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MANAGING RISK IN YOUR SALES AND OPERATIONS PLANNING / INTEGRATED BUSINESS PLANNING PROCESS

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ABERDEEN

Risk Management is a hot topic for supply chain leaders. No one can afford disruptions! Risk comes in many forms and its source may be different depending on the industry, company, and audience.

It can come from the demand side or the supply side, be product driven, or triggered by political or other known influencers. Underlying all of these causes is the financial impact. Risk management is always discussed within companies, but is it formally addressed? And how does risk management get operationalized and built into the daily fabric of the business? As demonstrated by the many initiatives already successfully managed under its umbrella, the sales and operations planning and integrated business planning process (S&OP/IBP) is a great place to start.

From a supply chain perspective, risk is associated with managing all the variables to stay on track, with backup and contingency plans to deal with any eventuality that might occur. Identifying the weaknesses and establishing contingencies to mitigate possible challenges is the DNA of supply chain. Institutionalizing and formalizing the approach is where the value of the S&OP/IBP process makes the critical difference. Establishing the sales and operations plan and vetting all the potential scenarios are already part of the process. Adding risk factors to the plan with proper scenario testing is exactly what S&OP encompasses. The high-level, hands-on management that occurs as part of the S&OP process turns the plans into actions that are tracked and monitored along with other scenarios during testing.

In this report, we examine risk management from the demand side, the supply side, and the known areas of expected change resulting from the impact of Brexit and U.S. tax and trade policies. We will identify how the

The Aberdeen maturity class framework identifies three groups of survey respondents. The data is used to determine overall company performance, based on self-reported performance across several key metrics. Each respondent falls into one of three categories:

- Best-in-Class: Top 20% of respondents based on performance
- Industry Average: Middle 50% of respondents based on performance
- Laggard: Bottom 30% of respondents based on performance

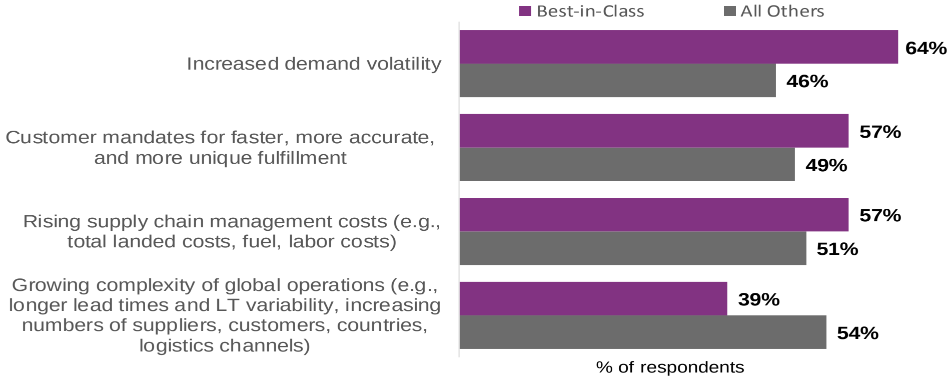
Sometimes we use a fourth category, All Others. This is a combination of Industry Average and Laggard.

S&OP process can address issues within the existing process framework and how it can be leveraged to determine the financial impact of the potential risk scenarios.

Business Performance Pressures Facing All Companies

We start with a view of the pressures facing all companies and the differences in prioritization based on their maturity level.

Figure 1: Business Pressures



n = 154, Source: Aberdeen, October 2017

The Best-in-Class are much more focused on the customer-facing challenges of increased demand volatility and customer mandates, whereas All Others are more internally occupied with managing the growing complexity of their supply chain and rising costs. This ranking has direct influence on the priorities for initiatives and performance that a company chooses to focus on.

Risk Comes in Many Forms and Multiple Sources

Supply chain risk commonly triggers concern about the supply side. In general, the immediate thoughts that come to mind and grab headlines are natural disasters that are extremely disruptive, such as the 2011 Thailand flood and the 2011 earthquake and tsunami in Japan. Yet there can be significant risk on the demand and product side that is equally as disruptive.

Demand

Volatility— increases or decreases in demand that wreak havoc on planning and fulfillment—is the primary suspect here, and is tied for number one on the list of supply chain disruptions. Figure 2 shows the demand and product side disruptions. Volatility can certainly be traced in part to the disruptive forces of eCommerce, where traditional distribution

Aberdeen Maturity Class Performance

Customer Service

- Best-in-Class: 93%
- All Others: 79%

Cash-to-Cash Cycle Days

- Best-in-Class: 39 Days
- All Others: 59 Days

Gross Margin

- Best-in-Class: 35%
- All Others: 23%

Forecast Accuracy – Product Family Level

- Best-in-Class: 68%
- All Others: 43%

channels have dramatically changed. To support those changes, retailers, distributors, and manufacturers are all dealing with omni-channel issues and direct-to-customer workflows, which negatively impact freight and labor costs.

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Figure 2: Disruptions - *Demand and Product Side Risk*

n =154, Source: Aberdeen, October 2017

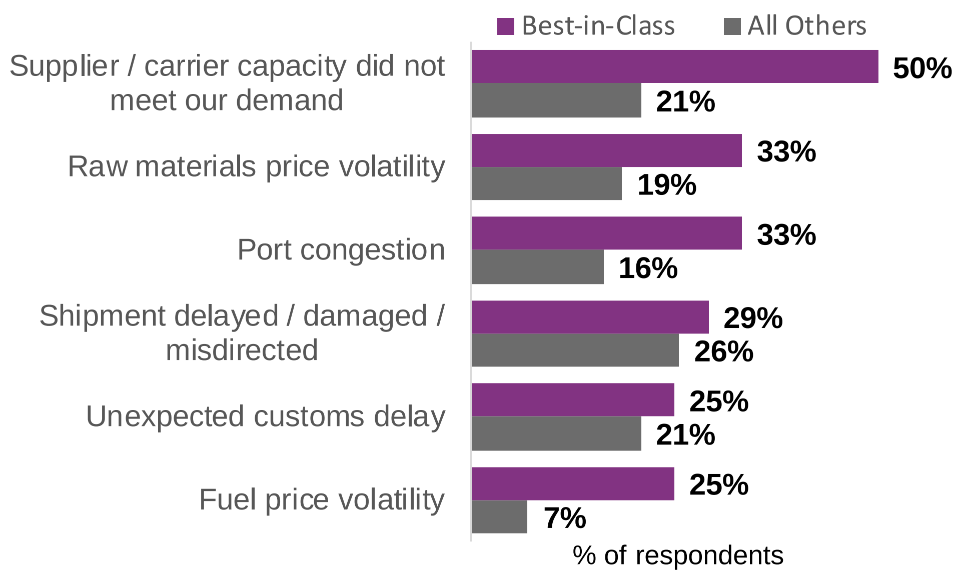
Another area of risk that can be a hidden assassin for many companies is the issue of product proliferation and inventories. If not managed closely, these can increase the risk of obsolescence and cash depletion. For any successful product offering, there is a tendency to round out the offering so that it's attractive as a complete product line, which often leads to slower-moving, complementary SKU's. While this isn't always the case, it is something to guard against.

Product recalls can also be catastrophic, not just for the supply disruption and recovery costs, but also for brand reputation. Think of recalls of pharmaceutical and food and beverage products, as well as products made in countries where material quality controls are not as stringent and substitutions might be made. The impact of recalls can be wide-ranging—the company may have to set aside or quarantine distribution inventory and/or quickly find or make available new space for the recovery efforts. Responsiveness and decisive action are paramount in these cases.

Supply

Most people gravitate to supply side disruptions when discussing supply chain risk. The vivid images from natural disasters are top-of-mind when considering major supply disruptions, but there are many other sources of concern that can be equally devastating. For example, container shipping lines have had some costly bankruptcies, destroying some supply lines and stranding product on ships that were unable to deliver goods for months. Figure 3 indicates some of the other areas that are often part of the discussion.

Figure 3: Disruptions – *Supply and Logistics Side Risk*



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Raw material and fuel price volatility are sometimes driven by fundamental capacity concerns or shortages, such as the nickel supply affecting stainless steel pricing and availability. These could be due to man-made issues, such as labor strikes, or local disasters affecting capacity. Port congestion can also rear its ugly head, particularly if it's a major gateway in or out of a country. Customs or carrier delays or mistakes also make the list. Any form of delay, whether physical or administrative, that halts the movement of product must be managed.

All of these disruptions point out the critical need for upstream visibility into suppliers and shipments at all levels, including the longest tail supplier. They also point to the importance of contingency planning, to enable informed decisions about options and alternatives for critical items when disruptions occur.

Known and Predictable Events

In addition to demand, product, and supply risk, there are current risks related to changes from Brexit and direction of U.S. tax and trade policies. The risk in this case is related to preparedness. How ready are companies to tackle the anticipated changes? Do they have the people, process and technology in place to handle them?

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Expected Influence on Business Metrics Where Tax & Trade Policies Will Have the Greatest Impact:

Profits

- Best-in-Class: *+2.21%*
- Industry Average: *+1.86%*
- Laggards: *+1.49%*

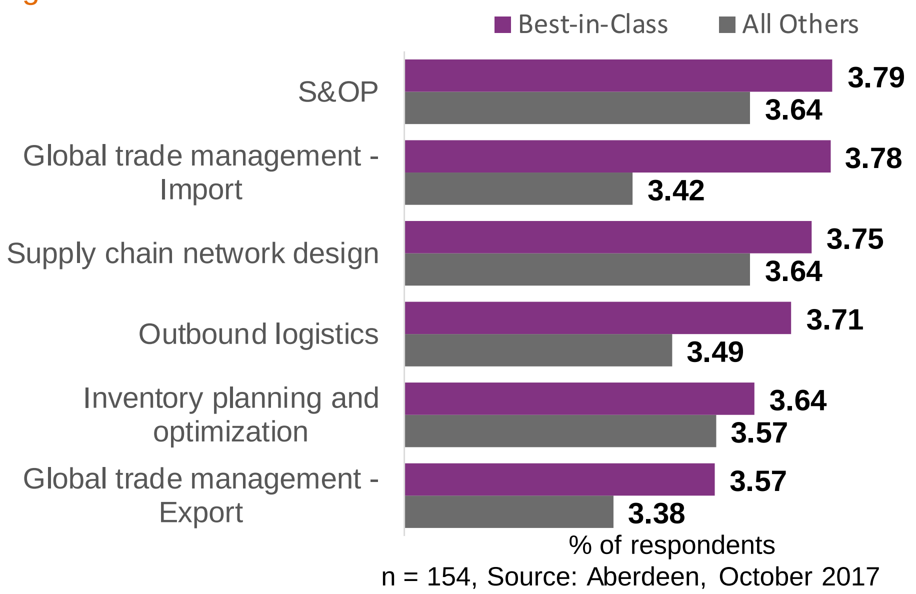
Revenue

- Best-in-Class: *+1.92%*
- Industry Average: *+1.60%*
- Laggards: *+1.26%*

From our survey on the impact of trade and tax policies, the data indicates a net positive bias in expectations for profit and revenue; and the higher the maturity level (Best-in-Class), the stronger the bias, as shown in the sidebar on page 5.

Drilling down further, the question was asked: Which functional areas and processes would be the most critical when it comes to managing the changes that are likely to occur? As shown in Figure 4, S&OP (often referred to as Integrated Business Planning – IBP) topped the list, a strong indicator that companies who use S&OP/IBP to manage their business recognize the value of the process in addressing all challenges the business might face. Although the specifics are unknown, the direction of the anticipated changes are intended to be favorable to U.S. companies. When the details emerge, companies will want to leverage them quickly to capture a competitive advantage.

Figure 4: Known Influencers – *Readiness Risk*



The risk is in not having the organizational readiness to handle the changes, whatever they are. The preferred process to manage the changes is S&OP, a very strong practitioner endorsement.

Managing Risk Within the S&OP/IBP Process

Figure 5 shows existing functions within the S&OP/IBP process that companies are using today to manage risk. Although taken for granted as fundamental to the S&OP process, establishing a feasible plan based on a good supply/demand match is the first step in managing risk. It

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addresses the basic question of having the right level of capacity to meet the demand plan. For those who are skeptical, a good supply/demand match is an actual risk issue. Consider the case where a company is unable to perform that task or doesn't have this capability. The ability to evaluate an unconstrained demand addresses the question: What will it take to satisfy the demand requirements? Having demand higher than existing capacity might be a problem many companies would like to have, but it's still a risk. The ability to address constrained demand answers the question of what can be done with the existing capacity (material, equipment, people) available. In both cases, Best-in-Class companies have a significant advantage over their competition.

The ability to evaluate upside and downside scenarios, along with risk-based scenarios, is at the heart of testing the S&OP plan. With the speed and scenario capabilities that exist within many solutions, it's common for companies to run multiple scenarios within the process time window to address all possible concerns. The value in running the scenarios is to anticipate what actions must be taken, to address any and all possibilities, and establish contingency plans for them. Risk scenarios often go beyond the likely upsides and downsides, but the process is the same. To sufficiently address sourcing, assets and costs, more involvement from supporting functions might be required than in normal scenario planning. Yet, management support to facilitate that dialog between functions is part of what a strong S&OP process provides.

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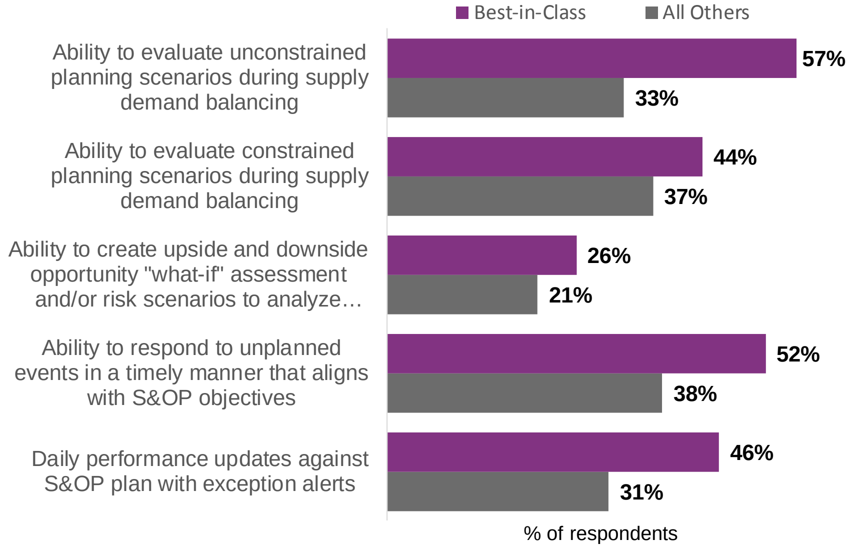
Figure 5: S&OP Risk Management Process Capabilities



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The real benefit of the having the capability to run risk-based scenarios is the superior execution that results when responding to an actual unplanned event — the Best-in-Class are 37% more likely to have this capability. The scenarios may well have tested the same or similar type of event in a scenario model, and this improves organizational readiness to respond — a big plus resulting from the scenario planning process.

Exception alerts are a key component to managing risk. They enable an organization to learn about issues at the earliest possible moment and enact the contingency plans. Hours can make a big difference in how an organization responds, and allow time to secure additional material or find available carriers, for example, if there is some type of natural disaster. Although they may not be formally categorized as a risk mitigation capability, S&OP exception alerts are a critical component in dealing with risk. The Best-in-Class are 50% more likely to have S&OP exception alerts in place, which gives them a significant edge compared to All Others in addressing disruptions on a timely basis.

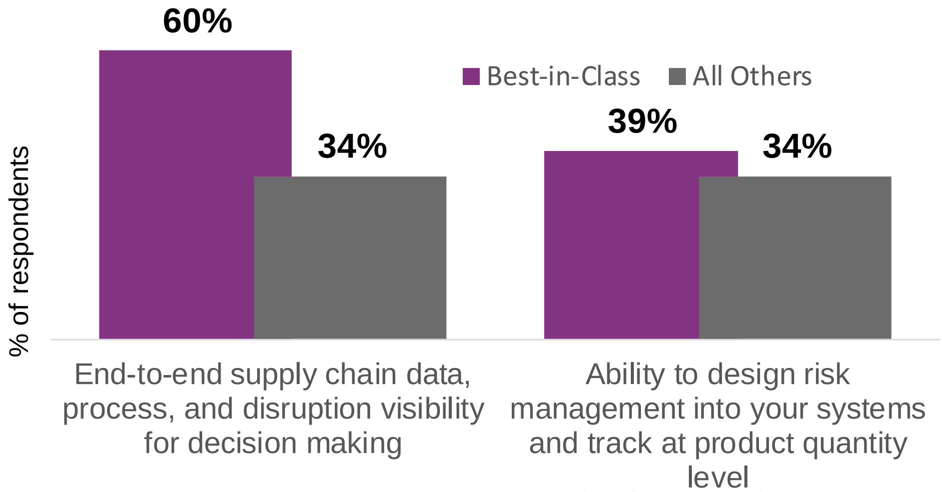
Best-in-Class Risk Management Capabilities / Actions

Beyond the S&OP process itself, the Best-in-Class have additional supply chain processes in place to further improve their risk management capability. These capabilities are considered by many as an extension of the S&OP process, but regardless of how they are viewed, they're critical to managing risk. The first capability is having end-to-end visibility into supply chain data, processes, and disruptions across the organization to enable decision making. Best-in-Class companies are 77% more likely to have this capability. For All Others, at 34% adoption, there's a steep hill to climb to catch up to the Best-in-Class, but establishing data access and visibility is a fundamental requirement of effectively managing and mitigating risk.

Exception alerts to the S&OP plan are a critical component in dealing with risk. The Best-in-Class are 50% more likely to have exception alerts to the S&OP plan in place.

Designing risk factors into the product systems, to enable tracking and adjustment at the product level, provides baseline information that can be leveraged in planning and costing. Having a risk profile in place and tracking it eliminates guesswork and rule-of-thumb estimates. Using data to properly identify and model product risk issues eliminates one more variable and provides better control.

Figure 6: Additional Best-in-Class Capabilities to Address Risk



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The Best-in-Class are not resting on their laurels. In addition to these capabilities, there are specific areas targeted for improvement, some that are directly risk-related, and others that are more related to supporting risk management. Forty percent of the Best-in-Class directly prioritize risk management across the organization, compared to only 23% of All Others. This is a way to emphasize the importance of risk management at all levels, and in all functions within the organization. Best-in-Class organizations target supply chain intelligence and analytics for improvement, which enhances the scenario planning capability. They are also twice as likely to focus on inbound supply chain and sourcing concerns. They do not assume that the status quo is an acceptable state, and are continuously improving.

Integrating the financial planning and budgeting process with the S&OP (often referred to as Integrated Business Planning – IBP) process is at the top of the list of strategic actions. This enables visibility to the financial impact of the risk scenarios that are generated within the S&OP process.

Active Risk Management

In addition to the capabilities the Best-in-Class have in place, they're also engaged in key strategic actions that directly improve their S&OP (often referred to as Integrated Business Planning – IBP) risk management capabilities, as shown in Figure 7. Integrating the financial planning and budgeting process with the S&OP process tops the list. This enables visibility into the financial impact of risk scenarios generated within the S&OP process. It puts the organization in a predictive position to know the cost of disruption and quantify risk in contingency plans.

Figure 7: Best-in-Class Strategic Actions Aimed at Risk

n = 154, Source: Aberdeen, October 2017

Integration of all processes across the extended supply chain further supports and extends the data and visibility model, which is needed for early warning about any issues upstream. Collaborative dialog with customers improves forecast accuracy and replenishment signals, and minimizes risk on the demand side. Establishing a supplier collaboration initiative enables better visibility into inventories, potential risks, and minor delays, and may provide better intelligence about issues before they turn into major disruptions.

Although the Best-in-Class have scenario planning capabilities in place, there's still a lot of room for improvement. For those who haven't adopted risk management in their S&OP process, 25% of the Best-in-Class indicate that doing so is one of their top strategic actions.

Summary and Key Takeaways

Supply chain risk management is a big concern for all companies because disruptions can be costly and managing risk comes in many forms. Risk can be customer or demand driven, or product related, which can be self-inflicted. Most people reactively think about supply-side risk from natural disasters, but it may be driven by supplier viability logistics issues as well. Risk also stems from organizational readiness to take on events, such as the tax and trade policy.

The S&OP/IBP process is the ideal vehicle to manage and operationalize risk management, because it leverages the scenario planning capability that already exists within S&OP, includes risk scenarios, and incorporates them into the basic supply/demand match. The process is also a clearing house for prioritizing major initiatives, and has the management support to drive a complex and sometimes thorny issue like risk management.

Best-in-Class performance warrants a look at what they're doing differently. Beyond the S&OP process, these organizations have additional supply chain capabilities and have targeted other areas for improvement to manage risk.

Companies identified S&OP/IBP as the key process they depend on to manage anticipated changes in tax and trade policies. Companies with a robust S&OP/IBP process recognize it as the vehicle to manage change and prioritize initiatives. Scenario planning is the key for readiness to evaluate change.

For companies seeking to improve, and to operationalize their risk management efforts, Aberdeen recommends formally incorporating risk management into their S&OP/IBP process as the most effective approach to achieve positive results in their risk management efforts.

Related Research

Supply Chain and Operations Leaders' Reaction to Potential Brexit and U.S. Trade/Tax Policy Changes; August 2017

How the Best-in-Class Leverage Their S&OP/IBP Process to Better Manage Their Customers; February 2017

Best-in-Class CSCO Priorities Targeted for Improvement in 2017; March 2017

CSCO Planning Strategies for 2017: Addressing Demand Volatility; December 2016

About Aberdeen Group

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