How Mature Is your Supply Chain?
The SCRD Capability Maturity Model®

Robert B. Handfield, Ph.D.
Bank of America University Distinguished Professor of SCM
Director, Supply Chain Resource Consortium
College of Management
North Carolina State University
(919/ 515 4674); robert_handfield@ncsu.edu

Samuel L. Straight
Executive-in-Residence
Supply Chain Resource Consortium
College of Management
North Carolina State University
(919/ 513 4480); samuel_straight@ncsu.edu

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Abstract: Speed to market is one of the most critical dimensions of competition in today’s markets. As more organizations seek to focus on their key core competencies, the outsourcing of critical business processes such as product design and development, manufacturing, sales, marketing, and even distribution, is becoming an increasing trend. As outsourcing occurs, the role of procurement will escalate, and management of information flows, physical flows, and relationships will become more important. In order to effectively assess the requirements for deploying outsourcing strategies, companies will need to understand the relative maturity of their supply management function using assessment tools (such as the Supply Chain Capability Maturity Model.) Use of a maturity model is critical in establishing baseline performance of current sourcing processes, as well as defining the requirements for future outsourcing of business processes. The model can also be used to assess the maturity of other processes in the integrated supply chain, including design, make, deliver, sell, and service processes.

The Role of Outsourcing in New Product Development

No one would disagree that new products are the lifeblood of the many industries. Almost every company is focused on developing new products, growing revenues, and reducing the cost of doing so, which together will add up to a positive return on assets, which in turn will help drive the company’s stock price up and satisfy stockholders, all during a very challenging economic environment. However, every business strategy, no matter how visionary, ultimately boils down to hard work. In most cases, this means specific team-based projects focused on improving existing processes to achieve these goals. The sum of these project results is ultimately how we measure the success of a strategy. One of the strategies that many companies are investigating today is to outsource many of the traditional “non-core” elements of their business.
Outsourcing is certainly an attractive option – so long as you remain world class in the process of outsourcing, and can devote resources to doing so. Many executives forget that outsourcing isn’t something that eliminates current deficiencies in your business processes. In fact, outsourcing brings with it a whole set of new challenges, and requires a mature supply chain organization to manage the outsourcing arrangement. Outsourcing can provide benefits when an outsourcer is able to control the product, the process, the documentation, and the quality systems. However, this cannot occur without the sponsor actively “managing” the service provider as well, through detailed metrics and audits as required before, during, and after a project. If the technology is well defined and the service provider has significant experience with it, these audits may be less intense in nature. However, in a not fully mature technology or one that the service provider is not familiar with, the rate of audits and measurement should be intensified. One of the greatest predicted success factors discovered in an NSF sponsored research study of supplier integration in new product development is that a prior experience with a service provider is likely to be a high predictor of future success (Monczka et al., 2000).

In response to this trend towards outsourcing, a whole new generation of contract companies is filling the void. This includes companies that can design, manufacture, distribute, or sell products for their customers. Contracted companies are increasingly becoming responsible for a broader breadth of services - and creating a whole new industry. For example, Magellan, a contract clinical trials provider for the pharmaceutical industry, was recently acquired by Cardinal Health to create a comprehensive pharmaceutical development service provider to the pharmaceutical and biotechnology industries, from early stage drug development to commercial manufacturing and distribution for virtually every dosage form.

As companies move into co-development, co-promotion, and co-marketing arrangements, the degree of invasiveness reaches epic proportions. These agreements are often structured based on complete and total joint government, implying consensus building at every level. Unfortunately, the mechanics of making this happen are difficult to operationalize at a detailed functional level. Moreover, both parties require extensive relationship management skills, particularly in the area of procurement, contracting, and strategic alliances.

Is Your Procurement Organization Ready for Outsourcing?

It is notable that the success of an outsourced project is not only dependent on technological capability, but is more dependent on the service organization to effectively communicate with its client and to stimulate open channels of communication – greater information will in every situation result in a higher likelihood of success – again, there is voluminous research conducted by our research and that of others that clearly indicates this relationship (Handfield and Nichols, 2002). In most cases, this task falls upon procurement. In many companies today, procurement is suddenly finding itself tasked with managing a highly complex relationship, without the required resources required to do so. Ineffective outsourcing management is further perpetuated by a high turnover, a new set of faces, and changes/shifts in the organizational chart----as people are re-assigned to new locations, downsized, or outsourced relationships are moved around based on supposed “cost savings initiatives” – the results are always likely to lead to significant market revenue losses due to delays, errors, and other problems arising from lack of communication, as shown in Figure 1.
In order to effectively managing outsourcing – it is critical that customer requirements be clearly understood by the procurement organization. This means getting the right people on the team that can understand the end user requirements, and understand the global impact on the customer of the partnership with the outsource provider. Specific details on communication tasks, timelines, and ownership of these tasks is critical, requiring a solid set of project management skills. Finally, a solid set of legal and regulatory infrastructure capable of supporting a global asset transfer is important, as well as the logistical processes for labeling, importing-exporting, and moving and storing materials. This is particularly true when we look at the globalization of the supply base, as well as the relationships we establish with outsource providers.

Traditional procurement-defined processes often are overwhelmed by these requirements; procurement managers have in the past been more comfortable with the sponsor-service provider relationship. The sponsor outlines the specs, the outsourced company was expected to meet the specs, and so on with the rules, etc. However, with outsourcing of non-traditional functions, sponsors must become more comfortable in letting outsourced providers do what they do best – and not assigning specific responsibilities in terms of actions, but establish end results through pre-defined metrics, and in some cases, let them become the true driver of the project plan.

From an objective standpoint, it is my observation that there is no clear leader yet in the area of outsourcing excellence….as it is such a new concept, the winners will be those organizations that are quickest to learn and to implement the lessons of other industries in collaborating with customers and suppliers, and moving materials quickly through the supply chain, through integrated product and process development.
Measuring the Maturity of Procurement Practices

Many companies today are deploying a myriad of procurement strategies, including:

- Applying reverse auctions to all commodities
- Apply strategic alliances with all commodities
- Outsourcing of key business processes
- Leveraging and supply base reduction

Not all of these strategies have been successful. Moreover, there is at times some confusion regarding which strategies are appropriate in which types of situations. Clearly, there is a need to understand what makes sense, given the relative maturity of procurement organizations. The reality is, many organizations are very new at outsourced relationships, and like any technological innovation, need to learn how to apply the new technologies and strategies.

John Seely Brown, the recently retired Corporate Vice President of Xerox and President of the Palo Alto Research Center, published a paper in the Harvard Business Review in Jan/Feb, 1991 ('Research that Reinvents the Corporation') which draws an interesting distinction between 'technological innovation' and 'local innovation'. Technological results from research on the knowledge base(s) underlying the products or services that a company sells in the marketplace. 'Local innovation' results from research on 'new work practices' within the firm that contributes to operational efficiency & effectiveness. If that is so, then maybe 'local innovation' is what happens in the new and emerging area of what we call “Good Procurement Practices” – that is, getting the products to market more quickly, by improving business processes in this area.
It is important to note that “Rome wasn’t built in a day”. Organizations typically proceed through an evolution in the evolution of their procurement practices (see Figure 2) - beginning with quality and cost teams, then moving towards cross-location international teams and supplier reductions (as well as focusing business on key customer accounts). In later stages, global sourcing and distribution systems provide full visibility to materials throughout the supply chain, cost is managed on a system-wide basis, supplier capabilities are improved through joint efforts, and customers and suppliers are integrated into NPD efforts. Organizations may also re-consider which activities are not “core” to their business, and decide to outsource those activities for which they are not world-class.

The question of how far you are to the right in this maturity grid is not as important as understanding the relative baseline of where you need to go. Moreover, companies need to measure the “maturity” of their purchasing function, in order to set strategic priorities for training, education, and organizational development. Unless you have a baseline set of metrics, it is difficult to know where resources should be focused. One way of understanding this requirement is through the assessment of the relative “maturity” of your company’s supply chain processes. Maturity can vary substantially across a wide variety of business processes – that are fundamentally defined as design, plan, source, make, deliver, and sell. The Supply Chain Resource Consortium at NC State has developed a very detailed approach to measuring and defining the relative maturity of these processes – ranging from Ad Hoc, to Defined, Linked, Integrated, and Extended. Each of these elements is measured at the business process level – as either a strategic process, team-based process, or operational (day-to-day) process.

A good example is that of strategic alliances. One of our modules addresses whether there is a process in place to create, execute, and manage strategic alliances with outsourcing partners. It is one thing to say that “yes, we are doing that,” and quite another to validate that:

- a) There is a process that identifies specific responsibilities, ownership of tasks, and associated metrics to monitor the health of these relationships,
- b) There is a process in place to ensure that strategy-causing communication is enabled and is not stalled by misperceptions of information barriers and/or confidentiality,
- c) Engagement of all relevant parties is ensured and promoted by top management to ensure that effective mutual purpose is the outcome,
- d) On-going sharing of information regarding changes to the business are effectively communicated on a timely business to ensure that all parties can react in the appropriate manner.

This is but a single example – there are many more.

I expect that the distribution of most companies, quite frankly, will be skewed towards the lower levels – simply because most companies have been working on this for a much smaller amount of time than other industries. This hypothesis can certainly be challenged. However, if you really take a hard look at your processes, benchmark internally as well as externally with other organizations, you have the beginnings of a baseline set of metrics for understanding where to direct your efforts.
REFERENCES

