

Developing the Future Transportation Workforce

Alain Verbeke

McCaig Chair in Management

Haskayne School of Business, University of Calgary

December 2nd, 2010

Agenda

- ① Human resources needs of firms with state-of-the-art SCM and logistics operations (and related managerial challenges) as perceived by the Haskayne School of Business (HSB)?
- ① What does the ideal, business-trained SCM and logistics graduate look like?
- ① Specific Van Horne Institute - HSB strategy?

Significance of SCM and Logistics

- ***If (starting point):*** The SCM and logistics function ***designs and coordinates*** all systems governing the stocks and flows of information, goods/services across the ***firm's value chain*** (upstream/downstream), Including all procurement and the delivery of products and services to customers...
- ***Then (implication):*** ***The SCM and logistics function makes or breaks the firm's operational efficiency***

Modern SCM and Logistics (1)

- **Past:** SCM/ logistics was a *back-office* operational activity
- **Present:** Strategic tool for creating *customer value* and *loyalty*
- Industry leaders' success now often revolves around *best-in-class SCM* and *global logistics systems* (e.g., Wal-Mart, Coca Cola, Nike etc.)
- **Core SCM** and **logistics jobs** include integrating activities across the supply chain, building strong relationships with suppliers, and working with customer-focused logistics service providers

Modern SCM and Logistics (2)

- In the current business environment, it is often *supply chains* that compete, not companies
- Supply chain and logistics managers are *technical experts* and *relationship managers*

Insight from the Council of Logistics Management

- But: Many firms do *not* have a *dedicated SCM and logistics department*
- SCM and Logistics functions are *integrated* in multiple other departments
- The SCM and logistics graduate's career path may weave through *manufacturing, marketing and general management* in product divisions
- The graduate may ultimately even perform SCM and logistics functions, as *Vice President* of manufacturing, operations, marketing or a specific product division
- Across all levels: 750+ thousand individuals engaged in SCM and logistics activities in Canada

Successful SC / Logistics Manager (1)

- General skills profile:

'T-shaped' skills profile: Managers have in-depth expertise in one discipline (SC and logistics knowledge), combined with enough breadth to see the connections with other functions across the value chain, and to act upon these

Successful SC / Logistics Manager (2)

Priority Skill Requirements of Canadian Employers:

- Knowledge of logistics functions and the supply chain
- Mechanical skills
- Optimization of workflow skills
- Knowledge of transportation

- Financial planning
- Forecasting
- Cost analysis
- ICT

- Knowledge of international business practices
- Knowledge of laws and regulations
- General management and business knowledge
- Languages


Martin Christopher (2004): Impacts of Seven Business Transformations (1)

- 1. *From supplier-centric to customer-centric firm:*** Understanding markets and customers
- 2. *From push to pull strategies:*** Higher levels of agility and flexibility
- 3. *From focus on inventory to information:*** Capturing and sharing information on real demand; advanced ICT systems and ICT expertise
- 4. *From transactions to relationships:*** Focus on service and responsiveness as the basis for customer retention; Ability to define, measure and manage service requirements per market segment

Martin Christopher (2004): Impacts of Seven Business Transformations (2)

5. ***From 'transport vehicles and sheds' to full value chain management:*** Wider definitions of supply chain costs; Understanding of the 'cost-to-serve' and time-based performance indicators
6. ***From a focus on functions to processes:*** Cross functional teams focused on value creation; Specialized functional excellence and cross-functional understanding; Team working capabilities
7. ***From stand-alone to collaborative orientation:*** Relationship management and win-win attitude vis-à-vis supply chain partners

The Change in Key Attributes as 3PL Service Offerings Migrate

Relationship & Pricing Models	Service Offerings	Logistics Outsourcing Models	Key Attributes
<ul style="list-style-type: none"> Partnership Value Based 	 <p>Advanced Services</p>	<p>Fourth-Party Logistics Provider (4PL)</p>	<ul style="list-style-type: none"> Strategic relationship Broad supply chain expertise Knowledge- and information-based Shared risk and reward Advanced technology capability Adaptive, flexible, and collaborative
<ul style="list-style-type: none"> Contractual Risk Sharing 	<p>Lead Logistics</p>	<p>Lead Logistics Provider (LLP)</p>	<ul style="list-style-type: none"> Project management/contract management Single point of contact 3PL technology integration
<ul style="list-style-type: none"> Contractual Fixed and Variable 	<p>Value-Added</p>	<p>Third-Party Logistics Provider (3PL)</p>	<ul style="list-style-type: none"> Enhanced capabilities Broader service offerings
<ul style="list-style-type: none"> Commodity Transaction 	<p>Basic Services</p>	<p>Logistics Service Provider (LSP)</p>	<ul style="list-style-type: none"> Focused cost reduction Niche services

Result of the seven business transformations?

- **“The good news is that logistics is now becoming a boardroom function as opposed to a loading dock function.”**

M. Anthony Burns, Chairman, President, & CEO, Ryder System, Inc.

The Ideal HSB Graduate in the Future Transportation Workforce? (1)

“One who meets or exceeds high expectations”:

4 components:

1. ***Functional knowledge competences***: core skills in supply chain management and logistics, but also in various related value chain functions (ICT, finance, OR HRM). Key is to be able to understand and work with complex datasets.
2. ***General management knowledge competences***: organization and strategy, business law, transportation regulation, environmental analysis, international business requirements, etc.

Note: Challenge is to Combine Generic SCM and Logistics Skills

- Reason: many different entry-level jobs, where specialized knowledge will be gained on the job, but the key to success is twofold: ***rapid integration in the workforce*** as a highly productive resource and ***potential*** for future development
- Entry and mid-level jobs (< 5 years):
Analyst or Consultant in Logistics, Customer Service Manager, International Logistics Manager, Inventory Control Manager, Logistics Manager, Logistics Services Salesperson, Logistics Software Manager, Materials Manager, Production Manager, Purchasing Manager, Supply Chain Manager, Systems Support Manager (MIS), Transportation Manager, Vendor Managed Inventory Coordinator, Warehouse Operations Manager

The Ideal HSB Graduate in the Future Transportation Workforce? (2)

3. **Core values***: honesty, integrity, respect, a serving not self-serving attitude, independent thinking, courage...
4. **Implementation skills** to make knowledge competences and values actionable

***Qualification:**

- HSB assists students to clarify what constitutes exemplary values/behaviour and to engage in self-assessment
- HSB provides a supportive environment and a portfolio of opportunities for students to reinforce exemplary values/behaviour

The Ideal HSB Graduate in the Future Transportation Workforce? (3)

Implementation skills to make knowledge competences and values actionable?

- **Communication** (listening, presentation, etc.)
- Focus on **team performance and interpersonal effectiveness** (diagnoses, intervention and organizational change)
- Focus on **exemplary professional conduct**, beyond the standard functional call of duty (excellence, fiduciary duty, integrity, contribution to community, etc.)
- **Actionable vision** of exemplary organizational character (code of conduct, sustainable development, ethics, etc.)
- **Personal awareness of - and connection with - exemplary leadership** (beliefs, leadership characteristics/styles)

The Ideal HSB Graduate in the Future Transportation Workforce? (4)

- **Threshold levels** of achievement in each of the **four performance categories** are required for a supply chain management and logistics graduate to approximate the “ideal graduate”:
- Having (1) and (2) but not (3) and (4) is like driving a car without a properly functioning steering wheel
- **But:** having (3) and (4) without (1) and (2) is like trying to drive a car without a proper engine

New Van Horne - HSB Initiative

- ① ***CANADIAN CENTRE FOR ADVANCED SUPPLY CHAIN MANAGEMENT AND LOGISTICS:***

1. Deliver high-quality graduates specialized in SCM and logistics, and with potential for managerial/leadership positions
2. Perform applied scholarship and best practices knowledge dissemination to the business community
3. Serve SCM and logistics stakeholder community at large

Large Portfolio of Courses

◎ **FOUNDATION COURSES:**

1. Materials and SCM
2. Field investigation in OM
3. Managing quality in products and services
4. Service operations management
5. Computer simulation for business
6. Business analysis using spreadsheets
7. Global procurement (**New**)
8. Advanced strategy in logistics (**New**)
9. Strategic SCM project evaluation (**New**)
10. Legal/regulatory environment of logistics and transportation (**New**)

How to attract the best and the brightest?

- *SCM and logistics must become a flagship specialization at the HSB (50 graduating students per year):*
 - *Scholarship Programme:* Full coverage of tuition fees in final year of the undergraduate Commerce programme
 - SCM and logistics *learning opportunities*, e.g., through a dedicated seminar series
 - *Extensive linkages* with the professional SCM and logistics business in Calgary