Supply Chain Management Careers

MBA Career Services Center
The Eli Broad Graduate School of Management
Michigan State University

Revised May 29, 2009

Introduction
SCM Career Paths
Desired Skills and Backgrounds
Important Curriculum
Typical Titles
Resume Key Words
  Manufacturing and Operations Management
  Purchasing and Logistics
  Transportation, Warehousing and Distribution
Sample Resumes
Samples of SCM internships
Companies Offering SCM Positions to Broad MBAs
Technical Interview Questions
Resources
  On-Line
  Professional Associations and Certifications
  Recommended Readings
SCM Deck Information (how the supply chain program is sold to recruiters) see functional advisor
**Introduction: Supply Chain Management**

This guide is intended to introduce MBA candidates at Michigan State University to an overview of supply chain management careers, and helpful advice for getting into those careers. This is, however, not a comprehensive guide, but will help you have a general idea of where supply chain may lead you. As a student you will work closely with the supply chain career coach in the MBA Career Services Center on tailoring your unique experiences and desires into an action plan for your specific career goals.

There are several up front cautions, however. First, if you intend to have a career in supply chain, you should endeavor to do your internship in supply chain. Students who choose a dual major, for example supply chain and finance are encouraged to pursue a supply chain internship if they intend to start their full-time work in the supply chain area. Further, while your background before the MBA program does not necessarily niche you into any certain area, doing an internship in finance rather than supply chain will likely niche you into finance in the eyes of corporate recruiters.

Make sure you go in with your eyes open to the reality of the positions for which you apply. While we encourage you to reach for the stars, make sure to keep your feet grounded as to what to realistically expect given your prior experience level in supply chain and related areas, as well as market conditions.

**Career Paths: Supply Chain & Operations**

Supply Chain and Operations combines the disciplines of operations, logistics, strategy and MIS. Rather than focusing on any single facet of delivering a product or service to the customer, SC&O covers the entire process, from “the suppliers of your suppliers to the customers of your customers.” A SC&O position may include any or all of the following, depending on the size and complexity of the organization:

- Choosing and developing suppliers.
- Designing and implementing systems and processes for improving the customer interface, reducing transaction costs, reducing inventories, and improving service levels.
- Sourcing materials, components, technologies, and services.
- Monitoring and managing inventory at all steps of the supply chain.
- Managing logistics, warehouses, distribution inventories, and service parts.
- Managing internal operations or service functions.
- Managing quality and six sigma projects throughout the supply chain.
- Strategically analyzing the supply chain to increase revenues, improve service, reduce cost, and ultimately improve profit.

**Skills and Backgrounds Desired: Supply Chain Management**

Candidates should be critical thinkers who can analyze, manage, and improve business processes using strategic thinking and analytical skills. The ability to understand international management issues is also important because Supply Chain Operations often cross national boundaries in addition to functional ones. Most employers seek students that have strong financial analysis skills, leadership skills,
information systems knowledge and the ability to work in teams. Strong oral and written communication skills are also desirable.

The cross-disciplinary nature of Supply Chain and Operations suggests supporting coursework from a large number of academic areas.
  • Operations Management for understanding manufacturing, service processes, inventory management, quality management, and supply chain technology management, along with associated process improvement techniques.
  • Logistics for the management of delivery and fulfillment systems.
  • Marketing for the ability to understand market behavior and distribution requirements.
  • Strategy for better understanding how supply chains compete, discerning effective alliances, and helping prioritize SCM opportunities.
  • MIS for an understanding of systems design and implementation.

The skills listed above are contained in the highly recommended courses listed below. In addition students should select electives from the suggested list of courses or other courses that complement their particular interests and experience.

In addition to the highly recommended courses, one possibility is to select one functional area such as marketing, operations, information systems, finance or strategy and organization for additional course work. This would build the strength of the student’s portfolio in one additional area to complement the supply chain and operations courses already taken.

Another possibility is to select courses from several of the areas suggested in order to build a broader base of expertise across the board. In this case the student would pick and choose courses from the suggested list to complement his or her experience and build more skills in several functional areas.

**Important Curriculum**

Courses will explore different ways organizations manage and create value through the supply chain. How do companies create value for their customers by producing, shipping and distributing products as efficiently as possible? How do supply chain decisions impact quality, flexibility, price and delivery of goods and services?

<table>
<thead>
<tr>
<th>Course titles include:</th>
<th>Generally, in this order:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement, Sourcing &amp; Operations Strategies</td>
<td><strong>1st Year Classes</strong></td>
</tr>
<tr>
<td>Integrated Logistics Systems, Total Quality Management</td>
<td>Supply Chain Management</td>
</tr>
<tr>
<td>Supply Chain Management Tools</td>
<td>Manufacturing Design &amp; Analysis</td>
</tr>
<tr>
<td>Manufacturing Design &amp; Analysis</td>
<td>Competing Through Supply Chain Logistics</td>
</tr>
<tr>
<td>Decision Support Models</td>
<td><strong>2nd Year Classes</strong></td>
</tr>
<tr>
<td>SCM Technology &amp; Applications</td>
<td>Procurement &amp; Sourcing Strategy</td>
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<tr>
<td>Environmental Conscious Manufacturing</td>
<td>Operations Strategy</td>
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<tr>
<td>Environmental Conscious Manufacturing</td>
<td>Integrated Logistics Systems</td>
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<tr>
<td>Environmental Conscious Manufacturing</td>
<td>SCM Technology and Application</td>
</tr>
</tbody>
</table>
Typical Titles in Supply Chain Management at the MBA Level

Recent graduates have obtained positions in supply chain management that include titles such as:

Customer Program Manager
Enterprise Integration Leader
Commodity Manager
Procurement Specialist
Senior Global Commodity Specialist
Strategic Sourcing Commodity Leader
Project Manager, Supply Chain Information Systems

Resume Key Word and Phrases: Manufacturing and Operations Management

Enelow, S., (2003), Best Keywords For Resumes, Cover Letters, And Interviews, Impact Publications, Manassas Park, VA

Asset Management: Directed asset management functions for 20 manufacturing facilities, two distribution centers, and 68 sales offices nationwide, with total asset value exceeding $2.1 billion.

Automated Manufacturing: Transitioned Playtex from a labor-intensive production operation into a state-of-the-art automated manufacturing facility.

Capacity Planning: Facilitated capacity planning to consolidate Canadian, Mexican, and U.S. operations into one centralized production operation.

Capital Budget: Controlled a $280 million capital budget allocated for technology acquisition.

Capital Project: Brought Johnson’s most significant capital project in the past 10 years from concept through planning, staffing, and budgeting to full-scale operations and on-time completion.

Cell Manufacturing: Transitioned from traditional line production to cell manufacturing, delivering a 22% improvement in product quality and 35% gain in daily production yields.

Computer Integrated Manufacturing (CIM): Spearheaded implementation of CIM, CAD, JIT, and SPC systems/technologies to accelerate production output and strengthen quality performance.

Concurrent Engineering: Introduced concurrent engineering processes that significantly enhanced transition from R&D to prototype manufacture to full-scale production.
Continuous Improvement: Implemented continuous improvement processes and achieved a 24% gain in product quality ratings.

Cost Avoidance: Created environment that rewarded individual employees for contributions to long-term cost avoidance and profit growth.

Cost Reductions: Captured over $2 million in material cost reductions through expanded vendor sourcing.

Cross-Functional Teams: Championed development of cross-functional teams to address critical productivity, efficiency, and quality issues negatively impacting production yields and customer satisfaction.

Cycle Time Reduction: Created formal production schedules, retrained supervisory staff, and impacted a measurable program of cycle time reduction.

Distribution Management: Architected the corporation’s first nationwide distribution management and warehouse control program.

Efficiency Improvement: Guided efficiency improvement initiatives throughout all core production planning, production scheduling, and manufacturing operations.

Environmental Health and Safety (EHS): Forged strategic partnership with Human Resources to create a performance-driven EHS program for all 10 IBM manufacturing facilities in the Northeast.

Equipment Management: Designed equipment management protocols to divest obsolete technology and redeploy advanced equipment resources to high-growth product lines.

Ergonomically Efficient: Redesigned manufacturing plant and created ergonomically efficient workstations, reducing extended employee absences and saving over $250,000 in annual workers’ compensation costs.

Facilities Consolidation: Advised Manufacturing Manager in design and implementation of a nationwide facilities consolidation program.

Inventory Control: Implemented inventory control models and processes which reduced on-hand inventory assets by more than $3 million.

Inventory Planning: Launched a large-scale inventory planning function in cooperation with Emerson, 3M, and AlliedSignal to control Joyner’s annual inventory expenses.

Just-In-Time (JIT): Modified Raytheon’s JIT processes for implementation throughout all Motorola divisions, affiliates, and subsidiaries.

Labor Efficiency: Improved labor efficiency ratings by 12% through in-house training and staff development efforts.
**Labor Relations:** Managed sensitive labor relations initiatives during six-month union contract negotiations.

**Logistics Management:** Created an integrated logistics management program assimilating all purchasing, inventory, distribution, and warehousing functions.

**Manufacturing Engineering:** Recruited to build and direct the corporation’s Manufacturing Engineering Division in an aggressive effort to upgrade production facilities, processes, and technologies.

**Manufacturing Integration:** Coordinated manufacturing integration of five acquisitions into core production operations.

**Manufacturing Technology:** Acquired over $5 million in manufacturing technology and robotics to fully automate the entire production operation.

**Master Schedule:** Designed master schedule for annual and five-year manufacturing plans.

**Materials Planning:** Revised materials planning programs to incorporate six new product lines into all production and distribution sites nationwide.

**Materials Replenishment System (MRP):** Introduced MRP II system to support start-up of ISO 9000 certification process.

**Multi-Site Operations:** Challenged to revitalize multi-site operations, reduce labor and material costs, upgrade quality performance, and strengthen customer loyalty.

**Occupational Health & Safety (OH&S):** Designed Layton’s first OH&S program, achieving compliance with both state and federal regulations governing hazardous materials handling and transportation.

**On-Time Delivery:** Improved on-time delivery from 56% to 98% within first year.

**Operating Budget:** Challenged to reduce $8.7 million annual operating budget through facilities, staff, and technology consolidation.

**Operations Management:** Senior Operations Management Executive with full P&L responsibility for six manufacturing plants and a staff of more than 2,000.

**Operations Reengineering:** Orchestrated an aggressive operations reengineering initiative and delivered a 22% improvement in production output, 10% reduction in material costs, and 34% improvement in key account retention.

**Operations Start-Up:** Recruited by CEO to plan and orchestrate operations start-up of clean room manufacturing facility.

**Optimization:** Worked to identify and implement methods to enhance optimization of production yields and finished product.
**Order Fulfillment:** Managed a 52-person order fulfillment operation supplying major customers in North America, Latin America, Europe, and Asia

**Order Processing:** Reengineered and upgraded order processing systems, achieving 99% same-day delivery.

**Outsourcing:** Pioneered Lytec’s first-ever assembly outsourcing operation and captured 12% reduction in labor costs over first six months.

**Participative Management:** Forged implementation of participative management strategies in cooperation with management teams, union officials, and hourly union personnel.

**Performance Improvement:** Guided a series of performance improvement programs that transitioned LTR from #4 to #1 in the industry.

**Physical Inventory:** Eliminated the need for annual physical inventory inspections through introduction of JIT systems/processes.

**Pilot Manufacturing:** Introduced new electronic technology into pilot manufacturing plant prior to full-scale production.

**Plant Operations:** Challenged to revitalize plant operations, eliminate redundancy, automate repetitive functions, and improve bottom-line profitability

**Process Automation:** Led an aggressive process automation program that computerized 115 manual processes and virtually eliminated all documentation requirements.

**Process Redesign/Reengineering:** Spearheaded an aggressive process redesign/reengineering program that increased manufacturing yields by 22%, reduced staffing requirements by 35%, and contributed to a 44% improvement in YTD profits.

**Procurement:** Revitalized procurement operations, introduced international sourcing to supplement domestic vendor programs, and controlled $245 million in annual purchasing contracts.

**Product Development & Engineering:** Assembled cross-functional project team challenged to re-invent Myer-Rand’s complete product development and engineering organization.

**Product Rationalization:** Initiated a large-scale product rationalization process to identify top performers and eliminate non-producers.

**Production Forecasting:** Designed a PC-based model to accelerate production forecasting and planning processes.
**Production Lead Time:** Slashed production lead times by more than 60% following implementation of computerized planning and scheduling technologies.

**Production Management:** Recruited to revitalize production management competencies in a down trending market and industry.

**Production Plans/Schedules:** Established bi-annual production plans and schedules in cooperation with plant managers and production supervisors nationwide.

**Production Output:** Recruited the industry's most notable trouble-shooter, provided technical and labor resources, and supported his efforts in enhancing production output, product quality, and cost savings.

**Productivity Improvement** Credited with a 34% gain in productivity improvement and product reliability.

**Profit & Loss (P&L) Management:** Senior Manufacturing Executive with full P&L management responsibility for the strategic planning, staffing, assets, and field operations of Raydoc's entire manufacturing organization.

**Project Budget:** Allocated $2 million project budget to renovate warehousing and distribution facilities throughout Ohio.

**Purchasing Management:** Redesigned purchasing management and contracting processes for a net $2 million annual cost savings.

**Quality Assurance/Quality Control:** Devised and implemented an integrated quality assurance/quality control process that improved finished product quality ratings by more than 30%.

**Quality Circles:** Led six quality circles challenged to eliminate obstacles to quality control and improve overall performance of operations, products, and components.

**Regulatory Compliance:** Achieved/surpassed all regulatory compliance standards as per OSHA, FDA, DOT, and other state and federal agencies.

**Safety Management:** Architected the corporation's first-ever safety management program and delivered a 24% reduction in lost time accidents over first two years.

**Safety Training:** Developed curriculum, trained instructors, and supervised a plant-wide safety training program.

**Shipping & Receiving Operation:** Restructured business processes to create a performance-driven, customer-driven shipping and receiving operation.

**Spares & Repairs Management:** Established in-house spares and repairs management function to reduce reliance on, and costs associated with, third party vendors.
**Statistical Process Control (SPC):** Implemented SPC into all core design, engineering, and manufacturing operations.

**Technology Integration:** Spearheaded $2.8 million technology integration project into Gryner’s German and French manufacturing operations.

**Time and Motion Studies:** Conducted a series of time and motion studies that identified and virtually eliminated all production inefficiencies.

**Total Quality Management (TOM):** Credited with the design and implementation of a fully integrated TOM program that positioned TerraLand as #1 in timbering operations.

**Traffic Management:** Created a global traffic management function to coordinate product distribution throughout Europe, Asia, and emerging African nations.

**Turnaround Management:** Challenged to plan and orchestrate an aggressive turnaround management initiative to transition Xylog from loss to sustained profitability despite intense market competition.

**Union Negotiations:** Participated in strategy planning and consensus building for favorable union negotiations.

**Value-Added Processes:** Implemented value-added processes to support Frester’s global acquisition and operations integration programs.

**Vendor Management:** Structured a sophisticated vendor management program with measurable quality, productivity, and efficiency objectives.

**Warehousing Operations:** Redesigned warehousing operations, reduced staffing requirements 12%, and improved net profitability 28%.

**Work in Progress (WIP):** Reduced WIP by 30% through introduction of cellular manufacturing and robotics technology.

**Workflow Optimization:** Engineered workflow optimization processes for a 34% improvement in daily production output.

**Workforce Management:** Credited with the creative design and integration of innovative workforce management, motivation, and incentive programs.

**World Class Manufacturing (WCM):** Transitioned HGM Computers from a small technology venture into a world class manufacturing operation recognized as one of Fortune’s 100 fastest growing enterprises.

**Yield Improvement:** Introduced improved production processes and delivered 22% gain in yield improvement.
Resume Key Word and Phrases: Purchasing and Logistics

**Acquisition Management:** Staffed and directed an acquisition management function responsible for over $2 billion in annual expenditures.

**Barter Trade:** Pioneered the development of an international barter trade program with Asian and European business partners to reduce domestic tax liabilities.

**Bid Review:** Managed a complex RFP and bid review process for the award of a $100 million health care research grant.

**Buy vs. Lease Analysis:** Developed PC-based models to enhance buy vs. lease analysis competencies.

**Capital Equipment Acquisition:** Directed over $50 million in capital equipment acquisitions during first year of $2 billion economic development program.

**Commodities Purchasing:** Managed a 12-person commodities purchasing business group responsible for electronics components acquisition in Japan, Korea, and the Philippines.

**Competitive Bidding:** Administered the entire competitive bidding and contract award process for the $2 billion renovation of the New York Harbor Tunnel.

**Contract Administration:** Directed contract administration, negotiation, and rebid functions for over $200 million in annual subcontracts.

**Contract Change Order:** Issued contract change orders to reflect design and engineering modifications.

**Contract Negotiations:** Led cross-functional teams responsible for all corporate contract negotiations for real estate acquisition and site development.

**Contract Terms and Conditions:** Standardized routine contract terms and conditions for all consumer lending relationships.

**Cradle-to-Grave Procurement:** Managed worldwide cradle-to-grave procurement contracts for the U.S. Army Materiel Command.

**Distribution Management:** Created a multi-channel distribution management program in cooperation with VARs, resellers, systems integrators, and major consulting firms.

**Economic Ordering Quantity Methodology:** Introduced economic ordering quantity methodology, EVA principles, and other sophisticated financial tools for purchasing, warehousing, inventory, and distribution.
**Fixed Price Contracts:** Administered fixed price contracts with the U.S. Army, U.S. Navy, IBM, Xerox, and Raytheon totaling over $40 million annually for the delivery of advanced navigational devices.

**Indefinite Price/Indefinite Quantity:** Managed indefinite price/indefinite quantity contracts for technology, communications, electronics, and underwater surveillance systems.

**International Sourcing:** Introduced international sourcing and partnered with Asian manufacturers to market the first-ever RBR devices in the U.S.

**International Trade:** Expanded international trade into emerging African markets to capitalize upon acquisition and divestiture opportunities in various mineral commodities.

**Inventory Planning/Control:** Re-invented Fram's inventory planning and control function, introduced JIT principles, streamlined documentation requirements, and cut inventory costs by 20% annually.

**Just-in-Time (JIT) Purchasing:** Successfully implemented JIT purchase into 200 IBM manufacturing sites worldwide, resulting in a better than 5% reduction in annual purchasing and inventory holding costs.

**Logistics Management:** Created a fully integrated logistics management function consolidating purchasing, inventory, warehousing and distribution.

**Materials Management:** Established a formal materials management function to gain control of parts, inventory, spares, and WIP throughout 100,000 sq. ft. manufacturing plant.

**Materials Replenishment Ordering (MRO) Purchasing:** Introduced a series of productivity improvement programs including MRO purchasing, quality councils, and an aggressive cost reduction initiative.

**Multi-Site Operations:** Planned, staffed, budgeted, and directed all purchasing and contract functions for multi-site operations throughout Pennsylvania, Maryland, and New Jersey.

**Negotiation:** Demonstrated powerful negotiation skills in challenging situations.

**Offshore Purchasing:** Reduced annual costs by $22 million through introduction of offshore purchasing and vendor partnerships.

**Outsourced:** Pioneered Kelly's successful transition from in-house to outsourced telecommunications and telemarketing services.

**Price Negotiations:** Managed sensitive price negotiations during $2 billion acquisition of American Savings Bank by Maryland National Bank.
Procurement: Appointed Project Officer responsible for worldwide procurement of military armament and explosives.

Proposal Review: Led team responsible for proposal review, cost analysis, and evaluation for acquisition of $275 million avionics system.

Purchasing: Recruited to this emerging Internet venture to guide the development of a corporate purchasing, materials management, warehousing, and data delivery function.

Regulatory Compliance: Directed regulatory compliance functions encompassing FAR, DFAR, and state regulatory requirements.

Request for Proposal (RFP): Issued 200+ RFPs in support of Syntex’s $300 million nuclear plant expansion and retrofit.

Request for Quotation (RFQ): Reviewed all RFQ submissions for $20 million health care services contract.

Sourcing: Expanded materials sourcing programs to include minority vendors in certified business districts.

Specifications Compliance: Reviewed contractor progress reports to ensure specifications compliance and accurate documentation.

Subcontractor Negotiations: Authorized general contractor to manage and administer all subcontractor negotiations.

Supplier Management: Created an integrated supplier management model based on partnership strategies and common visions.

Supplier Quality: Introduced a comprehensive supplier quality review and assessment process to strengthen quality of final consumer products.

Vendor Partnerships: Spearheaded profitable vendor partnerships to exploit common customer relationships and facilitate market expansion.

Vendor Quality Certification: Established a multi-year vendor quality certification program that contributed to a 22% increase in customer satisfaction/retention.

Warehousing: Managed a 22-site warehousing and product distribution organization to record performance, efficiency, and profit levels.

Resume Key Word and Phrases: Transportation, Warehousing, and Distribution
**Agency Operations:** Transitioned from company-owned to agency operations at all major ports throughout North America, reducing net-operating expenses by more than $15 million annually.

**Asset Management:** Directed asset management and allocation of more than $60 million in equipment.

**Cargo Handling:** Designed improved cargo handling procedures, reducing workers’ compensation costs by 22% annually.

**Carrier Management:** Outsourced all transportation functions and designed operations for new carrier management program.

**Common Carrier:** Contracted with common carrier for the movement of freight from manufacturing to warehousing centers nationwide.

**Container Transportation:** Designed container transportation programs to optimize space utilization and provide small shippers with economical rates for international freight forwarding.

**Contract Transportation Services:** Replaced in-house freight management system with contract transportation services, significantly increasing customer satisfaction and retention while reducing costs approximately 10%.

**Customer Delivery Operations:** Revitalized customer delivery operations with a focus on staff training in customer service and communication skills.

**Dedicated Logistics Operations:** Recruited to Ryder's dedicated logistics operations to integrate traffic, dispatch, warehousing, shipping, and customer management operations.

**Dispatch Operations:** Consolidated dispatch operations for four centers into one facility, reduced staff 64%, and improved on-time delivers to a consistent 99%.

**Distribution Management:** Planned and directed distribution management across multiple channels throughout North America and Western Europe.

**Driver Leasing:** Introduced driver leasing, driver training, and equipment rental programs to expand market research and meet changing customer demands.

**Equipment Control:** Implemented equipment control processes and reduced damage costs by more than $2 million annually.

**Export Operations:** Senior Logistics Executive with full P&L, operating, staffing, and budgeting responsibility for all export operations to the Far East.
**Facilities Management:** Revitalized facilities management programs. reduced costs, improved staff competencies, and enhanced reliability of building management systems.

**Fleet Management:** Directed fleet management and fleet service for 2,000 company-owned vehicles.

**Freight Consolidation:** Established new freight consolidation center at the Port of Baltimore.

**Freight Forwarding:** Managed a 200-person freight forwarding operation managing freight movement for W.R. Grace, AlliedSignal, and Sears.

**Import Operations:** Assessed the profitability of existing import operations, eliminated non-profitable business lines, and transitioned organization from loss to sustained profitability.

**Inbound Transportation:** Built an $8 million facility to manage inbound transportation and freight forwarding.

**Intermodal Transportation Network:** Established an intermodal transportation network integrating rail, sea, air, and truck to service customers worldwide.

**Line Management:** Directed line management throughout the Far Eastern Maritime Service.

**Load Analysis:** Computerized load analysis and planning functions for all shipping operations.

**Logistics Management:** Senior Operating Executive with full P&L responsibility for a dedicated and fully integrated logistics management organization with 22 sites nationwide.

**Maritime Operations:** Launched a start-up venture servicing maritime operations worldwide with on-site stevedoring at ports in 62 countries.

**Outbound Transportation:** Assembled all commodities into a centralized outbound transportation center to reduce domestic and international freight forwarding and traffic costs.

**Over-The-Road Transportation:** Transitioned from over-the-road transportation to rail transportation to expedite customer delivery.

**Port Operations:** Directed staffing, budgeting, planning, asset management, and transportation planning for port operations in New York, Boston, Atlanta, and Miami.

**Regulatory Compliance:** Achieved/surpassed all regulatory compliance standards for both OSHA and DOT.
**Route Management:** Reconfigured route management programs to optimize personnel and equipment resources.

**Route Planning/Analysis:** Automated route planning/analysis functions, improved costing, and upgraded customer service.

**Safety Management:** Identified need and developed a six-part safety management and training program for all newly hired personnel.

**Safety Training:** Revitalized safety training program and reduced onsite work accidents by 89%.

**Terminal Operations:** Restructured high-volume terminal operations at the Port of Wilmington, reducing costs 20% and improving customer satisfaction ratings by 88%.

**Traffic Management:** Designed improved processes and systems to enhance traffic management, reduce reliance on paper documentation, and achieve all budgeted operating goals.

**Traffic Planning:** Introduced GPS and other technologies to improve traffic planning and routing capabilities.

**Transportation Management:** Redesigned Xerox’s transportation management programs and saved the corporation over $10 million in annual traffic, warehousing, and distribution costs.

**Transportation Planning:** Directed transportation planning for all Caterpillar dealers and distributors nationwide.

**Warehouse Management:** Directed warehouse management operations for six facilities in the Northwestern U.S. distributing products throughout 16 states.

**Workflow Optimization:** Created performance-driven systems designed for workflow optimization, staff training, quality improvement, and cost reduction.
Education

The Eli Broad Graduate School of Management, Michigan State University

MBA Candidate, Finance & Supply Chain Management, May 2008 (Broad Scholar)
GPA: 3.9/4.0

The School of Management, Jinan University

Master of Management, Accounting, June 2001 (Full Scholarship)

The School of Economics, Nankai University

Bachelor of Economics, International Finance, June 1998

Experience

Mead Johnson Nutritional (A Bristol-Myers Squibb Company)

Summer Intern, Global Finance -- May 2007 to Aug 2007

- Achieved $1.5 million (10%) inventory savings for 13 & 32 OZ product lines (Distinguished Kaizen Leader Award Winner) by co-leading “Days-on-Hand Reduction” Kaizen Event through cross-functional brainstorming, process mapping, statistical modelling, and APO simulation
- Recommended the adoption of vendor-managed strategic stock, unified package size, and procurement consolidation based on an analysis of DHA Oil (key material with $120 million annual spending) that quantitatively differentiated cycle stock, operational & strategic safety stock (the recommendations subsequently led to an executive re-evaluation of DHA Oil inventory strategy)
- Enhanced data quality and streamlined budget and projection processes by aligning financial forecast with production forecast through data platforms integration, product hierarchy re-design and data collection templates standardization

Hangxin Aviation Engineering Group (Air France's sole subsidiary in China)

Deputy Financial Managing Director -- Dec 2005 to May 2006

- Implemented Activity-Based-Costing system that facilitated job specific margin analysis, which eventually led to a 3 share-point increase in gross margin to 45%
- Supervised “Aircraft Component & Spare Part Management” project that led to a 17% ($510,000) reduction in inventory level and an 8 share-point enhancement in “Spare Parts Availability” ratio
- Vertically and horizontally integrated Sales, Finance, Production, and IT departments to shorten bidding cycle by 40% to 3 days

Finance Manager -- Feb 2005 to Nov 2005

- Reengineered invoicing process to shorten billing cycle from 30 days to 4 days and collected “uncollectable” receivables of over $1 million within 90 days
- Performed equity valuation on Hangxin and presented the resultant report to senior management as the basis for a $2.5 million share transfer transaction
- Redesigned financial reporting system that combined actual, budgets, projection, cash flow forecast, and financial matrix

Lee Kum Kee Group

Senior Supervisor, Finance & Accounting -- Aug 2003 to Nov 2004

- Initiated the restructuring of reporting system, streamlined the monthly closing and shortened the reporting cycle from 10 days to 5 days
- Proposed, designed and implemented an in-house accounting & taxation education program aimed at enhancing internal communications between departments
Education

Michigan State University, The Eli Broad Graduate School of Management, East Lansing, MI
Master of Business Administration, Supply Chain Management and Strategy 5/2008
Honors: Graduate Assistantship, MSU Office of Intellectual Property
• Engineering patent evaluation, market valuation, and financial analysis for commercialization of nanorobotic devices
• Analyze commercial potential of university owned inventions in both science and engineering with outside consulting firm
• Assist in business proposal for development of university technology ventures project
Oberlin College, Department of Neuroscience, Oberlin, OH
Bachelor of Arts with Honors, Neuroscience and Biochemistry 5/2002

Professional Experience

Equipment Category Group-Procurement Analyst Intern
• Supplier service rate competitive analysis over $140M in annual spend across five equipment categories for global upstream, downstream, and midstream oil production
• Supplier audit, collected key data and helped devise strategy for data collection and analysis to ensure statistical significance
• Built a database to track and evaluate changes in contracted service rates across 20 strategic and competitively managed suppliers
• Analyzed cost models for supplier service rates, compared supplier service rates to applicable industry labor rate indices, and identified economic indicators for service rate changes

Cytyc/Hologic Corporation, Marlborough, MA 1/2005-7/2006
Product Development-Associate Scientist
• Developed cost analysis of outsourced biological stain, evaluated both product quality and supplier quality to identify root cause for inconsistent product performance, identified problem with single supplier, brought stain production in house with a cost savings of $5M per year, cut product release time by 50%, and increased product reliability to over 90%
• Created new biological stain with 150% shelf-life improvement and superior quality through Design of Experiment (Six Sigma) and Statistical Process Controls, immediate cost reductions of $3M per year
• Managed raw materials forecasting and planning to facilitate in house stain production
• Optimized sourcing by identifying key suppliers through development and utilization of raw materials testing, decreased costs by 15% with improved quality of goods shipped, mission assurance risk reduction decreased by 25%
• Conducted all experiments and recorded necessary documentation in accordance with all federal and ethical standards for medical diagnostics

Customer Relationship Management-Biological Staining and Imaging Specialist 7/2004-12/2005
• Problem-solved and investigated 36 customer complaints to ensure customer satisfaction, loyalty, and retention, monitored on-site product quality and performance at 50+ lab sites, and ensured proper procedures by customers
• Designed 14 protocols to increase product compatibility to meet marketing goal of 25% increased penetration in low volume US customer market and 20% penetration in European market
• Developed 3 user procedures for lab staff, traveled to customer sites to implement 2 new products and educate lab personnel for utilization of enhanced applications

Children’s Hospital Boston, Harvard Medical School, Boston, MA 6/2002-6/2004
Cellular and Molecular Otolaryngology-Research Associate
• Led a dynamic team of three research assistants, successful results were presented at two annual industry conferences
• Analyzed and computed data collected from hundreds of organ samples, successful identification and quantification of anatomical and chemical cell changes using Excel and Photoshop
• Designed a novel technique to analyze cell damage responsible for childhood deafness, collaborated with scientists in three labs across the country

NeuroBiochemistry-Research Assistant Intern
• Conducted primary research for identifying compounds for potential therapies for degenerative brain diseases, including Alzheimer’s and Parkinson’s
EDUCATION

MICHIGAN STATE UNIVERSITY
MICHIGAN
The Eli Broad Graduate School of Management
Masters in Business Administration, Supply Chain Management & Finance (Dual Specialization) GPA 3.74
Honors: Merit scholarship .Part of MBA admissions team.. Completed successfully a 4 month consulting project for Aquaculture Bioengineering Corporation. on behalf of MBA Consulting group. Active member of Supply Chain Club, Student Investment Board

VISVESWARAIAH TECHNOLOGICAL UNIVERSITY
BANGALORE, INDIA
Rashtreeya Vidyalaya College of Engineering
Bachelor of Engineering Electrical Engineering (Electronics & Communications)
First Class with Distinction (GPA 3.9); Outstanding All Round Student Performance Award (2002); Best Final Year Engineering Project Award . Nominated college president consecutively for 2 years.

PROFESSIONAL EXPERIENCE

Motorola, Libertyville
May 2007 – August 2007
Integrated Supply Chain -MBA Intern
• Part of a six-member team that secured the 1st position (out of 200 interns) for a new product business plan competition across North America. Featured in Motorola headline news and the Michigan State University MBA careers website.
• Successfully managed a Six Sigma green belt (DMAIC) supplier shared qualification and qualification cycle time reduction project across all component categories and suppliers (sixty suppliers). Reduced qualification cycle time by 35% for all components and by 40% for NPI sourcing.
• Organized and tracked numerous negotiation meetings with suppliers and category managers across commodities like IC’s, passives and displays.
• Developed new benchmarking and forecasting tool for supplier performance tracking and measure variance across all commodities.
• Performed exhaustive supply market analysis/spend analysis for complex components like displays and IC’s.
• Developed new reporting functionality with excel macro to pivot workflow process data from Savvion .This auto- generated report now provides statistical and status features to all stakeholders in the qualification process.
• Gathered and analyzed thoroughly workflow data with Minitab and made crucial recommendations to baseline measurements, tighten processes and remove non-value added steps in the qualification process.
• Co- developed a matrix for PCN’s and 2nd source qualification which documents all our PPAP requirements for every change process across all commodities.

General Motors
November 2004 –July 2006
Project Manager (Process consulting and business development)
• Headed five global product engineering and business development teams across horizontal functions in GM and successfully coordinated 10 global lean projects to reduce cycle time variance by 25%.
• Worked extensively in sourcing strategy, IT/operations, ERP(SAP) consulting and lean management consulting projects across the globe in Shanghai, Stuttgart (Germany) and Detroit.
• Championed many process improvement projects with six sigma methodology under GM’s global controller platform restructuring project.
• Responsible for valuation analysis, cost modeling and resource planning/budgeting for 50% of all new business development initiatives for GM India.
• Devised, implemented and audited key ISO and CMM level 5 initiatives in GM India that improved finished product quality ratings and cost of quality by more than 30%. 

- 18 -
• Implemented the GM global Six Sigma corporate strategy of ‘Road to Lab to Math’ in India.
• Selected from GM India to be part of a Global PLM team with North America, Germany and Sweden to initiate a common electrical platform (AUTOSAR) for all platforms along with representatives from BMW, Bosch, & Delphi Automotive.

Robert Bosch GmbH, Germany - September 2002 - November 2004

Senior Systems Analyst - Daimler Chrysler

• Slashed production lead times by more than 60% following implementation of computerized planning and scheduling technologies.
• Formulated and planned ,while onsite in Germany, a new automotive engineering process along with a team of engineers from Daimler Chrysler resulting in high quality product development and reduction in engine controller development cycle time from 3 years to almost a year.
• Initiated and implemented this same business model offshore in Bangalore India along with a team of colleagues from Germany.

ACTIVITIES/ADDITIONAL SKILLS

• Adept in cost modeling, spend analysis, ERP (SAP), SIX SIGMA analysis, supply market analysis, e-procurement tools, building complex financial models, security analysis and excel macro programming.
• Completed successfully a market analysis and online survey project for a client on behalf of Spartan Consulting group
• Conduct corporate recruiting/training sessions on automotive electronics and energy systems to leading universities.
• Adept in Excel Macro programming and Six Sigma statistical analysis using Minitab, SPSS etc.
• Part-time musician and part of a World Music group.
• Language skills: Native: Bengali; Fluent: English, Hindi; Basic: German

SAMPLES OF SUPPLY CHAIN INTERNSHIPS

FMC Technologies, Houston TX
Global Subsea Sourcing Intern Summer 2007
• Analyzed current cost structure of Subsea components and assemblies, identified potential cost saving opportunities of $2.5M through optimization of existing supply base.
• Studied current spend and quality performance of 3,000+ suppliers for all FMC Subsea locations, identified current purchasing pattern and opportunities in emerging markets.
• Utilized SAP and BW (Business Warehouse) system to evaluate performance of major Subsea commodity vendors from multiple dimensions, facilitated critical decisions of the strategic commodity.
• Developed RFQ templates and prepared RFQ package for 40+ existing and potential vendors

Johnson & Johnson, Skillman, New Jersey May 07-August 07
MBA Supply Logistics Intern- Sales and Logistics Company
• Developed value stream maps for McNeil’s 3 manufacturing plants and identified net savings of more than $11 million (in 3 years) for Logical Release / Shipping in Quality impound (QI) project.
• Communicated with Distribution centers, Overflow Warehouses, QA, IT, Planning, Transportation and Finance in United States and Puerto Rico for data collection.
• Collaborated with IT department to identify SAP changes needed for the Lean Supply Chain and worked with Quality Assurance department to identify risks involved with shipping the products in QI.
• Calculated the NPV, IRR and payback time and recognized the benefits of project for customers and QA compliance.
• Created timeline for the project and determined challenges for project, the cost of non-compliance for McNeil and DCs readiness for Logical release project.
• Developed the final business case for Logical Release project for McNeil companies in Puerto Rico, Fort Washington and Lancaster and identified $5.3 million future opportunity for McNeil QA.

Chrysler LLC
Supply Chain Consultant, Part Division Center Line
• Partnered with a cross-functional team to develop a supply chain visibility/intelligence IT platform for Chrysler’s part division. Project scope included all supply chain segments and 5 business scenarios.
• Identified and proposed annual cost saving opportunities of $23 million from reduced referral cost, reduced back order cost, and optimized transportation strategies.
• Awarded division-wide “Star Performer” by recommending an optimized inventory planning and forecast model, as well as other lean and Kaizen initiatives, to executive management.

VF Corporation, Greensboro, NC
Global Supply Chain Analyst
• Observed and evaluated the adequacy of controls and systems in place for distribution center in Nashville, Tennessee and South/Central American sourcing hub in Miami, Florida.
• Initiated the classification of mislabeled or rejected cartons in distribution center which identified the root cause and reduced time from receiving to inventory.
• Recommended and advised on use of a central repository and vendor scorecard while sourcing fabric from South America to assist in supplier selection and ensure consistent quality.
• Presented and collaborated one year action plans with senior management to resolve audit variances and improve effectiveness of internal controls.

Companies Offering SCM Positions to Broad MBAs
The lists below are companies that made offers to Broad MBA candidates for both permanent, full-time positions and summer internships for the 2007-08 year:

Avaya, Inc.  Altitcor
Abbott Laboratories  American Express Company
Adecco Technical  BHP Billiton
Agilent Technologies  Boeing
Alcoa  Boston Scientific
BP America Production Company

- 20 -
To see an updated list of on-line resources for more information on careers in supply chain management, or for sourcing job opportunities:
[https://www.mba.msu.edu/careers/students/links.cfm?category=32](https://www.mba.msu.edu/careers/students/links.cfm?category=32)

### SCM Technical Interview Questions

**How do you go about getting resources to get something done that is not under your direct control?**

**What are some of the most effective ways to keep tasks on track?**

**Tell me about a time when you had to organize and implement a system/work process.**
Please describe a time when you had to start up something from nothing.

Tell us about a situation in which things you had planned or expected fell apart. What was the situation and what did you do?

Take us through a complicated project you were responsible for planning. How did you define and measure success? What obstacles did you encounter? Which ones were anticipated and which were unanticipated? What did you learn that you could, or have, applied to other projects?

What planning methods do you generally use and where and how did you learn them?

Have you ever managed multiple projects simultaneously? What methods did you use to keep the all moving forward at the same time?

What different measure and feedback mechanisms have you used to keep track of progress and how have they helped, or hindered, you in past projects?

How do you know whether it’s better to lay out very specifically what others have to do – versus allowing them to use their own initiative and creativity?

Have you ever over-planned a project or spent too much time in planning versus execution? Or vice-versa?

Everyone at one time or another is too busy to plan future activities. Tell me about a time when you were so busy you just reacted to situations rather than planned for them.

What processes have you used to prevent or control backlog in your work area? Describe a specific instance.

In times of conflicting priorities, how did you determine what was top priority?

Tell me about a time you conducted a formal negotiation with an external group.

Tell me about a time when you negotiated well. Contrast this with a time you did not negotiate well.

Describe some supplier management tools and processes you have developed / implemented.

Describe a time when you had to deal with a difficult critical supplier. How did you resolve the situation?

Explain how you have used sourcing to drive results.

How would you define “best practice”? 
Describe a cost improvement initiative you have worked on.

What steps would you take to qualify a supplier to ensure that they can meet or exceed the company’s supply requirements?

Describe your experience with gathering and analyzing company financial data. Which tools have you used?

What are the cost elements you would look at to calculate Total Cost of Ownership of a product or service?

Tell me about a customer service initiative or business strategy that you developed or were responsible for executing.

Tell me about a time when you and your team improved operational efficiencies.

Tell me about a time when you took a risk and failed.

What is the worst work process you have personally experienced? How would you have changed it?

Describe a “dead end” you encountered while working on a problem and how you handled it.

What are the most important considerations in the logistics of an operation?

Tell me about the most innovative solution or action that you have come up with to support a business objective.

Tell me about an important project / task / assignment you were working on for an external customer when the specifications changed significantly but the deadline wasn’t extended. What did you do? What were the results?

Why does it matter to have a forecast as accurate as possible?

Describe the relationship between SKUs and forecasting. How can SKUs be changed to improve forecasting?

Professional Associations and Certifications

1. Institute for Supply Management (ISM)
   http://www.ism.ws/Certification/requirements.cfm

C.P.S.M.: The Certified Professional in Supply Management (C.P.S.M.) is slated to be the qualification that supply management professionals strive to obtain. The CPSM will be relevant internationally and reflect the expanded education, skills and experience needed to be a successful supply management professional. The CPSM will debut in
2008. The CPSM examination process will consist of three separate exams which together will cover the main segments of supply management. Exam content will address today's supply environment and workplace complexities such as risk, strategic sourcing, technology and increased skills needed for supply professionals to drive value in their organizations.

**C.P.S.M. requirements:** The Certification Committee recommended and the Board of Directors approved that a Bachelor's degree from a regionally accredited institution and at least five years of professional supply management experience will be required for the CPSM. Current C.P.M.s who hold a Bachelor's degree and wish to bridge to the CPSM must also have at least five years of professional supply management experience.

**C.P.M:** The Certified Purchasing Manager (C.P.M.) program is designed for experienced purchasing and supply managers. It focuses on managerial and leadership skills, plus a variety of specialized functions (e.g., sourcing analysis, supply and inventory management, forecasting) designed to enhance the value of procurement and supply management within an organization. It also covers the operational aspects of the purchasing and supply function, such as identifying requirements, preparing solicitations and agreements, negotiations, technology, quality, and maintaining relationships. Plans are underway to replace the C.P.M. with the CPSM by 2015, with the transition beginning in 2008.

**C.P.M requirements:** Applicants for C.P.M. certification must pass all four modules of the C.P.M. exam. In addition, the applicant must (a) have five years of full-time professional purchasing and supply management experience, or (b) have a four-year degree from an accredited institution and three years of full-time professional purchasing and supply management experience.

**C.P.M exam cost:** For domestic candidates (includes Canada), the computer exam costs $95 USD per module for members and $135 USD per module for nonmembers. International fees are $135 USD per module for members and $170 USD per module for nonmembers (candidates in Spain should contact ISM customer service for special provider information). Other costs vary according to the study materials used and/or review classes taken.

**A.P.P:** The Accredited Purchasing Practitioner (A.P.P.) program is for entry-level buyers or others primarily engaged in the operational side of the purchasing and supply function, such as identifying requirements, preparing solicitations and agreements, negotiations, technology, quality, and maintaining relationships. The A.P.P. is also relevant for those involved in purchasing and supply support activities and supply teams.

**APP requirements:** Applicants for Original Accreditation must pass modules 1 and 2 of the new A.P.P. Examination Module 1 - Purchasing Process, Module 2-supply environment. In addition, an applicant must (a) have two years of professional (non-clerical, non-support) work experience, or (b) have an associate's degree from an accredited institution and one
year of professional experience. Purchasing and supply management experience can be a secondary component of the applicant's job.

**A.P.P exam cost:** For domestic candidates (includes Canada), the computer exam costs $95 USD per module for members and $135 USD per module for nonmembers. International fees are $135 USD per module for members and $170 USD per module for nonmembers (candidates in Spain should contact ISM customer service for special provider information). Other costs vary according to the study materials used and/or review classes taken.

2. American Production and Inventory Control Society (APICS)


**CIRM:** Certified in Integrated Resource Management (CIRM) education integrates your understanding of organizational resources such as information technology, materials, human resources, production and supporting equipment, facilities, and capital to meet the goals of your organization. CIRM is a comprehensive program designed to develop managerial and leadership skills.

**CIRM requirements:** You must pass 5 CIRM exams with a total scaled score of 200 or higher on each exam to earn the CIRM distinction. The five exams are: Enterprise Concepts and Fundamentals, Designing Products and Processes, Delivering Products and Services, Identifying and Creating Demand, and Integrated Enterprise Management.

**CIRM exam cost:** APICS Members: $150.00 per exam, nonmembers: $185.00 per exam.

**CPIM:** Certified in Production and Inventory Management (CPIM) provides a common basis for individuals and organizations to evaluate their knowledge of the evolving field of production and inventory management. The program has helped individuals and their organizations become more productive and competitive because it is designed to test candidates’ in-depth knowledge of a variety of subjects specific to production and inventory management.

**CPIM requirements:** You must pass 5 CPIM exams with a total scaled score of 300 or higher on each exam to earn the CIRM distinction. The five exams are: Basics of Supply Chain Management, Master Planning of Resources, Detailed Scheduling and Planning, Execution of Control of Operations, and Strategic Management of Resources.

**CPIM exam cost:** APICS Members: $110.00 per exam, nonmembers: $145.00 per exam.
3. Project Management Institute (PMI)
   http://www.pmi.org/certification/

**PMP:** Project Management Professional (PMP) credential is the project management profession's most globally recognized and respected certification credential. The purpose and goal of this program is the development, maintenance, evaluation, promotion and administration of a rigorous, examination-based, professional certification program of the highest caliber.

**PMP requirements:** At the time of application, the candidate holds a baccalaureate or equivalent university degree and has a minimum of 4,500 hours of project management experience within the five (5) process groups (Initiating, Planning, Executing, Controlling, and Closing.) The number of hours on the Experience Verification Form(s) must total at least 4,500 hours and the project dates must indicate that the candidate has at least three (3) years of project management experience within the six-year (6) period prior to the application. Candidates must indicate at least thirty-six (36) unique (non-overlapping) months of project management experience on the Experience Verification Form(s) to satisfy the three-year (3) requirement.

**Required supporting documentation:**
1. A current resume/curriculum vitae detailing work experience and educational background (please provide the name and complete address for all employers and schools attended)
2. A copy of diploma or transcript for baccalaureate or equivalent university degree
3. Experience Verification Form(s) meeting criteria listed above

**PMP exam cost:** PMI member: $405.00, non-member $555.00

4. Association for Investment Management and Research (AIMR)
   http://www.aimr.org/cfaprogram/index.html

**Recommended Readings**

**“Classic” Articles:**


**Recent Articles:**


**Books:**


*Recommendations suggested by Professors Gary Ragatz and David Closs*