

## MEETING THE INFORMATION NEEDS OF THE SUPPLY CHAIN

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The supply chain exists both within the firm and among firms. As companies recognize its importance to their future success, measures will be needed to gauge efficiency within the organization, and also to demonstrate synergy and mutual benefits among organizations. Currently there is little or no agreement as to how to measure supply chain performance. Traditional measures such as inventory turns or ROI have been used, but they are pieces of a larger picture. Furthermore, because the supply chain extends beyond firm boundaries, meaningful measurement will require the cooperation of competitors. The problem is identifying 1) the relevant measures of supply chain efficiency 2) a means for communicating those measures, and 3) creating an environment where all interested parties would willingly share that information.

Developing measures of supply chain performance is a daunting task. Lambert and Pohlen [6, p.1] list the following factors as contributors to the problem: “lack of supply chain orientation, the complexity of capturing metrics across multiple companies, the unwillingness to share information among companies, and the inability to capture performance by customer, product or supply chain”. The profession is recognizing the need for meaningful tools to measure performance. Singhal and Hendricks [7] demonstrated that the stock market will punish firms with supply chain problems, and increasingly the CEOs and CFOs are recognizing the financial impact of the supply chain as distinct entity [4, 3].

While supply chain managers and upper management are beginning to recognize the need for meaningful performance measures, the accountants who create most of those measures for have yet to come on board. This is not because the accounting profession has not recognized the need to be more user friendly. The American Institute of Certified Public Accountant [2] has been emphasizing a more customer needs approach for financial reporting, with companies aligning their reports with the needs of the users. One possible solution at the interfirm level was proposed by Jensen and Xiao[5]. They suggest a “Customization Around a Standard Report” (CASR) environment where creators and users of financial information network to create custom reports based on mutual needs. This may be the platform to create an accounting interface with supply chain management. What that environment looks like depends on the willingness of the interested parties to share information. While all publicly traded companies provide annual reports of their performance in a somewhat standardized form, the details behind the statement numbers remain hidden. It is usually not in a company’s interest to share the detail, so getting firms to cooperate will be a major hurdle.

However, cooperation between firms in the supply chain is not unprecedented. In the transaction cost economics literature there are three primary forms of conducting transactions. These are market, contracting, and bringing them inside the organization [10,11]. The more specific the skills, assets, processes, etc. are to the transaction the greater the need to cooperate to minimize cost and maximize efficiency. The need for trust to conduct these transactions has been the focus of considerable research and theory development (see [9] and [1] for instance).

While the need for cooperation has been identified and the benefits of cooperation and relational contracting have been hailed in the literature there is no real direction as to how to achieve this in the context of the supply chain. The negotiation literature is rich with research demonstrating the increase in value of negotiation outcomes for all parties when an integrative strategy is used (see [8] for instance)

and information is freely exchanged. What is needed now is theory to integrate these various approaches to inter and intra firm relationships. The net result will be a greater understanding of the tools and processes available to maximize the benefits of collaboration within and between organizations that make up the supply chain for a given product or service.

The remainder of this paper will develop a cross disciplinary approach to identifying and providing measures of supply chain performance and efficiency. It will investigate what the relevant measures of supply chain performance are, consider how those measures can be communicated between interested parties, and consider how to overcome the inter-firm barriers.

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