

# MGT 176: Strategic Supply Chain Cost Management

Course: Spring 2021

CLASSROOM: Online and Remote via Zoom

(details to be provided later on Canvas)

CLASS HOURS: Friday 1230 - 320 pm
PROFESSOR: Christopher Gopal, PhD
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PHONE: TBD

OFFICE HOURS: By appointment OFFICE LOCATION: Online and Remote

TEACHING ASSISTANT/TUTOR: Andrew Tsuei

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#### DESCRIPTION

In today's highly competitive, uncertain and international environment, companies do not compete. Supply chains and industries compete. This course is a critical component of a business education and is directed at students of engineering, international business, marketing, organizational behavior, finance and accounting.

The Supply Chain is the most significant and critical component of most businesses, and accounts for the bulk of the people, cash and value-add in a company. The current pandemic and international trade crises have demonstrated this and highlighted the critical role of the Supply Chain in business, global trade and world economy. Supply Chains are the most discussed topic in business and is often the core of the discussion among industry leaders, the stock market, governments and service providers.

This course will cover the key cost and working capital elements of the supply chain, the impacts on the financial statements and market value, and the levers in the supply chain. Students will learn about key strategic cost and cash applications such as Total Costs of Acquisition and "Should" Costs in Supplier Selection and Management, financial and operational analysis, operational and process costs, Costs-to-Serve in evaluating Customers and service, and an approach to identifying and managing supply chain costs. The class will enable students to understand the costs and cost implications of the supply chain and international trade, discuss these with executives, and apply them in their companies.

Prerequisites: Upper Division Standing.

#### **OBJECTIVES**

1. To familiarize you with the costs, levers and cost reduction in the most critical component and set of functions in global business today, *the end-to-end supply chain*. We will discuss the



overall supply chain, its impact on the company's competitive and financial success, costs, working capital, Activity-Based Costing and cost structure of the supply chain from a strategic and tactical level.

- 2. To teach you about the cost estimation and improvement, key cost and working capital decisions that must be made in the supply chain.
- 3. To prepare you to leave this class armed with an understanding of the overall global end-to-end supply chain, its costs, cost structure estimation and improvement, the cost levers, and be able to confidently discuss these with executives.

#### **REQUIRED MATERIALS**

Required readings for this course have been published into a Cognella reader. The reader will be digitally offered via RedShelf at the price of \$53.69. You will have free access during the first two weeks of the quarter via RedShelf on Canvas. After two weeks, your student account will be charged the RedShelf price of \$53.69, unless you OPT-OUT. You will have until Saturday, April 10th to OPT-OUT or else your student account will be charged. RedShelf may be beneficial to you if your financial aid can cover the cost of the reader. Please email <a href="textbooks@ucsd.edu">textbooks@ucsd.edu</a> for questions related to RedShelf.

"The Path to Higher Shareholder Value", Chief Executive, July/August 1998, Stephen C Johnson, Gerry Marsh, Gene Tyndall

Analyzing Financial Statements, VG Narayanan, Suraj Srinivasan, HBS

Activity-Based Costing: Introduction, Robert S Kaplan and Robin Cooper HBR, ISBN-13: 1-4221-1596-1, 1596 BC

Introduction to Activity-Based Costing, Robert S Kaplan, HBS, 9-197-076, Rev July 5, 2003.

Ratios tell a Story – 2019, Mark E Haskins, Darden Business Publishing, May 21, 2020, UV 8057.

Activity-Based Costing and Management Rubrics Case Study, Hall, McPeak and Seaman, Richard Ivey School of Business, 910B11, Version (A) 2010-09-10

"What Should it Cost" Eric Arno Hiller, McKinsey (to be posted on Canvas; available on electronic reserves https://library.ucsd.edu/borrow-and-request/course-reserves/index.html)

Managing your Cost-to-Serve", Freeman, Haasz, Lizzola, Seierson. Supply Chain Forum (available on electronic reserves- https://library.ucsd.edu/borrow-and-request/course-reserves/index.html)

Precision Worldwide, Inc., William J Bruns, Jr., Harvard Business School, 9-197-103

Achieving Full-Cycle Cost Management, Robin Cooper, Regine Slagmulder, MIT Sloan Management Review, Vol 46, No. 1, SMR153, Reprint No. 46108 (available on electronic reserves - <a href="https://library.ucsd.edu/borrow-and-request/course-reserves/index.html">https://library.ucsd.edu/borrow-and-request/course-reserves/index.html</a>)



Additional readings will be posted on canvas before the appropriate classes.

A paperback copy of the Cognella reader can be purchased directly from Cognella Publishers using this link: <a href="https://store.cognella.com/23326">https://store.cognella.com/23326</a>

If you purchase the Cognella reader from Cognella's website directly, you must OPT-OUT of RedShelf. You will have until Saturday, April 10th to OPT-OUT or else your student account will be charged.

# Recommended for Reading -but not required for the class.

Supercharging Supply Chains: New Ways to Increase Value through Global Operational Excellence, Gene Tyndall, Christopher Gopal, Wolfgang Partsch, John Kamauff, John Wiley & Sons

Supply Chain Cost Management, Jimmy Anklesaria, 2008, AMA, ISBN: 978-0-8144-1742-3.

Supply Chain Challenges: Building Relationships. Harvard Business Review, July 2003; Reprint R0307E.

Supply Chain Financial Management, Robert J Trent, J Ross Publishing 2016

#### **CLASSROOM PROCEDURE**

The classes and all examinations will be conducted online via Zoom. Details will be posted on Canvas.

The course meets for 10 sessions for 2 hours and 50 minutes each session, with a 15-20 minute break. Class sessions will begin and end on time. Please be punctual to minimize the disturbance to others and so that you do not miss key concepts, assignments and the context of the session. If you need to miss a class, please e-mail me or the TA in advance.

Please be considerate to your fellow students, the professor and the TA. Be polite, don't talk over others and, importantly, mute your computer if you are not speaking. It is imperative that you do not disrupt the class during the session.

You may use the "Chat" feature to send the professor and/or the TA 1X1 messages, or use it to send a message to the class, if it's something that's relevant and applicable to everyone.

Class sessions will be recorded for access by students who will be taking the class asynchronously.

#### STUDY GROUPS FOR CASE STUDIES AND ANALYSIS

The Study Groups will, of course, be "virtual". Hence, while the Case Study groups will initially be self-selected, it may be necessary for us to designate teams. Teams will have to meet, collaborate and coordinate remotely. It is preferable that you use Zoom for this.

#### **CLASS ASSIGNMENTS**



For certain class sessions, I shall provide a case study, set of guiding questions, discussion points, and goals for the lecture. These will be given in the previous session. Some of these will be team assignments and others will be individual assignments. You are expected to prepare answers to these questions and be able to provide substantiated arguments on discussion points. Feel free to work with others to prepare for individual class assignments. I suggest that you work closely with your study group on these assignments to share and discuss individual ideas so that you come prepared to class and contribute to a richer learning experience. It is required that you read the assigned readings before attending the class or listening to the lectures. This will help give you perspective on the topics to be covered.

#### HOMEWORK ASSIGNMENTS

There will be two team homework assignments. This will typically (but not necessarily) be case study formats and will include concepts and problems that have been discussed. The assignments will be provided in class. The completed assignment write-ups are due at the beginning of class on their due dates and will be followed by the team discussions. Case Study teams will be finalized by April 16th.

#### ACADEMIC INTEGRITY

Integrity of scholarship is essential for an academic community. As members of the Rady School, we pledge ourselves to uphold the highest ethical standards. The University expects that both faculty and students will honor this principle and in so doing protect the validity of University intellectual work. For students, this means that all academic work will be done by the individual to whom it is assigned, without unauthorized aid of any kind.

The complete UCSD Policy on Integrity of Scholarship can be viewed at:

http://academicintegrity.ucsd.edu/

#### How the Honor Code applies to this course:

The team Homework Assignments are to be done with your assigned Case Analysis teams.

The Mid-Term and Final Exams are individual. Therefore, you should work individually to be well prepared for the exams.

For any problem discussions in class, you should limit your out-of-class discussion and analysis only to your Case Analysis teams.

#### **ASSIGNMENTS**

The following describes the guidelines for individual, collaborative or group work:

I – Independent, individual work only. No collaboration or consultation allowed.

G – Students may work together in groups and turn in one project or assignment for the entire group.

# **SCHEDULE**

#### **IMPORTANT ASSIGNMENT DATES AND TIMES**



Assignments	Date/Time
Homework Assignment # 1 & Discussion (Notes G)	Write-up due before class April 30
Mid-Term Exam (Notes I)	April 30
Homework Assignment # 2 & Discussion/Presentation	Write-up due before class May 28
(Notes G)	Presentations
Final Exam (Notes I)	June 9

#### **GRADING**

Component	Points [or percentage]
Team Homework # 1 Assignment Case Study	15
Team Homework # 2 Assignment/Case Study	15
Mid-Term Exam	35
Final Exam	35
Total	100

### **Class Participation and Attendance**

It is expected that all students will attend the class online, and participate as best as they can.

Your class participation should take into account the following:

- Can you articulate the issues and point of view clearly?
- Are the points that are made relevant to the class materials and discussion?
- Do the comments show evidence of analysis of the problem?
- Is there willingness to put forward new ideas?

## **Homework Assignment**

Note: Your homework assignments account for 30 % of your grade. The Homework Assignments will be team-based and typically include Case Study and problem-solving situations, a report write-up and class presentation. The homework is an important learning tool designed to increase your knowledge of the end-to-end supply chain costs and cost levers and, most importantly, is a required component of the course.

#### STUDENTS WITH DISABILITIES

A student who has a disability or special need and requires an accommodation in order to have equal access to the classroom must register with the Office for Students with Disabilities (OSD). The OSD will determine what accommodation(s) may be made and provide the necessary documentation to present to the instructor and OSD liaison. Students requesting accommodations for this course due to a disability must provide a current Authorization for Accommodation (AFA) letter (paper or electronic) issued by the OSD (https://osd.ucsd.edu/students/registering.html).

Students are required to discuss accommodation arrangements with instructors and OSD liaisons in the department <u>72 business hours in advance</u> of any exams or assignments. **No accommodations can be implemented retroactively.** 



Please visit the OSD website for further information or contact the Office for Students with Disabilities at (858) 534-4382 or osd@ucsd.edu.

# **CLASS AGENDA:**

Please note that the topics covered in any specific class are subject to change in terms of emphasis, depth or sequence. You are expected to read the assigned Chapters and Readings before attending the class or listening to the lectures. However, the dates and requirements for the Graded Assignments are fixed. Cases for class discussion will be assigned in the previous class.

Required Readings identified as "TBD" will be provided during the course.

# Session 1: April 2nd

TOPICS	REQUIRED READING	Assignments/Deliverables
<ul> <li>Introduction, Course Logistics</li> </ul>		
End-to-End Supply Chain/Network		
<ul> <li>Impact on Financials , Success and</li> </ul>		
Strategy		

### Session 2: April 9th

TOPICS	REQUIRED READING	Assignments/Deliverables
Structuring and Estimating Costs; Costs, Elements, Landscape and build-ups - by Function, Product and Process	"The Path to Higher Shareholder Value", Chief Executive, July/August 1998, Stephen C Johnson, Gerry Marsh, Gene Tyndall	<ul><li>Team Formation</li><li>"The Path to Higher Shareholder Value" discussion</li></ul>

# Session 3: April 16th

TOPICS	REQUIRED READING	Assignments/Deliverables
<ul> <li>Strategic Costs and the links with Strategy and Business Success</li> </ul>	Analyzing Financial Statements, VG Narayanan, Suraj Srinivasan, HBR	Team Finalization
	Guest Speaker: Jurgen Scherer	

# Session 4: April 23rd

TOPICS	REQUIRED READING	Assignments/Deliverables
, , , ,	Ratios tell a Story - 2019	Homework Team
and Financials		Assignment # 1 Due before class
		Deloie Class

# Session 5: April 30th

TOPICS	REQUIRED READING	Assignments/Deliverables
Mid-Term		Mid-Term

# Session 6: May 7th



TOPICS	REQUIRED READING	Assignments/Deliverables
Mid-Term discussion	<ul> <li>ABC: Introduction Chapter, Kaplan,</li> </ul>	
<ul> <li>Activity-Based Management and</li> </ul>	HBR	
Costing (ABC) and Cost Estimation	<ul> <li>Introduction to ABC, Kaplan</li> </ul>	

# Session 7: May 14th

TOPICS	REQUIRED READING	Assignments/Deliverables
Activity-Based Management and Costing (ABC) and Cost Estimation	ABC and Management Rubrics Case     Study	

# Session 8: May 21st

TOPICS	REQUIRED READING	Assignments/Deliverables
"Should" Cost Modeling	"What Should it Cost" Eric Arno Hiller,	Precision Worldwide, Inc.
<ul> <li>Total Cost of Acquisition (TCA)</li> </ul>	McKinsey (to be posted on Canvas)	Case Study discussion
Outsourcing Analysis	Precision Worldwide, Inc. Case Study	
	Guest lecturer: Jimmy Anklesaria	

# Session 9: May 28th

TOPICS	REQUIRED READING	Assignments/Deliverables
Contd from Session 8	Managing your Cost-to-Serve",	Homework Team
Cost-to-Serve (CTS)	Freeman, Haasz, Lizzola, Seierson.	Assignment # 2 due
<ul> <li>Total Landed/Delivered/Fulfilled</li> </ul>	Supply Chain Forum	before class
Cost (TDC)	TBD: Total Landed Cost	

# Session 10: June 4th

TOPICS	REQUIRED READING	Assignments/Deliverables
Pulling it all together – an Approach	<ul> <li>Achieving Full-Cycle Cost         Management, Robin Cooper, Regine         Slagmulder, Sloan     </li> </ul>	

# Session 11: June 9th, 2021

TOPICS	REQUIRED READING	Assignments/Deliverables
• Final Exam 1130 am – 230 pm		Final Exam



# Faculty:

# Christopher Gopal, PhD.

Dr. Gopal has over 35 years of experience in global supply chain & operations strategy, execution, and technology in a career that has encompassed industry executive management, consulting and executive education. Dr. Gopal has held executive positions at several leading companies, including Partner & Director of Global Supply Chain & Operations Services at Ernst & Young Consulting, VP in World-Wide Operations at Dell Computer, as well as executive VP positions at Unisys, Overland Storage and SAIC. His consulting clients have included prominent global and regional companies across a range of industries, and he has also assisted in several start-up companies.

Dr. Gopal most recently served as a Member of the Defense Business Board (DBB), which provides the Secretary and Deputy Secretary of Defense, as well as other senior leaders, trusted independent and objective advice which reflects an outside private sector perspective on proven and effective best business practices for consideration and potential application to the Department.

Chris currently consults with companies, serves as the Senior Strategic Advisor at OCX Cognition, a software and services company that integrates the Customer Life Cycle Experience with the Supply Chain and Finance, teaches at the University of California San Diego and at the University of Southern California, where he also serves on the Advisory Board of the Global Supply Chain Management Center

Chris serves on the Advisory Board of a prominent think-tank on Industrial Competitiveness, and recently served on a White House sub-committee on Manufacturing Technologies. He has been nominated to the Supply Chain Digest "Supply Chain Gurus" panel from 2015-2020.

Chris holds a PhD from the University of Southern California, and an MBA from the Cranfield School of Management, UK. He is the lead co-author of three books on Supply Chain & Operations, Dr. Gopal has spoken and served as an invited panelist at major industry forums, including the Milken Institute Global Forum, IATA World Conferences, the OMI-OECD Forum, the Harvard Business Review Forum, and the SecureAmerica Institute.