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Department of Logistics - Thiva TEI of STEREA ELLADA

ENGLISH COMMUNICATION

IN

LOGISTICS MANAGEMENT

Level 3

BY

Lefki Papacharalambous

Welcome Note

Dear Student

Welcome in Level 3 of your English Course In Logistics Science.

The aim of this academic workbook is to introduce you in the science of Logistics in the English language and help you familiarize with current notions, ideas and concepts in Supply Chain Mangement form the perspectives of Marketing, Total Quality Management, Change Management and Human Resource Management. You will also develop further your and Presentation and Time Management skills.

By the end of this English course in Logistics you will be able to use confidently and in a professional manner specialized terms of the Logistics science in your own speeches and essays. You will also be able to analyze business results and defend your own views in a professional manner. Finally, you will strengthen your professional profile in terms of your communication and leadership skills.

Enjoy the ride!

CONTENTS

Supply chain strategies: Which one hits the mark?

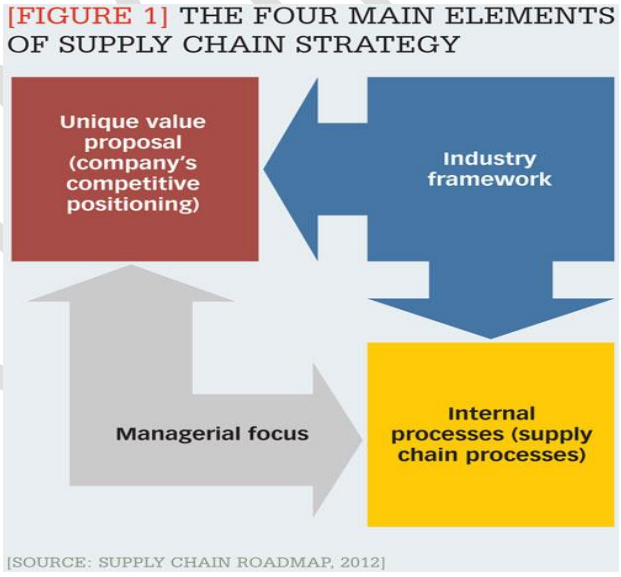
By Hernán David Perez | From the Quarter 1 2013 issue[1]

Supply chain strategies generally conform to one of six types. Choose the best one for your organization, and you'll manage your business more effectively.

Supply chains encompass the end-to-end flow of information, products, and money. For that reason, the way they are managed strongly affects an organization's competitiveness in such areas as product cost, working capital requirements, speed to market, and service perception, among others. In this context, the proper alignment of the supply chain with business strategy is essential to ensure a high level of business performance.

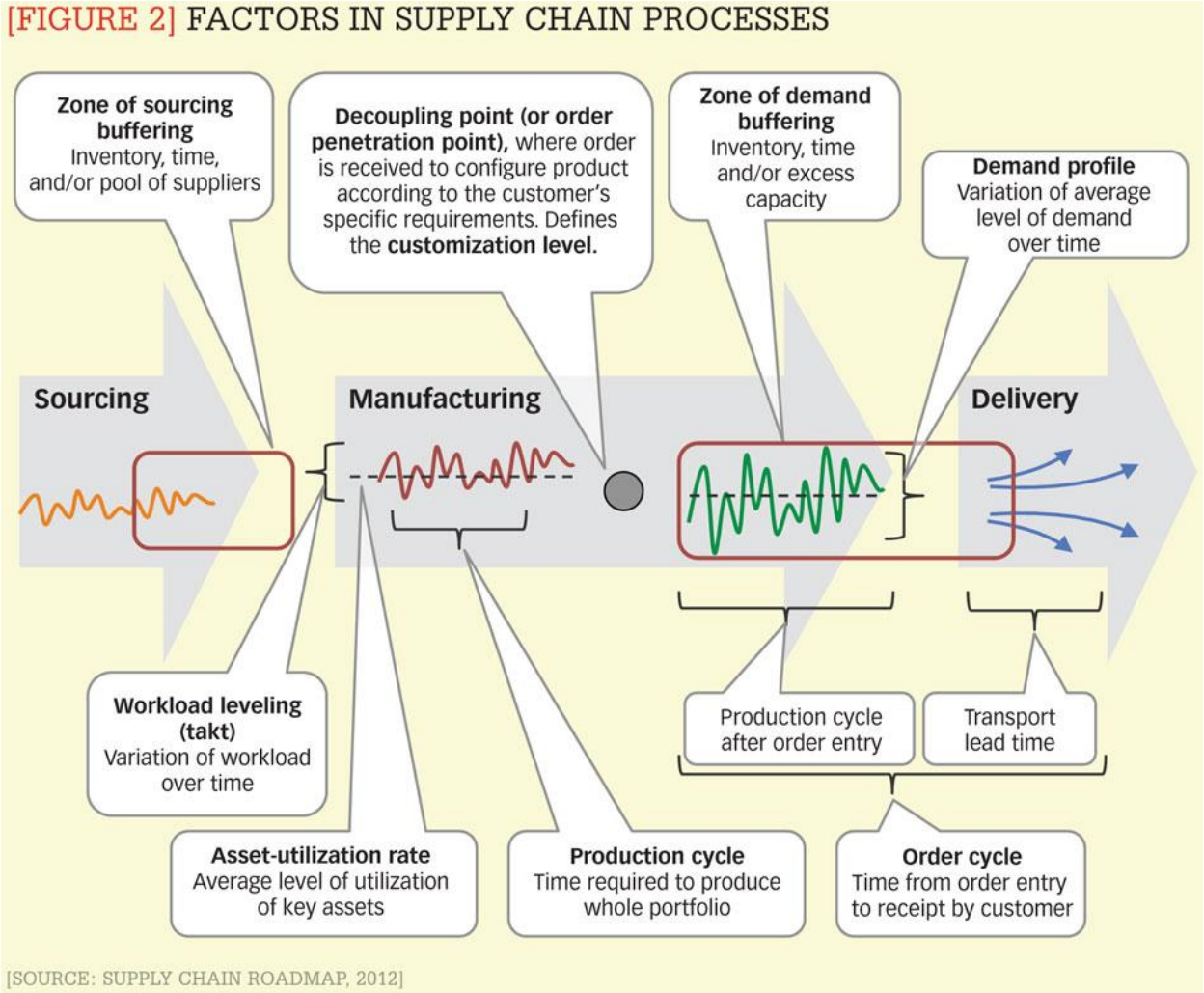
In 1997 Marshall Fisher introduced the revolutionary concept of supply chain segmentation in his famous article "What is the right supply chain for your product?"[1] Following Fisher's article, several academics and consultants, including Lee,[2] Gattorna and Christopher,[3] Ketchen and Hult,[4] Martínez-Olvera and Shunk,[5] and the consulting firm A.T. Kearney,[6] among others, developed several models regarding the formulation of supply chain strategy.

[Figure 1] The four main elements of supply chain strategy



[1] *Hernán David Perez, the developer of the Supply Chain Roadmap method, is supply chain manager of a home-improvement retailer and teaches supply chain management at Universidad de la Sabana in Bogotá, Colombia.*

[Figure 2] Factors in supply chain processes



[Figure 3] Supply chain roadmap: six generic supply chain models

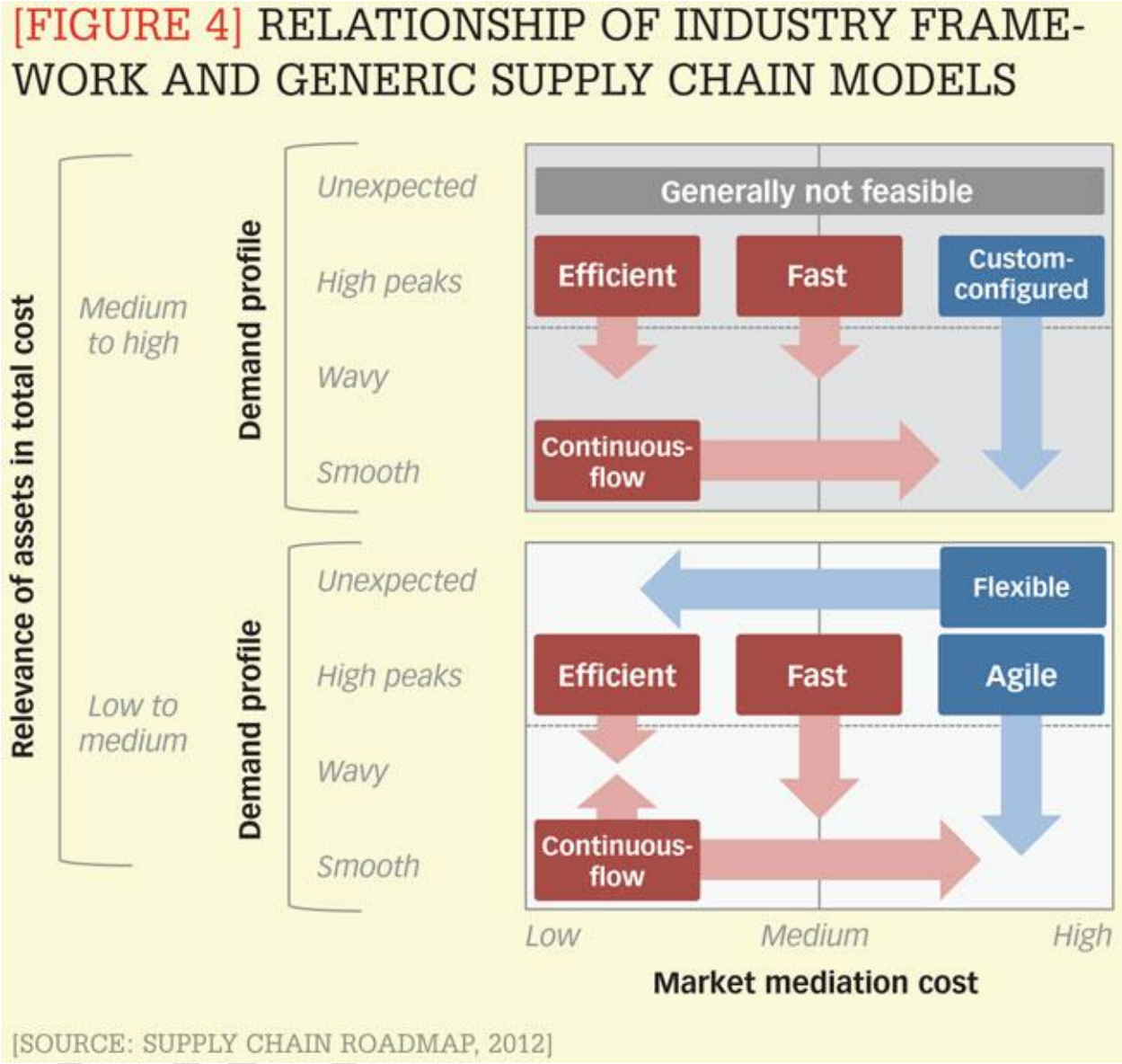
[FIGURE 3] SUPPLY CHAIN ROADMAP: SIX GENERIC SUPPLY CHAIN MODELS

		Oriented to Efficiency			Oriented to Responsiveness		
		Continuous-flow	**Efficient**	**Fast**	**Custom-configured**	**Agile**	**Flexible**
		A supply chain focused on building synergies supported by collaborative relationships. Low working capital for customers is the main deliverable. Workload is smoothed by customer's demand. Order penetration point is "make to stock" in order to ensure medium-high utilization rates with a high level of perfect orders. Production, driven by market demand, is designed to replenish predefined inventory levels.	A supply chain focused on lowest cost. Used for functional and commoditized products. Weakest value proposal when used in an isolated way; useful when used as a backbone for supporting mixed strategies. Efficiency is supported by a high asset-utilization rate based on a "make to forecast" model in order to maintain continuous production and ensure an optimal production sequence, thereby reducing setup time.	A supply chain focused on competitive cost and continuous portfolio renewal. Short time "from idea to market" and an affordable cost are main deliverables. Used for functional and short-lifecycle products oriented to fashion. Demand is "pushed" by a "collection" forecast. Fast product development is critical capability. Applied by "fashion creators," especially in industries such as apparel and beauty products.	A supply chain focused on product configurability, where several product features are customized among a set of limited options. Normally oriented toward the end user. Workload before product's decoupling point is smoothed by forecast. Extra capacity after decoupling point and design for easy assembly or postponement are key elements for agility. Order accuracy is a relevant factor in order to ensure fulfillment of customized orders.	A supply chain focused on responsiveness to unpredictable demand. Used for "exclusive" and short-lifecycle products. Asset utilization is not sufficiently relevant in the total cost. Workload has medium-size peaks and valleys. Customized/exclusive products and short order cycle are main deliverables. Extra capacity and common components/materials are key elements for agility. Normally oriented toward industrial customers.	A supply chain focused on solving problems, sometimes including customers' emergency situations, or on proposing solutions, perhaps at the level of engineering projects. Mainly used for products with high levels of added services. Typically price is irrelevant for customers due to uniqueness of the solution. Capacity on standby, capacity pooling, and reconfigurable processes are key factors for ensuring flexibility. Relationships with customers tend to be shorter-term.
Business Framework	Demand variation	Low	Medium to high	Medium to high	High	High	Unpredictable
	Product lifecycle	Long	Long	Short	Short to medium	Short to medium	Undetermined
	Market mediation cost	Low	Low	Medium to high	High	High	High
	Relevance of assets in total cost	Medium to high	Medium to high	Low to high	Low to high before PDP*	Low to medium	Low
Competitive Positioning	Main differentiation in service	High inventory turnover	Perfect orders	Short time from idea to market	User-friendly, low-effort order entry	Agility relative to demand changes	Understanding of customers' needs
	Main differentiation in product	Best performance/cost ratio	Best price	Continuous portfolio renewal	Configurable product	Customizable product	Adaptable process
Managerial Focus	End-to-end	Collaborative relationships to build synergies	Efficiency	Continuous portfolio renewal	Product configurability	Agile response to changes in demand	Resource flexibility
	Servicing	Information sharing for continuous improvement	Perfect orders	Short time from idea to market	Order accuracy	Short lead time	Understanding of customers' needs
	Product	Designed for fast changeover and quick manufacturability	Low cost at standard performance	Fast product-development process	Modular design for multiple configurations	Designed for small batches	Supported by complementary services
	Transformation processes	Regular schedule in an optimal sequence of SKUs	High rate of asset utilization	High rate of asset utilization / capacity pooling for peaks	High rate of asset utilization before PDP / extra capacity after PDP	Extra capacity in manufacturing and downstream	Asset flexibility / capacity pooling
	Sourcing	Collaborative relationships to build synergies	Lowest-total-cost supplier (opportunistic)	Pool of suppliers with short lead times and oriented to innovation	Agile response to changes in demand	Short lead time	Agile response and process flexibility to adapt to customers' requirements
Supply Chain Profile	Demand buffering	Inventory of finished product	Inventory of finished product	Inventory of finished product (current or next collection)	Inventory before decoupling point, extra capacity after PDP	Extra capacity	Standby capacity / capacity pooling
	Order penetration point	Make to stock	Make to forecast, in some cases make to order	Make to forecast	Configured to order / assembly to order	Make to order / make to stock	Design to order
	Minimum order size	Customers' replenishment needs	Mininum economic transportation batch	Collection forecast	End consumers' needs or customers' replenishment needs	Minimum economic production batch or minimum economic transportation batch	Minimum economic production batch and/or specific for each situation
	Order cycle	Replenishment according to a fixed cycle	Fixed lead time or fixed cycle	According to collection schedule	As short as possible according to orders in PDP queue	As short as possible according to customers' orders in queue	Flexible, as short as possible
	Collaborative relationships	Strategic relationships with key customers to build synergies	Not relevant	Cooperation to anticipate market trends / joint design	Cooperation with key customers to anticipate aggregate demand at PDP	Cooperation with some customers to anticipate capacity requirements	Understanding of "available to promise" at any moment
	Inventory strategy	Small and frequent batches to increase inventory turns	High level of inventory to optimize production efficiency	A single batch per SKU, based on the collection forecast	Inventory just before PDP	Materials / components under a common platform	Low inventory level and inventory pooling
	Customization	No	No	Usually no, but maybe in exceptional cases	Yes, just in PDP and downstream processes	Relevant in manufacturing and downstream processes	Relevant in design and downstream processes
	Asset-utilization rate	High to very high	Very high	High to very high	High before PDP, medium after PDP	Medium to high	Low to medium, in some cases standby capacity for occasional use
	Production cycle	As short as possible to reduce batch sizes	As long as possible to increase batch sizes and efficiency	As short as possible to reduce time from idea to market	Long before PDP, short in PDP and downstream	Variable according to customers' orders accepted in queue	As short as possible to reduce lead time
	Rate (takt) of workload	Smoothed by customer demand	Smoothed by rolling forecast	Smoothed by collection forecast	Smoothed by rolling forecast before PDP, peaks after PDP	Peaks and valleys of high magnitude	Capacity on standby for occasional use, high peaks when used
	Sourcing buffering	Inventory / one supplier for each key component	Inventory / best-cost supplier on each occasion	Pool of suppliers	Inventory / pool of suppliers	Inventory / pool of suppliers	Pool of suppliers for critical resources

*PDP = product decoupling point

[SOURCE: SUPPLY CHAIN ROADMAP, 2012]

[Figure 4] Relationship of industry framework and generic supply chain models



Despite these advances in supply chain theory, traditional approaches to formulating and validating supply chain strategy have not been consistently successful. This is largely because they have not paid enough attention to the connections and combinations among key drivers throughout the value chain, nor to their alignment with an industry's competitive framework and with each organization's unique value proposal (also called the "value proposition").

In order to address this shortcoming, an analysis has been conducted of the most widely recognized theories and case studies about supply chain strategy. This analysis has identified a set of common patterns that reveal key drivers of supply chain strategy and explain how these can be aligned in a coherent strategy. Those findings are summarized in a strategy-formulation model called the "Supply Chain Roadmap," which provides:

1. a compilation of the most relevant key drivers of a supply chain strategy;
2. an understanding of the interrelation of these key drivers with an industry's competitive framework and a business's competitive positioning; and
3. the characteristic profile of six generic supply chain types: efficient, fast, continuous-flow, agile, custom-configured, and flexible.

This article will describe each supply chain type and will outline the criteria for adopting them, thereby helping to answer one of the most frequently recurring questions among supply chain executives: *Which supply chain strategy best fits my business?*

The four elements of supply chain strategy

To paraphrase Michael Porter,[7] while operational efficacy deals with achieving excellence in individual activities or functions, supply chain strategy defines the connection and combination of activities and functions throughout the value chain, in order to fulfill the business value proposal to customers in a marketplace.

Accordingly, an organization's supply chain strategy is shaped by the interrelation among four main elements, as shown in Figure 1: the industry framework (the marketplace); the organization's unique value proposal (its competitive positioning); its internal processes (supply chain processes); and its managerial focus (the linkage among supply chain processes and business strategy). Although each of these elements includes multiple factors, only some of those factors are relevant drivers for the formulation of a supply chain strategy.

Industry framework. "Industry framework" refers to the interaction of suppliers, customers, technological developments, and economic factors that affect competition in any industrial sector. Within this framework are four main drivers affecting supply chain design, all of them interrelated:

1. *Demand variation, or demand profile,* influences the stability and consistency of the manufacturing assets' workload, and consequently is a main driver of production efficiency and product cost.
2. *Market mediation costs.* Market mediation costs, as defined by Marshall Fisher, are costs associated with the imbalance of demand and supply. Examples include product price markdowns to compensate for excess supply, and lost sales when demand exceeds supply. These costs, which reflect the unstable and fragile balance between lost sales and product obsolescence, arise from the consequences of the degree of demand predictability.

3. *Product lifecycle,* which is continually getting shorter in response to the speed of change in technology, fashion, and consumer product trends, affects the predictability of demand and market mediation costs. Consequently, it pushes companies to increase the speed of product development and to continuously renew their product portfolios.
4. *Relevance of the cost of assets to total cost* becomes critical in industrial sectors where business profits are highly correlated with the asset-utilization rate. Companies fitting this profile must assure high utilization rates, often to the detriment of working capital and service levels. In industries where the relevance of the cost of assets is low, companies may choose strategies that focus on responsiveness. In these cases, the asset-utilization rate falls between high and low, but responsiveness to unexpected demand is high, increasing customer satisfaction and reducing market mediation cost.

Unique Value Proposal. The second element, the unique value proposal, requires a clear understanding of the organization's competitive positioning in terms of its supply chain. A good approach to this is the concept of "order qualifiers" and "order winners" described in 1995 by Alex and Terry Hill.[8] These concepts define, respectively, the minimum requirements for being considered as a relevant option by customers, and the performance aspects that best differentiate the company from its competitors and therefore help to win customer orders.

Recognizing the main "order winners" (in terms of product features and service) in a company's value proposal allows the enterprise to shape the connection and combination of the key drivers that must be incorporated into supply chain processes in order to ensure the fulfillment of that value promise to customers.

Managerial Focus. Before discussing the fourth element—internal processes—it is important to explain the linkage and alignment between an organization's competitive positioning and its supply chain processes. The connection between these two areas is governed by the decision-making process and is driven by the supply chain's managerial focus.

This focus is the most important factor in ensuring coherence between supply chain execution and a business's unique value proposal. Yet it also can be an area where organizations are more likely to fail. Such failures mainly result from a standard managerial approach that emphasizes efficiency-oriented performance indicators regardless of the competitive positioning defined by the organization. This approach encourages companies to focus on seeking local efficiencies that may conflict with their value proposal to customers, thus creating misalignment between the supply chain and business strategy.

Internal processes. The fourth element, internal processes, provides an orientation that ensures a proper connection and combination within the supply chain activities that fall under the categories of source, make, and deliver. (See Figure 2.) Among the many factors

encompassed by this element, the most important are*asset utilization* and *the location of the decoupling point.* The decoupling point is the process in the value chain where a product takes on unique characteristics or specifications for a specific customer or group of customers. There is a high degree of interdependence between these two factors, and they in turn govern other factors:

1. When the business framework is characterized by a high degree of relevance of the cost of assets to the total cost, and/or when the unique value proposal is oriented to low cost, the high utilization of assets is mandated. Consequently, the location of the decoupling point should be at the end of the transformation process, or at least at the output point for the most relevant manufacturing asset in terms of cost.
2. Prior to the decoupling point, processes are "push," therefore the workload leveling is smoothed by the forecast, the production cycle tends to be long in order to increase production efficiency, and the asset-utilization rate is high.
3. After the decoupling point, processes are "pull," therefore asset utilization hovers around the medium level, the workload is driven by demand and is therefore highly variable, and the production cycle tends to be shorter in order to reduce the order cycle time and increase customers' positive perception of service.
4. The largest portion of the inventory, which is partially manufactured and ready to configure according to customers' requirements, is concentrated just before the decoupling point.
5. When the decoupling point is located farthest from the customer's end of the supply chain, product customization increases, therefore demand buffering should be supported by excess capacity. In addition, collaborative relationships with customers become more useful because they help to reduce demand uncertainty.
6. When the decoupling point is located toward the customer's end, product customization diminishes. Consequently, the minimum size of the order does not depend on the size of the manufacturing batch, and minimum order size is governed by the relevance of transportation cost to the total cost.

Six generic supply chain models

Once a company understands the factors driving its business, then it can determine which of six common supply chain models identified by the Supply Chain Roadmap best matches those criteria. These six are grouped in two categories: supply chain models that are oriented to efficiency, and those that are oriented to responsiveness. Figure 3 provides a detailed summary of the characteristics of these models, which are discussed below.

Supply chains oriented to efficiency

In industries where the value proposal is oriented toward low cost and/or high relevance of asset utilization to total cost, end-to-end efficiency is a must. Examples of such industries include cement, steel, paper, commodities, and low-cost fashion, among others. They are best suited to one of three supply chain types—"efficient," "fast," and "continuous-flow"—that are best able to maximize asset utilization:

The "efficient" supply chain model

The efficient supply chain is best suited to industries that are characterized by intense market competition, with several competitors fighting for the same group of customers who may not perceive major differences in their value proposals. In effect, competition is virtually always based almost solely on price.

Because customers in these commoditized businesses take an opportunistic approach to purchasing in order to ensure that they get the best price for each order, it results in a demand profile with recurrent peaks. Consequently, a continuous-replenishment model is inappropriate. Production should instead be scheduled based on sales expectations for the length of the production cycle, using a model based on a "make to forecast" decoupling point. Competitive positioning, therefore, depends on offering the best price and perfect order fulfillment.

Managers should focus on promoting maximum end-to-end efficiency. There are two main actions they can take to accomplish this. First, they should ensure high rates of asset utilization coupled with high overall equipment efficiency (OEE) in order to reduce cost. And second, they should ensure high levels of forecast accuracy to guarantee product availability and consequently, perfect order fulfillment.

For this supply chain model to be successful, the following factors should be in place:

1. There should be extra capacity in outbound logistics, to absorb demand peaks without affecting the ability to meet customers' expected receiving dates.
2. The SKU portfolio should be trimmed back to reduce the number of "high variation, low demand" SKUs, which create complexity in production and service.
3. The production cycle should be scheduled in a logical sequence of SKUs, with the aim of reducing setup time between each pair of adjacent SKUs. The production sequence should be fixed and maintained for long periods of time. This will help to increase the manufacturing line's experience with each setup, reducing the amount of time it takes for changeovers and, consequently, the length of the production cycle.
4. When transportation cost is highly relevant to the total cost, a minimum order-size policy of a full truckload is recommended. An alternative is a fixed order-cycle policy

that allows the company to consolidate certain customers' orders on the same truck. For example, orders for customers in a particular region would be consolidated every Tuesday at 5 p.m. and dispatched the next day.

5. When market demand evidences seasonal trends, extra warehousing capacity should be available in anticipation of the need to store additional product during high-demand periods.
6. Customers whose buying behavior follows a regular, predictable pattern should be invited to participate in collaborative programs. These are programs where supplier and customer share supply and demand forecasts and schedules in order to reduce demand variability. The purpose is to migrate them to a continuous-replenishment model, and then step-by-step to convert the supply chain model from efficient to continuous-flow (discussed later), which is a more mature model that generates higher levels of customer loyalty.

This supply chain model is well suited for businesses with commoditized products, such as cement and steel.

The "fast" supply chain model

The fast supply chain is best for companies that produce trendy products with a short lifecycle. From the customer's perspective, the main difference among competitors' value proposals is how well they are able to update product portfolios in accordance with the latest trends. This focuses competition in the market on manufacturers' ability to continuously develop new products they can sell at an affordable price. As a result, the main driver of competitiveness is the reduction of market mediation costs. In an industry framework characterized by a short lifecycle, this might appear to be a conundrum, but with an understanding of market trends and consumers' habits, it is possible to maintain market mediation cost at an optimal level.

Production should be scheduled in a single batch per SKU, with its size defined by sales expectations for the sales season (or collection, in the fashion industry), using a model based on a "make to forecast" decoupling point. As the product line's sales season becomes shorter, it gets more difficult to produce a second batch of the bestselling products from the collection and replenish it to stores before the product goes out of fashion and consumers no longer want to buy it.

Management should focus on promoting continuous portfolio renewal, which is supported by three main capabilities: short time from idea to market, maximum levels of forecast accuracy in order to reduce market mediation cost, and end-to-end efficiency to ensure affordable costs for customers.

For this supply chain model to be successful, the following factors should be in place:

1. For companies with high levels of seasonal demand, there must be a pool of suppliers that can provide additional capacity as needed. Although outsourced manufacturing could be more expensive than in-house manufacturing, in the long term it would be less expensive than unused capacity.
2. "Classic" SKUs, defined as those that have a permanent presence in the product portfolio, should be replenished under a continuous-flow supply chain model.
3. The fast supply chain model is the most demanding in terms of forecast accuracy, because it has to constantly anticipate market trends. This creates the highest level of market mediation cost; consequently, state-of-the-art forecasting techniques and a synchronized sales and operations planning (S&OP) process are required.
4. Because product portfolios are extensive and change frequently, there will be many SKUs with low sales volumes. Therefore, it is very important to develop the ability to produce small lots and to purchase raw materials in small quantities.
5. Standardization of raw materials and limiting their variety reduces sourcing complexity. In addition, modular processes and sharing of raw materials among several SKUs helps to ensure fast product development and manufacturability.
6. When a company slows the rate of portfolio renewal or lengthens the lifespan of its product collections or marketing campaigns, it should migrate to an efficient supply chain. This will allow it to reduce batch sizes and to manufacture based on several batches of the same SKU during the term of the collection or sales season.

Examples of companies that benefit from this supply chain model include those that engage in catalogue sales. Companies in this industry segment typically launch new marketing campaigns every three or four weeks, and each catalogue may refresh more than 50 percent of the SKUs featured. It's also appropriate for retailers that sell trendy apparel and whose customers tend to visit stores monthly. These retailers need to update their stores' SKU portfolio every few weeks so loyal customers see a fresh image at each visit.

The "continuous-flow" supply chain model

The main features of the continuous-flow supply chain model are supply and demand stability, with processes scheduled in such a way as to ensure a steady cadence and continuous flow of information and products. This model typically is for a very mature supply chain with a customer demand profile that has little variation. Consequently, the production workload can match demand through a continuous-replenishment model based on a "make to stock" decoupling point, where production is scheduled to replenish predefined stock levels based on

a specified reorder point for inventory in the production cycle. Accordingly, competitive positioning is based on offering a continuous-replenishment system to customers in order to assure high service levels and low inventory levels at customers' facilities, thus achieving optimization of costs associated with inventory.

Management should focus on promoting supply chain collaboration, which is supported by three main capabilities. In the early stages, they include electronic transactions that are used to reduce the number of transactional processes required during the order cycle, as well as the sharing of sales and inventory information to improve the ability to predict demand. In the most mature stage, collaborative planning with key customers helps to anticipate demand patterns.

For this supply chain model to be successful, the following factors should be in place:

1. Companies should use a prescheduled order cycle—for example, receiving orders from a group of customers the same day every week—instead of a lead-time order cycle, in which orders are dispatched based on a fixed lead time after order entry, independent of when an order is received. A lead-time order cycle could create demand peaks, and thus break up the continuous flow.
2. High-variance SKUs should be buffered with higher levels of inventory in order to avoid unexpected changes in the production schedule.
3. The production cycle should be scheduled in a logical sequence of SKUs, with the aim of reducing setup time between each pair of adjacent SKUs. The production sequence should be fixed and maintained for long periods of time; this will help to increase the manufacturing line's experience with each setup, reducing the amount of time it takes for changeovers and consequently, the length of the production cycle.
4. Collaborative efforts should be oriented toward customers that generate higher sales and those with high demand variability. For the latter group, if demand variability continues even after participation in a collaborative program, then it would be advisable to evaluate whether to shift them out of those programs. This is because they are forcing the supply chain to increase inventory or to break up a production sequence, both of which affect supply chain efficiency.
5. When demand variability moves in irregular patterns and/or customers are moving toward an opportunistic approach—that is, they are looking for the best price without regard for other benefits, such as lower working capital—it is wise to consider migration to an efficient supply chain.

This supply chain model typically works well for businesses with short-shelf-life products, such as dairy products and bread. It is also suitable for manufacturers of intermediate products, such as original equipment manufacturer (OEM) parts for assembly.

Supply chains oriented to responsiveness

Industries that face considerable demand uncertainty, where market mediation cost is highly relevant, should employ one of three different supply chain approaches that are oriented toward providing capacity in response to changes in demand. These include the "agile," "custom-configured," and "flexible" models.

The "agile" supply chain model

The agile type of supply chain is useful for companies that manufacture products under unique specifications for each customer. This is typically seen in industries that are characterized by unpredictable demand. They use a "make to order" decoupling point, producing the item after receiving the customer's purchase order to avoid manufacturing products that have no certainty of future sales.

As a result, the main driver of competitiveness is agility—the ability to meet unpredictable demand, in quantities exceeding the customer's forecast and/or within a shorter lead time than agreed. The ability to be agile is proportional to the ratio between excess capacity and the average rate of asset usage. In strict terms, there can be no agility without excess capacity.

Management should focus on ensuring agility, which is supported by two main capabilities: excess capacity, and products and processes designed to produce the smallest possible batches.

For this supply chain model to be successful, the following factors should be in place:

1. In order to reduce lead time, materials and components should be designed for a common platform (a group of products that share some key components) and they should always be available in inventory.
2. Low-variance customers should be protected by lower prices to prevent their defection to efficient competitors. Furthermore, customers with high demand variation should pay higher prices.
3. Collaborative relationships with key customers are important. They will help suppliers anticipate changes in capacity requirements, both in the short term for scheduling purposes and in the long term for asset-investment decisions.
4. If extra capacity gradually decreases to low levels, the company should invest in additional assets so it can maintain its ability to be agile. If it cannot do so, then it should

migrate to an efficient or a continuous-flow supply chain and adjust its value proposal from agility to efficiency.

Generally, this type of supply chain is employed by manufacturers of intermediary goods that make products for industrial customers according to each customer's specific needs, and by companies whose industrial customers place a high value on short lead times. This strategy is useful for industries where the company's value proposal is oriented toward offering products "on demand" and with a high service level, such as packaging, chemical specialties, and metal machining services, among others.

The "custom-configured" supply chain model

The custom-configured supply chain model is characterized by a high degree of relevance of the cost of assets to the total cost, and multiple (potentially unlimited) configurations of the finished product on a unique platform. Competitive positioning is founded on offering a unique configuration of the finished product according to the end consumer's needs. Unlike in an agile supply chain, where the product can be customized to meet virtually any customer requirement—limited only by technical constraints—in this supply chain, the product is configurable within a limited combination of product specifications, usually by combining parts into a set or assembly.

Usually, product configuration is accomplished during an assembly process, where some of the parts are mounted or assembled according to an individual customer's requirements. However, product configuration may be done in other types of processes, such as mixing, packaging, and printing, among others. As a general rule, the processes before product configuration are lengthier than the configuration itself and the downstream processes.

Because of the nearly unlimited number of possible finished products resulting from multiple combinations of parts or materials, it is practically impossible to make an accurate forecast. Other complicating factors include the finite number of materials or pieces, and the fact that processes that occur prior to configuration are scheduled according to a forecast or a continuous-replenishment model, depending on the variability of the demand profile. Consequently, product configuration and downstream processes are scheduled after receiving the customer's order, and to ensure a short order cycle those processes are designed with extra capacity available.

Because of those factors, this type of supply chain employs a "configurable to order" decoupling point, where the processes occurring before configuration are managed under an efficient or a continuous-flow supply chain model, and the configuration and downstream processes operate as in an agile supply chain.

For this supply chain model to be successful, the following factors should be in place:

1. The order-entry system should be detailed and accurate as well as user-friendly to ensure, respectively, a clear understanding of customers' requirements, and that it will be easy to use from the customer's perspective.
2. Processes before configuration should be managed under the criteria of an efficient or a continuous-flow supply chain, in accordance with the characteristics of the demand profile.
3. Configuration and downstream processes should be managed under the criteria of an agile supply chain.
4. Manufacturers should maximize the number of possible configurations for a product platform while minimizing the materials and/or parts used for that platform. This is the key factor in reducing complexity in this type of supply chain.
5. To prevent the order cycle from becoming longer, it is necessary to ensure the availability of materials and/or parts prior to the configuration process.
6. The most popular product configurations should be available in finished-goods inventory, managed under an efficient or a continuous-flow supply chain model.

One example of where this supply chain strategy makes sense is the assembly of personalized products, such as computers and vehicles. Another example is in the paper manufacturing industry, where the decoupling point occurs after the manufacture of the big paper rolls, and the products are customized in the cutting and packaging process. In the service sector, some fast food restaurants apply this supply chain model.

The "flexible" supply chain

The sixth supply chain type, the flexible model, is suited for companies that must meet unexpected demand and therefore are faced with high demand peaks and long periods of low workload. This supply chain model is characterized by adaptability, which is the capability to reconfigure internal processes in order to meet a customer's specific need or solve a customer's problem. This model typically is used by service companies that focus on handling unexpected situations, perhaps even including emergencies. Due to the nature of such events, customers appreciate not only the speed of a supplier's response, but also its ability to tailor solutions to their needs. Consequently, the price becomes largely irrelevant to the customer.

Management should focus on ensuring flexibility, which is supported by four main capabilities: extra capacity of critical resources, rapid-response capability, technical strengths in process and product engineering, and a process flow that is designed to be quickly reconfigurable.

For this supply chain model to be successful, the following factors should be in place:

1. Companies should keep critical resources (for example, pumps for companies that provide flood recovery services, or metal machining equipment for spare-parts manufacturing) available on stand-by. This may require pooling of critical resources—including with those of competitors—because these companies address unexpected situations that could easily result in demand exceeding capacity, and it is not economically feasible to have unlimited capacity.
2. Strong collaborative relationships with key suppliers are necessary for companies to understand at every moment their current "available to promise" inventory and capacity.
3. Adaptability is based on having many resources of low to medium capacity, instead of a few resources of high capacity.
4. A well-designed order-entry process is critical, in order to ensure a proper understanding of the customer's situation and requirements.

A typical example of this type of supply chain can be found in companies that provide metalworking and machining services for the manufacture of spare parts for industrial customers. This type of company may encounter emergency situations such as the need to immediately replace broken parts. Accordingly, they must be able to provide a fast response and sufficient capacity to develop unique parts by combining successive processes, such as turning, reaming, and welding, in a configuration adapted to a specific situation.

Simultaneous capabilities, or multiple supply chains?

Organizations tend to want their supply chains to have simultaneous capabilities: efficient, fast, agile, custom-configured, and flexible, among others. Yet each of these capabilities requires different skills, and in the majority of cases, these skill sets are incompatible within the same supply chain. However, it is possible to develop several *parallel* supply chains within a single organization, each focused on a defined market segment with a responsiveness level and a cost structure that are appropriate to the segment it serves.

The most powerful benefits of the "Supply Chain Roadmap" arise from its ability to help demystify the process of formulating supply chain strategy. As suggested by the overview in Figure 4, it does so by identifying the key drivers of business strategy, and then helping managers understand how those drivers would align in a coherent way with each of the six generic supply chains. This makes it possible to select the supply chain type that best fits a particular business segment.

UNIT 2 Organisational Change & SCM

Planning, implementing and managing change in a fast-changing environment is increasingly the situation in which most organizations now work.

Dynamic environments such as these require dynamic processes, people, systems and culture, especially for managing change successfully, notably effectively optimising organizational response to market opportunities and threats.

Key elements for success:

- Plan long-term broadly - a sound strategic vision, not a specific detailed plan (the latter is impossible to predict reliably). Detailed five years plans are out of date two weeks after they are written. Focus on detail for establishing and measuring delivery of immediate actions, not medium-to-long-term plans.
- Establish forums and communicating methods to enable immediate review and decision-making. Participation of interested people is essential. This enables their input to be gained, their approval and commitment to be secured, and automatically takes care of communicating the actions and expectations.
- Empower people to make decisions at a local operating level - delegate responsibility and power as much as possible (or at least encourage people to make recommendations which can be quickly approved).
- Remove (as far as is possible) from strategic change and approval processes and teams (or circumvent) any ultra-cautious, ultra-autocratic or compulsively-interfering executives. Autocracy and interference are the biggest obstacles to establishing a successful and sustainable dynamic culture and capability.
- Encourage, enable and develop capable people to be active in other areas of the organization via 'virtual teams' and 'matrix management'.
- Scrutinise and optimise ICT (information and communications technology) systems to enable effective information management and key activity team-working.
- Use workshops as a vehicle to review priorities, agree broad medium-to-long-term vision and aims, and to agree short term action plans and implementation method and accountabilities.
- Adjust recruitment, training and development to accelerate the development of people who contribute positively to a culture of empowered dynamism.

For complex changes, the processes of project management apply.

Job reorganization, task analysis, job transfer due to IT development or outsourcing etc

First, let's see the modern principles which underpin successful change. It's not always easy or perhaps even possible to consider matters at such depth, but try to if you can, or try to persuade others above in their ivory towers to think about the fundamental integrity of the situation, instead of short-term profit, or satisfying greedy shareholders.

There are various approaches to task analysis and job reorganization, whether prompted by outsourcing or IT development. Generally change process of this sort is pragmatic, and it's difficult to identify transferable processes, templates, etc. Examples of projects don't generally find their way into the public domain, although the likelihood is increasing of government project pdf's becoming available on the web as this sort of information is increasingly required to be available to the public. IT vendor case studies and trade journals of the IT and outsourcing sectors can also provide indicators of best practice or transferable processes. There are some useful software tools now available, which are helpful, especially if the change involves a high level of complexity and a large scale.

As a broad guide when managing this sort of change, these aspects are important for the process:

- Really understand and clarify mutual expectations about the level of detail and cost that the project requires. Sometimes it's possible to see it what you need on a table napkin. The organisational context, and other strategic drivers, personalities and politics are often more significant influences than the task analysis.
- If you are a consultant or project manager, agree expectations on a pragmatic basis. Agree the templates and systems to be used and the the level of report data required for the decisions to be made.
- Assume that the situation can be improved - it generally can be, so while it's essential to capture all activities based on current jobs, many of these can be absorbed, superseded, updated, etc., when you begin to look at the ideal situation ('blank sheet of paper') possibilities, so;
- A new overview analysis enables fresh unencumbered look at the whole, which suggests new and better ways of doing things. A flip chart and a few creative minds are the main pre-requisites. It makes a great workshop session and is good for creating ownership and buy-in for major change. It's a good process also to cascade down to departments to bring out ideas for improved processes and new ways of doing things.
- In terms of capturing all current processes and inputs, the individual job analysis templates need to enable jobs to be broken down into sub-tasks, and elements within sub-tasks.
- This is a tricky one, and not practicable in certain X-Theory cultures, nevertheless, be aware of the high probability of upsetting people whose jobs are threatened by change and try to develop a way of anticipating and reducing damaging fall-out. Treat people at risk with the respect they deserve and avoid keeping them in the dark - involve threatened people

wherever possible so they can see what's happening and why. If possible encourage the executive team to take the same humane approach, and try to establish counselling and support resources if none exist already.

- Analyses are more helpful if they identify critical vs essential task elements - this will help you to help the decision-makers to be more pragmatic (not least because by applying pressure to some of the 'essential' elements will reveal them to be habitual dispensable or traditional replaceable elements).
- Flow diagrams identify subtask linkage (inter and intra), variation and chronology.
- Behaviour needs identifying aside from processes.
- Standards, performance tolerance, % reliability, etc., should be indicated in task analysis as applicable to the sub-task or activity concerned.

UNIT 4

E-PROCUREMENT

E-Procurement - PROCUREMENT METHODS, PROS AND CONS

Procurement is the process whereby companies purchase goods and services from various suppliers. These include everything from indirect goods like light bulbs, uniforms, toilet paper, and office supplies, to the direct goods used for manufacturing products. Procurement also involves the purchase of temporary labor, energy, vehicle leases, and more. Companies negotiate discount contracts for some goods and services, and buy others on the spot. Procurement can be an important part of a company's overall strategy for reducing costs. Historically, the individuals or departments responsible for purchasing a company's goods and services relied on various methods for doing so. The most basic included placing orders via telephone, fax, or mail. Electronic procurement methods, generally referred to as e-procurement, potentially enable the procurement process to unfold in a faster, more efficient manner, and with fewer errors. These methods include electronic data interchange (EDI), online marketplaces or e-marketplaces, and various blends of the two.

In a January 2001 *Works Management* article, a report from e-Net revealed that 70 percent of companies in the finance and retail sectors used the Internet for some purchases. The adoption rate was much less among manufacturers, where only 17 percent used formal e-procurement systems. Besides varying from industry to industry, different companies use different blends of traditional and electronic procurement methods, and individual e-procurement systems themselves may incorporate traditional capabilities like telephone or fax.

ELECTRONIC DATA INTERCHANGE.

Since the 1960s, many large companies have relied on electronic data interchange (EDI) for the procurement of goods. EDI deals more with the way information is communicated during procurement than it does with the act of linking buyers and suppliers. By definition, EDI is the electronic exchange of business information—purchase orders, invoices, bills of lading, inventory data, and various types of confirmations—between organizations or trading partners in standardized formats. EDI also is used within individual organizations to transfer data between different divisions or departments, such as finance, purchasing, and shipping. Two characteristics set EDI apart from other ways of exchanging information. First, EDI only involves business-to-business transactions; individual consumers do not directly use EDI to purchase goods or services. Secondly, EDI involves transactions between computers or databases, not individuals. Therefore, individuals sending e-mail messages or sharing files over a network does not constitute EDI.

EDI can occur point-to-point, where organizations communicate directly with one another over a private network; via the Internet (also known as open EDI); and most commonly, via value-added networks (VANs), which function like telephone lines by allowing for the transfer of information. In the early 2000s, although many companies still relied on VANs, the Internet was playing a larger role in EDI. It is possible for companies to translate the files used during EDI and send them to another company's computer system over the Internet, via e-mail, or file transfer protocol (FTP). Because it is an open network and access is not terribly expensive, using the Internet for EDI can be more cost effective for companies with limited means. It has the potential to provide them with access to large companies who continue to rely on large, traditional EDI systems. The low cost associated with open EDI also means that more companies are likely to participate. This is important because the level of value for participants often increases along with their number.

While the automotive and retail industries have experimented with open EDI for some time, the efforts didn't result in widespread adoption by small suppliers, usually due to cumbersome requirements like the installation of on-site software. Incorporating EDI into e-marketplaces was an approach that held more potential. In March 2000, an e-marketplace called the WorldWide Retail Exchange (WWRE) was established. It allowed suppliers and retailers in various industry sectors—including retail, general merchandise, food, and drugstores—to conduct transactions over the World Wide Web. After one year of operation, the WWRE had 53 retailer members with combined annual turnover of $722 billion. Leading retailers, among them Kmart, Rite Aid, Best Buy, and Target, planned to offer a Web-to-EDI translation service on the WWRE so it would be easier for smaller suppliers to do business with them. In this arrangement, the retailers send purchase orders to a data center where they are translated to a language that can be read with a Web browser. Suppliers are then notified about the PO and allowed to respond. This is a break from true EDI, since orders are handled manually by suppliers.

For companies using open EDI, a language called extensible markup language (XML), similar in some respects to hypertext markup language (HTML), allows users to share information in a universal, standard way without making the kinds of special arrangements EDI often requires and regardless of the software program it was originally created in.XML played an important role in the development of online marketplaces like WWRE.

ON LINE MARKETPLACES

Online marketplaces bring many buyers and sellers together in an online environment and function as intermediaries between the two parties. In the early 2000s, third-party companies like Commerce One Inc. and Ariba Inc. offered high-end e-procurement software and services that were used to operate different online marketplaces. Numerous other companies provided similar kinds of services and applications. Online marketplaces existed for many different industries, ranging from the food and beverage industries to consumer packaged goods and interior design. The costs for participating in an online marketplace varied. In some cases,

participating companies (suppliers, purchasers, or both) were required to purchase special software from a third party. Third parties also levied different charges for making transactions, joining the network, and updating catalogs of available products.

In addition to connecting buyers and sellers, online marketplace providers add value to the procurement process by offering various services, ranging from inventory management and process improvement to tracking shipments and arranging financing. In addition to adding value, online marketplaces also can simplify the process of procurement. For example, some allowed suppliers to choose the manner in which they received orders from purchasers, such as XML, fax, e-mail, or EDI.

OTHER APPROACHES

In addition to EDI and online marketplaces, there are other approaches to e-procurement. One involves software applications that allow purchasing agents to establish systems for managing things like invoices, purchase orders, receipts, and requests for quotations (RFQs). These applications also enable companies to place orders for products from many different suppliers through one simple interface. Some companies relied on third-party organizations to use these systems via the Web. Acting like an outsourced purchasing department, the third party hosted the software instead of selling it to the user off-the-shelf. This approach was useful to companies without the resources to develop and maintain their own e-procurement systems. Some companies also purchased pre-packaged software products that performed many of the same functions.

Online auctions were another tool companies used to procure goods and services for both contract and spot buys. A number of factors were critical to the success of online auctions, including the kind of bidders involved, the number of bidders, and the length of the bidding periods. Although it's not directly part of the auction, online negotiation also can be a factor if the auction involves complicated elements like delivery and support.

No matter what method is used, there are many advantages to using e-procurement systems as opposed to those involving paper-based forms or oral communications. The main benefits are increased efficiency and cost savings. For example, EDI allows business transactions to occur in less time and with fewer errors than do traditional, paper-based means. It reduces the amount of inventory companies must invest in by closely tying manufacturing to actual demand, allowing for just-in-time delivery. By doing away with paper forms, EDI also reduces postage costs and the expenses and space considerations surrounding paper-based record storage.

Online marketplaces provide similar benefits. As Commerce One explains, they "make the entire business-to-business marketplace more efficient by expanding the range of sellers and buyers and by making the entire market mechanism more transparent. They reduce procurement and sales costs and improve the efficiency of the process. For buyers, these e-marketplaces aggregate content so it's easier to find new sources and pricing. For sellers, the e-

marketplaces break down geographic barriers and make product catalogs available to a wider market of buyers."

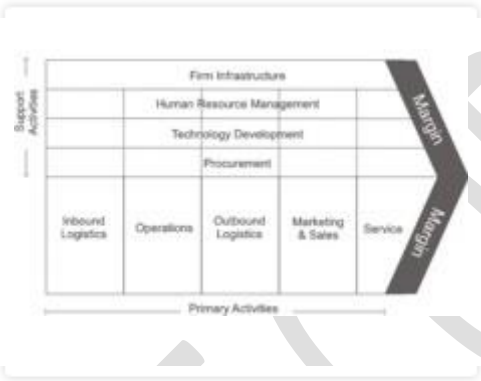
In some large organizations, purchasing responsibilities are distributed over several different areas of the company. E-procurement systems may enable a company to consolidate orders for similar items with one supplier, resulting in deeper volume discounts and cost savings. Additionally, e-procurement may allow a company to simplify purchasing by reducing the number of variables (available products) involved. Instead of having to sort through large volumes of paper or electronic catalogs, purchasing professionals are able to build custom catalogs that include only the items the company is interested in. Besides simplifying matters, this approach also drives up volumes of smaller numbers of items, which is another possible way of generating volume discounts.

Along with all of the positives, there also are disadvantages to e-procurement. Some EDI users have experienced snags. In *Planet IT,* Proctor & Gamble, a leading packaged goods manufacturer, reported that it found errors in more than 30 percent of its electronic orders, although they were mainly due to human error. Additionally, some companies have been disappointed by e-procurement software applications that don't meet their needs. *InformationWeek* revealed that two of the leading obstacles to successful e-procurement are enabling suppliers to support e-transactions and generating and maintaining electronic product information.

Additionally, *InformationWeek,* explains that numerous firms "sign on for E-procurement without anticipating the long road ahead. They dive into projects only to learn that E-procurement applications are limited in the types and scope of purchasing activity they address. Managing electronic catalogs with thousands of products, providing employees with the right mix of products and adequate information about them, and making it easy to search for items can also be tricky, requiring additional tools and threatening the efficiencies promised by moving purchasing to the Web."

UNIT 5
VALUE CHAIN MANAGEMENT

Porter's Value Chain
Understanding How Value is Created Within Organizations



Porter's Value Chain.

How does your organization create value? How do you change business inputs into business outputs in such a way that they have a greater value than the original cost of creating those outputs?

This isn't just a dry question: it's a matter of fundamental importance to companies, because it addresses the economic logic of why the organization exists in the first place.

Manufacturing companies create value by acquiring raw materials and using them to produce something useful. Retailers bring together a range of products and present them in a way that's convenient to customers, sometimes supported by services such as fitting rooms or personal shopper advice. And insurance companies offer policies to customers that are underwritten by larger re-insurance policies. Here, they're packaging these larger policies in a customer-friendly way, and distributing them to a mass audience.

The value that's created and captured by a company is the profit margin:

Value Created and Captured – Cost of Creating that Value = Margin

The more value an organization creates, the more profitable it is likely to be. And when you provide more value to your customers, you build competitive advantage.

Understanding how your company creates value, and looking for ways to add more value, are critical elements in developing a competitive strategy. Michael Porter discussed this in his

influential 1985 book "**Competitive Advantage**," in which he first introduced the concept of the value chain.
A value chain is a set of activities that an organization carries out to create value for its customers. Porter proposed a general-purpose value chain that companies can use to examine all of their activities, and see how they're connected. The way in which value chain activities are performed determines costs and affects profits, so this tool can help you understand the sources of value for your organization.

Elements in Porter's Value Chain
Rather than looking at departments or accounting cost types, Porter's Value Chain focuses on systems, and how inputs are changed into the outputs purchased by consumers. Using this viewpoint, Porter described a chain of activities common to all businesses, and he divided them into primary and support activities, as shown below.

Figure 1: Porter's Generic Value Chain

Primary Activities
Primary activities relate directly to the physical creation, sale, maintenance and support of a product or service. They consist of the following:

- **Inbound logistics** – These are all the processes related to receiving, storing, and distributing inputs internally. Your supplier relationships are a key factor in creating value here.
- **Operations** – These are the transformation activities that change inputs into outputs that are sold to customers. Here, your operational systems create value.

- **Outbound logistics** – These activities deliver your product or service to your customer. These are things like collection, storage, and distribution systems, and they may be internal or external to your organization.
- **Marketing and sales** – These are the processes you use to persuade clients to purchase from you instead of your competitors. The benefits you offer, and how well you communicate them, are sources of value here.
- **Service** – These are the activities related to maintaining the value of your product or service to your customers, once it's been purchased.

Support Activities

These activities support the primary functions above. In our diagram, the dotted lines show that each support, or secondary, activity can play a role in each primary activity. For example, procurement supports operations with certain activities, but it also supports marketing and sales with other activities.

- **Procurement (purchasing)** – This is what the organization does to get the resources it needs to operate. This includes finding vendors and negotiating best prices.
- **Human resource management** – This is how well a company recruits, hires, trains, motivates, rewards, and retains its workers. People are a significant source of value, so businesses can create a clear advantage with good HR practices.
- **Technological development** – These activities relate to managing and processing information, as well as protecting a company's knowledge base. Minimizing information technology costs, staying current with technological advances, and maintaining technical excellence are sources of value creation.
- **Infrastructure** – These are a company's support systems, and the functions that allow it to maintain daily operations. Accounting, legal, administrative, and general management are examples of necessary infrastructure that businesses can use to their advantage.

Companies use these primary and support activities as "building blocks" to create a valuable product or service.

Using Porter's Value Chain

To identify and understand your company's value chain, follow these steps.

Step 1 – Identify subactivities for each primary activity.

For each primary activity, determine which specific subactivities create value. There are three different types of subactivities:

- **Direct activities** create value by themselves. For example, in a book publisher's marketing and sales activity, direct subactivities include making sales calls to bookstores, advertising, and selling online.
- **Indirect activities** allow direct activities to run smoothly. For the book publisher's sales and marketing activity, indirect subactivities include managing the sales force and keeping customer records.
- **Quality assurance** activities ensure that direct and indirect activities meet the necessary standards. For the book publisher's sales and marketing activity, this might include proofreading and editing advertisements.

Step 2 – Identify subactivities for each support activity.
For each of the Human Resource Management, Technology Development and Procurement support activities, determine the subactivities that create value within each primary activity. For example, consider how human resource management adds value to inbound logistics, operations, outbound logistics, and so on. As in Step 1, look for direct, indirect, and quality assurance subactivities.

Then identify the various value-creating subactivities in your company's infrastructure. These will generally be cross-functional in nature, rather than specific to each primary activity. Again, look for direct, indirect, and quality assurance activities.

Step 3 – Identify links.
Find the connections between all of the value activities you've identified. This will take time, but the links are key to increasing competitive advantage from the value chain framework. For example, there's a link between developing the sales force (an HR investment) and sales volumes. There's another link between order turnaround times, and service phone calls from frustrated customers waiting for deliveries.

Step 4 – Look for Opportunities to Increase Value.
Review each of the subactivities and links that you've identified, and think about how you can change or enhance it to maximize the value you offer to customers (customers of support activities can internal as well as external).

Tip 1:
Your organization's value chain should reflect its overall **generic business strategies** . So, when deciding how to improve your value chain, be clear about whether you're trying to set yourself apart from your competitors or simply have a lower cost base.
Tip 2:
You'll inevitably end up with a huge list of changes.
Tip 3:
This looks at the idea of a value chain from a broad, organizational viewpoint. Our separate article on **value chain analysis** takes different look at this topic, and uses an approach that is also useful at a team or individual level.

Key Points
Porter's Value Chain is a useful strategic management tool.

It works by breaking an organization's activities down into strategically relevant pieces, so that you can see a fuller picture of the cost drivers

APPENDIX 1
CASE STUDY 1

Value Chain Analysis
Achieving Excellence in the Things That Really Matter

Value should be added at each link.

Value Chain Analysis is a useful tool for working out how you can create the greatest possible value for your customers.

In business, we're paid to take raw inputs, and to "add value" to them by turning them into something of worth to other people. This is easy to see in manufacturing, where the manufacturer "adds value" by taking a raw material of little use to the end-user (for example, wood pulp) and converting it into something that people are prepared to pay money for (e.g. paper). But this idea is just as important in service industries, where people use inputs of time, knowledge, equipment and systems to create services of real value to the person being served – the customer.

And remember that your customers aren't necessarily outside your organization: they can be your bosses, your co-workers, or the people who depend on you for what you do.

Now, this is really important: In most cases, the more value you create, the more people will be prepared to pay a good price for your product or service, and the more they will they keep on buying from you. On a personal level, if you add a lot of value to your team, you will excel in what you do. You should then expect to be rewarded in line with your contribution.

So how do you find out where you, your team or your company can create value?

This is where the "Value Chain Analysis" tool is useful. Value Chain Analysis helps you identify the ways in which you create value for your customers, and then helps you think through how you can maximize this value: whether through superb products, great services, or jobs well done.

Note:
This article looks at a simple approach to using value chains. A more structured approach was developed by

Harvard Business School professor Michael Porter (also creator of the **5 Forces** tool) in his book "**Competitive Advantage**". You can find out more about this version by clicking **here** .

How to Use the Tool:
Value Chain Analysis is a three-step process:

1. **Activity Analysis:** First, you identify the activities you undertake to deliver your product or service;
2. **Value Analysis:** Second, for each activity, you think through what you would do to add the greatest value for your customer; and
3. **Evaluation and Planning:** Thirdly, you evaluate whether it is worth making changes, and then plan for action.

We follow these through one-by-one:-

Step 1 – Activity Analysis
The first step to take is to brainstorm the activities that you, your team or your company undertakes that in some way contribute towards your customer's experience.

At an organizational level, this will include the step-by-step business processes that you use to serve the customer. These will include marketing of your products or services; sales and order-taking; operational processes; delivery; support; and so on (this may also involve many other steps or processes specific to your industry).

At a personal or team level, it will involve the step-by-step flow of work that you carry out.

But this will also involve other things as well. For example:

- How you recruit people with the skills to give the best service.
- How you motivate yourself or your team to perform well.
- How you keep up-to-date with the most efficient and effective techniques.
- How you select and develop the technologies that give you the edge.
- How you get feedback from your customer on how you're doing, and how you can improve further.

Tip:
If you carry out the brainstorming behind the Activity Analysis and Value Analysis with your team, you'll almost certainly get a richer answer than if you do it on your own. You may also find that your team is more likely to "buy into" any conclusions you draw from the exercise. After all, the conclusions will be as much theirs as yours.

Once you've brainstormed the activities which add value for your company, list them. A useful way of doing this is to lay them out as a simplified flow chart running down the page – this gives a good visual representation of your "value chain". You can see an example of this in Figure 1 below.

Step 2 – Value Analysis
Now, for each activity you've identified, list the "Value Factors" – the things that your customers' value in the way that each activity is conducted.

For example, if you're thinking about a telephone order-taking process, your customer will value a quick answer to his or her call; a polite manner; efficient taking of order details; fast and knowledgeable answering of questions; and an efficient and quick resolution to any problems that arise.

If you're thinking about delivery of a professional service, your customer will most likely value an accurate and correct solution; a solution based on completely up-to-date information; a solution that is clearly expressed and easily actionable; and so on.

Next to each activity you've identified, write down these Value Factors.

And next to these, write down what needs to be done or changed to provide great value for each Value Factor.

Step 3 – Evaluate Changes and Plan for Action
By the time you've completed your Value Analysis, you'll probably be fired up for action: you'll have generated plenty of ideas for increasing the value you deliver to customers. And if you could deliver all of these, your service could be fabulous!

Now be a bit careful at this stage: you could easily fritter your energy away on a hundred different jobs, and never really complete any of them.

So firstly, pick out the quick, easy, cheap wins – go for some of these, as this will improve your team's spirits no end.

Then screen the more difficult changes. Some may be impractical. Others will deliver only marginal improvements, but at great cost. Drop these.

And then prioritize the remaining tasks and plan to tackle them in an achievable, step-by-step way that delivers steady improvement at the same time that it keeps your team's enthusiasm going.

Case Study :
Lakshmi is a software development manager for a software house. She and her team handle short software enhancements for many clients. As part of a team development day, she and her team use Value Chain Analysis to think about how they can deliver excellent service to their clients.

During the Activity Analysis part of the session, they identify the following activities that create value for clients:

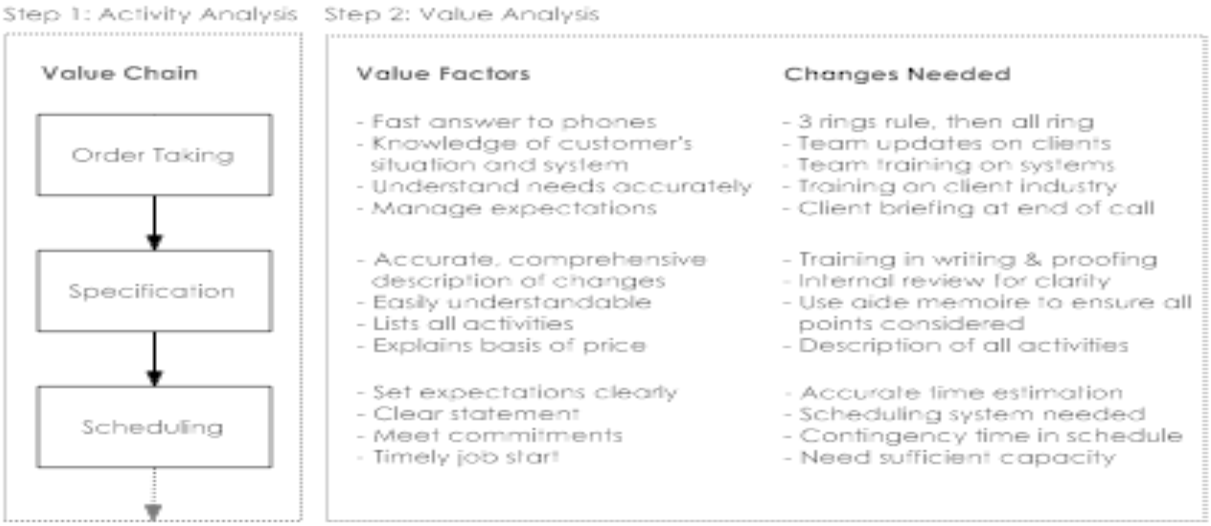
- Order taking
- Enhancement specification
- Scheduling
- Software development
- Programmer testing
- Secondary testing
- Delivery
- Support

Lakshmi also identifies the following non-client-facing activities as being important:

- **Recruitment**: Choosing people who will work well with the team.
- **Training**: Helping new team members become effective as quickly as possible, and helping team members learn about new software, techniques and technologies as they are developed.

Lakshmi marks these out in a vertical value chain on her whiteboard (you can see the first three client-facing activities shown in the "Step 1: Activity Analysis" box in Figure 1 below):

Figure 1: Value Chain Analysis Example



Next, she and her team focus on the Order Taking process, and identify the factors that will give the greatest value to customers as part of this process. They identify the following Value Factors:

- Giving a quick answer to incoming phone calls.
- Having a good knowledge of the customer's business, situation and system, so that they do not waste the customer's time with unnecessary explanation.
- Asking all the right questions, and getting a full and accurate understanding of the customer's needs.
- Explaining the development process to the customer and managing his or her expectations as to the likely timetable for delivery.

You can see these in the "Value Factors" column of figure 1.

They then look at what they need to do to deliver the maximum value to the customer. These things are shown in the Figure 1's "Changes Needed" column.

They then look at what they need to do to deliver the maximum value to the customer. These things are shown in the Figure 1's "Changes Needed" column.

They then do the same for all other processes.

Once all brainstorming is complete, Lakshmi and her team may be able to identify quick wins, reject low yield or high cost options, and agree their priorities for implementation.

Key Points:
Value Chain Analysis is a useful way of thinking through the ways in which you deliver value to your customers, and reviewing all of the things you can do to maximize that value.

It takes place as a three stage process:

- **Activity Analysis**, where you identify the activities that contribute to the delivery of your product or service.
- **Value Analysis**, where you identify the things that your customers value in the way you conduct each activity, and then work out the changes that are needed.
- **Evaluation and Planning**, where you decide what changes to make and plan how you will make them.

  By using Value Chain Analysis and by following it through to action, you can achieve excellence in the things that really matter to your customers.

Case Study 2

Walmart's 'Win-Play-Show' Assortment Strategy

by Steve Banker

July 23rd, 2009

Eric Peters, the CEO of TrueDemand Software, was in to brief us recently. During our conversation, Eric commented that many folks believe Walmart is performing well financially because low-cost retailers tend to have a competitive advantage during a recession. However, he believes Walmart's recent gains in logistics efficiencies are also contributing to the company's financial success. As an example, Eric highlighted Walmart's "Win-Play-Show" assortment strategy, and he pointed me to a presentationgiven by Bill Simon, COO, Walmart U.S., at Morgan Stanley's Retail Conference in April (you can read the transcript here).

Win-Play-Show is really a merchandising strategy that has beneficial synergies with logistics. In a "show" category, the company carries fewer SKUs than it has in the past. A "show" strategy is a defensive approach that limits product selection but does not cause a buyer to go somewhere else for a product. In "win" categories, price leadership is deemed absolutely critical, along with having more pronounced and well-positioned displays in the stores. This program has led to a reduction in the number of SKUs available in stores, something the folks in logistics always appreciate. Walmart supplements and expands the product assortment in its "show" categories through Walmart.com, where customers can order products online which are delivered to a nearby store for the customer to pick up.

Another Walmart initiative is to clean up the "look and feel" of its stores-i.e., make them less cluttered and look more like (to my eyes) Target stores. These revamped stores will carry even fewer SKUs than traditional stores that have not yet received a makeover. It will take Walmart about five years to makeover all of its U.S. stores.

Not surprisingly, having fewer SKUs, and selling higher volumes of them, results in more accurate forecasting and lower inventory levels. In its U.S. business, Walmart had a 6.8 percent increase in annual sales in FY 2008, yet it was able to reduce inventory by 1.2 percent. But the company believes these programs-fewer SKUs leading to less cluttered departments, combined with bigger, bolder price signage-also resulted in other business benefits, such as increased sales, fewer markdowns, and higher margin. For example, Walmart's pet category (a "show" category) grew by double digits.

In Walmart's financial presentations, the company talks about supply chain almost as much as it does about store operations and merchandising. For example, in his presentation, Simon commented, "Last year in a very, very difficult, up-and-down year…diesel went as high as $4.90…in some parts of the country and then dropped back down by the end of the year. Our logistics operation delivered about $200 million in savings to the group, and they did that through routing, reloading trucks, fuel efficiencies in how we drove, adding auxiliary propulsion units…no magic bullet[s]…except a lot of hard work and a very, very efficient organization."

(I've heard through the grapevine that routing efficiencies have been aided by Walmart's implementation of Manhattan Associates' TMS on the inbound side, while the company continues to use JDA's TMS on the outbound side. I'd love to know which GPS/telematics solution Walmart uses, but none of my sources knows. GPS/telematics enables increased fuel efficiencies based on better monitoring and coaching of drivers.)

Meanwhile, Walmart is eliminating empty miles in its produce category. In combination with a more structured replenishment process (in line with the way the company manages most of its other product categories), Walmart launched a program last October to increase the amount of produce it buys from local sources. This action has eliminated several days from its produce

supply chain and has reduced the number of miles traveled, which also benefits Walmart's sustainability objectives.

These inventory reductions has enabled to Walmart grow its sales without having to invest capital in building new distribution centers. As Simon commented, "Because we've rationalized SKUs and focused our energy on 'win, play, show' categories, because we have less inventory in the stores, it's easier for us to find and stock the shelves [and] order the products that we need from the distribution center. And so reduction in inventory has resulted in higher in-stocks, not lower in-stocks." This also means better labor productivity. Overall, labor productivity was up by about 3 percent and backroom productivity, which is measured as cases received per backroom labor hour, was up over 8 percent.

Walmart has always been one of the exemplars of supply chain excellence. What is interesting to me is how the company is blending merchandising and supply chain improvements to achieve benefits in both areas.

APPENDIX 2

BIO NOTE WRITING

EXAMPLE 1
PHOTO

- Maria is a young professional currently working in the field of Human Resource Management. Actually, Maria is a trainee HR Consultant in Achieve Global, an international Consultancy Firm. Her long term aim is to specialize in the area of marketing innovation. She holds a BA in Management Science and Technology and has been an active member of survey project teams quite a few times. While studying at the University, she got some job experience in the roles of both the advertiser and the intern in the marketing department of Mondelez International Organization. Maria is enthusiastic about meeting new people, volunteering in community projects and entrepreneurial initiatives. She seeks for personal development and loves coming across ideas that open up her mind. Her dream is to travel around the world.

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