SUPPLY CHAIN MANAGEMENT A Logistics Perspective Coyle • Langley • Novack • Gibson

Chapter 2 Questions

- Adam Smith in his renowned treatise, THE WEALTH OF NATIONS, provided not only a rationale for a market economy based upon competition, but also advanced a rationale for trade among nations called the...
 - a. Theory of Comparative Advantage
 - b. Theory of Absolute Advantage
 - c. Theory of Temporary Advantage
 - d. Theory of Competitive Advantage
- 2. <u>True</u> or false, the underlying logic of Adam Smith's theory was used to advance the rationalization what he called specialization of labor.
- 3. True or <u>false</u>, the central theme behind the theory of Comparative Advantage is that if one country has an advantage (lower cost) in the production of two products, they should focus on the production of both so that they gain the greatest advantage and trade when compared to other countries that may have a lesser advantage.
- 4. Which chose is not one of the essential factors for economic growth and increased development of global trade flows.
 - a. population growth and age distribution
 - b. urbanization
 - c. land and resources
 - d. knowledge dissemination
 - e. geo-political standing

5.	The top ten countries account for almost "X"% of the total world population.		
	a.	75%	
	b.	55%	
	c.	<u>60%</u>	
	d.	45%	
6.	As suggested, the aging populations in these countries will result in health cacosts and/but in the size of the working population or labor pool.		
		increased, a reduction	
	b.	increased, stagnation	
	c.	steady, a decrease	
	d.	nominal raises in, an increase	

7. According to prediction, _____, ____ and _____ will all house so called

- Megacities, whereas _____ will not have any cities of this size.

 a. Asia, Europe and Latin America; North America
 - b. Asia, Latin America and North America; Africa
 - c. Africa, Europe and North America; Asia
 - d. Asia, Latin America and North America; Europe

8.	<u>True</u> or false, one could argue that its external role in recent years has moved technology ahead of globalization as an agent or driver of change.		
9.	<u>True</u> or false, from a customer service perspective, one of the four important characteristics for global market and strategy is technology companies counteract short product lifecycle with continual upgrades and new products.		
10.	and are the top three recipients of exports from the United States, in that order. a. China, Mexico and Canada b. Canada, China and India c. Canada, Mexico and China d. Mexico, Canada and Australia		
11.	True of <u>false</u> , the Regional Trade Agreements, the establishment of the General Agreement on Tariffs and Trade (GATT) and its 1995 successor, the World Trade Organization (WTO) have together led to multilateral trade promotion and lowered barriers to international business transactions.		
12.	True or false, Honda and Toyota only manufacture automobiles in Japan.		
13.	3. <u>True</u> or false, tariffs and other trade barriers have been significantly reduced among many countries, allowing a much more competitive global economy.		
14.	Which one of the countries below is not part of NAFTA		
	 a. United States b. Canada c. <u>Argentina</u> d. Mexico 		
15.	Which is not an important issue for economic development and vitality of the economy a. Migration b. Urbanization c. Entrepreneurship d. None of the above		
16.	True or <u>false</u> , U.S. ports can play a role in global supply chains since over 50 percent of global trade U.S. passes through them.		
17.	Where is a megacity most likely to develop?		
	a. <u>Asia</u> b. Canada c. France d. England		

- 18. Which country is not one of the three top recipients of exports from the United States
 - a. China
 - b. Mexico
 - c. Canada
 - d. <u>India</u>
- 19. <u>True</u> or false, operating globally has become easier to accomplish for even individuals and small companies, because of the advances in information/communications technology.
- 20. <u>True</u> or false, from a customer service perspective, one of the four important characteristics for global market and strategy is companies need to attempt to standardize to reduce complexity, but they have to recognize that global markets need some customization global markets and strategy.
- 21. <u>True</u> or false, given the importance of global trade to the United States, a delicate balance exists between security and the efficient flow of global commerce.
- 22. The Trade Act of 2002 requires exporters to electronically submit shipping documents to U.S. Customs ___hours after delivery to a port.
 - a. 5 hours
 - b. 48 hours
 - c. 12 hours
 - d. 24 hours
 - e. 36 hours
- 23. True or <u>false</u>, The Trade Act of 2002 requires exporters to electronically submit shipping documents to U.S. Customs 24 hours before delivery to a port or 24 hours before vessel departure.
- 24. True or <u>false</u>, The Customs Trade Partnership Against Terrorism (C-TPAT) was put in place to assess the vulnerability of U.S. ports and to deny entry to ships from countries that do not meet U.S. security standards.
- 25. True or <u>false</u>, MFN stands for Many foreign nationals.
- 26. <u>True</u> or false, Reduced order cycle time has become an important part of supply chain management since it can lead to lower inventory levels for customers, improved cash flow, lower current assets and accounts receivable.

- 27. True or <u>false</u>, strategies such as compression and lean supply chains take the same amount of work to achieve in the global environment as it does in the domestic environment.
- 28. <u>True</u> or false, the scope and magnitude of trade flows between the United States and other countries have grown considerably in the last several decades.
- 29. Which two countries account for approximately 36% of the total world population?
 - a. China, US
 - b. US, India
 - c. India, Russia
 - d. Russia, China
 - e. China, India
- 30. <u>True</u> or false, While the total world population has been increasing on an absolute basis the rate of increase has declined.

Essay Questions

31. Explain the underlying rationale for global trade and explain the difference between comparative and absolute advantage.

Answer: Adam Smith in his renowned treatise, THE WEALTH OF NATIONS, provided not only a rationale for a market economy based upon competition, but also advanced a rationale for trade among nations called the Theory of Absolute Advantage. Smith argued that countries would be better off if they would trade commodities where each country had an economic or cost advantage for one or more of the products that they produced. In other words, sell or trade products where they had a cost advantage and buy or trade for products where they did not have an advantage. Smith concluded that all participants in such transactions would be better off than trying to be self-sufficient. While the analysis was relatively simplistic, it was valuable advice, especially for that time period.

The underlying logic of Absolute Advantage was also used by Adam Smith to *advance the rationalization what he called "division of labor" or specialization of labor*. The latter concept led to mass production or assembly lines in manufacturing plants. The underlying logic was that the specialization led to increased aggregate output and lower unit cost, and provided an opportunity for regional specialization and inter-region commerce for an overall economic benefit.

The theory of Comparative Advantage was advanced about 40 years later by several economists. They maintained that even *if one country had a comparative advantage (lower cost) in the production of two products, they should focus on the production of the one that they had the greatest advantage and trade for the other*. The analyses were also somewhat simplistic because not all of the relevant costs were considered. However, the logic was sound as long as total landed costs were considered. *The importance*

of both Absolute and Comparative advantage is they demonstrate that global trade and related global supply chain flows can be based not only upon scarcity of items among countries but also differences in the cost of production with implicit benefit to all parties involved.

As one would expect, later economists explored more fully the rational of global trade and specialization. For example, the Factor Endowment Theory postulates that when a country has more of one of the four so-called Factors of Production (land, labor, capital and entrepreneurship), they may have a comparative advantage in producing one or more products. For example, a country with an abundance of capital and an educated workforce may produce high tech products and import labor intensive products and agriculture products.

32. What are the essential factors for economic growth and increased development of global trade flows? Why are they so important in today's global economy?

Answer: Essential factors for economic growth and increased development of global trade flows include population growth and age distribution, urbanization, land and resources, economic integration, knowledge dissemination, labor mobility, financial flows and investment in infrastructure by public and/or private sources, faster communication systems, improved financial services for the effective flow of goods and services. These factors are the driving forces for globalization around the world and need to be discussed in order to understand the future course of global trade and development.

33. A number of authors have observed that traditional, hierarchical organizations have changed in the current global economy. How have organizations changed? Why have they changed? What are the impacts of those changes likely to be?

Answer: Changes have resulted in shorter product life cycles, new forms of competition and new business models. Traditional organizational structures and related business models frequently change as companies get more involved in outsourced manufacturing and some logistical activities such as transportation, warehousing, and order fulfillment. All of this impacts the supply chain and its related customer service activities. Out sourcing, off-shoring and insourcing have become part of the lexicon of 21st century businesses, and information technology has allowed supply chains to be redesigned for more efficiency and effectiveness as well as better execution. Supply chain management has become an important and for some organizations, even critical ingredient for their competitive strategy and success in this global environment. Companies have transformed themselves by changing their supply chains to take advantage of global opportunities.

The synergism between globalization and technology, especially, has permanently changed the dynamics of the world's marketplace. This new era has and will continue to spotlight supply chains as a critical part of the ability of organizations to compete economically.

34. What contributions do successful supply chains make to companies?

Answer: A supply chain is boundary spanning; that is, encompassing a group of interrelated firms focused on delivering the best price or value products and services to the ultimate customer at the end of the supply chain. It was also noted a supply chain can manage four important flows, namely, materials/products, information, financials and demand.

An important characteristic of today's world economy is the increasing regional economic integration. The globalized economy has led to multilateral trade promotion and lowered barriers to international business transactions. The best supply chains allow organizations to compete very successfully on a national, regional and global basis.

35. What is meant by the current description of the global economy that "time and distance have been compressed"? Do you agree? What has been the impact of this compression?

One can hardly dispute that the exponential rise and evolution of information technology, boundary spanning trade agreements, advances in transportation medium capabilities/capacities (better shipping, better over-ground transportation, access to ports and shipping lanes, etc.), and reduced product life cycles, along with many other factors, have combined to relatively "compress" time and distance when compared to business models of yesteryear. Whereas a customized personal computer may have taken weeks to build and ship in the mid-90s, an accepted standard due to lack of available alternative, can now reach the customer in a matter of days, if not hours.

It can be argued supply chains help to establish the limits of what is competitively possible in the market. In other words, the cost and value at the end of the supply chain help determine a firm's ability to compete in a global marketplace. Good supply chains are business power and good supply chain managers are continually pushing the limits of their supply chains to be viable in both domestic and global markets.

Operating globally has become easier to accomplish due to advances in information/communications technology, as noted above, and the continuing improvement of specialists such as UPS, FedEx, DHL, etc., which can provide global supply chain services at a very reasonable cost. A growing number of specialists and continuing improvements in information technology/communications are contributing to the flattening of the world. Obviously, large global companies are also contributing to this phenomenon.

It is safe to conclude supply chains and supply chain management play an important role in the global economy and have helped to push the growth and success of companies that do "supply chaining" very well. Reduced order cycle time, for example, has become an important part of supply chain management since it can lead to lower inventory levels for customers, improved cash flow, lower current assets and accounts receivable. Conversely, the increased length and complexity of the supply chain make it more difficult to achieve shorter lead times. Global supply chains impact all with lower prices, increased array of products, and convenience (read 24/7, one-stop shopping, etc.), but are not without challenges.

36. Why are customer service and its related strategy so important for companies operating global supply chains? Do you think that customer service is more important than lower cost to the customers?

From a customer service perspective, global markets and strategy have four important characteristics. First, companies attempt to standardize to reduce complexity, but they have to recognize that global markets need some customization. For example, in contrast to the U.S. market where large retail stores buy in volume quantities for delivery to their large warehouses, less developed countries may have tiny retail stores that are only 80 to 100 square feet. This means deliveries of small quantities, more frequent deliveries, different packaging, etc. Customer service levels have to be adjusted for these markets in terms of delivery schedules, volumes, order fulfillment, and other areas.

Second, global competition often reduces the product life cycle, as previously mentioned, since products can be copied or reengineered quickly by competitors. Technology companies are faced with this phenomenon even in the U.S. market, but globally other products are faced with similar experiences. Technology companies counteract with continual upgrades and new products. Apple, for example, had great success with its iPod, but it quickly followed this with the iPhone, and now the iPad, to maintain financial momentum. Shorter product life cycles present challenges for inventory management with

respect to obsolete items. Customer service levels are also impacted because changes have to be made as the product matures in terms of sales volume and then declines, which reduces product profitability. Usually, companies cannot afford to provide the same level of customer service when the product volume declines.

Third, traditional organizational structures and related business models frequently change since companies get more involved in outsourced manufacturing and some logistical activities such as transportation, warehousing, and order fulfillment. All of this impacts the supply chain and its related customer service activities. The collaboration indicated requires effective coordination among the various parties to ensure that customer service levels (on-time delivery, complete orders, reliability, etc.) are maintained.

There are many challenges for supply chain managers. The soft side of global supply chain management presents significant challenges. The social and cultural elements come into play when dealing with foreign business partners and require daily effort to ensure smooth supply chain execution. This is because "soft" issues and physical problems are, in many cases, not mutually exclusive. Misunderstanding the culture and miscommunicating can cause havoc on the physical side of global supply chain planning and execution. Cross-cultural communication is made complicated by not only different languages and time zones, but also other culturally-rooted practices such as communication styles, different approaches to completing tasks, different attitudes toward conflict, and different decision-making styles, among other factors.

Fourth, globalization introduces more volatility and complexity. It is much more likely that global supply chains will experience challenges with weather, terrorism, strikes, and other disruptions. The need for flexibility and responsiveness is a requisite for customer service throughout the supply chain. The expanded networks cover long distances and many are complex. Trade policy, regulations, tariffs and currency exchange rates exacerbate the level of complexity for global supply chains. Furthermore, the number of intermediaries that can be involved adds another additional layer of complexity.

When considering which is more important, customer service or lowered cost, one must take into consideration not only physical, but "soft", cultural factors as well. Some, more affluent sectors may be willing to pay an increased price for goods so long as those goods are backed by a good and robust customer service "tail" – think customer loyalty. However, more developing nations and counties, whose population may be more defined by "fickle" youth and rapid change of taste, customer service becomes less important when compared to price point. These phenomenon must then be weighed against the physical cost of providing either prime customer service, competitive cost, or a delicate balancing of both.