REALIZING SUPPLY CHAIN SUCCESS

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ABOUT THIS REPORT

Beyond the Horizon, an ongoing project conducted by a Michigan State University (MSU) supply chain research team, with the support of the Eli Broad College of Business and the APICS Supply Chain Council, investigates the current supply chain practices of global firms. The intent is to determine what supply chain managers need to do to keep their firms competitive in the future.

The project has been named “Beyond the Horizon” to reflect its future-focused goals and to underscore the necessity for firms to remain attuned to the increasingly dynamic and complex internal and external environments in which they operate. This white paper presents initial research insights from the project and introduces a conceptual model, named the bridge model, which can guide supply chain strategy development and decision making.

BACKGROUND

In the initial stage of the project, a nine-person MSU research team conducted in-depth personal interviews with hundreds of executives from more than 50 firms headquartered throughout the United States, Europe, South Africa, and China. The interviews lasted 1–3 hours and typically involved multiple representatives from the individual firms. The intention was to include executives from a range of areas—including supply chain, innovation, marketing, information technology, and sustainability—to develop an understanding of the overall value chain process. A structured interview guide was used to ensure specific areas of interest were covered, but participants also were encouraged to discuss any additional areas they deemed relevant and important. The interviewees described specific strategic initiatives that were underway or recently completed at their companies and explained their firms’ strategic focuses and objectives. Considerable attention was paid to the future outlook for the firm—what they anticipated would happen in the next 2–3 years, or even 5–10 years, and how they were preparing for those changes.

All interviews were recorded and subsequently transcribed. The transcriptions were coded on key dimensions corresponding to firm environment, activities, processes, and metrics. The research objective was to develop a framework that can assist firms in realizing their goals. This framework, which we illustrate in the form of a bridge, can help firms move from their intent to a successful reality.
THE BRIDGE MODEL

Figure 1 depicts the bridge model framework. The model is based on an extensive review of current supply chain literature and insights gained from the Beyond the Horizon project interviews.

The bridge graphic was selected to illustrate that a firm’s journey to achieve supply chain and business superiority must align a variety of resources and the firm’s environment. The environment is composed of both internal and external elements, and the resources include a combination of assets, skills, competencies, and capabilities. The focus of the model is on the central goal of most firms—the realization of business superiority. The bridge model seeks to be a guide toward realizing that goal. Many firms have not been able to make the complete journey as illustrated by the bridge model. They may be stalled at some point because of an incomplete understanding of the characteristics of their environments or an inability to orchestrate the right combination of resources. To achieve the desired success, the firm starts out with intent in the form of targeted goals, but those goals often may not be fully realized. We propose that the environment and resources—represented as pillars of the bridge—are all necessary for success and must be jointly considered. Firms must effectively develop and manage a total package with consistent logic across all the various model components and make decisions appropriate for their internal and external business situation.
The starting point for a firm’s journey on the bridge model is intent. Intent refers to goals or desired outcomes. Obviously a wide range of potential goals exist: the firm may want to increase market share, become the sole provider for customers of choice, be known for premier delivery service, gain differentiation as a low-cost provider, etc. Selection and full understanding of the organization’s intent provides focus and guidance for subsequent decisions. Decisions concerning the various resources required for success on the bridge model must be consistent within the firm, and the structural elements must work in concert. Proceeding without this consistency would be equivalent to building a suspension bridge on a mismatched combination of different pillars. Each pillar in the model represents a combination of environmental and resource components.

When moving across the bridge model, it first is critical to consider the firm’s operating environments, including both the current and projected internal and external environments. How will the internal and external operating environments impact the firm’s ability to achieve specific goals? Some of the internal drivers requiring consideration include business operations and process complexities, resource constraints, talent availability, technology, and organizational culture. Extremely complex operations or processes may preclude a strategic decision to outsource portions of the business because internal handling may be necessary to maintain quality requirements. Alternately, resource constraints in the form of capacity or talent availability may prompt an outsourcing decision. External drivers include, but are not limited to, the competitive environment, the legal or political environment, and the economic environment. When operating in a highly competitive environment, strategies will need to be developed that at least meet (and, better yet, exceed) the competition. Legal or political environments may limit options regarding expansion and growth, as well as possibly placing significant restrictions on business decisions. The economic environment can impact business decisions in a number of ways as well. For example, high interest rates may limit expansion plans, and high inflation rates will influence inventory carrying policies.

Understanding the status of these environmental drivers should directly influence the firm’s decisions regarding strategy and structure. Although a wide range of strategies is available, we will limit the current discussion to the most common choices. One of the most straightforward approaches to strategy selection involves deciding among a cost-leadership strategy, a differentiation strategy, or a combination of the two. With respect to organizational structure, one of the primary decisions is choosing among centralized authority and decision making, decentralized authority and decision making, or a hybrid alternative.
When making decisions about strategy and structure—the second pillar—the two should be considered in conjunction with one another and must be synchronized to optimize ultimate firm performance. A common approach to investigate the interactions between strategy, structure, and performance uses the strategy-structure-performance paradigm, which suggests that certain strategy and structure combinations outperform others. For example, a cost-oriented strategy is generally best supported with a centralized structure allowing strong control or oversight. A differentiated strategy is more often associated with a decentralized structure, allowing for more localized control.

It also is important to consider what a firm, organization, or supply chain does to help achieve their goals and influence performance. In other words, what practices should be implemented to facilitate business operations? Practices are imitable activities, generally widely known, and applicable across businesses. Simply stated, practices aren’t unique. Practices provide specific guidelines to managers as to appropriate behaviors. How well they are implemented and their relevance to the specific organization and operating situation are key to their value.

Much has been written regarding the importance of developing best practices and their potential to yield high performance. However, the development of best practices should not be considered the end goal, as that alone is seldom a great competitive differentiator. In the bridge model, we propose that best practices are a necessary component, but it is how those practices are leveraged that is critical to success. What you do with the practices offers the potential for differentiation.

More specifically, practices must be bundled or grouped together in such a manner as to provide greater value in the form of capabilities—the third pillar. Capabilities are complex bundles of skills and accumulated knowledge that enable firms to make the best use of their assets by coordinating activities and practices. Capabilities, too, can be combined to yield greater value. Specialized, interconnected combinations of capabilities and assets are termed competencies. Competencies—the fourth pillar—can lead to organizational competitiveness and better performance.

Although the research is identifying a number of key competencies that will be discussed in future Beyond the Horizon reports, three are particularly interesting. These include: integrated value perspective, strategic connectivity, and strategic simplification.
Integrated value perspective reflects a firm's ability to identify the unique value proposition that is necessary for the success of key customers and to then position the firm and its value chain partners to be able to deliver that value. This means that the firm must be able to identify the combination of product, service, delivery, and solution alternatives and then orchestrate the firm’s combination of supply chain partners to deliver it. If the firm’s value proposition focuses on cost, then the firm and value chain partners must organize their value chain processes to deliver efficiency. Additionally, one size does not fit all. For example, it may not be appropriate to provide “premium service” with a highly responsive supply chain for all customers. There may be a substantial segment of the market willing to accept longer lead times, which can be handled in a more cost-effective manner.

Strategic connectivity refers to the firm’s ability to effectively connect with value chain partners. It includes the ability to receive information from customers and supply chain partners for processes related to marketing innovation, demand management, manufacturing scheduling and operations, and delivery. This is particularly important for firms involved in omnichannel operations, which requires firms to stay connected with different customers in different market segments. In addition, strategic connectivity must include the ability to manage a wide range of risks through effective use of the web and social media.

Strategic simplification refers to the firm’s ability to effectively make decisions regarding process and product complexity. Although firms have employed many initiatives to reduce process and product complexity, the results are often negligible. Even with the initiatives, the number of processes and products continues to increase. Firms with the strategic simplification competency are focusing their efforts on identifying when complexity provides differentiable value to their key customers and targets the remaining complexity for removal. Strategic simplification often focuses on standardization of processes and rationalization of product lines in order to increase efficiency.
THE NEXT STEPS

The relationships among the major constructs of the bridge model discussed in this white paper—intent, internal and external drivers, structure and strategy practices, capabilities, competencies, and ultimate realization of objectives—need to be explored in greater depth. A survey is in development that will allow us to drill down on key aspects. Input is needed from a broader range of firms and individuals, and we are actively seeking new participants for the project. Your input will help us to confirm or modify our model and add substantial value to the research.

If you are willing to help, please contact us at msu_scm_research@broad.msu.edu.

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ABOUT ELI BROAD COLLEGE OF BUSINESS

Michigan State University’s Eli Broad College of Business prepares students to make business happen through an innovative curriculum and collaborative culture, guided by a distinguished faculty. The hardworking, team-oriented students of Eli Broad College acquire deep knowledge of their chosen disciplines and a broad understanding of how global businesses work, enhanced by study abroad and real-world projects in research centers and experiential labs. The college, consistently ranked among the top business schools, offers undergraduate, graduate, and executive development programs. Broad graduates are ready to tackle business challenges around the world, part of an unparalleled peer and alumni network.

ABOUT APICS SUPPLY CHAIN COUNCIL

APICS Supply Chain Council (APICS SCC) is a nonprofit organization that advances supply chains through unbiased research, benchmarking and publications. APICS SCC maintains the Supply Chain Operations Reference (SCOR) model, the supply chain management community’s most widely accepted framework for evaluating and comparing supply chain activities and performance. APICS SCC enables corporations, academic institutions and public sector organizations to address the ever-changing challenges of managing a global supply chain to elevate supply chain performance. APICS SCC is part of APICS, the premier professional association for supply chain and operations management. Visit apicsscc.org to learn more.