Re-Starting Transportation Center Executive Programs

Presentation for the Business Advisory Committee at Its Meeting April 7, 2005

Robert E. Gallamore, TC Director

Purpose & Outline

- 1. Request Input from Transportation Center BAC Members on the Value and Likely Success of "Re-Starting" Executive Courses
- 2. Provide Background on Previous TC Exec-Ed Programs
- 3. Provide Background on Current Kellogg (Allen Center) Exec-Ed Courses
- 4. Give Examples of Possible New Transport / Logistics Courses TC Might Offer Jointly with KSM / Allen Center
- 5. Next Steps

Appendix: *Inbound Logistics'* Summary of Top University Supply Chain Executive Education Programs

Three BAC Member Survey Questions:

(Please Respond in Most Convenient Manner)

1.	What issues that Northwestern professors might address are the most challenging for your firm:
	In the next year?
	Over the next decade?
_	
_	
_	
-	

Three BAC Member Survey Questions:

(Please Respond in Most Convenient Manner)

2.	What specific managerial skills do your people need to have to be		
	better equipped for meeting these challenges?		
	– Quantitative / analytical skills?		

_	Knowledge / expertise in specific substantive areas?
_	People skills, cultural awareness, international experience?

Three BAC Member Survey Questions:

(Please Respond in Most Convenient Manner)

3.	Do you have interest in an executive workshop format in which your
	firm's participants collaborate with Northwestern faculty in
	developing a specific outcome, such as:

- A new product strategy
- A forecasting system design
- An inbound or distribution logistics network, or

_	A marketing	plan?
---	-------------	-------

Background

- At Peak, 15 Years Ago, There Were about 275 TC Exec-Ed
 Students; By 1999, < 150
- Some Courses Were 3-4 Weeks Long
 - Attendance Mainly from BAC Firms
 - Courses Presented at Orrington Hotel
 - Heavy Use of Non-Northwestern Faculty
- Until mid-1990s, Exec Programs at Least Broke Even
 - Questionable "Profit" if Use Fully Allocated Cost Basis
 - Under NU President Weber, NWU Began Charging 8 ½ % Sales Tax on TC
 Exec-Ed Courses
 - TC Exec-Ed Courses Were a Significant Part of the Center's Public
 Visibility

Background, Cont.

- Rising Competition from Other Universities and Commercial Education Vendors
 - Kellogg School of Management Developed Competing Courses at Allen Center
 - Many Top Schools Offered Courses and/or Certificate
 Programs See Appendix = Inbound Logistics Article
- Corporate Belt-Tightening Hurt Registrations Late 1990s
- By 2001, TC Exec-Ed Offerings Down to 6
 - 3 Logistics / Supply Chain
 - 2 Pipeline
 - 1 Info Tech for Transport & Logistics
- Impact of 9/11 Was Devastating

Example Current Allen Center Exec-Ed Course Offerings

KSM Account

- Global Supply Chain Management (Chopra)
- Market Access
 Strategies (Coughlan)
- Factory Physics (Hopp & Chopra)
- Leading in Turbulent Times (Diermeier)

Shared with TC

 Leveraging Financial Information for Supply Chain Optimization (Balachandran)

See accompanying Allen Center brochure for complete listing.

Example Future Exec-Ed Course Offerings --Shared Between TC and Allen Center

* More Detail Provided in Later Slides

- International Supply Chain
 Development & Management*
- Marketing Channels with Precision Distribution & Returns
- Optimizing Supply and Distribution Networks
- Management of Long-Distance Supply Chains Under Emergencies
- Metropolitan Area Freight
 Planning to Increase Capacity
 and Ease Congestion*
- Meeting New Security & Safety
 Mandates

- Improving Business Forecasts under Uncertainty
- Innovative Financing for Public / Private Projects
- Airline and Airport Economics and Operations
- Managing Extreme Complexity in Network Businesses*
- Implementing Toll-Based Congestion Management Policies
- Improving Risk-Management Strategies in Transportation*

Four Examples of New TC-Allen Center Exec-Ed Possibilities

- Outlines of these Courses on 4 Following Slides
- Are these the Best Examples?
- Do BAC Members Have Other Ideas for Courses that Are More Needed?
- Do the Outlines Cover the Most Important Success Factors?
- What Additional Market Research Should We Conduct?

1. International Supply Chain Development & Management

- An advanced course that picks up where "Global Supply Chain Management" leaves off.
- How do you set up inbound logistics and outbound distribution networks overseas?
 - What help can you get from your partner nations and from the U.S. Trade Development Agency?
 - Recruiting foreign nationals for line management functions in the USA and abroad.
- Complying with Customs & Border Patrol requirements security and duties.
- Working with your carriers: maritime, air cargo, rail intermodal (container) lines, local drayage at both ends.
- Working with Third Party Logistics (3PL) firms.
- Pre-planning for (and recovery from) supply chain disruptions.

2. Metropolitan Area Freight Planning to Increase Capacity and Ease Congestion

- A course for policy-makers and practitioners in both public and private sectors.
 - **{TC is working on securing Federal funding for a pilot.}**
- Introduction to best practice principles in metropolitan area planning:
 - Federal agency requirements
 - State, regional, and local planning environments
- Winning support for the planning process:
 - From business leaders and other key external stakeholders
 - From approval authorities and implementing agencies / carriers
- Public-Private Partnerships and Innovative Financing
- Using modeling tools and gathering adequate data to make them worthwhile.
- Recruiting and gaining maximum value from outside experts:
- Going public with the finished product!

3. Managing Extreme Complexity in Transportation & Logistics Networks

- An advanced course that picks up where "Leading in Turbulent Times" leaves off.
- How do you prepare quantitative analyses of the performance of your inbound logistics and outbound distribution networks, or your transportation carrier operations?
- What are the key steps in developing network performance improvement plans:
 - Capital / design enhancements for capacity and productivity?
 - Operational improvements for safety, reliability, flexibility, maintainability?
 - What are the benefits / costs of streamlining vs. redundancies in networks?
- How can you test changes in capital or operating plans before the investments and training are implemented?
- Should information systems support tools for re-engineered processes precede or follow roll-out of the changes?
- Are "Network Streamlining" and "Process Simplification" good in and of themselves? Is it easier to reduce or manage complexity?
- Anticipating network failures, and preparing to recover.

4. Improving Risk-Management Strategies in Transportation / Logistics

- This is an advanced course in applying risk-management tools and strategies to entrepreneurial and safety / security activities in both public- and private-sector enterprises.
- Examination of the principles of risk management
 - Understanding the differences between risk and uncertainty
 - Setting up risk / reward matrices, fault trees, other analytical tools
 - Benefits and costs of streamlining vs. redundancies in networks
- Using [probability of an incident x consequences = risk]
 - Gathering data for probabilistic analyses
 - Modeling poorly understood operations and attacks on vulnerable facilities
 - Developing and ranking mitigation strategies
 - Prevention vs. recovery
 - The value of monitoring, tracing, and mapping impact
- Fail-safe versus fail-operational outcomes
- Stimulating development of technological counter-measures
- Developing risk- and performance-based standards in public and company policies

Where Do We Go from Here?

- 1. Receive / Analyze Suggestions from BAC
- 2. If Apparent Consensus Is to Move Forward, Select Most Promising New Courses (Jointly with Allen Center):
 - Recruit Faculty Academic Directors
 - Flesh Out Course Outlines
 - Conduct Market Analyses
- 3. If Favorable Results Hold, Continue Course Development, Begin Marketing (Allen Center)
- 4. Continue to Work with DOT & Public Agencies on Professional Development (Consortium of Universities Idea Still Alive)
- 5. Remember, This Is All About Preparing Leaders for the Future of Transport & Logistics Industries!