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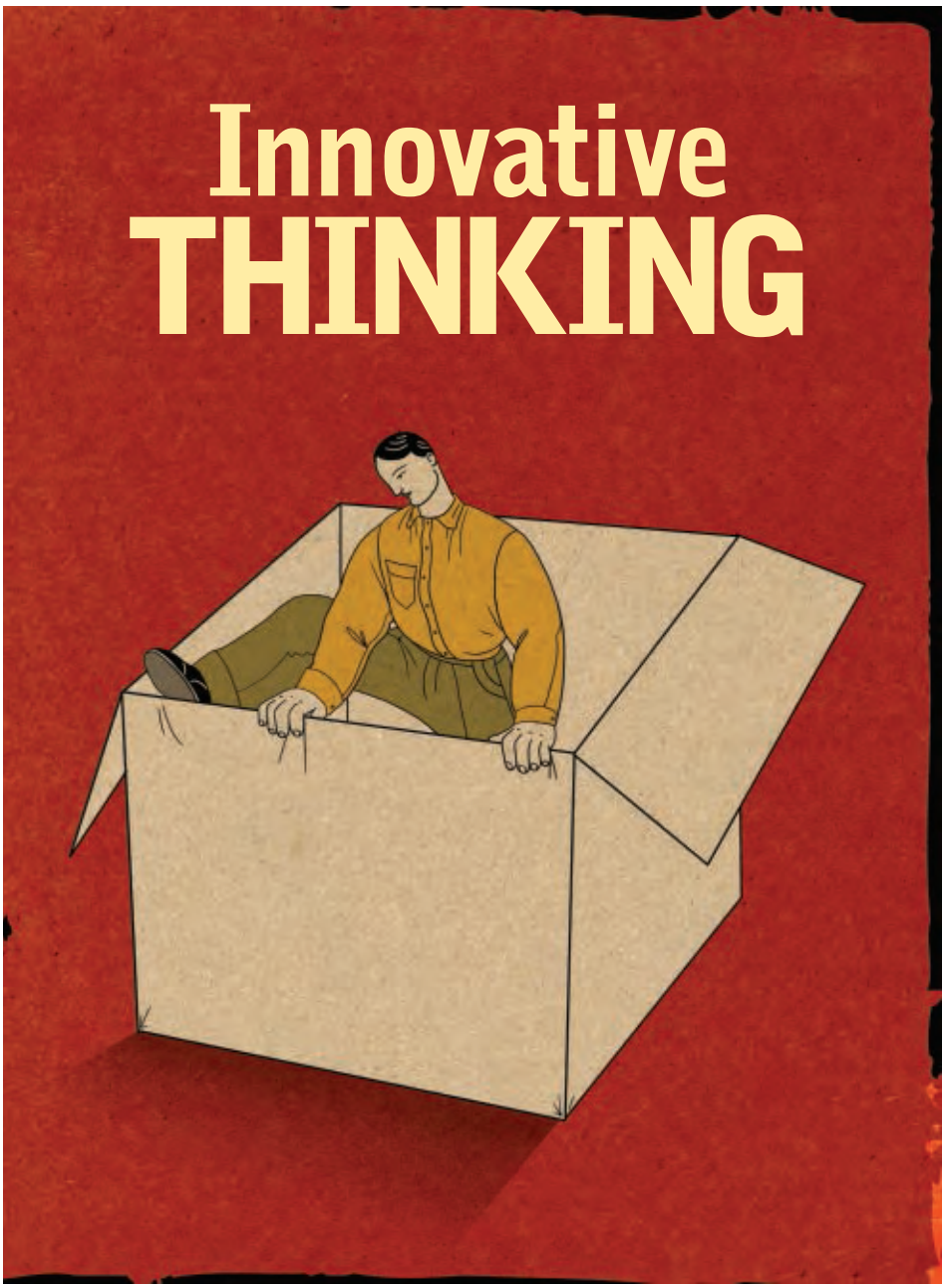

FEATURES

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HOW STEELCASE TOOK CONTROL OF SUPPLY RISK

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Supply risk management has taken on increased strategic importance as global supply and demand markets fluctuate due to political and economic uncertainties, shortened product lifecycles, supplier performance issues, natural disasters, and other factors. In this volatile environment, procurement needs to be established as a risk management discipline that is supported by company structures and processes. This is what Steelcase Inc. accomplished through its Global Procurement Process (GPP)—a comprehensive initiative that links supply risk management to procurement activities in a way that leads to fact-based decision making and superior business performance.

This article describes the Steelcase experience with its GPP. We relate the pain points leading to the creation of the initiative, the key elements incorporated into the GPP, and some results achieved to date. We also discuss implications that the Steelcase experience may have for others pursuing similar supply management initiatives in their own organization.

Steelcase Background

Steelcase Inc. is a global, publicly traded company with fiscal 2012 revenue of approximately $2.75 billion and nearly 10,000 employees worldwide. The company competes in the global office furniture industry with a portfolio of office environment solutions. Steelcase encompasses three core brands: Steelcase, Turnstone, and Coalesse as well as several sub-brands, including Nurture, which is the company's healthcare division. Suppliers provide design, production, and service support for the Steelcase brands and are a key to the company's competitive success.

As Steelcase has grown over the years, many of their suppliers have grown with them, resulting in long-standing relationships with a proven supply base. In this regard, the company had been operating in a relatively low supply risk environment as the strong

Matt Herring

Operating in a dynamic global environment, Steelcase Inc. recognized it needed to get a better handle on supply risk. The solution was an initiative called the Global Procurement Process. This comprehensive approach to risk management is built on two core principles: "begin with the end in mind" and "manage suppliers and risk throughout the lifecycle of the process."

relations with qualified suppliers helped proactively mitigate risks. Despite the relative stability, however, Steelcase recognized that it needed to more effectively manage the many supply risks that all global firms now face. People throughout the organization understood that the supply group managed supplier-related risks such as capacity constraints and quality issues as well as uncontrollable external events like flooding or hurricanes. People outside of the supply group, however, historically had not considered how corporate strategic moves affect supply—and ultimately corporate risks. The following points illustrate the situation:

• Within the last decade, Steelcase entered new markets such as health care and higher education. This drove a surge in R&D and the introduction of new products, requiring new suppliers and new supplier capabilities. The company pushed for shorter-than-typical product development cycle times during this period (including some tough economic times), which resulted in higher supply risks.

• Plant consolidations that were key to the long-term health of Steelcase put stress on the company's suppliers. For example, a local supplier to a Steelcase plant in California might now be required to also serve a plant in Texas. An additional element of risk came not only from the expected logistics challenges, but also from the need to develop new buyer-supplier relationships in light of the service expansion.

• Steelcase in recent years had adopted lean principles and practices that have positively impacted business results. However, this also increased the sensitivity of plants to supply performance and required suppliers to dedicate already constrained resources to integrated lean processes such as JIT deliveries.

The Global Procurement Process

Given these significant and growing challenges, Steelcase recognized that it needed to act to better manage risk. The catalyst for action would be the procurement organization. Procurement at the time was not widely viewed as a risk management discipline at Steelcase—much less an enterprise risk management discipline. But the company's Vice President of Global Operations took a critical step to change this perspective and improve business results by developing a new Global Procurement Process (Exhibit 1).

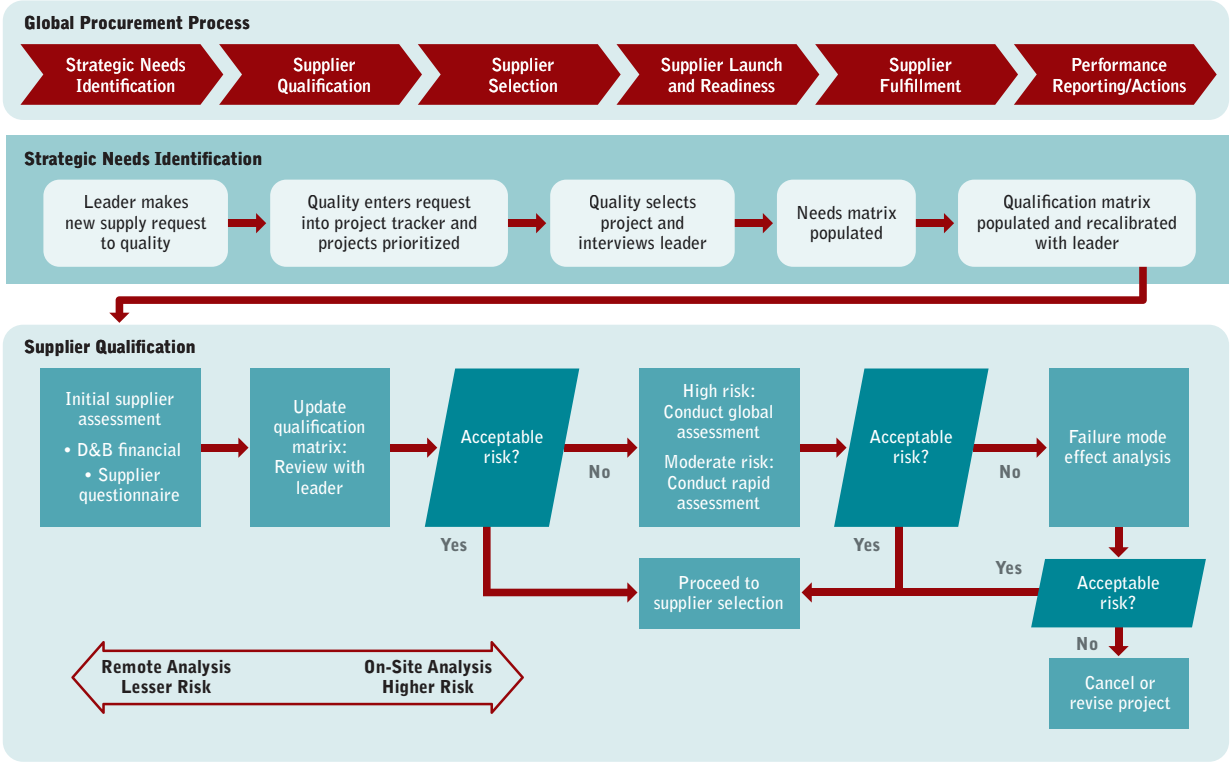
Two underlying principles of the GPP are "begin with the end in mind" and "manage suppliers and risk throughout the lifecycle of the process." The process enables internal customers to make fact-based decisions tied to business needs in an information-rich environment across the lifecycle of the project and relationship. This is in sharp contrast to the traditional approach of simply issuing RFPs and then making decisions based strictly on quotes.

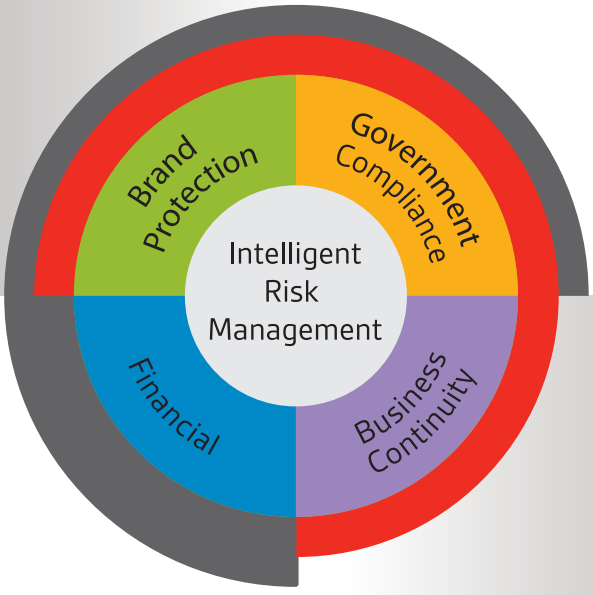
The GPP consists of interdependent and interactive processes that are managed by two groups in the procurement organization. The Supplier Quality Group is primarily responsible for "strategic needs identification" and "supplier qualification," the two processes examined in this article. Supply Chain Leaders (that is, the buyers) are primarily responsible for the other four processes.

Though the Supplier Quality Group and the Supply Chain Leaders support each other throughout the GPP, they have primary responsibility for different processes for a reason. The Supply Chain Leaders are under constant pressure to manage and reduce cost, while ensuring reliable and speedy delivery. Pursuit of such objectives might drive short-term decisions that unintentionally increase

EXHIBIT 1

Steelcase Global Procurement Process (GPP)





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risks. The Supply Chain Leaders, for their part, could not be as effective and efficient if they also had to constantly analyze risks on their own. So it falls to the Supplier Quality Group to analyze the impact of different risk factors on overall corporate and sourcing objectives. The group then provides details to Supply Chain Leaders who then can make informed, risk-adjusted sourcing decisions.

Though the GPP is fundamentally a risk management process, it is presented as a supplier qualification, selection, and management process. The reason: Steelcase did not want stakeholders to feel that they were just going through an engineering risk management exercise. The concept of risk seems to be distant to some people. So without being overly explicit about it, the GPP gets people to buy in to the fact that risk exists, to be sensitive to risk, and to recognize that potential degradation of supplier performance can be predicted to some extent.

Strategic Needs Identification and Supplier Qualification

Considerable forward planning takes place before the Global Procurement Process even begins. On a semi-annual basis, supplier quality and product category leaders interview innovation leaders (for example R&D, marketing, and lead-users) to identify future business and product needs. These needs are communicated to the Supply Chain Leaders for advanced planning. When a new product development project is initiated that has new sourcing needs (such as a part, material, process or supplier), the Supply Chain Leader group contacts supplier quality. The Supplier Quality Group gathers basic information (e.g., who are you, what are you looking for, and what project are you working on) and lists the project in a tracker sheet where projects are prioritized and then selected for action.

Once a new sourcing project is selected, the "strategic needs identification" process begins. The two key tools and outputs of this process are the "Needs Criteria Matrix" and the "Supplier Qualification Matrix". Supplier Quality interviews the Supply Chain Leaders using the Needs Criteria Matrix to identify business needs from the end-user's perspective (see Exhibit 2). The Supply Chain Leaders will also rank the importance of each criterion. Though the interviews last only about a half hour, they are critical because they identify the end-user's business needs that will be used throughout the GPP to guide decisions. The Supply Quality Group also solicits needs information from other key stakeholders such as R&D, category project leaders, materials group leaders, and product development and launch managers.

The Supplier Quality-Supply Chain Leader interviews strike a balance between a too-generic discussion of general needs that fails to capture sufficient detail and a full-scale risk assessment that could become burdensome and time consuming. The interviews are a personal communication and interchange between Supplier Quality and Supply Chain Leaders. The interviews not only help clarify priorities and end-user needs, but also create a higher sense of ownership of project requirements and strengthen the relationship between the two groups, ultimately establishing a higher level of mutual support of objectives throughout the project lifecycle. The Needs Criteria Matrix was designed to ensure that for each purchase decision a broad set of differentially weighted issues are addressed up front—even if at first glance the purchase decision appears relatively risk free. This matrix is reviewed with Supply Chain Leaders throughout the GPP and recalibrated if needed.

The face-to-face interview process that was used to populate the Needs Criteria Matrix creates an opportunity

EXHIBIT 2

Steelcase Needs Criteria Matrix

Date:	
Material Group:	**Process Stakeholders:**
Start Date :	**Target Completion Date:**

- What are you buying?
- Are there engineering, material or test specifications that must be met?
- Describe the process or equipment requirements?
- Do you require the supplier to provide product/material lot traceability, material tracking to manufacturing dates?
- Does the product require any certifications? (e.g., EICC, UL, BIFMA Level, PVC Free)
- Is there an existing supplier? Who is it?
- Have you identified any candidates? Who are they?
- What is the annual spend and material/piece volume?
- Do you have a preference on supplier location?
- Will the product be make-to-order (specials, low quantity) or make-to-stock (e.g., supplier held inventory, high volume/high production runs, large lots with minimal changeovers)?
- Will the supplier manage inventories for us?
- Does it matter what markets the supplier serves? Automotive, furniture, consumer goods, etc.
- Will this product/material have specific lead time requirements?
- What engineering and R&D capabilities does the supplier require (e.g., rapid prototyping, product design, material testing, lifecycle management)?
- Do you require any quality systems, process or environmental certifications?
- Will you require the supplier to provide financial reports (P&L and balance sheets)?

to identify a wide range of issues, some of which may not have been identified if a standardized form had been used in lieu of the interviews. Supplier Quality analyzes and codes the information in the Needs Criteria Matrix and then maps that coded information into a Supplier Qualification Matrix (see Exhibit 3). Not all items on the Supplier Qualification Matrix will be ranked at this point. The individual items on this matrix are grouped into 12 major risk categories plus three special processes (welding, finishing, and adhesives.) Each major category has multiple subcategories, though only the major categories are shown in Exhibit 3. This Qualification Matrix will be used during the supplier qualification process to rate and compare suppliers.

The Supply Chain Leaders are not involved in the initial population of the Qualification Matrix; however, they review the matrix to determine if recalibration is required prior to the supplier qualification step. The Qualification Matrix is the tool that standardizes the information to be used throughout the GPP, but it is not a static document. Project needs will be recalibrated as the process moves forward.

The supplier qualification process is a risk-and-gap analysis that drives the decision to qualify and develop a supplier, or not to do so. The amount of information gathered, the level of detail analyzed, and the allocation of resources for supplier qualification depends on the situation. The first two steps in the supplier qualification process are (1) completion and analysis of a financial report (for example, D&B Supplier Evaluation Risk Rating and Supplier Stability Indicator) and (2) completion of a "Candidate Supplier Questionnaire" that suppliers access and fill out via the Steelcase.com supplier site. A coding key maps measures from the financial report and the supplier questionnaire to the previously initiated Qualification Matrix. Not all items in the Qualification Matrix will necessarily have a score assigned to them already. This may be the case for an item that is a known and relatively low risk commodity that does not require further risk analysis, or for an item that requires a higher level of risk assessment.

At this point Steelcase gets a strong sense of the risk level for potential suppliers as well as the needs that might have to be recalibrated. The initial calibration was driven by a mostly subjective perspective, and took place during the interviews. Scores were then recalibrated after the Needs Criteria Matrix and Qualification Matrix were populated. However, it is not until the tools are actually used with internal customers that the needs analysis becomes more fixed and a detailed perception of risk can be developed. For example, if the Supply Chain Leader is leaning toward a supplier that does not have the highest score or does not perform as well on some of the highest rated need factors, it may be that project needs have changed or some other criteria are now being considered. Either way, by referring to the Needs Criteria Matrix and/or the Qualification Matrix, everybody can be made aware of the potential risk of not selecting the most qualified or aligned supplier. Then, the needs weighting perhaps will be revised because project needs have changed, or the Supply Chain Leader will revisit the supplier selection.

In short, the Supplier Qualification Matrix provides a quantitative and relatively objective way to choose between competing suppliers. The Supply Chain Leader and Supplier Quality groups can compare suppliers by risk category, line-item by line-item, and by total risk.

Levels of Supplier Assessment

Up to this point only remote analysis has taken place—that is, there have been no supplier site visits. In the past, Steelcase may have conducted on-site assessments of all potential suppliers because "that's the way we always do it." However, the company came to realize that for many purchases, particularly lower risk commodity purchases,

EXHIBIT 3

Steelcase Supplier Qualification Matrix

Weight	Item	Target	Score
	1. Company Culture		
	2. Customer Satisfaction		
	3. Environmental and Corporate Social Responsibility		
	4. Facilities Safety and Cleanliness		
	5. Visual Management Deployment		
	6. Research and Development		
	7. Scheduling Systems		
	8. Quality System Deployment		
	9. Supply Chain Integration		
	10. Inventory Management, Product Flow and Use of Space		
	11. People, Teamwork, Skill Level and Motivation		
	12. Equipment and Tooling Condition and Maintenance		
	Special Processes (Welding, Finishing, Adhesives)		
	Total Profiling Score		
	Final Supplier Rating: Criteria Met or Needs Improvement or Needs Significant Improvement or Stop/Override by VP		

Note: Only the major categories are shown; there are many subcategories for each major category.

they may have spent more on the risk assessment process than on the combined cost of purchasing the part and responding to risk situations. For example, the company might purchase 15,000 parts annually at $0.05 per part, resulting in an annual spend of $750. The cost of on-site risk assessment for such an item would easily exceed the annual spend for the item. Steelcase now first determines if remote analysis is sufficient before conducting either a rapid plant assessment or a full-scale global business process assessment. Both types of assessment use the same 12 risk categories and special processes in the Qualification Matrix.

A rapid plant assessment is typically completed in two hours or less by a team of four to five people. Each Steelcase representative has primary responsibility for a few specific risk categories. Prior to the visit, the team studies the supplier's annual reports, analyst reports, prior assessment data, industry characteristics, and project needs. Since Steelcase does not want the supplier to prepare anything in advance, the team does not inform the supplier of the visit date. Nor does it bring a copy of the assessment form or take notes during the visit. Doing such things, Steelcase believes, could impede communication and detract from picking up visual cues. The team meets immediately after the rapid assessment to summarize findings and develop the rating sheet.

In higher risk situations, Steelcase will conduct the more in-depth global assessment. Those items previously ranked as critical needs will be explored in great detail. Steelcase will inform the supplier in advance of the visit, and provide them with initial rankings, comments, concerns, and key areas of assessment. It will also request in advance various supplier documents, policies, and procedures. The supplier will be provided with a checklist of actions to be completed prior to the meeting. Steelcase's objective here is to ensure that the supplier is prepared and has the necessary resources to conduct the in-depth global assessment when it is scheduled.

A key part of the qualification process is linking special technical assessments, which we describe below, to the business process assessments to determine the sustainability of the special technical skills. Highly qualified technical personnel will conduct the special assessment, while Supplier Quality will conduct the global assessment. (Exhibit 4 depicts the process used for linking the assessments.)

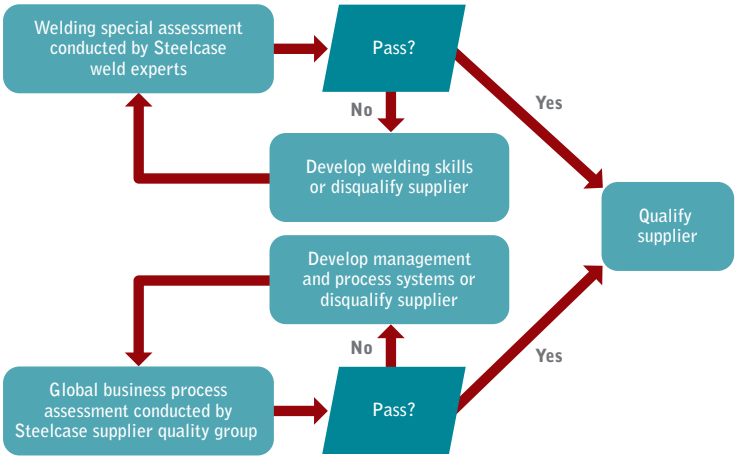
Supplier Quality then integrates the two assessments to determine whether or not the qualities observed at the detailed special technical level are also in place at a higher business process level. For example, a special assessment of a complex weld station process might initially indicate that the supplier is highly qualified to perform that operation. However, nine months later the supplier's weld performance degrades significantly. If the business assessment had indicated that the corporate culture was a problem, or that there was little emphasis on continuous improvement, or that employee retention was a problem, then the degradation in weld performance might have been predicted. Aligning the technical and business process assessments enables Steelcase to determine whether the specific competencies identified are sustainable.

In rare cases of extremely high risk, Steelcase may conduct a full-scale Process Failure Mode Effects Analysis (PFMEA). PFMEA is a structured analytical technique for identifying and evaluating the impact of potential failures on products or processes.

Most PFMEAs are conducted using a highly structured PFMEA form or "template." These templates may be unfamiliar to people outside of an engineering discipline. So rather than gathering information by directly using a PFMEA template, the Supplier Quality Group created an interview guide that puts PFMEA issues into a format and language more familiar to the end-user. This ensures that data will be in terms driven by the buyers—the end-user in this case. The PFMEA requires cross-functional determination of rankings for items such as risk severity, likelihood of occurrence, and likelihood of detection. There will be disagreement regarding final rankings because people from different functions perceive risk differently. Yet while the final ranking is important, the greatest benefit of the process comes

EXHIBIT 4

Global and Special Assessments Alignment



from the team analyzing risks from a variety of perspectives. The process provides each team member with insights into system wide risks.

After all of the necessary assessments are completed, a qualification review form is populated using all available information. Each candidate supplier receives a total score and is ranked. This form enables Steelcase to make fact-based supplier selection decisions. It also makes transparent the level of risk associated with each potential supplier. The Supply Chain Leader group now takes primary responsibility for supplier selection (that is, awarding the business), which is the next step in the Global Procurement Process.

Results and Implications

Steelcase developed the new Global Procurement Process (GPP) to ensure business needs are met by beginning with the end in mind and assessing risks and priorities throughout the process. The GPP was implemented in Steelcase's North American Operations in April 2012. Detailed team training for European teams was just completed in June, and training for Asia-Pacific teams is forthcoming. Ten supplier qualification projects have been completed since GPP roll-out. It is too early to fully quantify the GPP final outcomes, but preliminary outcomes are very positive from our customer groups (Procurement Material Group Leaders and Supply Chain Leaders).

Here's a sample of the benefits realized to date:

- More efficient and effective communications between the Supplier Qualification & Development Team, Procurement Material Group Leaders, and Quality Engineering team members regarding supply risks and procurement processes.
- Company-wide adoption of a framework to implement emerging new supplier requirements as determined by company leadership.
- Increased awareness of all supplier qualification and development projects underway including project objectives and resources.
- No significant customer performance disruptions resulting from new supplier qualification risks.
- Supplier qualification throughput time now more predictable and is being reduced through continuous improvement principles.
- Reduced average time and costs to evaluate and qualify suppliers.
- Fewer detailed (on-site) supplier business process assessments required.

Throughout the development and implementation of the Global Procurement Process, Steelcase experienced a number of valuable "lessons learned"—lessons that may well have relevance for other supply chain professionals pursuing similar initiatives in their own organizations. Here are some that stand out:

1. Companies considering new strategic initiatives—whether it's launching a new market, making an acquisition, redesigning the distribution network, and so forth—need to proactively and comprehensively consider the risk impact on supply processes and partners.

2. Supply management is an enterprise risk management discipline, and needs to be viewed as such. Formal supply structures and processes must enable risk management and raise awareness of supply management's role in this effort.

3. Responsibility for day-to-day purchasing activities and for supply risk management should be separated to support long-term decision-making and optimization of overall supply performance.

4. Because the concept of risk may be distant to some people, risk management should not be presented to the organization as an engineering exercise. Rather, it needs to be framed in the language and business processes familiar to the responsible end party, which in this case are the Supply Chain Leaders.

5. End-user needs and risks need to be clearly specified early in the procurement process. In addition, all subsequent sourcing decisions should be linked to those needs and risks to most effectively mitigate supply risks.

6. Supply risk strategy and supplier selection processes must be flexible to respond to new ideas, project needs, and technologies that may develop. Needs and priorities may be recalibrated as new information is made available and as situations change. However, all subsequent procurement decisions should be tied to the risks and priorities.

7. Given constrained resources in most organizations, companies should apply different levels of risk assessment depending on the perceived level and understanding of risk. (In the case of Steelcase, there are the remote, rapid assessment, global assessment and PFMEA.)

8. A supplier's technical competence in a discipline may not be sustainable if that supplier does not have the culture, leadership, and processes required for continuous improvement. Technical and managerial risk assessments need to be integrated to evaluate the sustainability of supplier capabilities.

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