Best Practices for Improving the Governance of Supply Chain Quality

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The governance of quality is broken in many supply chains. Employees, suppliers and customers have different expectations of quality, resulting in subpar outcomes. This research gives CSCOs and quality leaders a path to global integration and governance of quality to drive results beyond compliance.

Key Challenges

- Inconsistent accountability for quality across the supply chain leads to disconnects and missed opportunities for improving products or serving customers.
- Lack of disciplined quality methods and procedures make it difficult to scale quality stewardship across global organizations.
- Disconnects between espoused "cultures of quality" and the actual behaviors, policies and standards create confusion for stakeholders across the supply chain.
- Compliance is frequently misused as a hammer to drive quality improvements or force inflexible approaches to quality, negatively impacting stakeholder motivation and quality performance.

Recommendations

- Move away from decentralized to centralized or center-led management of quality.
- Clearly define accountabilities to globally orchestrate and locally execute the functions and activities for quality, including supplier quality. This will motivate the right behaviors from all stakeholders and limit risk.
- Drive governance of quality by establishing a balanced system that clearly defines standard best practices for procedures, process parameters and performance management expectations.
Introduction

Governance is like a jar full of air — you know something is in there, but because you cannot see it, it is hard to quantify. Like air, the practices of governance are all around us, spanning tactical controls such as budgets and audits to harder to quantify behavioral practices implied by organizational culture. In many cases, we tend to take both good governance and air for granted, until there is a crisis or challenge.

One of the most important applications of governance is in quality management. In a recent study of chief supply chain officers, 1 47% of respondents noted that quality of product supply was a "top priority investment with high expected benefit." This was greater than any other top priority. In contrast, a 2014 study on quality management in supply chain 2 uncovered a fractured approach to quality and a lack of global quality disciplines. Figure 1 illustrates that the primary accountabilities for quality are widespread with very little promotion of a global quality role. While quality is of primary importance, many companies are not yet organized in a way that addresses some of the critical issues.

Figure 1. Accountability for Quality Execution: "Who within your organization has primary accountability for ensuring quality standards are being executed?"

When we looked at global quality organizations, we found a lot of disconnects between the multiple definitions and levels of control around quality. With a lack of discipline around global quality practices, it is nearly impossible to govern, let alone scale, important quality-enabling capabilities and processes in procurement, manufacturing, customer service or product development.
Customers in different parts of the globe being served by different parts of the business may have vastly different quality experiences, leading them to question the overall brand of a company when quality fails.

A lot of this can be linked back to disconnects between espoused quality and the actual quality culture, policies and standards present in supply chain organizations. While leaders may think that one coherent culture of quality exists, different functions and individuals will behave differently. They often get mired in wars against variability to drive cost reductions rather than focus on the integration of quality across the enterprise. The subsequent clashes of culture across product groups and operational functions create confusion of ownership and responsibility for aspects of quality.

Furthermore, when quality is strictly framed around complying with rote checklists, quality becomes a chore rather than an accelerator of employee engagement, creativity and problem solving to achieve better product, market or customer outcomes. For example, quality-based assessment and improvements might yield significant gains in quality as a result of collating data about how the product is being used or feedback from customers. Understanding what governance is can set a supply chain on the right path toward more effective quality management.

In the research note "Creating a Governance Approach for Supply Chain," Gartner defined governance as "an accountability framework for aligning the motivations, decision making and transactions of supply chain with business objectives." In order to "quantify the air in the jar," we outlined four key levers (see Figure 2) for supply chain leaders to use:

Balance the risk profile of supply chain decision making and transactions by:

- Allocating decision rights to clarify authority, roles and accountability across the supply chain.
- Setting parameters within which staff must make decisions to align with the objectives and risk tolerance of the business.

Motivate compliance to requirements by:

- Outlining procedures that clarify the steps, sequencing, timing and participation related to critical decision processes.
- Ensuring performance and adherence to expectations with metrics and incentives that align, inform, motivate and give insight into the progress toward business objectives.
This research outlines in more detail some best practices in applying this governing model to better structure global quality governance.

### Analysis

#### Move Away From Decentralized to Centralized or Center-Led Management of Quality

Quality management is becoming more important to supply chain organization structure. In a study of CSCOs published in 2016, 46% responded that quality is a direct report to the supply chain; 24% added it as a direct report to supply chain within the last three years. Companies that identified their supply chains as growth enablers to the business were more likely to have quality as part of the supply chain than those that identified and branded (internally) their supply chains as cost centers.

In a decentralized model, each business unit owns quality and manages it to its own specifications (see the Acronym Key and Glossary Terms section), linking to the parent organization only where it relates to the management of corporate risk and compliance processes. While this makes it easier for managers to take care of localized quality issues, it results in a lack of cross-organization quality standards and inconsistencies by market. Decentralized management of quality also leads to more
of a focus on operations rather than a customer or market focus for the enterprise. Not surprisingly, the data from our quality study\textsuperscript{2} indicates that, in a decentralized quality structure, manufacturing is seen as the most important function, meaning that manufacturing has the most control over quality. Sourcing and procurement came in second, and a stand-alone quality organization was not even ranked in the top five most important functions.

Why does the consolidation of quality into supply chain matter? Without a center point of governance, quality will stagnate or remain strictly execution focused in your business. Decentralized management of quality promotes everyone to have their own view on what quality looks like and how it should be managed versus quality being a deliberate set of coordinated activities and outcomes. For example, one chemical company producing the same product in multiple plants across the globe found that, while each plant was manufacturing within tolerance, the tolerance was wide enough that the customer was getting a very different product from each plant.

A move to more coordinated effort is required to gain scale and efficiencies in the quality space. This is being done in many organizations by deploying a different organizing construct for quality, moving from decentralized to centralized or center-led quality management.

**Organizations Are Moving to Either a Centralized or Center-Led Model**

One way to improve the governance of quality in the organization is to shift the organizational governance. In the research note "Four Platforms to Focus Supply Chain Organization Design," we outline four basic platforms for organizing, including decentralized, center-led, distributed-matrix and centralized organizations. We find similar models being applied in the governance of global quality. Figure 3 describes the current trends around how quality is being managed in global supply chains.
In a move to center-led quality, supply chains are shifting the balance toward greater coordination of global quality standard best practices, methods and procedures. In center-led organizations, there is a central group developing standards, processes, technology and capability that is used as a platform for quality across the globe, with some customization by market. We often see this model in consumer products (CP) companies, where a global quality function, in collaboration with other internal stakeholders, defines certain standards that are reinforced, managed and implemented within different regions and markets.

One CP producer relies on this approach to ensure product quality and brand integrity by aligning the local, market-level execution of quality with corporate-led analytical programs, product integrity oversight, and global risk and audit teams. These groups drive the common processes for testing critical ingredients and materials used to produce products for the marketplace to ensure product quality and adherence to regulatory and safety requirements. The information collected in the audits is utilized by the field associates to drive corrective actions within markets. Additionally, there is a feedback loop for identifying improvement opportunities and mitigating risk. Region- and market-based teams feed information and input into a central quality organization that analyzes product performance, customer complaints and ongoing external influences (regulatory impacts), and then identifies global risks to the business and brands. They, in turn, work with the quality function to put preventive action plans and adjusted processes in place to address these risks. The result is a closer connection with the customer in each market.
This structure can drive past "compliance as quality" and focus on cross-functional best practices, tools and capabilities shifts toward operational excellence, market leadership and customer experience. While manufacturing remains the key player in delivering product quality, data shows that the stand-alone quality organization now becomes critical to implementing quality standards. Supply chains are implementing center-led models when business units are:

- Diversified across customers and products, but there is an opportunity to develop integration and standards in key areas.
- Regionalized, but there is sameness across product and customers. In this case, the center-led model is looking to synchronize standards across product design, engineering, supply management and manufacturing so that customers get the same product experience regardless of the business unit.

With centralized quality organizations, the core roles and departments driving quality have direct reporting into a center group that is driving the quality agenda for the entire organization as part of the supply chain strategy. This does not mean that everyone sits in one physical location. Rather, it means that quality leaders in different geographical and business unit locations report into the central organization. Figure 4 summarizes the core differences and trade-offs when choosing an organizational model.
One high-tech brand owner centralizes its governance of quality under supply chain leadership. It does this so the complexities of multiple segments, management of partners (OEM, original design manufacturer [ODM], electronics manufacturing services [EMS], third-party logistics [3PL] and aftermarket services), compliance requirements (which can vary by market), and warranty management are done in a consistent fashion. The supply chain organization has responsibility for the operating system of standard best practices and metrics that integrate testing, supplier engagement, cycle times and costs across different functions and tiers. These measures are reviewed on a monthly (at minimum) basis. This drives consistency but also gives the customer reliability, ease of doing business, limited defects in product launch and service, and brand integrity. The centralization of quality has also provided a base platform of activities to build upon as this company transitions from selling product to providing solutions.

This governance alignment allows for improved and quicker synchronizing of quality objectives between the central organization and the field. In this model, you are shifting the decision making for quality strategy, policy and process to a central leader, who then tasks staff to drive the quality agenda into the operations of the business. This model works best when there is relative stability in

### Table: Governing Models of Quality

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Decentralized</th>
<th>Center-Led</th>
<th>Centralized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality functions report to business or operate in isolated silos. No overlaps in supply chain quality.</td>
<td>Small central quality organization with weak dotted lines to businesses. Council-driven quality structure and COEs.</td>
<td>Centralized quality management with solid lines to quality staff in operational roles.</td>
<td></td>
</tr>
<tr>
<td>Role of the Center</td>
<td>None</td>
<td>Guide</td>
<td>Controller</td>
</tr>
<tr>
<td>Quality Operations</td>
<td>Business units</td>
<td>Business units</td>
<td>Shared services, functions</td>
</tr>
<tr>
<td>Quality Guidance</td>
<td>Councils/knowledge sharing</td>
<td>Quality COE</td>
<td>Quality COE, quality functional department</td>
</tr>
<tr>
<td>Strengths</td>
<td>Close to market and customer.</td>
<td>Maintain autonomy while leveraging synergies.</td>
<td>Global focus, leverage investments, authority to drive standards.</td>
</tr>
<tr>
<td>Weaknesses</td>
<td>Redundancy and duplication, overbearing compliance focus.</td>
<td>Lack of goal clarity and reporting lines, limited functions, limited power to enforce standards.</td>
<td>Overly standardized and nonresponsive, distance from the operation.</td>
</tr>
<tr>
<td>Choose When</td>
<td>Each supply chain has objectives and significant differences in channels/customers, products, or markets, and the cost of synergies is greater than the benefits.</td>
<td>Differences in channel/customers, products, or markets, but you are looking to create a moderate level of integration in key areas.</td>
<td>Stability in the market environment and limited need to customize based on channel/customer, product, or market.</td>
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Source: Gartner (February 2016)
the market and there is little need to customize products and services across customers/channels or markets. In this way, quality can be increasingly standardized and scaled across a global platform.

Choose the Governing Model That Fits Your Business

Supply chain quality leaders may have a vision for how governance needs to shift, but that shift must be in sync with the overall governing model of the business and supply chain. For example, in businesses that are decentralized as part of their business model (diverse products and customers), it is not recommended to push a shift to center-led or centralized management of quality. In this case, it makes more sense to develop quality-governing councils that may share best practices, but leave responsibility for execution in each of the business units. Where a supply chain is decentralized due to low maturity, there are often opportunities to shift the mindset and model of the business. However, this is not likely to occur unless the operating model of the rest of supply chain is also headed in that direction or there is another strategic catalyst driving quality to a new mode of organizing. Often, supply chain transformation efforts can be leveraged as opportunities to drive new quality governance and organization practices into the business.

Clearly Define Accountabilities and Linkages Between Global Quality and Line Operations Quality Functions

Quality is an ecosystem of multiple parallel activities, and, like any ecosystem, it must be in balance to be healthy. When there is a heavy-handed approach from the center, standardization can overreach and cause issues or unmet expectations at the execution level. When the execution level is just being responsive to their immediate environment, they are not seeing how their behavior links to larger outcomes the enterprise is trying to achieve around customer, product or market performance.

To achieve this balance, companies deploy multiple approaches to organizing people around quality-focused tasks (see Figure 5). Each of these has a purpose and can be used to achieve specific outcomes in the quality ecosystem:

- **Quality global governing councils** are leadership focused, comprising the leaders of operations and quality from around the enterprise to establish the guiding principles for quality. This includes defining what a "culture of quality" looks like — allocation of decision making, quality policy development, prioritization of investments in quality systems, and aligning metrics and incentives.

- **Quality centers of excellence** (COEs) drive the design and implementation of quality processes, systems and people capabilities across the business.

- **Global functional quality departments** work with the global quality council to implement the standards, focusing on orchestrating and executing on quality procedure, policy and performance across the enterprise.

- **Quality shared-service organizations** consolidate quality activities from multiple regions and functions into a centralized entity and analyze the functional interdependencies, coordinate with
nonsupply chain functions (e.g., regulatory affairs) and develop the standard best practices and metrics.

- **Functional quality departments in business units** manage the execution of quality and focus on compliance and quality standards.

Figure 5. Quality Organization Strategy: "Which of these organizing strategies does your organization use for managing quality across the supply chain today?"

One of the key things to distinguish when setting up a more effective global structure is the difference between groups performing governing activity and the links with those executing them.

Those on the front lines of product development, manufacturing, sourcing and customer service play important roles in executing on the standards of quality. Line managers, manufacturing employees, sourcing professionals and others should know and understand the standards, and should be driving to execute on them, and provide feedback for improvement and refinement opportunities.

Another group of roles focuses on ensuring those standards are being applied. This activity includes communicating the standards as well as making sure they are being adhered to. Operational VPs and business unit leaders are critical here, especially as it relates to focusing on customer experience. Also important here are global quality shared services organizations and regional quality shared services organizations.
Developing the standard best practices for quality is the core role of quality governing councils as well as quality COEs. While the governing council is focused on more strategic issues around standards, the COE is focused on how to adapt those standards from a process, systems and capability perspective.

The key is to understand the many players in the quality ecosystem within your organization and define the roles, responsibilities and accountabilities for each of those major players. Some organizations use high-level responsible, accountable, consulted and informed (RACI) diagrams to frame this discussion. There is not one quality organizational solution, but rather a mix of positions and teams with each playing their role and keenly aware of the roles that others play.

Drive Governance of Quality by Setting a Balanced Global Platform That Includes Clear Procedures, Parameters and Performance Management Expectations

Once roles and responsibilities are assigned, there needs to be a foundation for decision making around quality in the business. The role of the governing groups in the quality ecosystem is to define the answers to several questions:

- How does everyone stay connected?
- How does everyone know what decisions to make?
- How does everyone know what a good decision is relating to quality?
- How does everyone know the impact of their decision on the quality ecosystem?
- What is linking us together?
- What is motivating us to drive toward better quality as an entire supply chain rather than just as individual functions?

Governing groups cannot control every decision and task related to quality, but they can develop an ecosystem in which the players understand how to make good decisions and execute on tasks. There are three mechanisms through which they do this — quality procedures, quality parameters and quality performance.

**Quality Procedures**

Procedures are standard steps that employees must adhere to in the pursuit of quality. Examples include quality design, quality review and quality audit procedures that are replicated across the enterprise. These procedures are seen in product design, materials specifications, materials sourcing and product manufacturing among others. As products and services increase in complexity, specification requirements, risk or the need for regulatory compliance, the procedures related to them will increase and become more stringent.

For example, there is a litany of procedures that NASA goes through before the launch of a rocket into space. Each item on the list must be checked and double-checked, because a failure in any procedure could represent a life-threatening quality issue.
Quality Parameters

Parameters are the filters that employees use as they are making decisions related to quality. They include tangible parameters, like design specs and tolerances for manufacturing a physical product, as well as less tangible aspects, such as risk sensitivity, ethics and culture. Tangible parameters such as design tolerance/requirements are easier to codify, communicate and measure, and require tangible ways in which they can be synchronized within the business. Less tangible parameters require clear articulation and training throughout the business, and must be in sync with each other and the tangible aspects of quality.

For example, supermarket companies may have one standard view on produce quality; however, the way it is executed at the store level could be vastly different if employees stocking the produce shelves are not educated on the quality standard. Further, the cultural aspects of quality must be embedded in employees, focusing them on the brand importance of having only fresh produce on the shelf. It may be easier for the store to trade product quality for reducing financial risk when it comes to throwing away (and losing money on) product that is marginally below the quality standard.

Quality Performance

Quality performance mechanisms are used to motivate employees to adhere to the decisions, procedures and parameters outlined in the rest of the governing model. This motivation comes in the form of metrics, audits and incentives that not only measure performance against the quality standard, but that also have behavioral implications (good and bad). Performance observation and measurement coupled with consequences drives employees to perform activities in the manner outlined by the company. These performance outcomes serve several purposes — to measure the state of quality, understand the effectiveness of governing processes for ongoing improvement and ensure that employees are following important guidelines so as to avoid negative brand/customer outcomes or risk and compliance issues. Without observation, you do not know how you are performing, but, more importantly, employees may not perceive that the standards you are setting are important.

One global industrial company summarized some of these governance components in terms of "leadership alignment" around quality. They outlined three focuses for quality, along with their associated behaviors:

**Quality culture is seen as a critical core value:**
- Drive a zero-defect mentality into everything we do.
- Leaders are accountable for quality.

**Quality is integrated into business decisions:**
- All decisions reflect a balanced, rational approach to quality, cost and delivery.
- Quality is prioritized at every step of the product development and supply processes.
Everyone is empowered to resolve quality issues:

- Quality is everyone’s responsibility and priority.
- Quality issues and progress toward resolution are communicated openly with all employees.

Each of these is important to governing quality in the organization, and to remapping how employees make trade-off decisions around quality. With clearly articulated procedures, parameters and performance, employees have a greater sense for the importance of quality and feel empowered to make decisions because they have a background in what is important to the company.

The governance of quality in global organizations is complex and evolving. We see evidence of best-practice organizations moving toward increasingly controlled and centralized organizations, and well-structured governance of quality that help balance focus on products, markets and operations across the enterprise.

Acronym Key and Glossary Terms

| Specifications | Specifications and standards represent standard operating procedures that govern, support and enforce conformity to quality standards ranging from internally defined business rules to International Organization for Standardization (ISO) standards, government mandated (such as by the Dodd-Frank Act, and Food and Drug Administration [FDA] regulated), or other industry-specific and customer-mandated quality specifications and standards. |

Gartner Recommended Reading

Some documents may not be available as part of your current Gartner subscription.

"Supply Chain Is Missing the Mark on Quality"
"Creating a Governance Approach for Supply Chain"
"Design Four Layers Into Your Organization Structure for a More Effective Supply Chain"
"Four Platforms to Focus Supply Chain Organization Design"

Evidence

1 2016 Chief Supply Chain Officer study

2 2014 Supply Chain Quality study — Gartner conducted a series of survey-based interviews to gain insight into how manufacturing-based companies are approaching quality today and through year-end 2017. From 20 August 2014 through 29 September 2014, 184 respondents from manufacturing companies with $250 million or more in revenue were interviewed using an online survey. Approximately half the respondents were from the U.S. and half were from Western Europe (France,
Germany or the U.K.). Forty percent of the respondents had specific quality management roles, with the remainder in senior leadership roles with strong knowledge of their organization’s quality management initiatives:

- Manufacturing operations, 21%
- Customer service management, 13%
- Supply chain logistics, 9%
- Supply chain strategy, 7%
- Supply chain planning, 7%
- Supply chain sourcing, 3%

Participants were presented with the following definition of quality: "The delivery of profitable value throughout the entire life cycle of the customer experience through adherence to standards and specifications, either through product or service."