the graduate level.
 - MBA majors in LSCM and OM
 - Graduate Certificates in LSCM and BI (Business Intelligence)
 - PhD in LSCM
 - Undergrad major in Logistics & OM + Minor in Transprtation Studies



Needs

- **1. Domain knowledge** (in SCM) to understand the issues and formulate the questions/problems.
- **2. IS/IT or BI processes, tools, and technologies** to collect, manage and prepare data.
- 3. Analytics (Descriptive, Predictive and/or Prescriptive) to convert data → insight → better decisions.
- 4. Communication skills to convey recommendations.

Pose the right questions.

Procure the right data.

Perform the right analyses.

Present results the right way.



Analytics and LSCM at UMSL

- Identify and map analytics content and skills with business partners.
- Map current courses in SCM and other departments to content and skills needs...
- Added 3 new courses:
 - Business Analytics and Data Mining
 - Data Integration
 - Practicum
- Link to existing courses in SCM, Digital Marketing, and Economics, where appropriate...



Features of Our Programs

- Depth in prescriptive analytics.
- PhD in LSCM with analytics focus
- Commercial software courses for LSCM Modeling:
 - Logistics and Supply Chain Strategic Modeling:
 IBM ILOG LogicNet Plus XE, INSIGHT SAILS, Micro Saint Sharp
 - Logistics and Supply Chain Operational Modeling:
 IBM OPL Studio, Crystal Ball, ArcGIS (ArcLogistics Route)
- Analytics Practicum course emphasizes problem framing and communication of results and recommendations.



Issues

- 1. Target? (data scientists vs. analytically savvy master's students vs. analytically aware BSBA's)
- 2. How much IS/IT is needed?
- 3. Don't forget problem framing and communication of results.
- 4. Which analytics tools?
- 5. How much text analytics and social media analytics?
- 6. Visualization (Tableau) as an entry?
- 7. Retraining faculty.
- 8. Recruiting in "big data/analytics".





BIG DATA

IN

SUPPLY CHAIN MANAGEMENT CURRICULUM

THE H.H. FRANKLIN CENTER FOR SUPPLY CHAIN MANAGEMENT
WHITMAN SCHOOL OF MANAGEMENT
SYRACUSE UNIVERSITY



March 5, 2015

Franklin Center for Supply Chain Management

- Established in 1919
- First program in the nation
- Legacy
- □ Fresh ideas
 - Innovative curriculum
 - Supply chain finance
 - Design thinking for growth
 - Wine futures market



Industry projects in curriculum

- Experiential learning projects as part of the course
- II. Experiential learning for extra credit
- III. Consulting firm no credit
- IV. Research creating new knowledge
 - l. Descriptive vs.
 - II. Prescriptive

Franklin Center – Examples

- 1 Staples our corporate partner
- 2 Gaylord Bros
- 3 Open Source ERP (start-up)
- 4 Wine futures electronic marketplace

Corporate Partner



Big Data projects with Staples

- Inventory Optimization:
 - Millions of SKUs, millions of orders
 - Capacity planning
 - Trips per order vs. Minimum cost
- II. Risk mitigation
 - Various disruptions
 - Heat maps, bow tie diagrams
 - Risk exposure index (REI) determine the highest risk facilities in the Staples supply chain
 - GIS: dynamically update heat maps and REI
- 6 faculty + 4 doctoral + 9 masters + 8 undergraduate students

Gaylord Bros (Demco)



Gaylord: Single vs. Dual sourcing



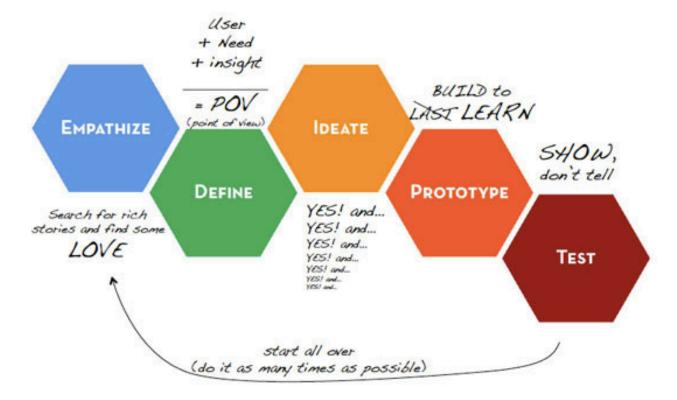




Creatively Growing Your Business

First and only SCM program to teach supply chain design for start-ups and growth firms

My design thinking CHEAT SHEET







Liv-ex.com

20 7062 8788 ge@liv-ex.com

data

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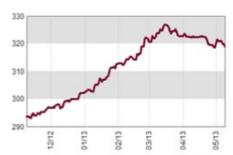


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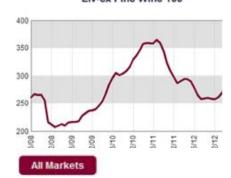
owths ux 2011 owth Markets Growths rowths Growths owths uscans ux 2012 Blog

Liv-ex Fine Wine 50



Daily Close 13/05: 319.95 Change 0.88 (0.28%)

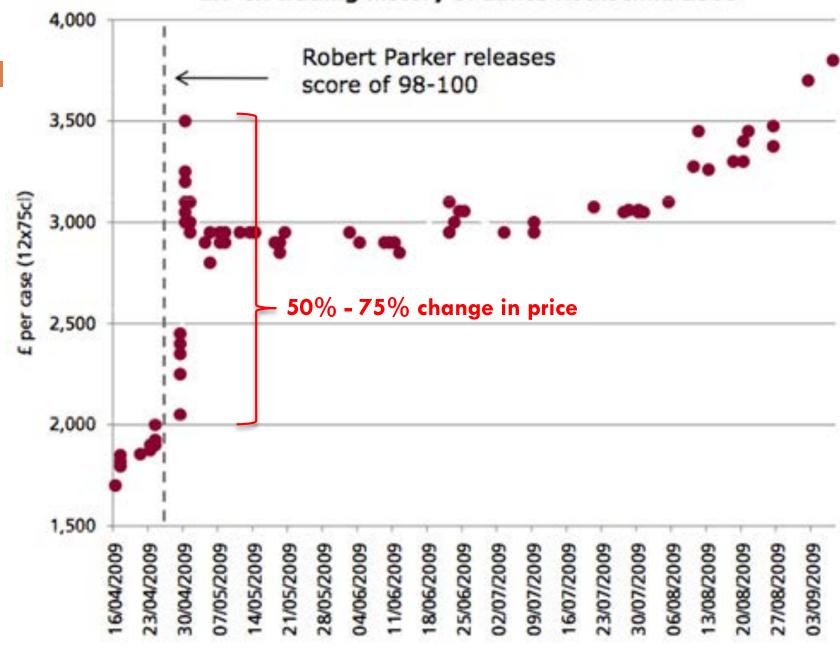
Liv-ex Fine Wine 100



Your Exposure

es	Spreads		
Liv-ex ma	Liv-ex markets		
Bid	Offer	Last	
700 2	705	700 03/01/14	
4,875	4,925	4,800 03/01/14	
680	687 12	680 03/01/14	
1,570	1,590	1,495 03/01/14	
5,000	5,075	5,000 03/01/14	
	Bid 700 2 4,875 1 680 4 1,570	Liv-ex markets Bid Offer 700 705 1 4,875 4,925 1 1 680 687 4 12 1,570 1 1,590 1 1	

Liv-ex trading history of Lafite Rothschild 2008



Data: Bordeaux Wineries

Left Bank	Right Bank
Cos d'Estournel	Angelus
Duhart Milon	Cheval Blanc
Ducru Beaucaillou	Clos Fourtet
Leoville Poyferre	Evangile
Mission Haut Brion	Pavie
Pichon Lalande	Troplong Mondot

Choice of wineries: Liv-ex.com, Heart & Hands Wine Co.

Choice of vintages: 2006 – 2011

Futures data: Liv-ex.com

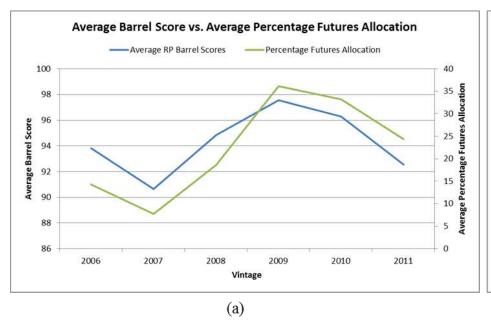
Barrel and bottle scores data: Wine Advocate and erobertparker.com

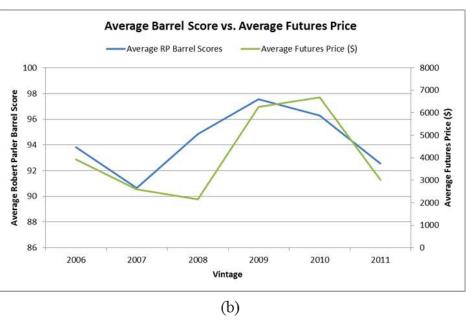
Production data: Wine Spectator

Number of cases traded in the form of wine futures = 307,909

Number of trades = 32,869 cases

Bordeaux Wineries





- (a) The impact of average Robert Parker barrel scores on Bordeaux winemakers' average percentage allocation of wine for sale as wine futures
- (a) The impact of average Robert Parker barrel scores on futures prices.

Financial impact of wine futures

		lpha - Percent of Futures		$\Delta \rho$ – Profit/financial impact			
Winemaker	ϕ - risk aversion	Min α	Max α	Avg α	Min Δho	Max Δho	Avg Δho
Angelus	0.96936308	6.90	49.35	18.71	2.16	14.45	5.71
Cheval Blanc	0.86918809	8.59	71.25	39.26	3.23	24.81	13.91
Clos Fourtet	0.88701179	9.48	45.85	29.18	3.38	15.56	10.21
Cos d'Estournel	0.87673835	4.96	43.74	21.15	1.78	14.84	8.21
Ducru Beaucaillo	0.88961788	14.23	65.63	39.45	4.88	22.06	13.53
Duhart Milon	0.79816123	14.80	47.05	26.24	6.47	19.03	10.92
Evangile	0.85688923	21.40	100.00	64.03	7.84	41.81	22.70
Leoville Poyferre	0.90829830	6.94	38.90	23.45	2.43	12.74	<i>7</i> .91
Mission Haut Brion	0.94221522	1 <i>7</i> .19	80.46	38.04	5.59	24.33	11.80
Pavie	0.97247639	2.08	31.45	12.30	1.1 <i>7</i>	14.75	6.27
Pichon Lalande	0.84258235	6.40	49.09	29.20	2.53	18.54	11.01
Troplong Mondot	0.83791897	10.86	68.99	42.55	4.22	25.41	16.11
	Weighted Average 27			27.65			10.10

 θ consumer risk aversion = 0.972599; β consumer heterogeneity = 24

Heart & Hands Wine Co.



Financial impact at Heart & Hands

		β = 10 Homogenous consumers		β = Heterogeneou	
Varietal	Vintage	lpha - $%$ of futures	Δho - profit	lpha - $%$ of futures	Δho - profit
Pinot Noir Barrel Reserve	2007	53.26	13.74	31.25	15.20
	2008	55.74	13.95	32.29	14.96
	2009	54.42	13.63	31.53	14.60
	2010	51.23	12.97	29.82	14.08
Riesling	2008	59.25	14.92	34.40	16.09
	2009	62.63	15.59	36.20	16.61
	2010	57.09	14.29	33.07	15.32
	2011	61.57	15.41	35.67	16.52
Weighted Average		55.03	13.87	31.96	14.95

Curriculum Impact

- Industry collaborations provide:
 - Experiences not part of regular curriculum/textbook
 - GIS data dynamically updating Excel-based risk model
 - Inventory with market-basket analysis
 - Single (cost) vs. dual sourcing (risk)
 - Open Source ERP: connecting bodegas and distributors
 - Wine futures market



Michigan State University Broad College of Business

Masters of Science Supply Chain Management

Nancy M. Taylor Director

Supply Chain at Michigan State University

- Transportation/Materials Management/Logistics/Supply Chain Management has been taught at MSU since the 1960s.
- Bachelors in Supply Chain Management: approximately 1200 majors and graduates numbering 300 + per year
- Masters of Science in Supply Chain Management: established in 2002 - historically averaging 20 graduates per year. New format – 80 per year.
- The MSU MBA Program: includes a Supply Chain Management concentration of which historically 50% are SCM. Approximately 100 graduates per year.
- PhD in Logistics and in Operations and Sourcing Management

Program Stats

Hybrid format for working professionals

All students are working full time in SCM careers

Average age is 33 with 8-10 years work experience

Attendance from all 50 states and international

NEW FORMAT – 1st OFFERED January 2015

36 credit degree program

24 months, semester based

3 day onsite sessions/8 week online modules

Strategic supply chain management focus

Specializations in logistics, procurement, operations and the newly created value chain creation (VCC)

Courses:

SCM 870 Introduction to Logistics and Supply Chain Management (3 Credits)

SCM 871 Applied Data Analysis (3 credits)

SCM 872 Distribution Fulfillment (2 credits)

SCM 874 Total Quality Management and Lean Enterprise (3 credits)

SCM 875 Manufacturing Planning & Control (2 credits)

SCM 876 Logistics Operations Methods and Systems (2 credits)

SCM 879 Supply Chain Management – Strategy and Applications (3 credits)

SCM 848 Analysis of Supply Markets and Supplies (2 credits)

SCM 881 Global Supply Chain Management (3 credits)

SCM 882 Field Study/Research Project (5 credits)

SCM 883 Technology and Product Innovation Management (2 credits)

SCM 886 Strategic Sourcing (2 credits)

COM 874 Communication in Supply Chain Management (2 credit)

MGT 875 Change Management (2 credits)

New Courses being added in 2016: Engineering, Packaging, Criminal Justice, Food Safety.

Marketing and Recruiting

Beginning:
Print Ads, Corporate
Contacts, Conferences

Transition:
Electronic Media, Internet,
Social Media, Facebook
LinkedIn, Twitter
Conferences

Current:

Partner with University Alliance/Bisk which handles all advertising, focus on electronic placements.

Department still manages Social Media: LinkedIn growth, Facebook maintenance, Twitter Conferences

Recruiting/Marketing Plans

- Maintain and build on #1 rankings in supply chain education
- Synergy with strong undergrad program that attracts employers to campus
- Synergy with MBA program and other Masters degree to attract employers
- Coordination of activities that attract SCM professionals to MSU and involve them in:

Graduation Education

Recruitment

Research

Development

Questions.

RUTGERS

Rutgers Business School Newark and New Brunswick

Supply Chain Management at Rutgers Business School

What students want to see to come?

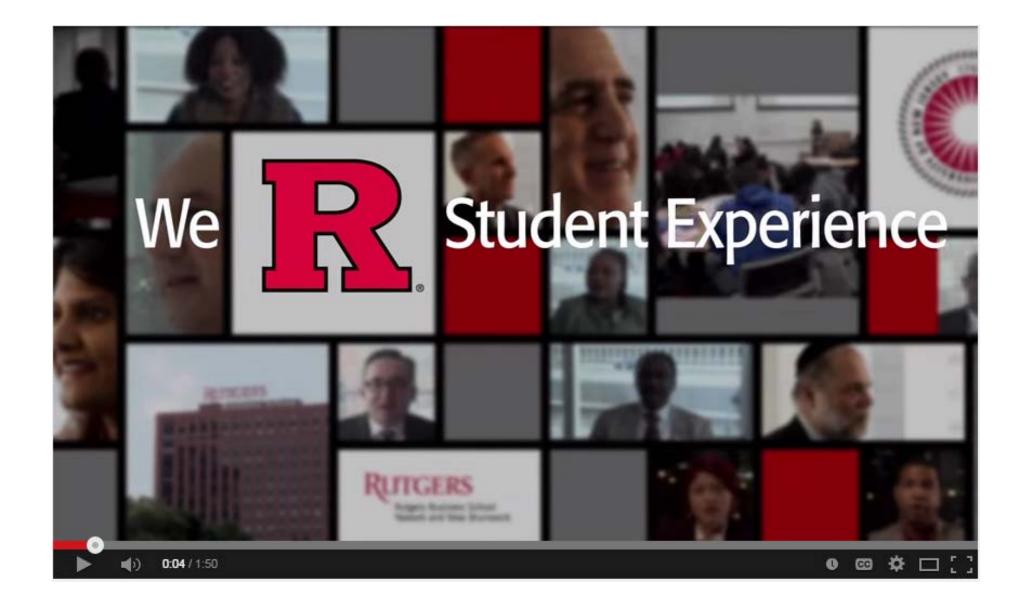
Professor Arash Azadegan

Department of Supply Chain Management and Marketing Sciences



Rutgers SCM Program Facts

- Background on Rutgers Business School
- What we focus on telling students
 - Orientation Meeting
 - Curriculum of classes
 - Who we work with on the industry side
 - RBS Supply Chain Center & corporate advisory board
 - Supply chain Disruption Research Lab
- How we prove it
 - Our new Online MS program and its particularities



RUTGERS Rutgers Business School Newark and New Brunswick

Jersey Roots, Global Reach

Rutgers University Originally chartered as Queen's College, 1766

New Bruns	wick, NJ – 100 R	OCK	
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100000	THE THE PARTY OF T
Academic staff	212
Students	6,992
Undergraduates	4,956
<u>Postgraduates</u>	1,849
<u>Doctoral students</u>	187

Academic staff	2,937 ^[3]		
Admin staff	6,757 ^[3]		
Students	65,000 ^[4]		
<u>Undergraduates</u>	45,000 ^[4]		
<u>Postgraduates</u>	20,000 [4]		





What we don't really talk about!!

Rutgers Scarlet Knights

NCAA FBS standings

< ∋	Atlantic Coast	Big 12	Big Ten	Conference	e USA	Independe >
East			Conference	Overall	STRK	vs Top 25
	Ohio State		8-0	14-1	W13	4-0
E	Michigan State		7-1	11-2	W4	2-2
A	Maryland		4-4	7-6	L2	0-2
R	Rutgers		3-5	8-5	W2	0-3
	Michigan		3-5	5-7	L2	0-3
0	Penn State		2-6	7-6	W1	0-2
Ψ	Indiana		1-7	4-8	W1	1-2

Rutgers SCM Program Facts

- U.S. Ranking , US News & World Report, Gartner
- SCM-MBA Internship Placement: 100% (2008, 2009, 2010, 2011, 2012)
- SCM-MBA Permanent Job Placement Rate: 100%(2010), 94% (2011)
- 2009, 2010, 2012 CSCMP Scholarships: 100% awarded to RU-SCM
- Over 100 SCM scholarships through SCM Center (2009-2011)
- 2009 winner of the East-West regional SCM case competition
- 2012 HULT Global Case Competition: (Cornell, Darden, and Rutgers)
- 2012 US News and World Report #20 (Harvard)

Curriculum

 At least 15 credits beyond the MBA core, foundation, and integrative courses.

Nine (9) credits from the SCM concentration core.

• A minimum of six (6) credits from Areas 1, 2, 3, or 4.



Curriculum

Required Courses

- Operations Analysis (22:799:564) is part of the MBA core and is required for all MBA students.
- Procurement Management & Global Sourcing (22:799:608)
- Supply Chain Management Industry Project* (22:799:650)
- Supply Chain Management Strategies (22:799:607)



Area 1 - Procurement and Sourcing Management

- Business-to-Business Marketing (22:630:606)
- Global Labor Governance (22:799:678)
- Global Supply Chain Law (22:799:662)
- Managing Strategic Transformations (22:620:606)
- **Negotiations** (22:620:617)
- Supply Chain Environment Management / Green Purchasing (22:799:672)
- Supply Chain Disruption and Risk Management (22:799:669)



Area 2 - Supply Chain Performance Optimization and Technologies

- Advanced Project Management (22:799:675)
- Business Intelligence for Supply
 Chains and Marketing (22:799:670)
- **Data Models** (22:960:575)
- Demand Analysis & Management for Value Chains (22:799:663)
- Enterprise Resource Planning (22:010:623)
- Fundamentals of Project Management Professionals (PMP) (22:799:677)
- Introduction to Project Management (22:799:661)
- Lean Six-Sigma (22:799:676)

- Logistics / Transportation Management (22:799:679)
- Microsoft Project for Professionals (22:799:671)
- New Product Development (22:799:TBA)
- Quantitative Modeling & Managerial Decision Making for Value Chains (22:799:TBA)
- Supply Chain Solutions with ERP/SAP I (22:799:659)
- Supply Chain Solutions with ERP/SAP II** (22:799:660)
- Total Quality Management (22:799:605)



Area 3 - Industry Series by Distinguished Business Executives (1 credits each)

- Contract Management for Supply Chain Management Professionals (22:799:655)
- Managing Global Supply Chains (22:799:665)
- Manufacturing Outsourcing (22:799:658)
- Pharmaceutical Purchasing and Supply Chain Management (22:799:647)
- Product Design and Supply Chain Alignment (22:799:653)
- Sales & Operations Planning (22:799:668)
- Service Management (22:799:TBA)
- Service Outsourcing (22:799:664)
- Supply Chain Pricing Strategy (22:799:673)
- Supply Chain Finance (22:799:685)



RBS-SCM Program Corporate Sponsors

AmerisourceBergen (Sr.VP)	Merck (VP) & Schering-Plough (VP)		
AstraZeneca (VP)	MetLife* (Sr. VP)		
Barrier Therapeutics (VP)	Panasonic (Sr. VP)		
Bayer HealthCare (Director)	PSEG (VP)		
BD (VP)	Novartis Pharma (Exec. Director)		
Bristol-Meyers Squibb (VP)	Sandoz (Director)		
Colgate-Palmolive* (VP)	Estee Lauder (SVP)		
Deloitte* (Senior Partner)	Sciele Pharma* (VP)		
Exelon Corporation (Sr. VP)	Unilever (Sr. VP), KENCO(COO)		
Hoffmann-LaRoche (VP)	Itochu (SVP), GENCO (EVP)		
Johnson & Johnson (VP)	Pfizer (VP), BB&BY (VP), Verizon (VP)		



Area 4 - Field Practice Courses

- India Travel Course (22:799:646)
- Valuation of New Business Ventures: A Supply Chain Perspective (22:799:648)

RUTGERS Rutgers Business School Newark and New Brunswick



Rutgers SCM Recruiting Event: September 19, 2012









MOTOROLA

KUEHNE+NAGEL

BASF

Becton-Dickinson

Bristol-Myers Squibb

Caterpillar Inc.

Excel/DHL

Ford Foundation

Goya Foods

Johnson & Johnson

Kenco Logistics Servic

Kraft Foods

L'Oreal

Motorola Solutions

Rhodia Inc.

Toys "R" Us

Verizon

Bed Bath & Beyond

Burlington Coat Factory

















DuPont

Global Shipping Services

International Flavors & Fragrance:

JP Morgan Chase

Kuehne + Nagel

McGraw-Hill

NFI Industries

Novartis



Panasonic Solutions Company

Phillips Van Heusen

Pfizer

PSE&G

Schindler Elevator

Unilever

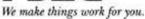
Waste Management

Wiley and Sons









🗆 = BASF

The Chemical Company

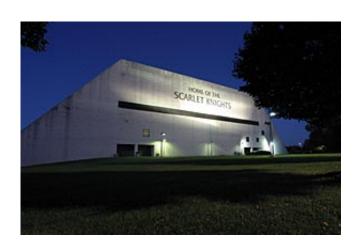








Where to hold the Fall 2012 Rutgers SCM recruiting event with 50+ major corporations?







Final answer: Rutgers Basketball Stadium



Rutgers Supply Chain Management Meet & Greet



85 LEADING CORPORATIONS AND 600 STUDENTS PARTICIPATED IN THE MOST RECENT SUPPLY CHAIN MANAGEMENT MEET & GREET

Each year, the Department of Supply Chain Management and Marketing Sciences partners with Rutgers Business School Career Services to host more than 70 major corporations for students majoring in Supply Chain Management.

Spring 2015 - Newark Campus

When: March 4, 2015 - 12:00pm to 4:00pm

Where: Paul Robeson Center, 350 Martin Luther King Jr. Blvd

(New Brunswick info for Fall 2015 will be posted when it becomes available)

Looking for a full-time job, co-op, internships, or just wish to network with business professionals from a variety of industries? Come out to the Spring 2015 Supply Chain Management Meet & Greet this March 4, 2015! This is the final Supply Chain-exclusive networking event of the year so you don't want to miss it!

M&G 2015



M&G 2015

Join us!

Read about our recent history below:

- 2014 Rutgers Business School alumna returns to campus for Supply Chain Management Meet & Greet
- 2013 Supply Chain Management's annual Meet and Greet connects hundreds of students with leading companies, prospective employers
- 2012 Supply Chain Management annual Meet and Greet to bring students and Fortune 500 companies together
- 2011 Supply Chain Management undergraduate students network and meet with sixteen companies







I would like to build excitement for the program, run events that will draw students of high caliber into the program. I look forward to our discussion... - Roy Anderson, Senior VP, MetLife

Novartis Pharmaceuticals would be very interested in supporting an undergraduate SCM program.....

- William D. McLaury, Executive Director, Novartis

Dr. Lei's strong leadership has built the Rutgers Supply Chain Program into a top tier program.

- Ken Blankenhorn, Director, Bayer HealthCare

As a founding corporate member, PSEG hoped that Rutgers would provide a local source for graduating MBA's with supply chain training. You have far exceeded our expectations.

- Michael Graham, Director, PSEG



Many business persons now view a strong affiliation with Rutgers as a competitive advantage.

- Ronald Keegan, VP, ChemLogix LLC

Rutgers University is now positioned to give the various students within the university a world class education in the study of SCM.

- James S. White, SVP, Logistics, Park B. Smith, Ltd, and RBS '82

I have been extremely impressed by the offerings and contributions of the SCM program at RBS... - Dr. Tan Miller, Senior Director, J&J

RBS has developed one of the top supply chain programs in the country...students are as prepared as any student in the country when they graduate...

- Kenneth Frawley, VP, Times Warner, Inc.



"Novartis is in the process of creating a stronger recruiting presence at Rutgers for Supply Chain/ Procurement MBA candidates...."

- Steven Chyung, VP, Novartis

"I understand through a business colleague that Rutgers is developing a strong SCM program. We would be interested in hearing more about your program at some point in the future.'

- Ginger L Picone, recruiting manager, Hallmark

"To confirm our discussions on the endowment, we desire a restricted grant with the funds directed solely to [RBS] SCM. This the same process we have done for SC programs at Arizona State and Bowling Green."

- Bill Stirling, VP, BMS

"It was a pleasure finally to meet you. As we agreed I am sending this email with the points that we discussed: Promote our openings among your SC students..."

- Vitor Silva, Production Manager, Blinds-To-Go



[April 17, 2012] It is exciting to hear how Caterpillar and Rutgers Business School [SCM] may be partnering together in the future.





Douglas Oberhelman President and CEO Caterpillar

RUTGERS Rutgers Business School Newark and New Brunswick

Kuehne & Nagel News Release (May 15, 2012)

Kuehne & Nagel & Rutgers SCM Partnership

"Our people are our strongest asset. It is important to us to partner with one of leading Supply Chain Management Universities in the United States [Rutgers SCM] to support education and secure talent for the future."

- Marc Meier, SVP, Kuehne + Nagel North









Why is SCM Important?

 "If you are in supply chain management today then complexity is a cancer that you have to fight, and process management is the weapon. This framework develops a robust model of supply chain management processes and properly defines them so that they can be managed. It has enabled our organization to understand that supply chain management is too important to be just a function. Instead it's everybody's job."

Supply Chain Management is Everybody's Job!

—Tom Blackstock
Vice President,
Supply Chain Operations,
Coca-Cola North America

RUTGERS

Rutgers Business School Newark and New Brunswick

Master of Science in Supply Chain Management

Co-Directors:

Arash Azadegan

and

Rudolf Leuschner



Background

- Online Education is a Reality!
- We won't beat them (at first)
 - we may as well join them; then.....
- Expands Options for SCM Education



♠ U.S. News Home

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Key Milestones

- September 22nd, 2014
 - Department of Education Program Approval
- October 2nd, 2014
 - Program Website Launch:
- November 6th, 2014
 - Google AdWords Campaign Launched
 - \$50/day budget
- December 1st, 2014
 - Application Deadline
 - 26 Applicants
- January 12th 16th, 2015
 - Orientation
- January 20th, 2015
 - Start of classes

Program Overview

- 30 total credits
- 9 SCM courses
- Plus 1 general business course
- Flexible and lockstep structures
- Began January 2015



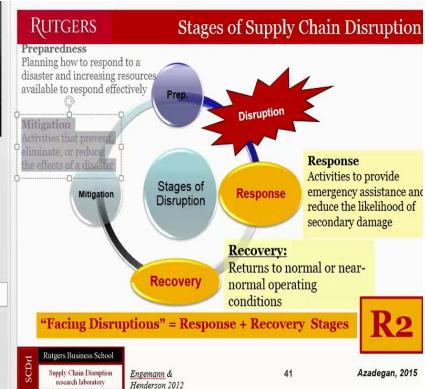
Classes

- Operations Analysis (Sp15)
- Supply Chain Management Strategies (Sp15)
- Global Procurement and Supply Management (Sp15)
- Demand Management (Su15)
- Global Logistics Management (Su15)
- Supply Chain Risk and Disruption Management (Su15)
- Supply Chain Sustainability
- Lean Six Sigma
- Introduction to Project Management
- Supply Chain Finance
- Supply Chain Governance
- B2B Marketing

Delivery & assessment

- Recorded Lectures –2-3 hrs/wk
- "Threaded" discussions
- Focus on weekly assignments
- Online lab
 - (equivalent to office hours)
- Proctored Exams



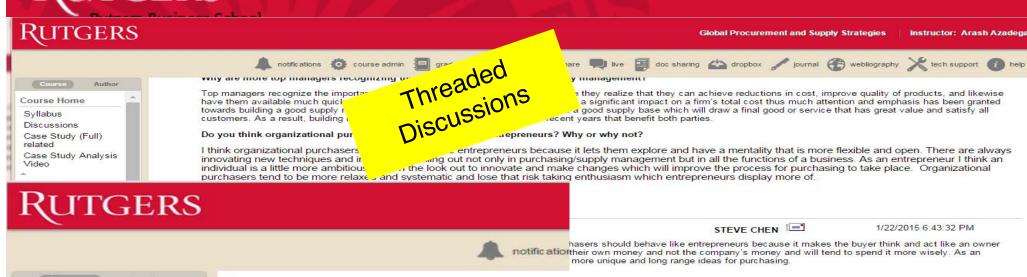


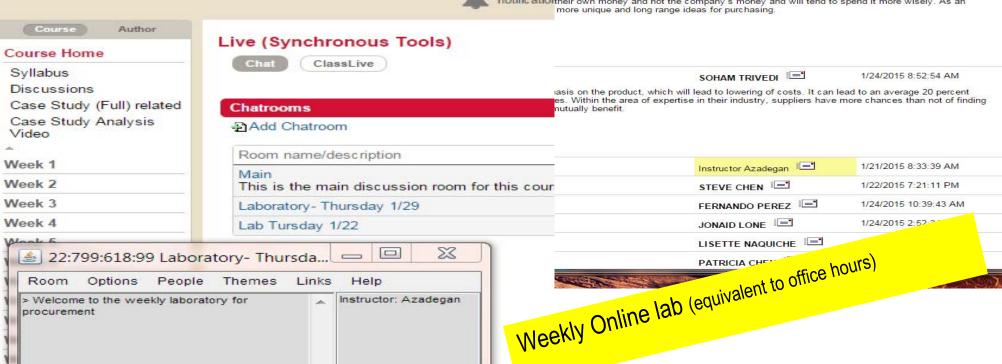


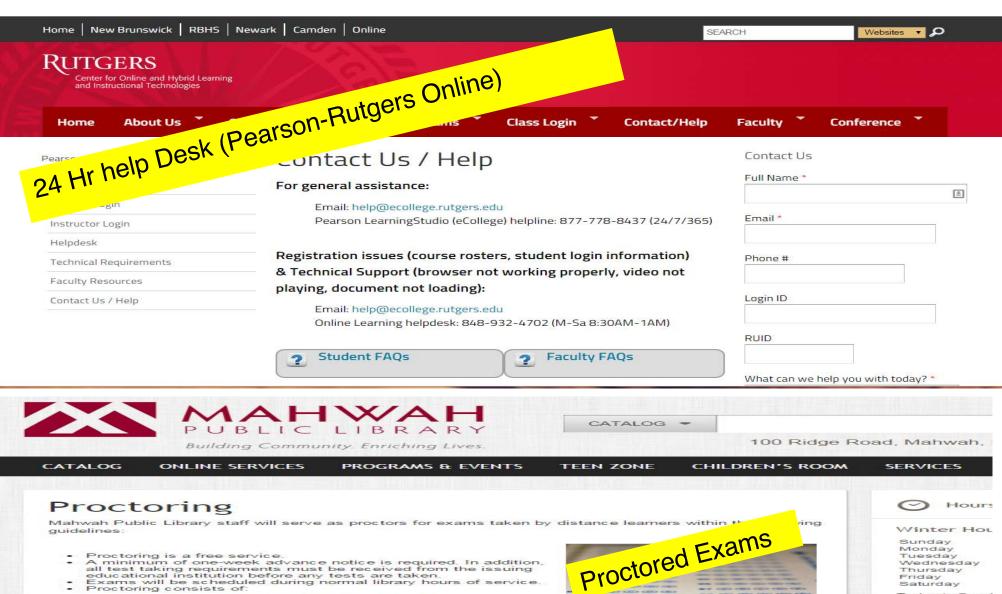
Recent events/expert interviews embedded

RUTGERS

Select a name for the profile. Double click a name for private chat.







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- Proctoring is a free service. A minimum of one-week advance notice is required. In addition, all test taking requirements must be received from the issuing
- educational institution before any tests are taken. Exams will be scheduled during normal library hours of service
- Proctoring consists of:
 - Checking identification of student taking the exam
 - Noting the time that an exam was started and completed in the Library.

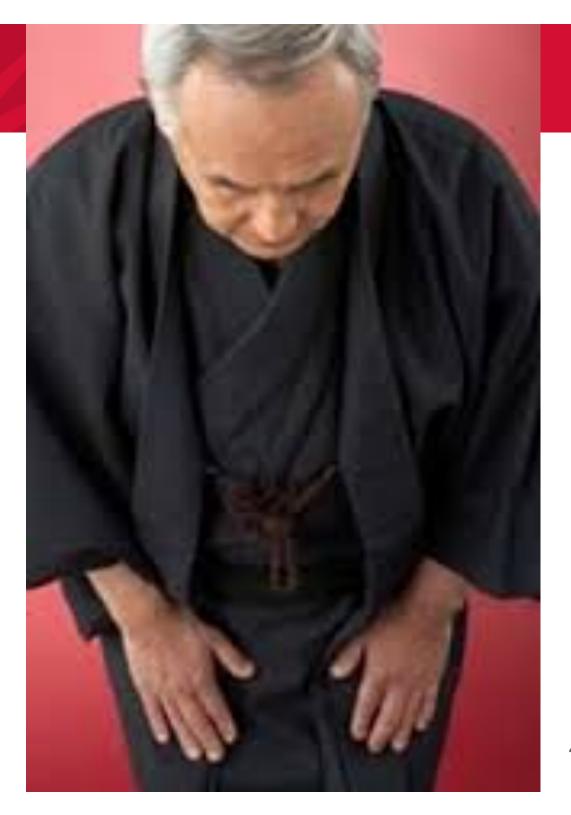
 - Signing the required school supplied documentation. Direct supervision during the exam is not provided.
 - Examinations will be taken in a quiet area of the library. The exam proctor will be the librarian in charge at the time
 - the exam is taken.
- The Library cannot proctor online exams that require public
- access computer settings to be modified.
 Staff will seal the envelope of the completed exam and place in library outgoing mail.
- The Library does not keep copies of completed exams

Student responsibilities:

- It is the student's responsibility to confirm that this proctoring policy meets the requirements of the institution giving the examination.
- The service must not involve any direct cost to the Library. Students or the administering institution
- will be responsible for providing postage and any other expenses incurred. It is the student's responsibility to ensure that the library's computing resources are adequate for their test taking requirements. MPL accepts no responsibility for Internet connections. Completed exams will be returned to the testing institution via the U.S. Postal Service in postage paid envelopes provided by the student or institution.
- Tuesday Wednesday Thursday Friday Saturday Today is Sund 1pm to 5pm. I MAP & E Your Check your a 24/7 with you Library Card:

RUTGERS Rutgers Business School Newark and New Brunswick

Thank you.



Brigham Young University

Marriott School of Management

Innovation in Global Supply Chain and Operations Curriculum

Y-Facts Marriott School of Management Students

- Approximately 2,000 undergraduate students and nearly 1,000 graduate students are enrolled in the Marriott School.
- Approximately 70% of the students are bilingual and many have lived abroad.
- The school enrolls approximately 8 percent international students.
- Students have access to three centers that allow them to gain an added edge: the Whitmore Global Management Center, the Rollins Center for Entrepreneurship and Technology, and the Ballard Center for Economic Self-Reliance.

Curriculum Innovation

- Forces exerting pressure on GSCM curriculum innovation;
 - Global Brand
 - "Lean, Do, Become" Initiative
 - Evolving relationship with National Advisory
 Council (Industry)

Dean Lee Perry "Learn, Do, Become" Initiative

• Learn = Classroom

• **Do** = Global Immersion Program (Study Abroad)

• **Become** = Capstone Strategy Course combined with Supervised Consulting Project

Learn = Classroom

- Multi-class
 - Root beer Activity
 - Case based learning across disciplines (Logistics & Purchasing)
- Multi-semester learning
 - Capstone Class & Consulting Project
- Experiential Learning
- Internal Case Competitions

Industry Feedback

- Boeing Survey GAP Analysis
 - Operations Analytics







Do = Global Immersion Program Study Abroad

- Learn through all five senses
- Business across different contexts



Global Immersion Experiences: Study Abroad Programs

- In addition to classroom learning
 - Living case studies, observing operations



NEW Global Supply Chain Study Abroad Program

- Extending the prior objectives to include the complexities of supply chain coordination across differing contexts
- Students will also learn of global strategies, observing successful SCM applications

Living off the land: Fiji

• Visit Fijian village, subsistence living

• Indo-Fijian business association

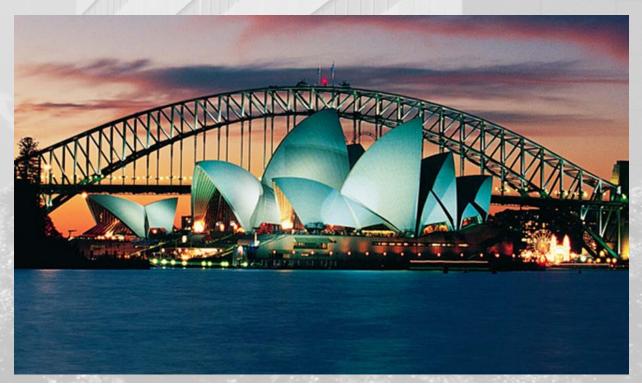
• Service: consulting with Indigenous Fijian

small businesses



Extracting from the land: Australia

- Rio Tinto or Chinese mining company
- Attorney specializing in mineral extraction
- U.S. Consulate



Production: China

- Procter and Gamble
- Wal-Mart suppliers
- John Deere





China: Shanghai



Distribution: Hong Kong

• Distribution from Shenzhen/Guangzhou to

port

- Port of Hong Kong
- Allen Anderson
- Swire Coca-Cola







Distribution to Retail: Japan

- Wal-Mart
- Disney, Asia



Expected Outcomes

- Visualize the connectedness of excellent global SCs
- Increased confidence in ability to contribute as a global supply chain professional

Expected Outcomes

Understand concepts from classroom learning



Expected Outcomes

• Students will perceive themselves as global citizens

• Students will see the value of their SC

training to
address some
of the world's
most pressing
problems



Details

- Courses
- Dates
 - Leave SLC on April 27
 - Return by May 22 for internship

Internships

On-Campus Internship Experience

Traditional Internship Experience

Most GSCM students 1-2 internships

Close to making mandatory

Become = Supervised Consulting Project

- Fall & Winter Senior Year
 - Capstone strategy course (BusM 469) combined with a supervised consulting-project (BusM 494).
 - The capstone course will blend textbook instruction with professional exposure to carefully selected guest speakers. The guests will lead discussions about real-word supply chain management problems faced in their companies.
 - In addition, teams of 4-6 students will engage in consulting projects under the supervision of a faculty coach and a company mentor. The goal is this advanced course is to help the students become professionals prior graduation.

Thank you.

WCC Tournament

Go Santa Clara!





Go Cougs!



Global Supply Chain Management at USC



http://vimeo.com/105706948



Program Director

Nick Vyas

- Expert practitioner who has held senior management responsibilities such as EVP at Allogistix International, Director of Operations at Toys R Us/Babies R Us, General Manager at Sears Logistics Services and VP of Global Operations at Duty Free International.
- Nick teaches Global Supply Chain Management and application of Lean Six Sigma at USC.





Program Intro:

Academic Director

Raj Rajagopalan

- Expert on information and operations management, including global operations and Global Supply Chain .
- Consulted for Johnson and Johnson, Fidelity, and Hewlett Packard.
- Teaches Global Supply Chain and Operations Management classes for MBA and Executive MBA Programs at USC.



The Center for Global Supply Chain Management



A one-stop resource for students:

- -Internships
- -Research
 Opportunities
- -Expand your network
- -Mentors





The Mission of the Center for GSCM:

Connecting the World through Global Supply Chain Excellence with Network, Education and Advanced Research (NEAR)

USCMarshall



Center for Global Supply Chain Management

The Mission:

*Networking Events

- Supply Chain Excellence Summit
- Annual Round Table
- Speaker Series

*Professional Development Certifications

- Lean Six Sigma Certification
- International Shipping/Logistics Course
- Financial Implications of GSCM

*Advanced Research

- Company Projects
- White Papers/Research Papers



M.S. in Global Supply Chain Management Online and Residential





Online Course Calendar

2014 Fall Semester				
• GSBA 534	Operations Management	3		
• DSO 581	Supply Chain Management	3		
• DSO 557a	Global Supply Chain Management in			
	International Settings (Singapore)	1.5		
2015 Spring Semester				
• DSO 521	Enterprise Systems	3		
• DSO 520	Logistics Management	3		
2015 Summer Semester				
• DSO 549	Lean Six Sigma	3		
• DSO 580	Project Management	3		



Online Course Calendar

2015 Fall Semester				
•	DSO 505	Sustainable Supply Chains	1.5	
•	DSO 506	Sourcing and Supplier Management	1.5	
•	DSO 557b	Global Supply Chain Management in International Settings (Los Angeles)	1.5	
•	DSO	Elective Course	3.0	

Total Units: 27

Graduation in Los Angeles at USC Campus



Elective Course Titles

ISE 513 Inventory Systems

DSO 547 Designing Spreadsheet-Based Business Models

ISE 580 Advanced Concepts in Computer Simulation

DSO 522 Time-series Forecasting

DSO 528 Data Warehousing, Business Intelligence

CE 589 Port Engineering: Planning and Operations



For additional information

USCMarshall

Center for Global Supply Chain Management

USC Marshall Center for Global Supply Chain Management

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Email: ms.gscm@marshall.usc.edu

Website: www.marshall.usc.edu/msgscm