Supply Chain University Program Trends: Implications for Industry

Dana Stiffler
March 6, 2015
Networked Economy

Differentiated Customer Experiences

Digital Business

New Global Geography

People & Resources
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 co-ops
- Integrate with onboarding, rotations, career paths
- Treat as investment in SC brand

![Pie chart showing distribution of internships/co-ops](chart.png)
Starting Salaries

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

University Curricula as Basis for Corporate Academies

Virtual Learning Impacts on Traditional University Programs
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
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
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 state-of-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

Internal-Organizational
Supply Chain and
Internal Operations
Management

Business Process
Excellence

Management Science and
Industrial Engineering and
Analytics
# Academic Curriculum

<table>
<thead>
<tr>
<th>Category</th>
<th>Courses</th>
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<tr>
<td><strong>Business Core</strong></td>
<td>Computer Information Systems</td>
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<td>Probability and Statistics</td>
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<td>Survey of Operations Management</td>
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<td>GSCOM Consulting Project</td>
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<td><strong>Electives</strong></td>
<td>Advanced Quantitative Methods</td>
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<td>Data Mining</td>
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<td>Revenue Management</td>
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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:

<table>
<thead>
<tr>
<th>Company</th>
<th>Industry</th>
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<tbody>
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<td>Avaya</td>
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<td>Continental Tire</td>
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<td>Cummins Turbo Technologies</td>
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<td>EZGO-Textron</td>
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<td>Harvest Hope</td>
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<td>Johnson &amp; Johnson</td>
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<td>Price Waterhouse Coopers</td>
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<td>Snider Tire</td>
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<td>Trane-Ingersoll/Rand</td>
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<tr>
<td>Westinghouse-Nuclear Fuels</td>
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<td>Carolinas Healthcare System</td>
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<td>Colonial Life</td>
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<td>Cummins Engine</td>
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<td>Eaton</td>
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<td>Flextronics</td>
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<td>Hilex Poly</td>
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<td>Kaiser Aluminum</td>
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<td>Michelin</td>
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<td>Pfizer-Capsugel</td>
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<td>Siemens</td>
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<td>Sonoco</td>
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<tr>
<td>Walmart</td>
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</tbody>
</table>
• Logistic Regression:

• 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 break-pack 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

- 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
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
Manoj Malhotra, Ph.D.
Director, USC-Global Supply Chain & Process Management Center
Jeff Bates Professor and Chair, Department of Management Science
Tel: 803-777-2712  Fax: 803-777-3064
Email: malhotra@moore.sc.edu

Sanjay Ahire, Ph.D., ASQ-Certified Six-Sigma Master Black Belt
Associate Director, USC-Global Supply Chain & Process Management Center
Professor of Operations & Supply Chain Management
Tel: 803-767-7609  Fax: 803-777-3064
Email: ahire@moore.sc.edu

Jack Jensen, Ph.D.
Managing Director, USC-Global Supply Chain & Process Management Center
Professor of Operations & Supply Chain Management
Tel: 803-777-6824  Fax: 803-777-3064
Email: jensen@moore.sc.edu
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 Transportation 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

I. Experiential learning projects – as part of the course

II. Experiential learning for extra credit

III. Consulting firm – no credit

IV. Research – creating new knowledge
   I. 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

I. 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

Iron Horse

Advantage

EconoTruck
First and only SCM program to teach supply chain design for start-ups and growth firms
Liv-ex trading history of Lafite Rothschild 2008

Robert Parker releases score of 98-100

50% - 75% change in price
## Data: Bordeaux Wineries

<table>
<thead>
<tr>
<th>Left Bank</th>
<th>Right Bank</th>
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<tbody>
<tr>
<td>Cos d’Estournel</td>
<td>Angelus</td>
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<tr>
<td>Duhart Milon</td>
<td>Cheval Blanc</td>
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<td>Ducru Beaucaillou</td>
<td>Clos Fourtet</td>
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<tr>
<td>Leoville Poyferre</td>
<td>Evangile</td>
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<tr>
<td>Mission Haut Brion</td>
<td>Pavie</td>
</tr>
<tr>
<td>Pichon Lalande</td>
<td>Troplong Mondot</td>
</tr>
</tbody>
</table>

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

(b) The impact of average Robert Parker barrel scores on futures prices.
## Financial impact of wine futures

### α - Percent of Futures

<table>
<thead>
<tr>
<th>Winemaker</th>
<th>φ - risk aversion</th>
<th>Min α</th>
<th>Max α</th>
<th>Avg α</th>
<th>Min Δρ</th>
<th>Max Δρ</th>
<th>Avg Δρ</th>
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<tr>
<td>Angelus</td>
<td>0.96936308</td>
<td>6.90</td>
<td>49.35</td>
<td>18.71</td>
<td>2.16</td>
<td>14.45</td>
<td>5.71</td>
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<td>Cheval Blanc</td>
<td>0.86918809</td>
<td>8.59</td>
<td>71.25</td>
<td>39.26</td>
<td>3.23</td>
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<td>Clos Fourtet</td>
<td>0.88701179</td>
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<td>45.85</td>
<td>29.18</td>
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<td>Cos d’Estournel</td>
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<td>4.96</td>
<td>43.74</td>
<td>21.15</td>
<td>1.78</td>
<td>14.84</td>
<td>8.21</td>
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<td>Ducru Beaucaillio</td>
<td>0.88961788</td>
<td>14.23</td>
<td>65.63</td>
<td>39.45</td>
<td>4.88</td>
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<td>Duhart Milon</td>
<td>0.79816123</td>
<td>14.80</td>
<td>47.05</td>
<td>26.24</td>
<td>6.47</td>
<td>19.03</td>
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<td>Evangile</td>
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<td><strong>Weighted Average</strong></td>
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<td><strong>27.65</strong></td>
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<td><strong>10.10</strong></td>
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θ consumer risk aversion = 0.972599; β consumer heterogeneity = 24
Heart & Hands Wine Co.
### Financial impact at Heart & Hands

#### Varietal

<table>
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<th>Vintage</th>
<th>$\alpha$ - % of futures</th>
<th>$\Delta \rho$ - profit</th>
<th>$\alpha$ - % of futures</th>
<th>$\Delta \rho$ - profit</th>
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<td><strong>Barrel</strong></td>
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<td><strong>Reserve</strong></td>
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$\theta$ consumer risk aversion = 0.99659
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
THANK YOU
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.
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 University Originally chartered as *Queen's College*, 1766

New Brunswick, NJ – 100 ROCK

<table>
<thead>
<tr>
<th>Academic staff</th>
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<tr>
<td>Admin staff</td>
<td>6,757[^3]</td>
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<tr>
<td>Students</td>
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<td>Undergraduates</td>
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<td>Postgraduates</td>
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[^3]: Source: Rutgers University
[^4]: Source: Rutgers University
## Rutgers Scarlet Knights
### NCAA FBS standings

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<tr>
<th></th>
<th>Atlantic Coast</th>
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<td>W2</td>
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<td>Michigan</td>
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<tr>
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<td>4-8</td>
<td>W1</td>
<td>1-2</td>
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</table>
Rutgers SCM Program Facts

• U.S. Ranking, US News & World Report, Gartner

  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 )
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.
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)
- 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)
Electives

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

- 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)
- 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

<table>
<thead>
<tr>
<th>Company</th>
<th>Role</th>
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<tbody>
<tr>
<td>AmerisourceBergen (Sr.VP)</td>
<td>Merck (VP) &amp; Schering-Plough (VP)</td>
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<tr>
<td>AstraZeneca (VP)</td>
<td>MetLife* (Sr. VP)</td>
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<tr>
<td>Barrier Therapeutics (VP)</td>
<td>Panasonic (Sr. VP)</td>
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<tr>
<td>Bayer HealthCare (Director)</td>
<td>PSEG (VP)</td>
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<tr>
<td>BD (VP)</td>
<td>Novartis Pharma (Exec. Director)</td>
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<tr>
<td>Bristol-Meyers Squibb (VP)</td>
<td>Sandoz (Director)</td>
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<tr>
<td>Colgate-Palmolive* (VP)</td>
<td>Estee Lauder (SVP)</td>
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<tr>
<td>Deloitte* (Senior Partner)</td>
<td>Sciele Pharma* (VP)</td>
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<tr>
<td>Exelon Corporation (Sr. VP)</td>
<td>Unilever (Sr. VP), KENCO (COO)</td>
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<tr>
<td>Hoffmann-LaRoche (VP)</td>
<td>Itochu (SVP), GENCO (EVP)</td>
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<tr>
<td>Johnson &amp; Johnson (VP)</td>
<td>Pfizer (VP), BB&amp;BY (VP), Verizon (VP)</td>
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</table>
Area 4 - Field Practice Courses

- India Travel Course (22:799:646)
Rutgers SCM Recruiting Event: September 19, 2012

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!
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
Business Executives’ comments on RU SCM

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**
Business Executives’ comments on RU SCM

[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
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."

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

Supply Chain Management is Everybody’s Job!
Master of Science in Supply Chain Management

Co-Directors:
Arash Azadegan
and
Rudolf Leuschner
• Online Education is a Reality!
• We won’t beat them (*at first*)
  – we may as well join them; then…..
• Expands Options for SCM Education
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
Threaded Discussions

Weekly Online lab (equivalent to office hours)
Contact Us / Help

For general assistance:
Email: help@ecollege.rutgers.edu
Pearson LearningStudio (eCollege) helpline: 877-778-8437 (24/7/365)

Registration issues (course rosters, student login information) & Technical Support (browser not working properly, video not playing, document not loading):
Email: help@ecollege.rutgers.edu
Online Learning helpdesk: 848-932-4702 (M-Sa 8:30AM-1AM)

What can we help you with today? *
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

USC MARSHALL SCHOOL OF BUSINESS
The Mission of the Center for GSCM:

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

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<th>Units</th>
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<tr>
<td>DSO 506</td>
<td>Sourcing and Supplier Management</td>
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<tr>
<td>DSO 557b</td>
<td>Global Supply Chain Management in International Settings (Los Angeles)</td>
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<tr>
<td>DSO</td>
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**Total Units:** 27

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**Graduation in Los Angeles at USC Campus**
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<tr>
<td>DSO 580</td>
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<tr>
<td>ISE 513</td>
<td>Inventory Systems</td>
</tr>
<tr>
<td>DSO 547</td>
<td>Designing Spreadsheet-Based Business Models</td>
</tr>
<tr>
<td>ISE 580</td>
<td>Advanced Concepts in Computer Simulation</td>
</tr>
<tr>
<td>DSO 522</td>
<td>Time-series Forecasting</td>
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<tr>
<td>DSO 528</td>
<td>Data Warehousing, Business Intelligence</td>
</tr>
<tr>
<td>CE 589</td>
<td>Port Engineering: Planning and Operations</td>
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