

CHAPTER 1

INTRODUCTION TO OPERATIONS AND SUPPLY CHAIN MANAGEMENT

Review and Discussion Questions (on Connect)

1. The Kearl oilsands project example touches on many topics within Operations and Supply Chain Management, and also many connections to the other functional areas of an organization.
 - a. What aspects of the Kearl oilsands project would be connected to functional areas such as Marketing, Finance, Accounting, Human Resources, and Information Systems?

Functional Area	Project Connections
Marketing	Focus on public relations during project to communicate with the many stakeholders
Finance	Securing sources of funds for project when payback won't begin for many years (debt, equity, etc.?)
Accounting	Cost control for project expenditures, providing comparison of actual expenses to project budgets
Human Resources	Hiring or subcontracting for the many tradespeople required. Where will the workers live as the project is in a remote area?
Information Systems	Software systems for planning the project, making project purchases, and recording actual expenditures. Linking to subcontractors for information sharing. Remote access for workers at the site.

- b. Referring to the chapter index of this textbook, what Operations and Supply Chain Management topics were mentioned in the Kearl oilsands project?










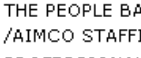
Forecasting, Project Management, Inventory Management, Supply Chain Management, Global Sourcing and Procurement, and Logistics.

2. What factors account for the resurgence of interest in OSM today?

With the expanding objectives of productive and distribution systems combined with increased applications to services and increased efficiency of Japanese producers, there is increased interest in nuts and bolts issues.

3. Look at the want ads in *The Globe and Mail* or local newspapers and evaluate the opportunities for an OSM major with several years of experience. If there are limited opportunities, think about possible reasons for the lack of opportunities.

The following are some examples of jobs available nationally to OSM graduates with several years of experience from the Globe and Mail Careers website, June 12, 2009.

SUPPLY CHAIN SPECIALIST	 PERSONNEL SEARCH i	Halifax, NS, CANADA	May 15, 2009
Supply Chain Analyst/Operations	NEALANDERS INTERNATIONAL INC. -	Mississauga, ON, CANADA	May 14, 2009
Customer Supply Chain Analyst (CPFR)	 LOCK SEARCH GROUP i	Toronto, Ontario, CANADA	May 12, 2009
Public Sector Opportunities within Procurement and Supply Chain	 MICHAEL PAGE INTERNATIONAL i	Toronto, Ontario, CANADA	May 12, 2009
Supply Chain Manager - Special Processes (6 month temp) Req #5575	 GOODRICH LANDING GEAR i	Oakville, ON, CANADA	May 09, 2009
Customer Supply Chain Manager	 KRAFT CANADA INC- i	Etobicoke, ON, CANADA	May 08, 2009
SAP Supply Chain Technical Consultant/Triage	 IAN MARTIN LIMITED - THE 500 STAFFING INC.	Toronto, Ontario, CANADA	May 07, 2009
Supply Chain Manager	 MICHAEL PAGE INTERNATIONAL i	Woodbridge, Ontario, CANADA	May 07, 2009
Retail Supply Chain Manager	 MICHAEL PAGE INTERNATIONAL i	Calgary, Alberta, CANADA	May 06, 2009
Supply Chain Professionals	 THE PEOPLE BANK/PLACEMENT GROUP /AIMCO STAFFING SOLUTIONS/ ALLEN PROFESSIONAL SEARCH i	Vancouver, British Columbia, CANADA	May 04, 2009
National Supply Chain Manager	 MICHAEL PAGE INTERNATIONAL i	Edmonton, Alberta, CANADA	Apr 30, 2009

4. Using Exhibit 1.5 as a model, describe the input-transformation-output relationships found in the following systems:

a. An airline: See Exhibit 1.5

b. A provincial penitentiary

Inputs: criminals

Components: legal system, physical plant (prison), guards and support staff

Primary functions: segregation of prisoners from society, punishment, rehabilitation

Output: reformed society members

c. A branch office of a bank

Inputs: customers

Resources: tellers, bank officers, teller windows, systems

Primary functions: deposit and withdrawal handling, loan initiation, storing money and valuables

Output: satisfied customers, positive return on loan ratios

d. The home office of a major bank

Inputs: paperwork from customers and other institutions

Resources: loan underwriters, clerks, computer systems

Primary function: record-keeping, loan processing, coordinating cash flows

Output: satisfied customers, sound investment portfolios

e. A Blu-Ray player manufacturer

Inputs: Components, presses metal sheets, packaging material, wiring

Resources: Assemblers, equipment, Tools

Primary functions: Assembly of components into finished products

Output: High quality high, definition DVD players

f. A hospital: See Exhibit 1.5

g. An automobile manufacturer: See Exhibit 1.5

5. Is the DVD accompanying a textbook a good or a service? Explain?

Looking at exhibit 1.7 - The Goods-Services Continuum, a DVD would fall under Core Goods, Data storage systems. Your core service provider - your instructor - uses this as a facilitating good to support his or her class.

6. Define the service package of your college or university. What is its strongest element? Its weakest one?

The categories with examples are:

Supporting facility - location, buildings, labs, parking.

Facilitating goods - class schedules, computers, books

Explicit services - classes with qualified instructors, placement offices

Implicit services - status and reputation (e.g., Ivy League schools)

7. Do universities offer goods or services or both? Give examples?

Looking at exhibit 1.7 - The Goods-Services Continuum, universities are primarily oriented towards providing services (education) they also offer some goods like furniture, textbooks, food and beverages, computers, notes packages, and clothing.

8. What service industry has impressed you the most with its innovativeness?

The communications industry is constantly introducing new products such as smart phones, GPS devices and other devices.

But innovation is a fact of life in all industries – whether they be automobiles or financial services,

9. What are value-added services and what are the benefits to external customers?

Value-added services make the external customer's life easier and help carry out their particular function. They provide benefits in two areas. First, they differentiate the organization from the competition. Secondly, these services build relationships that build customers to the organization in a positive way.

10. What is the difference between a service and a good?

A service is an intangible process, while a good is the physical output of a process.

11. Recent outsourcing of parts and services that had previously been produced internally is addressed by which current issue facing operations and supply management today?

The coordination of relationships between mutually supportive but separate organizations.

Case (on *Connect*)

Instructor's Solution to "Split Decision: How Back to Basics Supply Chain Management Can Save a Lot of Dough"

Tim Sweet explains, "The root cause was so uncomplicated it was routinely overlooked. Drivers were not being consistently informed when they were required to stop in Vancouver for a split load and could not easily identify when Splitting was necessary."

The simplicity of Tim's solution might surprise you. There was no need to rework shipping schedules, to redesign existing documentation, or to re-train staff. The drivers simply needed to be "made aware that they were carrying a split load."

To distinguish a split load from a regular load, Tim purchased a stamp which printed "SPLIT" boldly on the shipping manifest. With this labelling, drivers knew immediately what shipping method was intended without having to be told directly, and without

having to rely on remembering what happened “last time”. Thus, the incidence of missed split loads was completely eradicated with the introduction of a \$40 self-inking stamp.

Senior Management was shocked, remarking “That was too easy!” “Anyone could have figured that out!” It wasn’t the grand explanation or expensive solution they were expecting.

Tim explained, “The reason they failed was because they were looking for a Big “Supply Chain” Solution, to a Big “Supply Chain” Issue – not addressing the primary cause of highlighting critical information for the driver. They were used dealing with the resulting chaos and assumed high costs were just part of doing business. I challenged existing assumptions and provided a fresh perspective.”

Once the solution was in place, the company was convinced - who wouldn’t be happy with a 10,000% return on investment? The \$40 stamp more than paid for itself the first time it was used, proving big savings don’t always require substantial investments or complex solutions.

Topics for discussion:

Discuss the importance of “Agile Thinking” in operations management.

Discuss the worth of simple solutions (K.I.S.S.).

Discuss the dangers of complacency and the worth of “Out-of-Box” thinking.

Discuss Poka-Yokes.

Discuss Ishikawa Diagrams and Root Cause Analysis.

Discuss the difference between Direct Costs and Soft-Costs.