

Operations Practice

How great supply-chain organizations work

When redesigning a supply-chain organization, it's intuitive to look to successful companies' design choices. But our research finds that other factors correlate better to bottom-line performance.

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How do decisions about the design of supply-chain organizations affect the overall performance of a business? We recently analyzed the supply-chain organizations of more than 50 companies in a wide range of industries in Europe, Asia, and the Americas (see sidebar, “Note on methodology”). We asked about strategic priorities, organizational structures, management practices, and work culture in their global supply chains, aiming to understand choices that correlate with companies’ EBITDA performance. What we found may be surprising—and a window into the fabric of successful supply-chain organizations.

Optimal organizational design is a recurrent debate. Supply-chain executives often think about organizational changes in one of three situations: when the structure of the business changes, for example due to mergers or acquisitions; when changes in operations require it, such as the digitization of processes, or the reconfiguration of the supply network; or when leaders notice signs of ineffectiveness, such as new-product launches that take too long to scale, or decisions made in cross-functional forums that fail to be executed effectively on the ground.

Redesigns of supply-chain organizations typically start with a benchmark of peers’ organizational

choices, followed by an attempt to replicate what seemed to work well. But design choices don’t work miracles in a vacuum. Our research found no correlation between supply-chain organizational archetypes and companies’ bottom-line performance. Whether organized by region or by business unit, or predominantly centralized; whether integrating processes from planning through sourcing and on to making and delivering—or integrating only portions of these steps—organizational design did not affect the likelihood of a company achieving better EBITDA performance than peers in any sector.

Our research instead found a host of other organizational mechanisms that work alongside structure to determine success. These include the quality of end-to-end coordination, harmonization, and clarity of decision rights; a cross-functional performance system; and employee professional support through social cohesion, mobility, and capability development.

Design choices don’t work miracles in a vacuum

Organization design is not just boxes and lines. The supply-chain function’s organizational design interacts with its assets, technology, processes,

Note on methodology

We conducted research on supply-chain organizations from November 2019 to February 2020, through standardized survey and interviews. The research involved 54 companies from five broad industry groups: advanced industries, chemicals, consumer goods, high tech, and life sciences.

We identified companies with superior EBITDA results among their industry peers. We observed that first-quartile performers gave consistently high ratings to a number of organizational factors (described as statements of effectiveness). We tested the correlation between quartile ranks and these factors, using Spearman rank correlation, obtaining a coefficient ρ of 0.83.

and people to make strategy happen. When parts of this system are not aligned, execution can be nearly impossible.

Take the example of a consumer-goods manufacturer with a fundamentally decentralized supply-chain organization. Planning and delivery functions in each product-based business unit had evolved through acquisitions that were never truly integrated. Yet the supply-chain function thrived, with competitive service levels and decent margins. Nevertheless, in an effort to improve overall organizational and cost efficiency, the company launched a program to centralize its supply chain, following industry trends to create a cross-business-unit, corporate function.

Other elements of the organization were not well prepared for the change. Processes had not been fully streamlined and IT infrastructure was not uniform across business units. The company's culture, biased towards execution and quick service, resisted the change, and employees became demotivated when planning processes appeared too bureaucratic. As a result, business started to suffer.

The company therefore took a step back to assess the situation. It relaunched a full transformation and change program, designing a new blueprint for its overall supply chain while protecting business units' independence in execution.

A degree of centralization has become an accepted practice in supply-chain organization design. Across sectors, the majority of companies at least centralize the strategic supply-chain function, so that ownership and improvement of selected processes are orchestrated across geographies while local units maintain control of execution (Exhibit 1). Centralization typically works well for functions that improve, standardize, or manage constrained resources across units: for example, supply-chain process design and compliance oversight, master-data management across subfunctions, or ring-fenced analytics units that drive analytics projects across the end-to-end supply chain.

Centralized operational execution has been less

popular. Shared-services centers have helped organizations improve efficiency by increasing spans of control and deepening pools of specialized talent, particularly in functions such as master-data management, logistics and trade operations, and inventory analytics. Such centralization in global or regional structures has the benefit of economies of scale and skill, but making them work requires operational integration with business-specific (local) people and processes. In turn, this requires harmonized processes and structural consistency across business units. Otherwise, the centralized operating structures have to deal with variability across a company's many businesses and geographical markets, which hampers collaboration and erodes responsiveness.

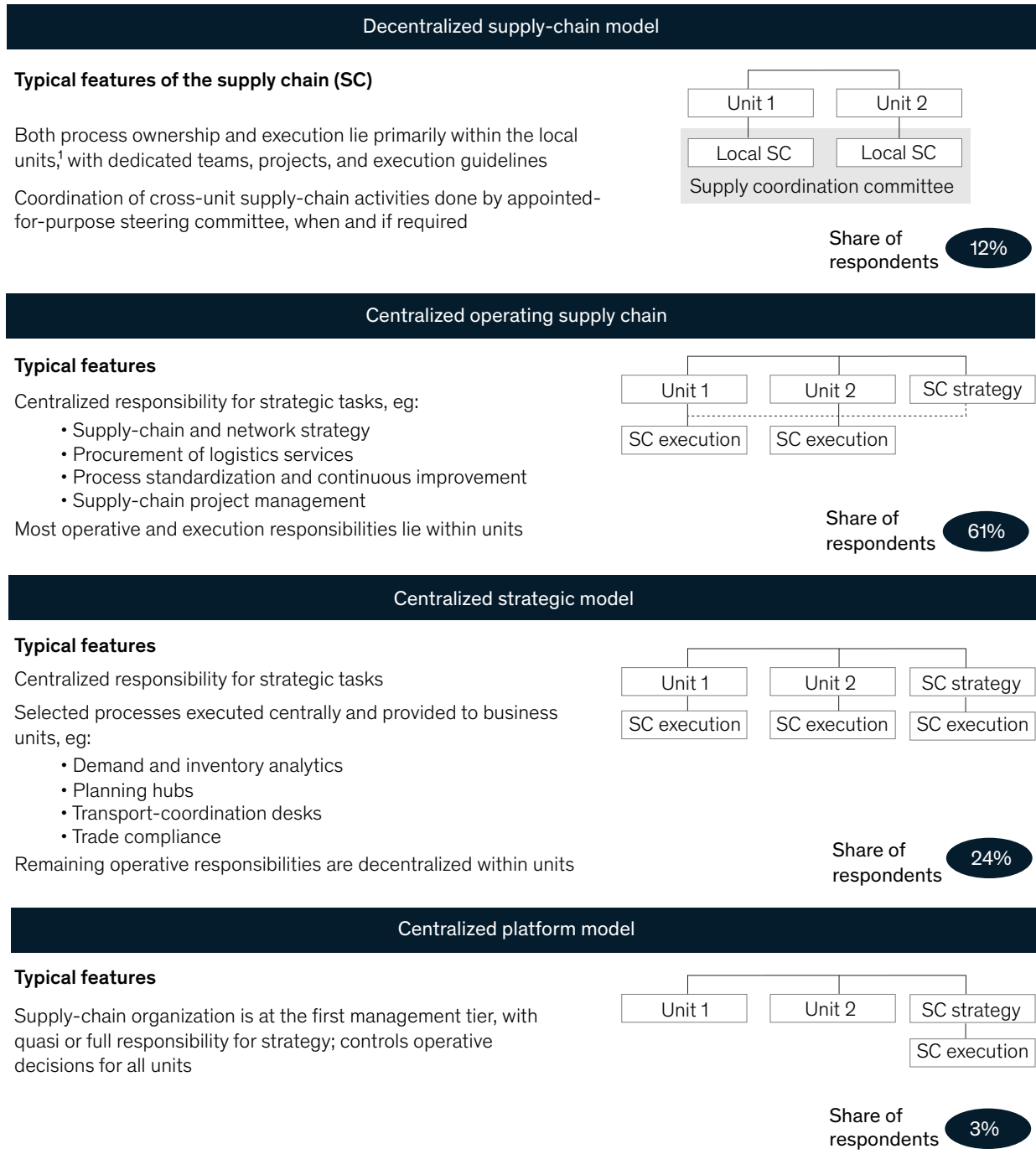
Some companies have never designed a consistent supply-chain organization. A single function can report to different parent functions, and different points within those functions across geographies or business units. As such, the processes can be executed differently, generating confusion and slowing responses to urgent matters. One example is demand planning. In almost one in three companies, demand planning is not systematically organized, reporting to supply-chain leaders in some geographies and to sales or business leads in others. In about one in ten companies, the same is true of order management and logistics. In global firms with inter-regional business, such internal complexity hinders sorely needed cross-business execution.

Six success drivers every organization can implement

Our research revealed six EBITDA-correlated organizational factors high-performing companies use to break silos and improve cross-functional supply-chain performance (Exhibits 2 and 3).

Exhibit 1

Most companies operate in the middle of the centralization spectrum, with very few on the extremes.



¹"Units" refers more generally to sites, regions, products, brands, or combinations thereof; conglomerates of different business units were excluded from the survey.
 Source: McKinsey global survey on supply-chain organizations, 2020

Our research has identified 6 EBITDA-correlated markers of great supply-chain teams.

Examples of practices found in high-performing organizations



End-to-end (E2E) coordination

Integrative roles and E2E planning processes, for example:

- Business process owners, eg, orchestrators of integrated business planning
- E2E value-stream planners, eg, bridging highly-specialized functional verticals
- E2E segment planners, eg, replacing traditional demand and supply planners



Decision rights

Harmonized processes, with strict standards and segment-specific differentiation as needed

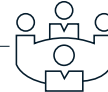
- [+] Organizational simplification, with standard roles and job titles
- [+] IT-enabled workflows based on formalized process maps



Performance metrics

Consistent performance-management system across geographies and business units

- [+] Shared incentives for collaborative functions, eg, sales and supply chain
- [+] Quarterly reviews, with individual and team consequences as part of evaluations



Social cohesion

Team co-location, or

Investment in periodic team events, knowledge-sharing, and related initiatives



Career mobility

Fluid roles and assignments in supply chain, managed through corporate HR team

- [+] Cross-functional job rotations and mentorship programs



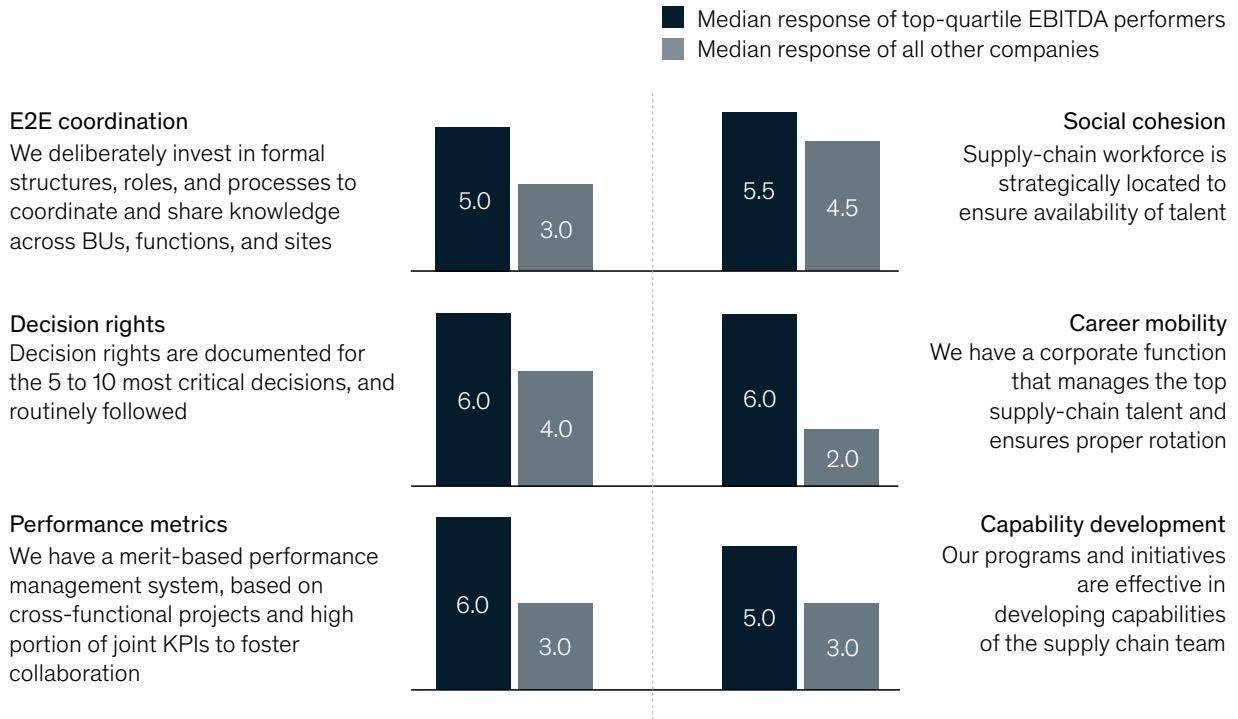
Capability growth

Internal capability-development programs, linking learning to business initiatives

Source: McKinsey global survey on supply-chain organizations, 2020

For each marker of great supply-chain teams, certain differentiators stood out.

Responses on scale of 1 (completely disagree) to 7 (completely agree)



Source: McKinsey global survey on supply-chain organizations, 2020

Integrative roles to drive end-to-end coordination

High-performing supply chains invest in formal roles to coordinate planning along the end-to-end value chain across business units, functions, and sites. One-fifth of organizations tell us they have acute struggles with silos and difficulty in cross-business execution. Even companies in which “supply chain” covers the entire plan-source-make-deliver system don’t solve the coordination issue through the reporting structure alone. They can still be hobbled by a range of factors, including competing incentives, gaps in capabilities, and the sheer effort required to pull data together from different systems.

Leading companies are overcoming these barriers with three specific roles. One is the business process owner, who deals with continuous

analysis and improvement of performance, and orchestrates common process interfaces. An example is the integrated business planning lead, a role responsible for orchestrating midterm planning across functions, regions, and business units. Where it exists, this role operates mostly at global, regional, or business unit level, where the demand rollup and supply reconciliation takes place within the supply network. This role underscores the importance of harmonization and standardization in process preparation, orchestration, and performance management, as it gets the conditions right for the supply chain to fulfill customer orders in the future. In the 65 percent of companies where this role currently exists, its success in coordinating end-to-end planning is linked to the existence of the other five organizational mechanisms discussed below.

The second type of role is that of end-to-end value-stream managers, observed in companies that are organized in highly specialized functional verticals and that promote efficient process management. Planners' high specialization and mastery of functional tasks come at the expense of end-to-end process ownership. Value-stream managers are responsible for bridging collaboration and trade-off execution.

Take the example of a pharmaceutical company, which instituted this role to bridge islands of functional excellence across product groups in demand planning, supply planning, and production planning. The new role, accountable for end-to-end key performance indicators (KPIs) and targets (such as inventory days on hand, fulfillment lead times, on-time-in-full service levels), combines cross-functional team management around each value stream. Value-stream managers configure decoupling points for each product group along the multiechelon supply chain, giving guidance and consistency to decision-making across planning processes, and connecting to the commercial organization. They also manage exceptions, generating and analyzing scenarios for optimal decision-making across the different processes that operate in that value stream.

A third type of integrator role is execution-focused, with end-to-end planners dedicated to specific supply-chain segments. These roles, often co-located and supported by a high degree of process automation, operate as a single point of contact between commercial and supply units, and allow execution of segmented strategies by coordinating order fulfillment from start to finish. Such roles replace the traditional functional planners that focus separately on demand and supply, and can help streamline operations, improve visibility and responsiveness, and increase service levels.

Formal documentation of critical processes and decision rights

Companies rarely document their critical processes and decision rights. They assume employees have clarity over end-to-end process accountability, but they rely on ad hoc delegation and self-management to execute.

In many industries, new-product introductions and order fulfillment are critical value-creating processes. They are highly cross-functional, and suffer from the disconnects and misalignment created by functional silos. To complicate matters, parts of these processes are often done in different ways in different units—an inconsistency that creates confusion, slows responsiveness and increases error rates.

Process harmonization—with strict standards where feasible and allowable degrees of differentiation where required by specific supply-chain segments—can go a long way to creating a baseline understanding on who does what, so that cross-functional and cross-unit coordination becomes easier. Process harmonization also allows organizational simplification through standard roles and job titles, which further contributes to organizational clarity. Finally, implementing those process maps into formal IT-enabled workflows can embed the mechanics of collaboration into day-to-day processes, while digitization also speeds up the process as a whole.

Aligned performance systems

In companies where there is variety in structures and process ownership, performance management also tends to have its own flavor by unit, geography, or site. Each can develop its own metrics in isolation from the others, despite working towards the same end. This reinforces silos and their associated problems.

Facing this issue, one consumer-goods company began to revise its performance-management system by aligning KPI definitions across all of its units. Although targets would still be differentiated by market, it designed a system in which the most important metrics were owned by collaborating functions. Initially, for example, the sales force was measured only by top-line metrics, which encouraged inflated sales projections. Supply-chain employees were measured on inventory and write-offs, which led them to reduce stock on hand whenever possible. The result was frequent stock-outs and lost sales. The company decided to introduce shared incentives—forecast accuracy, on-time-in-full deliveries, and sales growth—among the sales and supply-chain functions, so that both

had a stake in the outcome of the business. It reinforced the incentives with clear targets and performance reviews every quarter, while individual and team outcomes were included in performance evaluations.

Social cohesion

Talent availability is a main driver for the location of supply-chain roles, but talent needs nurturing. With co-location, team bonding increases performance. When not co-located, high-performing teams still meet periodically, which facilitates connection and promotes mutual support on the job. With remote-work settings amplifying the ability of companies to recruit talent with fewer location constraints, the increased challenge of social cohesion must be met.

Career mobility

Another characteristic of the supply chains of high-performing companies has been fluid roles and assignments. This assumes that a corporate HR function manages career paths for supply-chain talent, with cross-functional job rotations and mentorship programs that allow professionals to develop business leadership skills that improve supply-chain performance over time. Leading supply-chain companies regularly rotate their supply-chain managers from and to other roles, such as production or sales-management positions. Such mobility programs can also promote social cohesion, along with understanding and respect for the supply-chain management profession in the larger organization.

Capability development

Executives have known for some time that nearly 70 percent of all transformation programs fail, and a main reason is that employees do not have the necessary skills and capabilities to support the transformation program. It therefore comes as no surprise that high-performing companies invest time and resources into building skills internally.

This need will become more acute. According to McKinsey Global Institute research, more than half of today's tasks could be automated by 2055, resulting in process transformations and the

implicit need to reskill and upskill workers. How ready are organizations? While most report having a corporate capability-building academy, and despite the fact that 30 percent of those now also include new data and analytics programs, only one in 20 respondents said they believe that those programs effectively build the skills needed to deliver on strategic aspirations. The root cause of this could be the fact that only 6 percent of companies have a formal perspective on their organizations' strategically important skills and competencies.

The most effective capability-building programs we have seen develop an integrated set of functional, technical, and leadership skills, linking learning to existing business initiatives and capability profiles. For example, the most frequently-implemented supply-chain transformation initiatives involve advanced analytics—ranging from network modelling and risk analytics to planning optimization and integrated decision-making. Traditional supply-chain skills involving network design and optimization, demand and supply planning, and inventory management are all needed to drive operating performance impact from such initiatives. In addition, a high-performing team will also be able to operate with a strategic orientation, recognize and reduce bias in a data set, validate the outputs of data-based models, manage cross-functional teams and motivate colleagues to bring their best at work.

To illustrate this with an example, consider the case of a North American industrial company. The collective functional skills of its supply-chain organization ranked in the top quartile of its region and sector. Its performance, however, was lagging in both cost and service levels. An internal qualitative diagnostic revealed that the organization had long been center-led and focused on manufacturing-cost optimization. As a result, employees were not used to thinking about end-to-end trade-offs, and there was little collaboration between supply-chain functions or with the commercial side of the company.

Senior leadership recognized that building well-rounded profiles would be critical for tomorrow's supply chain, where calling the right trade-offs is the essential role of the supply-chain professional. That required a comprehensive overhaul of skills and culture, with change interventions aimed at communicating and reinforcing the benefits of true end-to-end management at every level within the organization.

Building your own high-performance supply-chain team

One major stumbling block faced by many organizations wanting to improve their effectiveness is knowing where to start. Benchmarking your organization against industry peers isn't the whole answer, but many organizations find it useful to begin with rapid, fact-based assessment of their current processes, capabilities, and structures,

comparing them to the approaches adopted by the highest performing organizations, and checking their alignment with the company's overall strategic intent.

Where the assessment indicates opportunities to improve, it is time to adopt an agile mindset. Companies do this by designing new structures, roles, and processes to create a "minimum viable product" version of the new supply-chain organization—then testing and refining their new supply-chain operating models in an iterative way. This approach helps companies spot the issues outlined in this article, from misaligned incentives to capability gaps, and take steps to address them as they scale up the supply-chain transformation. Above all, it gives supply-chain personnel across the organization a part in shaping their own future roles, helping build the sense of ownership and accountability that can be decisive for success.

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