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SUPPLY CHAIN – basic definitions

A. Vocabulary

Supply chain (according to traditional forward approach) – a flexible and cooperative business network of suppliers, manufacturers and distributors through which raw materials are acquired, transformed within value-adding (VA) processes and delivered as final goods to customers.

The forward supply chain processes are as follows:

- **Supply (or procurement)** – includes all activities connected to purchasing, transportation and storing of the raw materials and new components that are input to manufacturing system.
- **Manufacturing/production** – enhances all value-adding processes that transform the raw materials and components into final products according to actual customers' demand or demand forecasts.
- **Distribution** – refers to all activities needed to provide the customers with ordered products. Distribution usually consists of transportation, storage and sales services. In case of closed loop supply chains the distribution processes might include the optional collection of end-of-life products from customers.

Supply chain management – planning, coordinating, controlling and correcting of all activities within supply chain connected with flow of materials, information and money.

B. Reading

WHAT MAKES A MODERN SUPPLY CHAIN PROFESSIONAL?

By David Aquino and Kevin O'Marah – "Supply Chain Management Review", 5/1/2009

As recently as ten years ago, the impact of the Internet on business was minimal. Connectedness between supply chain sites such as factories and warehouses as well as operational links to other business functions like research and development or sales was limited at best. The dominant model for finding supply chain talent boiled down to recruiting managers with direct experience in narrow functional skills like logistics and transportation, inventory control, or purchasing. Professional associations played a key role by certifying mastery of specific techniques. For site-specific jobs, unburdened by the 24x7 pressures of our post-Internet global supply chain, these largely vocational talent pools were adequate.

An interesting thing happened, however, along the way to 2009. Supply chain professionals, especially those steeped in principles like Lean and Six Sigma were among the first to really grasp the implications of our new connectivity for the materials management core of all these disciplines. Inventory gradually morphed from being regarded as an asset to more of a liability, and practitioners saw that integration from customer demand back through distribution all the way to procurement of raw materials was the key to business performance. Once supply management fully embraced the outsourcing of manufacturing to third parties in low-cost countries, the picture of our 21st century global supply chain had come into focus and with it the emerging ideal supply chain organization.

Unfortunately, the degree programs in many major universities were still largely teaching to functional skills rather than the broader view demanded by this new global supply chain. At one level, the concept of 'value chain', as popularized by Michael Porter of the Harvard Business School, had begun to take root. However, this was more often applied as a purely conceptual tool used by consultants to help business rethink strategy rather than as an operating blueprint for execution.

Exercise 1

Match the words from the text with their corresponding definitions.

- | | |
|----------------------|---|
| 1. boil down | a. the procuring of service or product |
| 2. inventory control | b. transform |
| 3. unburden | c. condense/summarize |
| 4. vocational | d. have origins |
| 5. morph | e. something intended as a guide for making something else |
| 6. outsourcing | f. providing/undergoing training in special professional skills |
| 7. to take root | g. to relive from trouble |
| 8. blueprint | h. control of the level of materials kept at company |

Exercise 2

Scan the text again and answer the following questions.

- What the degree programs don't meet the new supply chain management challenge?
- Why inventory control is nowadays so important in supply chain?

Exercise 3

According to the text on the previous page, are the following sentences true (T) or false (F)?

1. The impact of the Internet on supply chain management was very big.
2. Nowadays inventory is perceived as valuable asset and should be maximized in supply chain.
3. Universities' programs meet the employers' expectations.
4. Customer's demand should be the main driver of supply chain operations.
5. Professional associations played an important role by certifying logistician's skills in particular functional areas.
6. The dominant model for supply chain education is focus on integrated supply chain management (not on narrow functional skills).

C. Glossary

supply chain – łańcuch dostaw

supplier – dostawca

to acquire – nabywać

manufacturer – wytwórca, producent

to deliver – dostarczać

delivery – dostawa

procurement – zaopatrzenie

raw material – surowiec

demand forecast – prognoza popytu

flow – przepływ

overseas retail – sieć sprzedaży za granicą

carrier – przewoźnik

DC – centrum dystrybucji

warehouse – magazyn

inventory control – kontrola zapasów

logistics network – sieć logistyczna

to supply – dostarczać

to transform – przemieniać, przetwarzać

to manufacture – wytwarzać

customer – klient

distribution – dystrybucja

to purchase – kupować

demand – popyt

final goods – wyroby finalne

retailer – hurtownik

3PLs – operator logistyczny

storage – przechowywanie

factory – fabryka

to collect – zbierać, gromadzić

business performance – wynik ekonomiczny

Exercise 4

Work in pairs and write down 10 sentences using all of the above pointed words.

D. Practice – industry-insights

Exercise 5

Complete the following passage using the words from right column.

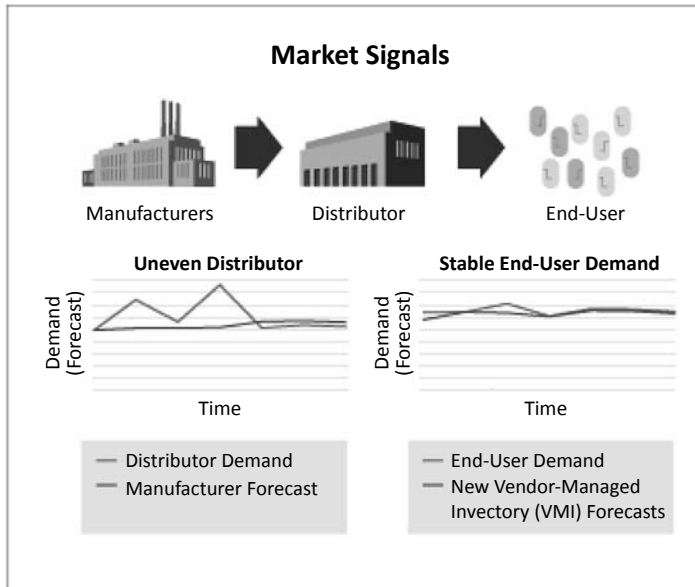
PRINCIPLE OF SUPPLY CHAIN MANAGEMENT

Demand planning across the supply chain – how to gain consistent forecasts and optimal resource allocation

Traditionally a number of departments has acted independently, creating forecasts for the same products, using their own assumptions, measures, and level of detail. Many consult the marketplace only informally, and few involve their major suppliers in the process.

Such independent, self-centered ___ is incompatible with excellent supply chain management, as one manufacturer of photographic imaging found. This manufacturer nicknamed the warehouse ‘the accordion’ because it had to cope with a production operation that stuck to a stable schedule, while the revenue-focused sales force routinely ___ cyclical demand by offering deep discounts at the end of each quarter. The manufacturer realized the need to implement a cross-functional planning process, supported by ___ planning software. Initial results were very bad. Sales volume dropped sharply, as excess ___ had to be consumed by the marketplace. But today, the company enjoys lower inventory and warehousing costs and much greater ability to maintain price levels and limit discounting. Like all the best sales and operations planning (S&OP), this process recognizes the needs and objectives of each functional group but bases final operational decisions on overall profit potential. Excellent supply chain management, in fact, calls for S&OP that ___ company boundaries to involve every link of the supply chain (from the supplier’s supplier to the customer’s customer) in developing forecasts ___ and then maintaining the required capacity across the operations. Good S&OP can detect early warning signals of demand ___ in customer promotions, ordering patterns, and ___ algorithms and takes into account vendor and carrier capabilities, capacity, and _____.

triggered
out-of-stocks
inventory
cross
constraints
forecasting
collaboratively
lurking
restocking
demand



Source: Andersen Consulting.

Picture illustrates the difference that cross supply chain planning has made for one manufacturer of laboratory products. As shown on the left of this picture, uneven distributor demand unsynchronized with actual end-user demand made real inventory needs impossible to predict and forced high inventory levels that still failed to prevent _____. Distributors began sharing information on actual (and fairly stable) end-user demand with the manufacturer, and the manufacturer began managing inventory for the distributors. This coordination of manufacturing scheduling and inventory deployment decisions paid off, improving fill rates and profitability.