4 SUPPLY CHAIN PERFORMANCE METRICS

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Abstract
Every CEO must always be concerned with the competition. In today’s economy the battlefield is shifting from individual company performance to what we call Supply Chain Performance. Supply Chain Performance refers to the extended supply chain’s activities in meeting end-customer requirements, including product availability, on-time delivery, and all the necessary inventory and capacity in the supply chain to deliver that performance in a responsive manner. Supply Chain Performance crosses company boundaries since it includes basic materials, components, subassemblies and finished products, and distribution through various channels to the end customer. It also crosses traditional functional organization lines such as procurement, manufacturing, distribution, marketing & sales, and research & development.

To win in the new environment, supply chains need continuous improvement. To achieve this we need performance measures, or “metrics,” which support global Supply Chain Performance improvements rather than narrow company-specific or function-specific (silo) metrics which inhibit chain-wide improvements. We describe a number of supply chain performance measures that are expressly designed to support and monitor Supply Chain Performance improvements across the supply chain and illustrate the shortcomings of several common metrics.

Charlie slammed the door on the way out of his boss’s office. As operations manager for a major aluminum processing facility, he was proud of the fact that he had in past months achieved significantly high production figures for high margin specialty milled orders. But his boss had just berated him for producing fewer tons of low margin aluminum than budgeted. Charlie was a victim of a “bad” performance measure or metric. Raw tonnage is an inappropriate measure of supply chain performance for a diverse product line where gross margin per ton varies considerably. The use of “bad” metrics can be a major impediment to the implementation of effective integrated supply chain management in today’s highly competitive business environment.

1. Introduction—Why a Top Management Concern?

Today’s CEO can’t simply focus on his or her company’s performance in a vacuum; there is an emerging requirement to focus on the performance of the extended supply chain or network in which the company is a partner. The battleground will be Supply Chain versus Supply Chain, with emphasis on continuous improvement across the extended supply chain. To maintain and encourage supply chain improvement we need to go beyond traditional functional and business performance measures and develop new metrics with enough detail and richness to handle Supply Chain Performance rather than individual business performance.

Modern supply chains are highly complex and dynamic. They are characterized by constantly changing relationships and configurations, they support a proliferation of Stock Keeping Units (SKUs), they use a mixture of manufacturing techniques (build-to-stock, make-to-order, flow) to fulfill orders, and they involve multiple organizations. Furthermore, the emergence of the Internet as a new technology enabler has increased the number of customer interactions and product configurations, thereby presenting greater demands on supply chain management and performance. The ultimate goal and measure is customer satisfaction: the ability to fulfill customer orders for personalized products and services faster and more efficiently than the competition.