white paper
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Maximizing Supply Chain Value

Very few executives would disagree that supply chains are undergoing a radical transformation. They will almost certainly be able to point to significant initiatives in their own supply chain. But are they the right initiatives? Are they capturing the strategic benefits that supply chains can deliver or are they strictly cost-focused? This article details the stages that most companies go through as they elevate Supply Chain Management to drive strategic competitive advantage.

In the past, companies urged their operations functions to add value through cost-containment initiatives. While the approaches may differ in the end, each of the Supply Chain Management tools of the 1980s and 1990s, including material resource planning, just-in-time production, kanban, continuous improvement, time-to-market, and total quality management focused on traditional issues of cost control and improving operating performance. These approaches are too narrowly focused to maximize supply chain value or drive corporate value. Yesterday's view of the supply chain as a cost center no longer works.

Competitive advantage, e-commerce, product proliferation, diverse sources of supply, and increasing customer requirements are exerting pressure on existing supply chain models. A company must understand how to unleash the underutilized strategic value tied up within the supply chain. The role of the supply chain in the organization needs to be redefined to maximize a company's value.

As an example, a manufacturer of graphic arts printing plates had been going through a period of significant change. Having once commanded a large market share and strong profits, sales began to erode. In an effort to retain market share, the company pursued a strategy of lowering price. This tact resulted in decreased margins and associated lower profitability. To combat the decreased margins, more than 100 supply chain cost reduction efforts were initiated.

While these short-term, tactical solutions helped the printing plates manufacturer to reduce costs and maintain margins, they failed to address the company's core problem – reduced demand for the company's primary product, printing plates for silver halide-based film. With the rise of new print processing technologies (primarily, digital and computer imaging technology), printing plates were no longer required to create the desired images/pictures.

The graphic arts printing plate manufacturer had defined the role of the supply chain as reactive and focused on reducing costs. Ultimately, the existing assets and infrastructure for graphics arts printing plates did not enable movement into the new, changing market. The strategic value of the supply chain was not maximized.

The New Role of Supply Chain

Supply chain impacts on a company are numerous and substantial. Supply chain costs can equal one-half, or more, of a company's revenues, while completing the demand generation-fulfillment cycle by linking a company and its products and services with customers. The supply chain enables a company to manufacture products at target cost levels, ensuring the right goods are received by the right customers in the right quantities at the right time.

Given a supply chain's integral role in executing a company's business strategy, it can do more than successfully fulfill demand generation needs. The role of the supply chain can be defined in five stages (see Figure 1.0). At the lowest levels of strategic value contribution, supply chain is purely execution focused – management develops plans to increase supply chain efficiency and cost performance. At higher levels, it is demanded that the supply chain demonstrate strategic value to the organization. The supply chain involves containment of operating costs, effective

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deployment of capital, risk management, and even revenue generation.

It should be noted that while each stage has distinct attributes and properties, the stages are not mutually exclusive. For example, within a company's overall supply chain, procurement may exhibit traits of an Efficient Reactive Supplier while manufacturing and logistics more closely resemble an Efficient Proactive Supplier. Additionally, a given function within the supply chain may also display more properties of multiple stages. In the aforementioned graphic arts printing plates manufacturer example, manufacturing's processes and personnel characteristics may be those of an Efficient Proactive Supplier, but it may invest in capital projects as a Reactive Supplier would.

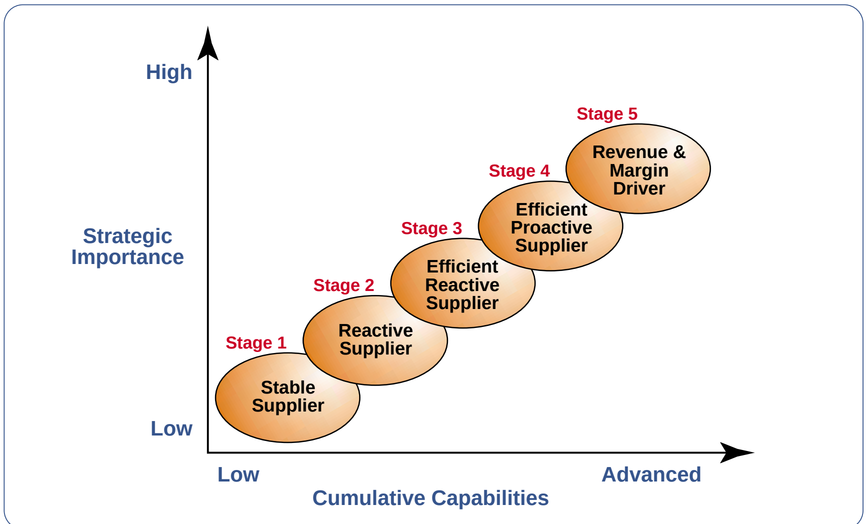

Figure 1.0 **The Role of Supply Chain**

Stable Supplier – Stage 1

The least strategic stage of a supply chain is that of the Stable Supplier. The low level of strategic importance at this stage has as much to do with the external environment in which the company operates as it does with the relationship between supply chain and other company functions. Stable companies exist in mature, slow-to-change industries, such as table salt manufacturers, where supply and demand are in equilibrium. With predictable supply and demand, minimal forecasting is needed. The supply chain knows, with a good deal of certainty, how much product to produce each period. This predictability eliminates the need for the supply chain to be reactive to demand changes, as occurs in the next stage.

The process discipline, personnel skills, and technology emphases are all designed for long runs with few line changes. The production process is an excellent example of scale production. Costs are kept low, not because processes are regularly re-engineered, but rather because the predictability of demand allows for minimal intrusion of management decisions and changes. Capital assets are dedicated to specific tasks. Overhead and management levels can be held to a minimum since there is little risk of sudden market changes that will require immediate strategic changes.

Reactive Supplier – Stage 2

As a Reactive Supplier, expectations of the supply chain's role in the overall company strategy is still minimal. The supply chain typically acts to fulfill demand by responding to and supporting the company's sales and marketing strategies. The position of Reactive Supplier is very unstable – while service may be high, it is at any cost. Unless a firm excels substantially in other functional areas (for example, demand generation, production innovation, etc.) or other value disciplines (for example, product leadership and customer intimacy), it is extremely difficult for a company to survive for the long term as a Reactive Supplier.

The supply chain is viewed by other functions and views itself as a cost center. Although the supply chain may make efforts to control costs, often these efforts fail or fall short of their stated goals. Functional silos predominate and frequently seek to maximize their own efficiency, often at the expense of the entire supply chain system. Management tends to view workers as "replaceable assets" with little money or time invested in further developing the skills of operations people. Little attention is spent on acquiring competitive technology or capital assets, or modifying existing technology to support the latest sales and marketing needs. The mantra of many is to ensure throughput continues at any cost.

Efficient Reactive Supplier – Stage 3

In the move from Reactive Supplier to Efficient Reactive Supplier, the supply chain and the rest of the company still view the supply chain's contributions to the firm's competitive position as minimal, or at best, moderate. The supply chain's role is still one of fulfilling demand, not one of influencing demand. However, the supply chain now fulfills demand by acting as an efficient, integrated unit not as individual fiefdoms – it is an integrated supply chain with low costs and excellent customer service.

An internally integrated supply chain process seeks to work in concert to reduce the total delivered cost of finished goods. No longer does manufacturing seek to maximize its own efficiencies at the detriment of logistics or procurement. Line managers, foremen, supervisors, etc., understand and have performance measures showing them how their actions affect upstream and downstream processes. They take actions that are directed to reducing the total delivered cost of finished goods.

The role of technology also changes with Efficient Reactive Suppliers. Many companies become fixated on the management concepts of improved operating efficiencies – often with little regard to the capital management side of costs. In their efforts to reduce total delivered costs, many firms view the acquisition of technology as the supply chain's top priority. Companies

SUMMARY OF THE ROLE OF THE SUPPLY CHAIN

	Strategic Impact	Process Focus	Personnel Roles	Capital Spending
Stable Supplier	Minimal	Long runs; few changeovers	Little autonomy	Dedicated assets
Reactive Supplier	Minimal	Minimize functional costs	Workers are replaceable assets	Equipment modification
Efficient Reactive Supplier	Minimal – Moderate	Integrate supply chain activities and minimize supply side costs	Integrated supply chain managers; replaceable workers	Production equipment
Efficient Proactive Supplier	Moderate – High	Integrate supply chain activities and minimize supply side costs	Integrated supply chain managers make demand suggestions; Line workers provide suggestions	Information technology to enhance integration
Revenue and Margin Driver	High	Integrate supply and demand chain activities across companies and partners	Managers integrated with trading partners	Information technology to enhance integration cross-company

Figure 2.0 **Summary of The Role of the Supply Chain**

invest in new equipment and automate with the desire to reduce labor costs and improve capacity and throughput.

Efficient Proactive Supplier – Stage 4

A significant transformation occurs when Efficient Reactive Suppliers become Efficient Proactive Suppliers. The most noticeable difference is in the relationship structure between the integrated supply chain and the sales and marketing organizations. The supply chain now proactively makes recommendations to other corporate groups regarding how a new product design or a new raw material substitute may further reduce supply chain costs or complexity. The supply chain fully understands the areas in which it can make a substantial impact, and sales and marketing consider the supply chain an equal partner. The company expects the supply chain to regularly step forward and demand changes to such items as design specifications if such changes will lead to even greater efficiencies.

The integrated processes within the supply chain are in many ways similar to those found in Efficient Reactive Suppliers. However, now supply chain groups actively pursue demand generation by suggesting product design or service changes to further enhance the efficiency of the supply chain. Further, supply chain groups understand how their actions impact not only upstream and downstream supply chain activities, but also how demand generation decisions influence the supply chain's actions.

Efficient Proactive Suppliers invest in new technology, where appropriate. Often this technology takes the form of integrated information systems to permit once disparate groups such as sales, procurement, manufacturing, and logistics to view the same information and share ideas at the same time.

Revenue and Margin Driver Suppliers – Stage 5

Revenue and Margin Driver Suppliers take actions that go much further than improving supply chain efficiencies, reactively or proactively. They fully integrate the demand generation and fulfillment sides on an intercompany basis, achieving true supply chain-wide integration. For the first time in the supply chain's evolution, the supply chain is expected to actively contribute to not only the execution of, but also to the development of a company's overall corporate strategy. Senior level strategic direction setting meetings now include active upfront input from the supply chain. Today's build-to-order personal computer supply chains are examples of revenue and margin drivers.

The supply chain uses its interactions with external parties to help develop new strategies. Enterprise resource planning investments are leveraged though two-way, real-time data linkages with customers, suppliers, and alliance partners. A true "pull" demand signal travels seamlessly across organizations. Business agreements are developed with partners with a total profit objective. Forecasting, planning and replenishment processes are fully integrated across companies with clear material visibility, continuous replenishment, and coordinated product design efforts. Technological knowledge and advances are shared with partners. Measurements involve total intercompany supply chain revenue, cost, asset return, and profitability.

Most technology emphasis is on information systems. The ability to access same-time information and transfer it to customers, suppliers, and alliance partners is invaluable. Often such investments, whether direct or in the form of agreements with third parties to provide such capabilities, provide greater revenue or margin levels.

Summary

For many companies, supply chain value can be maximized by elevating the supply chain to greater strategic importance (see Figure 2.0). Supply chains must transition from a cost-focus to value-focus perspective. Company leaders must recognize the imperative to make this paradigm shift happen in their organization. Yet a change of mind-set is insufficient; it must be backed by actions and initiatives that change the way the supply chain operates. The organizations, infrastructure, processes, and systems must be put in place to integrate not only internal supply chain functions, but integrate with customers, competitors, and alliance partners. Focusing capability development efforts to build these strategic linkages may mean reviewing old viewpoints but will ultimately drive the greatest returns from a supply chain change program.