

Sales and Operation Planning Improves Supply Chain Agility

Over 90% of Companies Believe that S&OP
Improves Supply Chain Agility

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Research

The independent research referenced in this report was 100% funded by [Supply Chain Insights](#) and is published using the principle of Open Content research.

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Disclosure

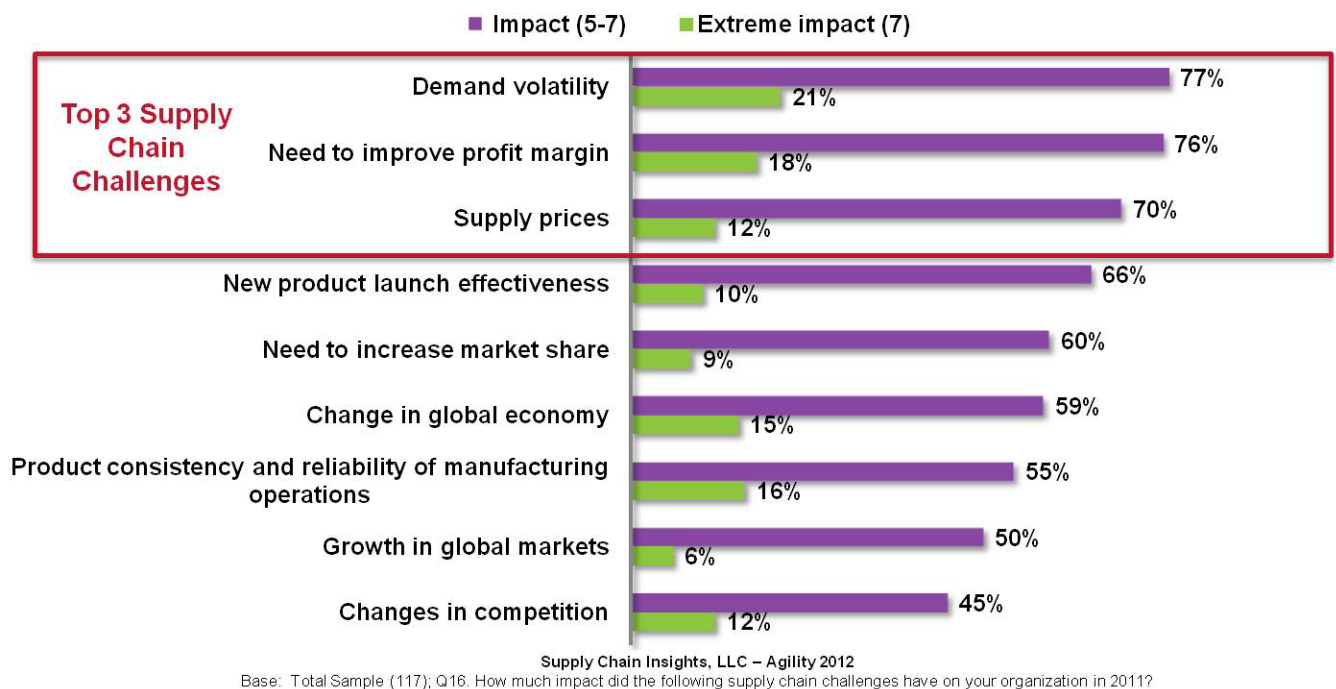
Your trust is important to us. As such, we are open and transparent about our financial relationships and our research process.

The Changing Face of Sales & Operations

Planning

For manufacturers and retailers, supply chain is business. The Sales and Operations Planning (S&OP) process aligns the organization to the business strategy. As companies have become more global and face rising complexity, volatility and uncertainty, the importance of S&OP is increasing. The most progress in supply chain performance happens when there is margin pressure. With the flattening of growth, S&OP is becoming more important.

Fig. 1 Impact of Supply Chain Challenges on the Organization (7-Point Scale)

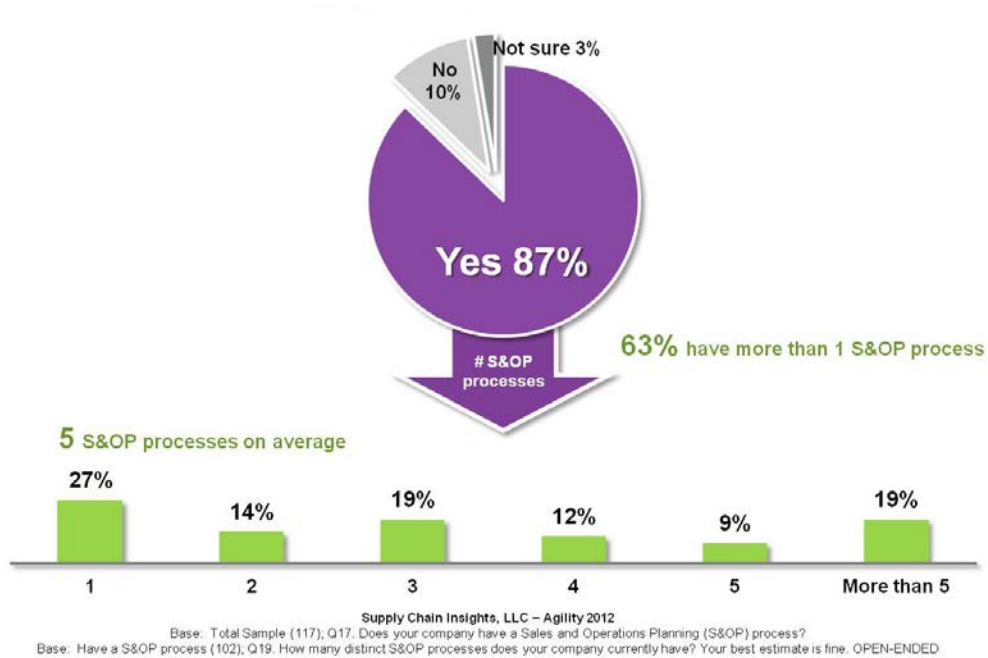


However, solving supply chain problems and building a great S&OP process is not as easy as it used to be. It is not your father's S&OP. The process has become more complex in five areas:

- **Basics Matter. Supply Chain is More Important.** In 2012, corporate growth has flattened and costs have increased. Supply chain basics matter more than ever and supply chain planning is increasing in importance. Today, 90% of businesses are grappling with skyrocketing costs and rising supply volatility.
- **Longer Supply Chains. Greater Risk.** The extended supply chain has greater risk. In 2011, 85% of supply chain leaders experienced a disruption.
- **Multiple Supply Chains. Multiple S&OP Processes.** The process is fraught with multiple processes and increasing complexity. Today, 63% of companies have multiple S&OP processes. While it was one eight years ago, today the average company has five S&OP processes and 63% of companies have more than one process. Each can have a different governance model and underlying process.

- **Planning Not Tied to Execution.** In this quantitative survey, 90% of companies believe that a strong S&OP process improves supply chain agility. However, only 13% of companies have effectively tied S&OP planning to execution.
- **Gaps in Center of Excellence Delivery.** Today, a company is five times more likely to have a supply chain center of excellence than eight years ago. However, there is still a large gap in the effectiveness of S&OP: a 60% point gap between performance (what a company would like to achieve) and actual performance (current level of performance) in existing S&OP processes.

Fig. 2 Presence of Sales and Operations Planning Process and Number of Distinct Processes



Horizontal processes bridge the links of the organization to give it structure, purpose and connectivity. S&OP is the most important horizontal process. Today, within organizations, horizontal processes are not as strong as vertical ones. Historically, organizations have focused on strength: making the vertical processes of sell, make, source and deliver resilient. Functions have competed, they have not aligned. The lack of alignment decreases the ability of an organization to *orchestrate trade-offs across the company to maximize business opportunities and mitigate risks*.

As companies have shifted from a vertical to a horizontal focus, there has been a shift from inside-out (within the organization to the market) to an outside-in (from the external markets into the organization) focus. This market-driven focus, along with strong horizontal processes, helps companies to adapt to channel changes and to orchestrate to mitigate supply risks.

What is S&OP?

There are as many definitions of S&OP, and Integrated Business Planning (IBP), as flavors of ice cream in a gelato parlor. For the purposes of this paper, the term S&OP means: *“a process to develop tactical plans that provide management the ability to strategically direct its businesses to achieve competitive advantage on a continuous basis by integrating customer-focused marketing plans for new and existing products with the management of the supply chain ...”* Post-recession, this process has become more important to power growth, improve resiliency and drive efficiency improvements. To understand how agility is improved through the maturity of S&OP we start with a definition of an S&OP maturity model and then share the research on agility. We then share how S&OP improves organizational agility.

S&OP Maturity

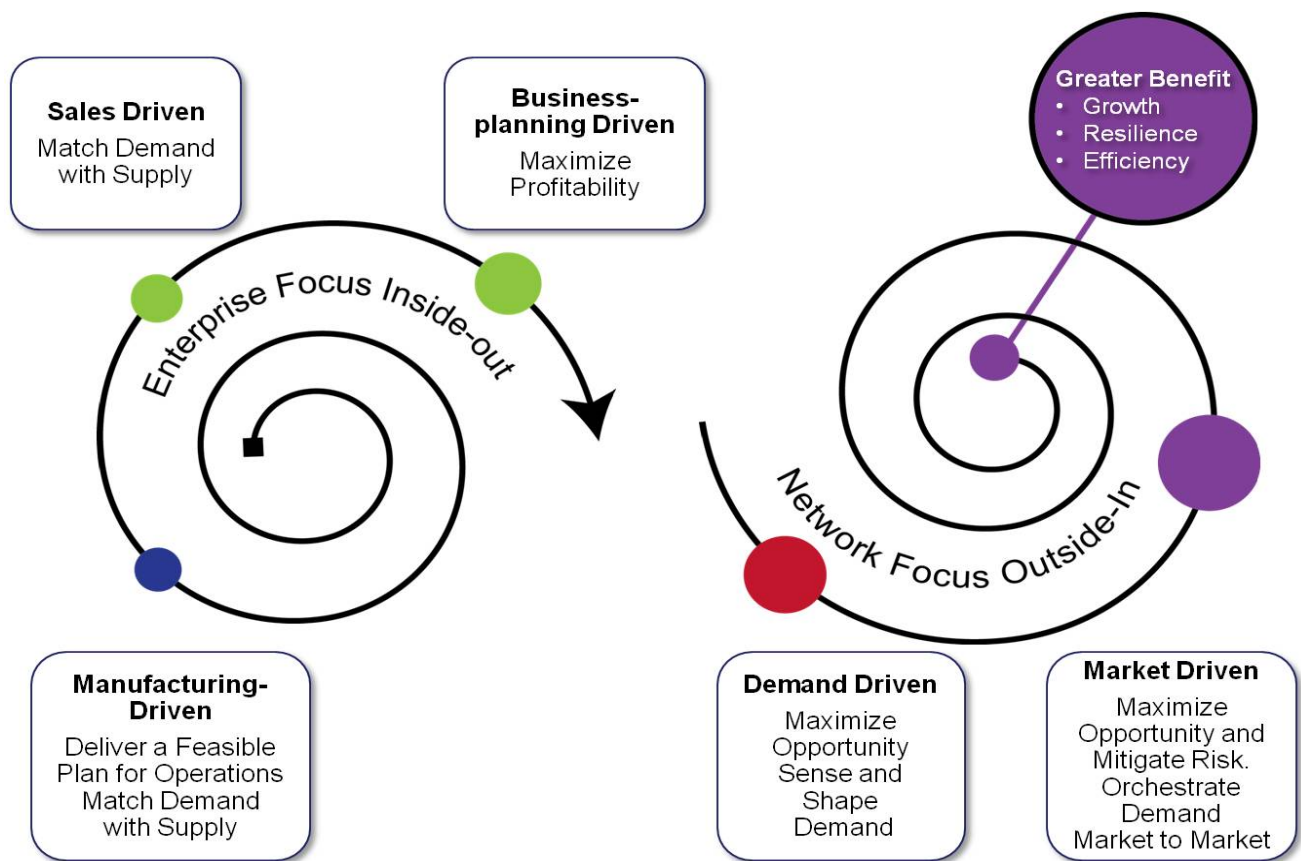
When companies start their journey on S&OP, the first goal is to establish a *“feasible plan.”* At this stage, the process is frequently controlled by manufacturing, and the organization lacks balance. In the next stage, the balance shifts to the sales and marketing organization, and the focus becomes matching demand with supply. This is usually a *“sales-driven”* process that is fraught with bias. In the third stage, the organization focuses on the *“building of the plan of plans.”* This is the market definition of Integrated Business Planning (IBP). It is the ability of the organization to align demand, supply, inventory and financial plans seamlessly against a business strategy. In this stage the focus shifts from *“volume”* to a focus on the *“balance sheet.”* This requires a technology layer to enable demand translation, the modeling of changing product mix, and the visualization of equivalent units. This technology layer then becomes the system of record for the multiple S&OP plans.

However, this is not sufficient to sense and shape a response to adapt to buy- and sell-side market changes. Why? In these first three stages of evolution, the plans are built on enterprise data not market data. In addition, in these first three phases of maturity, the process definition is inside-out (enterprise data used to predict the market shifts); in the latter two stages of S&OP maturity, the model shifts to be outside-in (market data to sense and shape based on market shifts). In these last two stages, market data is used to be better able to sense and adapt to both buy- and sell-side markets. In the last stage or market driven, the horizontal process uses both buy- and sell-side market data to bidirectionally align from market-to-market. As the company shifts from inside-out to outside-in, data models need to be redefined and the technologies re-implemented. They are fundamentally different data models.

One of the issues in driving S&OP excellence is that companies are not deliberate in their statement of goal, the definition of governance, and the alignment of metrics. Each of these stages in S&OP evolution requires a different technology platform, organizational structure and process. It starts with a clear definition of supply chain strategy which is an issue for 85% of companies.

While companies state that they want to improve their S&OP processes and that they want to be agile, they have to define what this means for their company to make it “actionable”. Like the S&OP definition, there are many definitions of the term “agility” in the market. The first step is defining it. The second is tying it to your stage of S&OP maturity to drive improvement.

Fig. 3 Evolution of Supply Chain Processes



Market-driven Value Network: An adaptive network focused on a value-based outcome that senses and translates market changes (buy- and sell-side markets) bidirectionally with near real-time data latency to align sell, deliver, make and sourcing operations.

However, making this change in S&OP maturity sounds easier than it is. It is a multi-year journey and the concept of a market-driven value network is aspirational. In the research for this report, we find that companies that are the most mature in S&OP have had the greatest impact on improving agility.

There is no magic wand. It is hard work. It takes a concerted effort with a focus on supply chain strategy by an enlightened management team. A key element of this strategy and the road map for S&OP maturity should be agility and balance.

Executive alignment and understanding of supply chain is a barrier. As can be seen in figure 4, today, in industry, the largest gap is the executive understanding of supply chain excellence and the knowledge of how to lead the design of S&OP processes. It is the goal of this report to help executives understand how an effective S&OP process can make the supply chain process not only strong, but also improve the balance and agility of supply chain processes.

Fig. 4 Largest Sales and Operations Planning Challenges



Webinar, May 15, 2012
Base = Webinar Attendees (n=28), What is your largest challenge in building an agile Sales and Operations Plan?

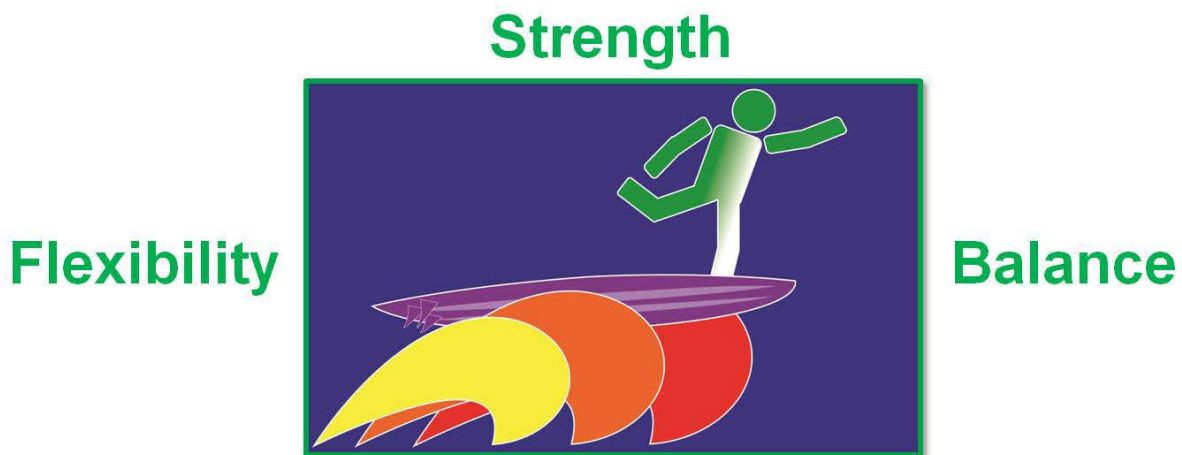
What is Agility? What is Balance?

To perform, an athlete needs strength, balance and agility. Agility is the same for the supply chain. In the face of increasing market volatility and complexity, the organization needs to train like an athlete.

The focus of supply chain projects for the last thirty years has been on improving the “strength” of the supply chain. This has included investments in Enterprise Resource Planning (ERP), Lean/Six Sigma, tight integration of trading partners, and Advanced Planning Systems (APS).

S&OP helps to improve balance and agility. In qualitative interviews, the supply chain professionals often express the need for greater flexibility or agility and the need to gain balance.

An Athlete Needs:



Balance

In the design of an effective S&OP process, balance is easier to accomplish than agility. Balance is the result of strong leadership. Through the understanding of how to make trade-offs, and a clear definition of supply chain strategies, companies can achieve better balance. Even though it is easier to accomplish than agility, 80% of supply chain executives believe that their S&OP processes are out of balance. In a recent webinar with forty supply chain executives, 41% believe that they are too heavily weighted towards operations and 39% believe that they are too heavily weighted towards sales. The organization without a clear supply chain strategy will see-saw back and forth. To gain balance companies need to align reporting structures to a profit center manager and focus on the balance between the “S,” or go-to-market strategies, with the “OP” or the organization’s definition of operational excellence.

Fig. 5 Sales and Operations Planning Balance



Webinar, May 15, 2012
Base = Webinar Attendees (n=41); How balanced is your Sales and Operations Process?

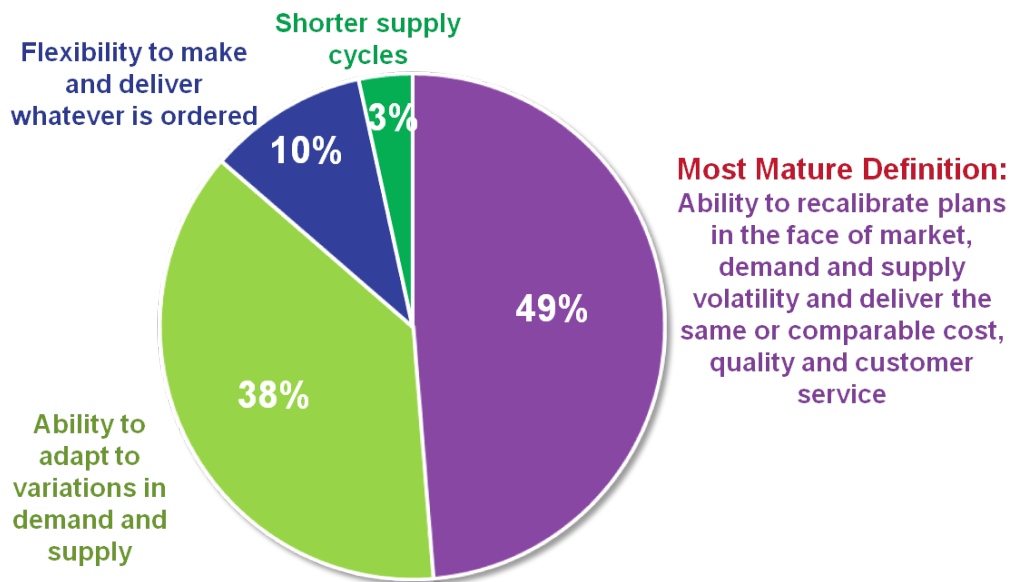
Agility

An effective supply chain is built for purpose. It is designed with the goal in mind. As companies have implemented global systems, improved the cost structures, and implemented lean programs, the supply chain has become less agile. Today, for many, it is brittle. It is stronger in the middle than the ends.

Historically, agility has not been a design element of most corporate strategies. (Achieving agility often requires a cost trade-off.) Companies have been confused believing that the most effective supply chain is the most efficient, many have not valued agility. As a result, in the face of supply and demand volatility, the company is less resilient. The organization has less of an ability to adapt to change and absorb market volatility. In the research for this report, three things quickly became obvious:

Inconsistent Definitions. There is no standard industry definition for agility. While companies frequently use the term, and quickly acknowledge the need, they do not have a clear definition. As a result, the term needs to be defined by each organization. It cannot be assumed. Without it, the organization will thrash about finding it difficult to design the supply chain and drive alignment on agility. In figure 6, we share how 117 supply chain executives recently defined agility. For a market-driven supply chain, the best definition of agility is “the design of the supply chain to have the same cost, quality and customer service given the level of demand and supply volatility.”

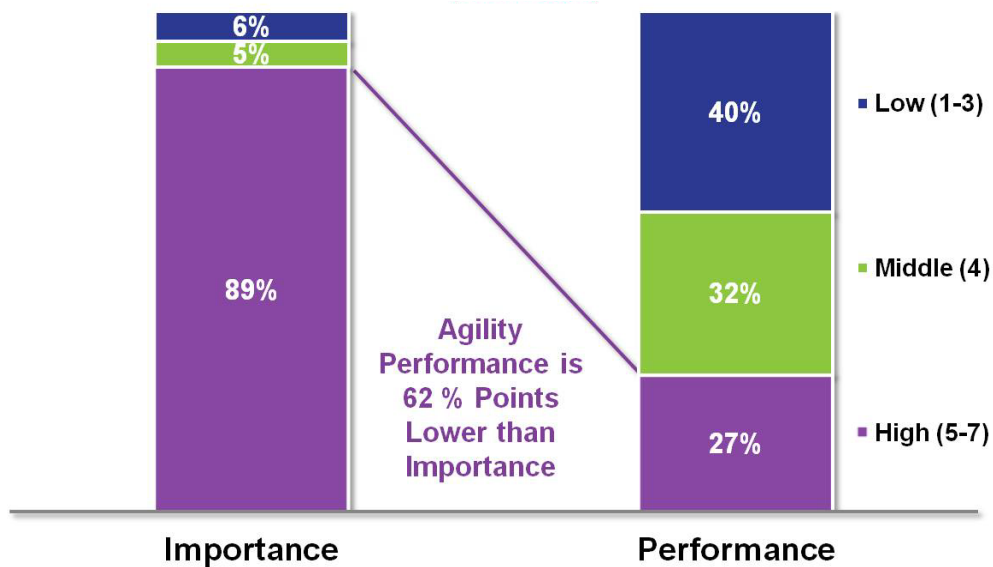
Fig. 6 What is Agility?



Supply Chain Insights, LLC – Agility 2012
 Base: Total Sample (117); Q11. How would you define what it means for your company's supply chain to be "agile"? Please select the one that fits best.

Many companies, early in their understanding of supply chain management, will erroneously define agility as a "shorter cycle time." Speed is important, but only the company can use speed to do the right things faster. All too often, companies will speed up ineffective processes increasing waste and reducing reliability. In designing a supply chain, if given a choice between speed and reliability, choose reliability.

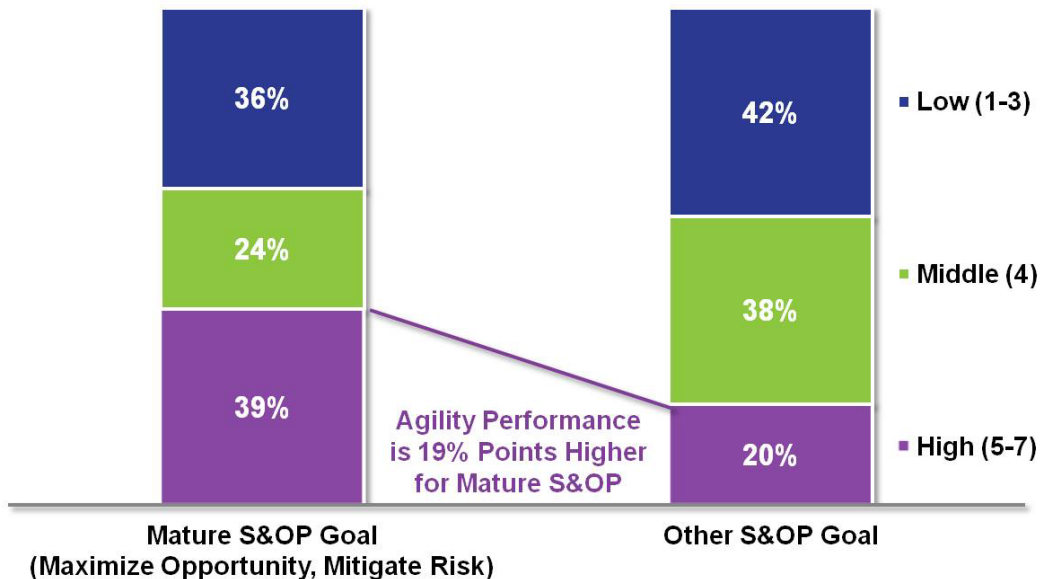
Fig. 7 Supply Chain Agility: Importance versus Actual Performance (7-Point Scale)



Supply Chain Insights, LLC – Agility 2012
 Base: Total Sample (117); Q12. How important is it for your company's supply chain to be "agile" in 2012? Please base your answer on however your company defines agility. SCALE: 1=Not at all important, 7 = Extremely important; Q13. How would you currently rate your company's supply chain in terms of being "agile"? SCALE: 1=Not at all agile, 7 = Extremely agile

It is Growing in Importance. Today, there is a growing gap in agility. In interviews for this report, this gap is frequently cited as an issue by the second generation supply chain pioneer. In figure 7, 89% of companies see agility as important, but only 27% of companies rate themselves as agile. Companies with mature Sales and Operations Planning (S&OP) goals are more likely to rate themselves as agile.

Fig. 8 Supply Chain Agility Performance by Mature vs. Less Mature S&OP Goal (7-Point Scale)

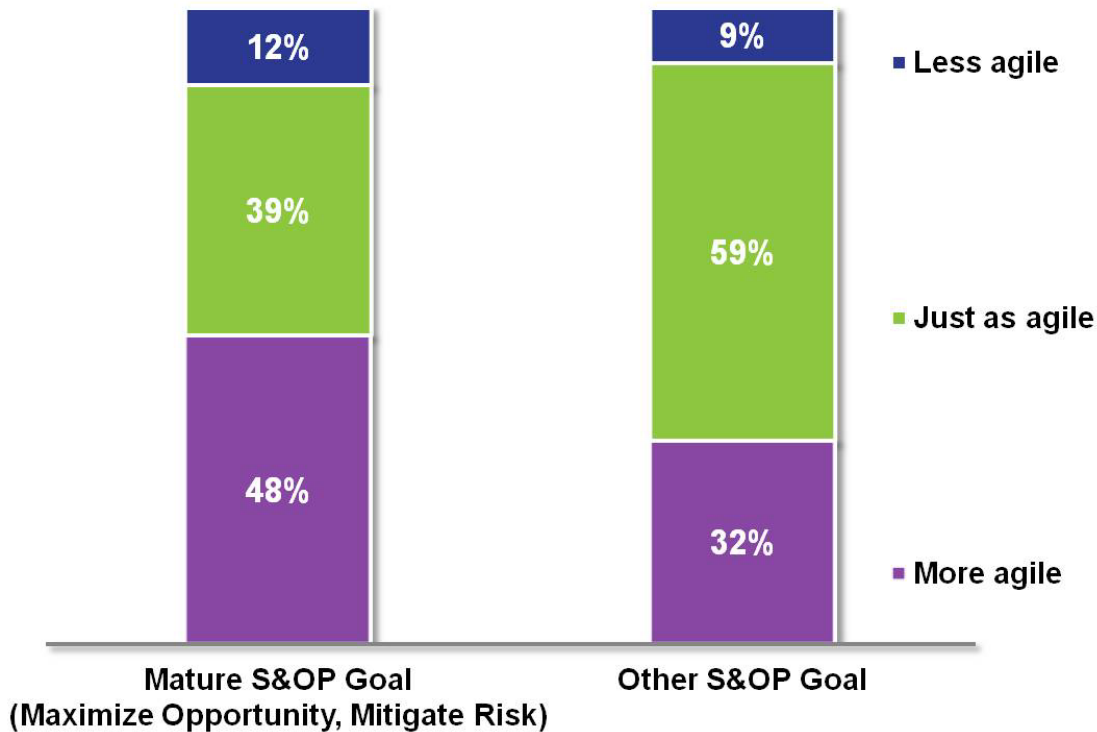


Supply Chain Insights, LLC – Agility 2012
 Base: Mature S&OP Goal (Maximize Opportunity, Mitigate Risk)(33), Other S&OP Goal (69)
 Q13. How would you currently rate your company's supply chain in terms of being "agile"?SCALE: 1=Not at all agile, 7 = Extremely agile

For Many, the Challenge is Growing. Many supply chains today are brittle and fragile. Many of the programs driven by the first generation pioneers—tight integration of the supply chain, lean process improvement programs, eProcurement and electronic bidding—made the supply chain stronger; but, there was an unconscious trade-off of agility.

For companies with more advanced maturity in supply chain management, 48% say that their supply chains are more agile than one year ago, compared to only 32% for those with less mature S&OP goals. The largest contributing factors are strong horizontal processes, the use of predictive analytics and a focus outside-in.

Fig. 9 Supply Agility vs. 1 Year Ago by S&OP Goal



Supply Chain Insights, LLC – Agility 2012
Base: Mature S&OP Goal (Maximize Opportunity, Mitigate Risk) (33), Other S&OP Goal (69)
Q14. How would you compare your supply chain's current agility to 1 year ago? How about compared to 5 years ago?

However, the benefit extends to all companies at all levels of maturity. Over 90% of companies believe that S&OP improves supply chain agility.

Building organizational agility needs to be a conscious choice. Just as an athlete makes a choice to do flexibility exercises, and build agility, the supply chain needs to be designed with the right mix of strength, agility and balance. It is for this reason that S&OP is growing in importance.

No two supply chains are alike, and the average company has not one, but five to seven supply chains. The greater the demand and supply volatility, the more important it is to apply the market-driven definition of agility (the ability to drive the same cost, quality and customer service given the level of supply and demand volatility). To increase agility, consider taking these five actions:

Supply Chain Design: To be more agile, companies should design the supply chain based upon the expected level of demand and supply variability. Since there is an inverse relationship between variability and cost or customer service, leaders use technology to understand what is possible given the trade-offs. These teams then set goals and metrics based on the analysis and understanding of the supply chain potential. This helps to align expectations to reality. Since

a supply chain is a complex system composed of increasingly complex business processes, modeling helps to build a cross-functional understanding of what is possible in the managing of supply chain trade-offs.

Sales and Operations Planning (S&OP) Playbooks: Plan for the unexpected. Focus less on “precise numbers” and more on understanding how the variability of supply and demand signals impact costs, customer service, quality and inventory. Understand the trade-offs and develop playbooks to align the organization for action plans against expected market impacts. In the playbooks, outline what could happen in the plan, and the organizational “audibles” or “actions to take” for market-to-market shifts.

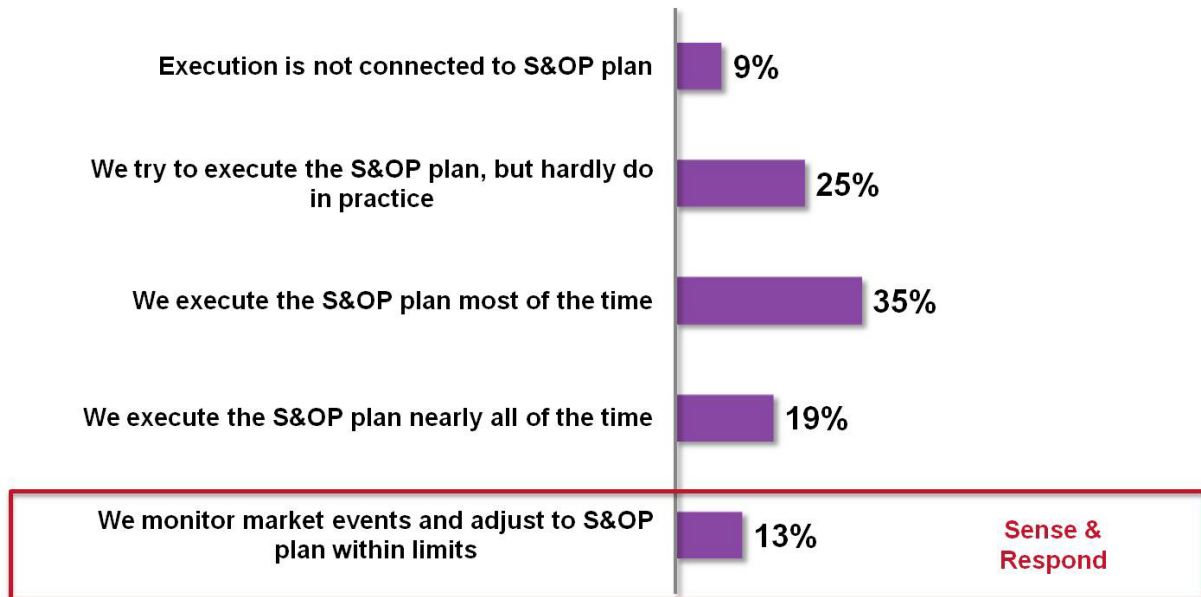
To accomplish this, buy the right technologies. Today, only 8% of companies rate themselves as having technology that easily allows them to do “what-if” analysis on demand and supply variability to build the playbooks. The lack of the right technology to do supply chain “what-if” analysis is a barrier to agility.

Simulations: Train employees to understand how variability decreases supply chain potential, and how little improvements in reliability can add up to great improvements in supply chain effectiveness. This can be simulated to help teams understand the impact (building an event simulator or game environment). While companies have a number of corporate initiatives come and go, a steadfast focus on improving the reliability of operations is the foundation for great results.

Drills. Practice the simulation of supply chain disasters. While the disaster that will strike your supply chain may not be the same one that you train for, the understanding of how to make decisions, and the impact of these decisions in the face of adversity, will be invaluable. Build a cross-functional understanding of constraints, business drivers and market assumptions to help teams better align. A clear understanding of roles and responsibilities is an important component of improving agility and working through volatility.

Tie Planning to Execution: Only 13% of companies rate themselves as being good at connecting S&OP planning to execution. This is an opportunity for all.

Fig. 10 How the S&OP Plan is Executed



Supply Chain Insights, LLC – Agility 2012
Base: Have a S&OP process (102); Q25. After your S&OP plan is generated, how is it executed? Please pick the one that describes it best.

Conclusion

One of the greatest barriers to supply chain excellence is the understanding of the supply chain by the executive team and the alignment of this understanding to supply chain strategy. S&OP is an enabler of business strategy. It aligns functions against a common goal and helps companies to facilitate trade-offs.

To improve business results, companies should consciously design to be sure that the process is balanced and that action is taken to maximize agility. Those that are the most mature in their definition of S&OP see the greatest benefit.

Appendix

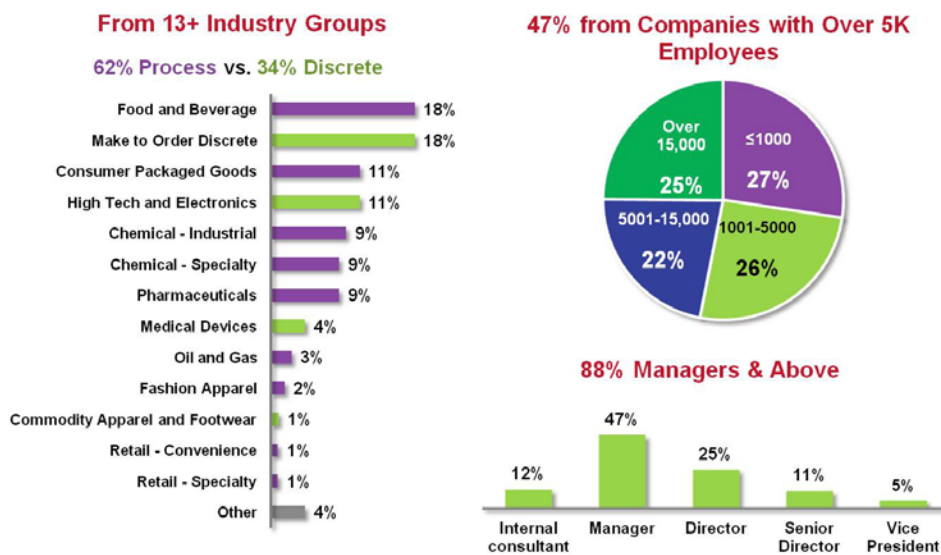
Research for this report was obtained from multiple sources. A quantitative survey of 117 supply chain executives in the period of March 22 to April 9, 2012 formed the backbone of the research. These findings were augmented through qualitative interviews and work with manufacturers on their refinement of S&OP processes. In addition, 40 supply chain executives were asked the questions about S&OP balance and challenges in response to the overall agility survey findings presented in a webinar in May 2012. To help the reader, we list below the demographic information for the companies surveyed as part of the quantitative research.

Over 50 Companies Surveyed*		
Aeryon Labs Inc.	Grupo Campari do Brasil Ltda	Pacific Gas & Electric Company
Alfonzo Rivas & Cia.	Hartzell Propeller	Philips Home Healthcare
Amway	Heidelberger Druckmaschinen AG	Purac RTM
Aperam	Inversiones Mundial S.A.	Saint-Gobain PAM
ASC	Jaguar Land Rover	SandvikSauer-Danfoss
Beiersdorf Hellas	Jay Ushin Ltd	Scapa
Berger Paints India Ltd-British Paints Div	Huber Engineered Materials	Schreder Tov
C&A	Johnson & Johnson	DCRA's Select Classics
Cameron Romania SRL	LEGO Systems	Shell Global
CSC	Linde Gases Ltda.	Springs Window Fashions LLC
Danone Chile	Lupin Pharmaceuticals, Inc.	Suave
Dow Chemical	Mahindra & Mahindra, LTD	Sicie Ltd
Dow Agrosciences	Mansour Group	Telecom New Zealand
Elecon Engineering	Mars Drinks	Therm-O-Disc Inc
FCI	MC Sports	Towers Corporacion
Freescale Semiconductor	Mexichem	VF Corporation
Gay Lea Foods Co-Operative Limited	Momentive	Vincor International Inc
Grundfos Holding A/S	Novartis OTC	VME

Supply Chain Insights, LLC – Agility 2012

*Includes only those who provided their company name (57% of respondents)

Base: Total Sample (117); Q1 - First, what is the name of your company? OPTIONAL, OPEN-ENDED

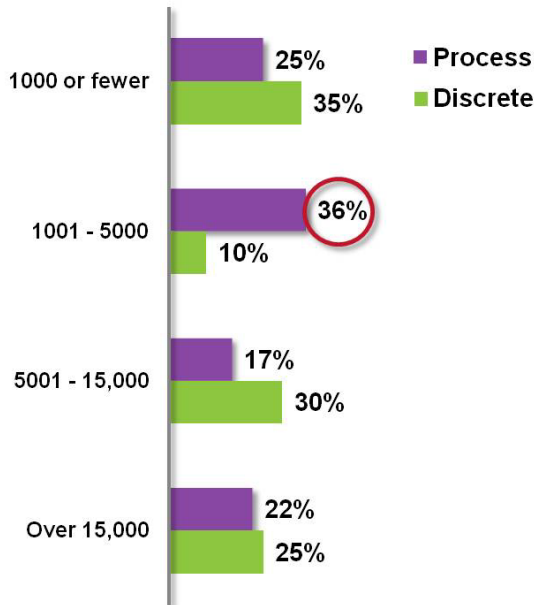


Supply Chain Insights, LLC – Agility 2012

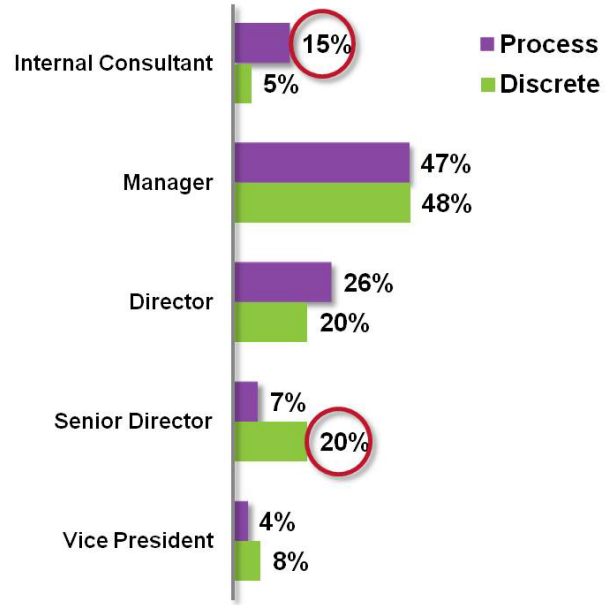
Base: Total Sample (117)

Q2. Which industry grouping best defines your company? Please select the one that best applies.
Q3. What is the size of your company, in terms of number of employees? Your best estimate is fine.
Q4. Which of the following best describes your current position? Please select the one that best applies.

Number of Employees by Industry

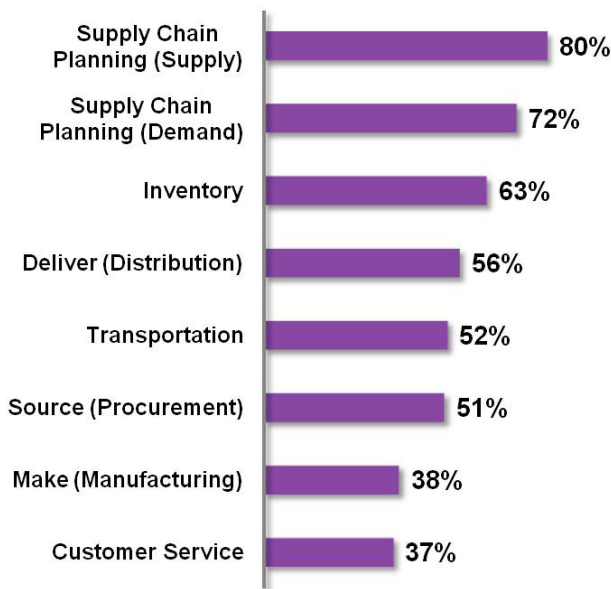


Title by Industry

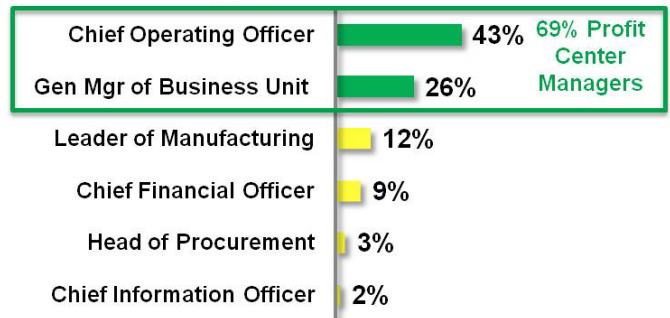


Supply Chain Insights, LLC – Agility 2012
 Base: Process Industry (72), Discrete Industry (40)
 Q3. What is the size of your company, in terms of number of employees? Your best estimate is fine.
 Q4. Which of the following best describes your current position? Please select the one that best applies.

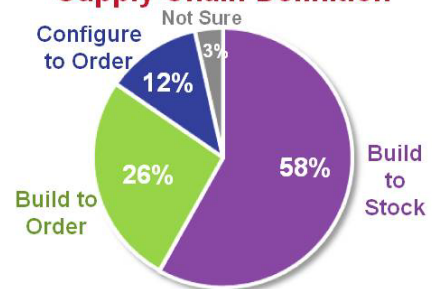
Functions Reporting Through Supply Chain



Supply Chain Leader



Supply Chain Definition



Supply Chain Insights, LLC – Agility 2012
 Base: Total Sample (117); Q5. Please tell us how you define your company's supply chain organization by selecting which function(s) report through the supply chain organization. Please select all that apply. Q7. To whom does your supply chain organization report? Q6. How would you characterize your company's supply chain?

About Supply Chain Insights LLC

Supply Chain Insights LLC (SCI) is a research and advisory firm focused on helping supply chain teams improve value-based outcomes. The offerings include research-based Advisory Services, a Dedicated Supply Chain Community and Web-based Training. Formed in February 2012, the company helps technology providers and users of technologies gain first mover advantage.

About Lora Cecere



Lora Cecere (twitter ID [@Icecere](#)) is the Founder of [Supply Chain Insights LLC](#) and the author of popular enterprise software blog [Supply Chain Shaman](#) currently read by 4500 supply chain professionals. Her book, **Bricks Matter**, publishes in the fall of 2012.

With over eight years as a research analyst with **Altimeter Group, AMR Research, Gartner Group** and now as a Founder of Supply Chain Insights, Lora understands supply chain. She has written over 600 articles on demand-driven value networks and has worked with over 600 companies on their supply chain strategy. Lora is a frequent speaker at over 50 conferences a year on the evolution of supply chain processes and technologies. Her research is designed for the early adopter seeking first mover advantage.