

Missed Opportunities

Four often hidden truths
in the Service Supply Chain.

WHITE PAPER

Executive Summary

For many organizations, the service supply chain has operated in the shadow of the forward supply chain. Leaders have invested heavily in production planning, procurement, manufacturing efficiency, logistics, and sales execution, while the service supply chain has too often been treated as a necessary support function: important, operationally demanding, but not always understood as a strategic source of enterprise value.

That view is changing. Service Council research says that 43% of service executives expect the strategic role of the service supply chain to increase in 2026.

As manufacturers, technology providers, medical device and industrial equipment companies, and other complex service organizations seek new sources of profitable growth, the economics of the aftermarket and service business have become impossible to ignore. Service revenue is often more financially attractive than new product revenue. Service margins are frequently higher than new equipment or product margins; 2 in 3 respondents to Service Council's State of the Service Supply Chain survey say that profit margin from parts is higher than 40%. Service performance directly influences customer retention, brand trust, renewal rates, and future growth. And while customers increasingly expect uptime, responsiveness, and outcome-based commitments, Service Council reports that less than 1 in 3 service supply chain leaders achieved their annual target for 'First-Time-Fix Misses due to Service Parts'. The ability to deliver service reliably has become a powerful source of differentiation.

Yet the service supply chain remains one of the most misunderstood and under-optimized areas of the enterprise. Its complexity is hidden beneath service commitments, inventory decisions, field execution challenges, customer escalations, and daily operational firefighting. The visible symptom may be a delayed repair, an expedited shipment, a missed service-level agreement, or excess inventory. But the deeper issue is often structural: service supply chains are being asked to deliver strategic outcomes using operating models, processes, and technologies that were not designed for the unique realities of service.

This whitepaper explores four often hidden truths of the service supply chain. Together, they explain why service supply chain performance matters, why traditional approaches fall short, and why the future will be defined by intelligent, closed-loop planning and execution.

Service Council research says that **43%** of service executives expect the strategic role of the service supply chain to increase in 2026.

Hidden Truth | 01

Tactical Afterthought vs. Strategic Advantage

Core Idea

The service supply chain is a major profit pool, but it is still too often managed like a cost center.

For many manufacturers and service organizations, the aftermarket and service business is not just a support function. It is often one of the most profitable, resilient, and strategically valuable parts of the organization. Yet the planning, inventory, and execution processes behind it are often underinvested in compared with product development, manufacturing, or front-end sales.

Diving Deeper

The service supply chain sits at the intersection of customer retention, recurring revenue, margin expansion, and brand trust. When a product is sold, the customer relationship does not end. In many cases, that is when the highest-value economic relationship begins. Installed base service, spare parts, upgrades, repairs, warranty, and uptime commitments can generate long-term cash flows that are less cyclical than new product sales.

The hidden truth is that companies often underestimate this value because they see parts inventory, logistics, planning, and service fulfillment as “costs to manage” rather than “value pools to optimize.” That framing leads to underinvestment, fragmented systems, and reactive decision-making. The result is excess inventory in some locations, shortages in others, missed service revenue, unnecessary expedite costs, and avoidable customer dissatisfaction.

The Proof

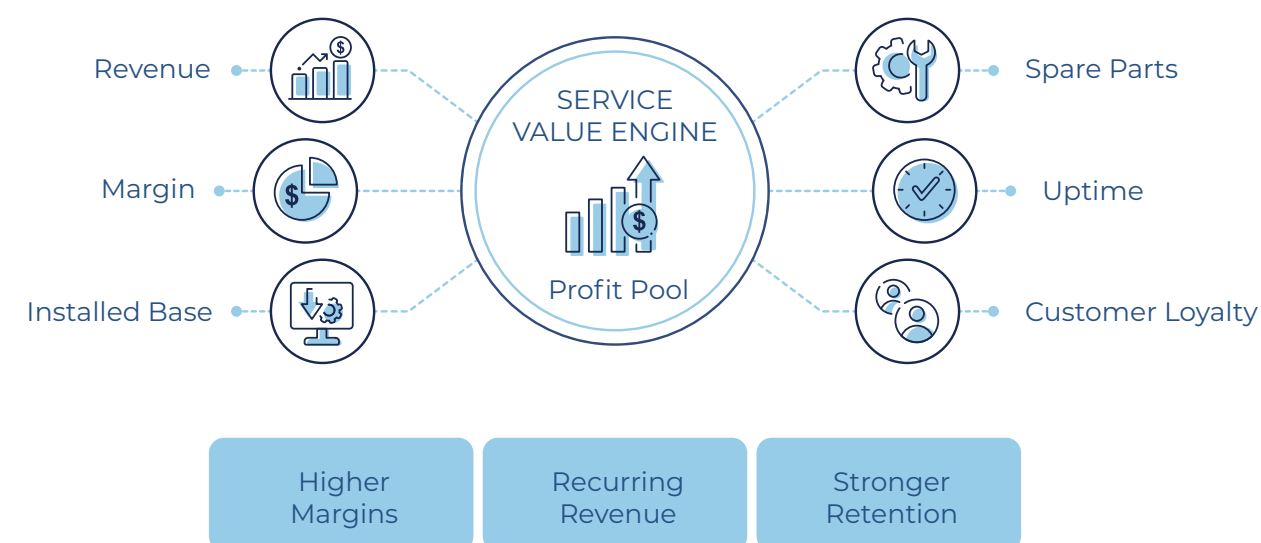
McKinsey reports that aftermarket service margins are “almost always” at least double new-unit margins and can reach up to ten times higher for aggressive aftermarket models. [AH2.1] McKinsey also estimates that industrial companies can increase services revenue by 30% to 60% within three to five years by improving their aftermarket approach. Deloitte similarly reports that aftermarket operating margins globally are about 2.5 times those of new equipment sales, and that many manufacturers generate 40% to 50% of overall profits from services. Service Council reports that those leaders who expect the service supply chain to play a more strategic role, also identify with ‘Growth’ as their fundamental mandate six times more often than ‘Efficiency’. Moreover, 4 in 5 said that their targets for ‘Revenue’ and ‘Margin’ were increasing in 2026, which is twice as many as for ‘Cost Reduction’.

Strategic Takeaway

The first hidden truth is that the service supply chain is one of the most important profit pools in the enterprise, but it is still too often treated as a cost center. The companies that win will be those that recognize service not as an obligation after the sale, but as a strategic engine for margin, growth, resilience, and customer loyalty.

Hidden Truth | 01

Tactical Afterthought vs. Strategic Advantage



Aftermarket service can drive outsized margin, growth, and customer loyalty.

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Hidden Truth | 02
Field Service Focus vs. Orchestration

Core Idea

Service performance is not simply a field service problem. It is an orchestration problem.

When a service event fails, the visible symptom may be a delayed repair, a repeat visit, or an unhappy customer. But the root cause is often upstream: the wrong part was not available, inventory was positioned incorrectly, planning was disconnected from execution, or the organization lacked visibility into demand, risk, and service commitments.

Diving Deeper

Field service is the moment of truth, but the outcome is determined long before the technician arrives. A successful service event depends on the right part, in the right location, with the right technician, at the right time, aligned to the right customer commitment. That requires orchestration across planning, inventory, logistics, supplier management, entitlement, installed base data, field execution, and customer communication.

This is why optimizing field service alone is not enough. Better scheduling can reduce travel time, but it cannot solve a missing-part problem. More inventory can improve availability, but it can also trap working capital if it is positioned poorly. Faster expediting can save an individual service event, but it can destroy margin if it becomes the default operating model. The real opportunity is integrated orchestration: connecting service parts planning and service order execution so decisions are made with a shared understanding of cost, risk, service level, and customer impact.

The Proof

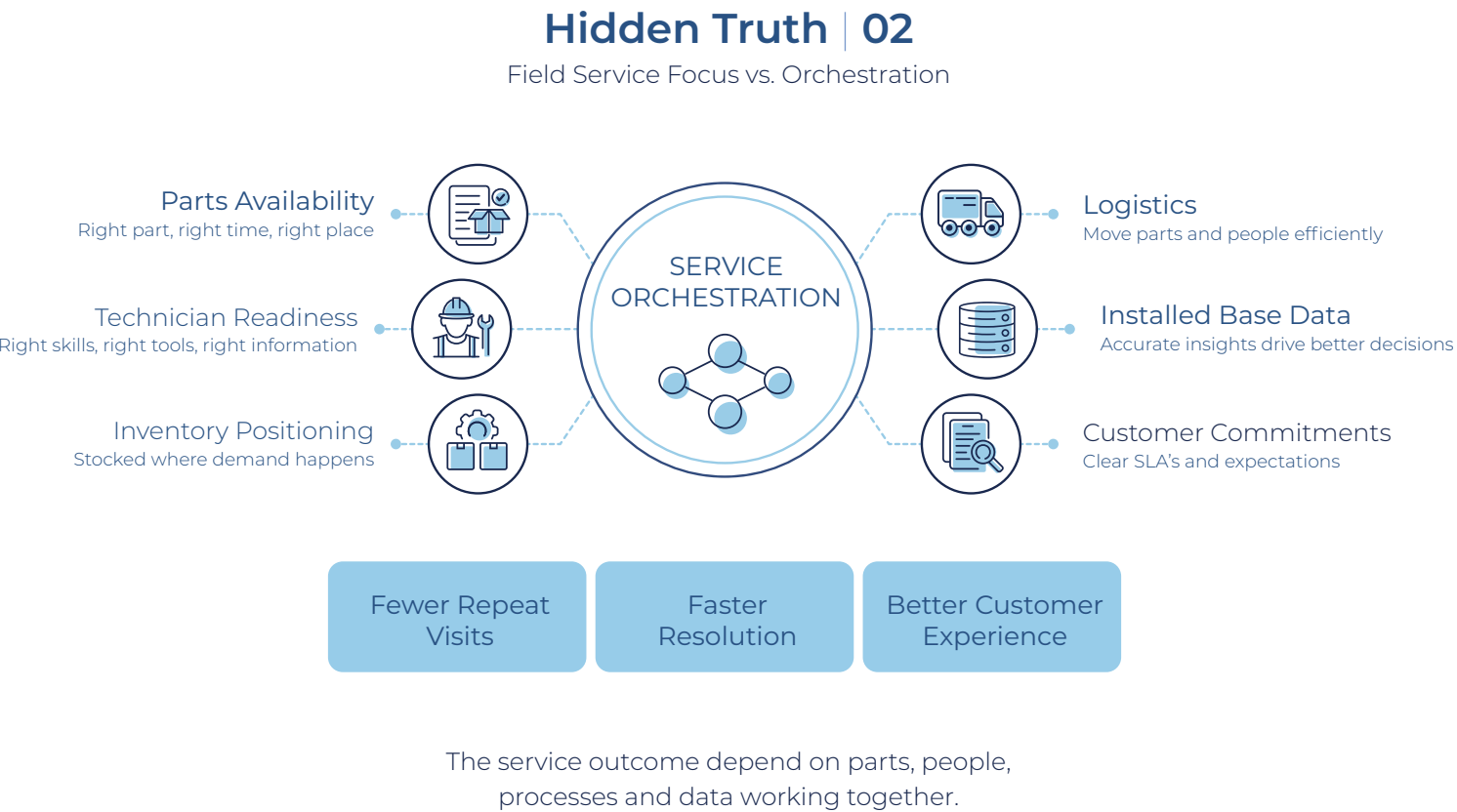
Service Council research revealed that 62% of service supply chain leaders identified coordinating the flow of different sources of supply as their biggest challenge. Their research further emphasizes that the integration of real-time signals, decision logic, and execution authority determines an organization’s ability to orchestrate the flow of parts and information across the ecosystem.

Aberdeen found that average first-time-fix performance was 75%, meaning one in four field service calls required at least one additional visit. For unresolved first visits, an average of 1.6 additional dispatches were required. The same research estimated a single truck roll at \$200 to \$300 and showed that an organization with 500 scheduled visits per day could face an annualized additional dispatch burden of \$12.6 million at average first-time-fix performance.

Most importantly for our category, Aberdeen found that part unavailability — incorrect or missing parts — was the leading reason for a second or third visit, cited by 51% of respondents. It also found that more than 50% of field service visits required a service part, and that best-in-class organizations had the necessary parts available in the technician’s truck 58% of the time versus 45% for other organizations. Similarly, Service Council research reports that 57% of service supply chain leaders say at least 1 of every 5 first-time-fix misses was due to service parts.

Strategic Takeaway

The second hidden truth is that service performance is not just about field service. It is about orchestrating parts, people, processes, and decisions across the entire service supply chain. The customer sees the service event. But the customer experience is shaped by every planning and execution decision that happens before that moment.



Core Idea

The service supply chain is fundamentally different from the manufacturing supply chain.

Traditional supply chain methods were largely built for production environments: forecast demand, plan supply, manufacture efficiently, and distribute at scale. Service parts supply chains operate under a different logic. They are driven by failures, installed base behavior, service-level commitments, product life cycles, and unpredictable demand.

Diving Deeper

In a manufacturing supply chain, demand is often tied to production schedules, customer orders, channel forecasts, or relatively stable consumption patterns. In the service supply chain, demand can be intermittent, sparse, urgent, and highly variable. A part may not move for months, then suddenly become critical because a customer asset is down. The value of the part may be small, but the cost of not having it can be enormous.

Service parts also carry a different form of risk. They often support long-lived equipment, aging installed bases, warranty obligations, contractual service levels, and products that may already be out of production. That creates a lifecycle mismatch: companies must support service demand long after original product demand has changed or disappeared.

This means generic planning methods are often insufficient. A traditional reorder point, safety stock calculation, or production-oriented forecasting model may optimize the wrong objective. The goal is not simply efficiency. The goal is economically intelligent availability: achieving the right service outcome at the right cost and risk level.

The Proof

Service Council identifies four fundamental realities which make service supply chain orchestration especially challenging:

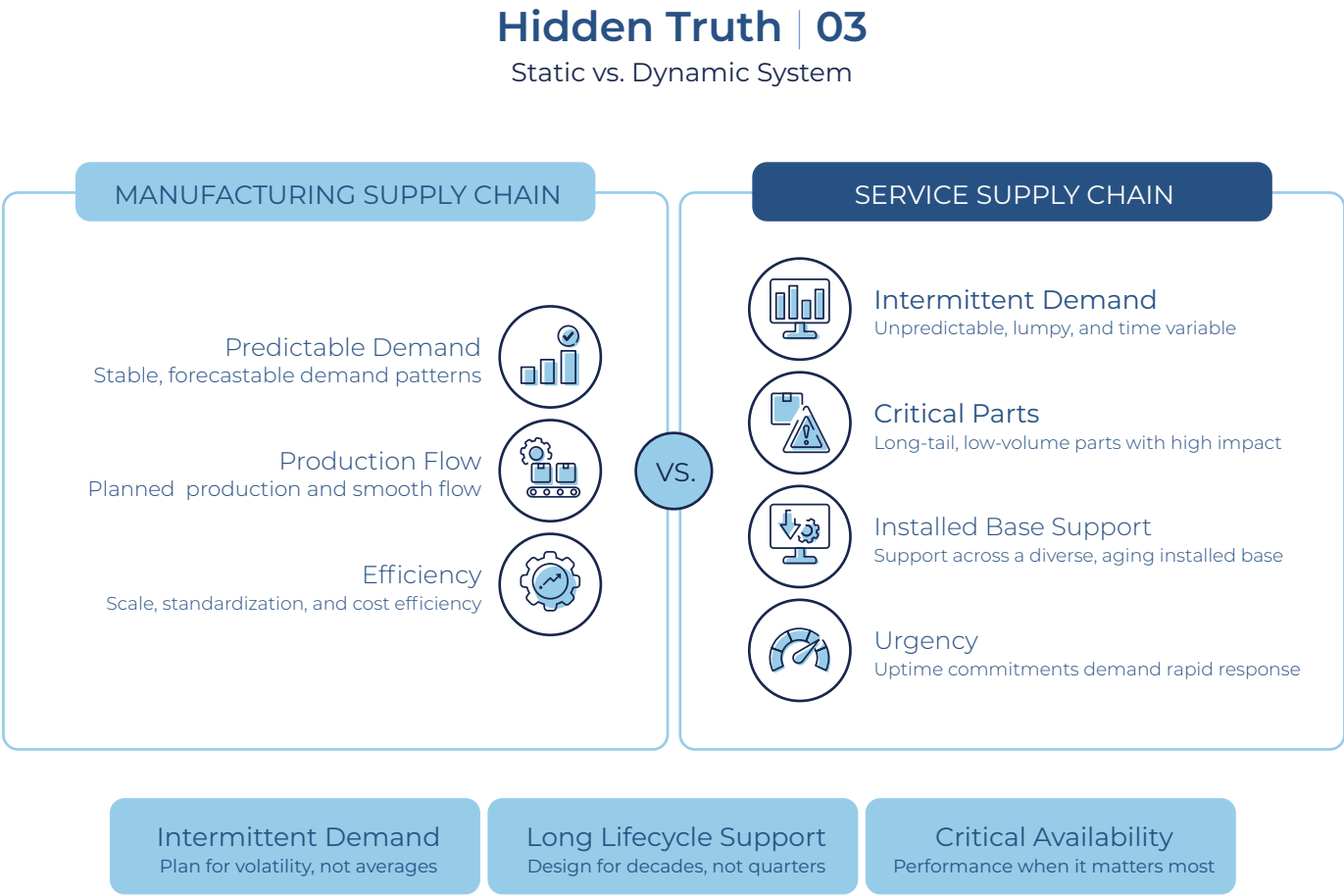
- 1. System assumptions often differ from field behaviors
- 2. Traditional parts segmentation is only sufficient for legacy metrics that prioritize functional over strategic optimization
- 3. Full standardization is not optimal as it prevents local adaptation at speed
- 4. Most of the execution in the service supply chain is uncertain as it depends on partner performance and external events.

An MDPI literature review, on spare parts inventory management notes that spare parts management is difficult because the number and variety of parts are usually very large, intermittent demand patterns are common and difficult to predict, and consumption is tied to product usage, damage, and maintenance. The same review states that inventory policies designed for final products are usually suboptimal for spare parts because spare parts demand patterns, obsolescence risk, and service objectives are fundamentally different.

The same review highlights that spare parts inventory management is important because non-availability can create significant financial losses for product owners, while good management improves customer satisfaction by reducing product downtime. It also notes that spare parts often face obsolescence risk and must achieve product availability at minimum economic and environmental cost.

Strategic Takeaway

The third hidden truth is that the service supply chain cannot be managed like a manufacturing supply chain. Service demand is more uncertain, more urgent, more intermittent, and more directly tied to customer commitments. That is why service supply chains require purpose-built processes, data models, and technology.



Intermittent demand, long-tail parts, and uptime commitments
require a different planning model.

Core Idea

Most service supply chains are built for predictability, but they operate in uncertainty.

Service organizations operate in a world of constant change: unpredictable failures, variable installed base behavior, constrained suppliers, changing lead times, shifting customer priorities, and evolving service-level commitments. Yet many organizations still rely on static plans, disconnected spreadsheets, and manual intervention.

Diving Deeper

The core challenge in service supply chain management is not only to forecast better, it is to continuously adapt. Every service parts decision is a trade-off: inventory versus service level, cost versus risk, centralization versus proximity, expedite versus margin, customer priority versus network efficiency.

The problem is that these trade-offs are often made too slowly, too manually, or too locally. A planner may optimize inventory without seeing real-time execution constraints. A field team may expedite parts without seeing total cost impact. A sales or customer success team may commit to service levels without understanding supply risk. Over time, this creates a reactive operating model: firefighting becomes normal, tribal knowledge fills process gaps, and service performance depends too heavily on heroic effort.

The hidden truth is that uncertainty is not the exception in service. It is the operating environment. The winners will not be the companies that pretend uncertainty can be eliminated. They will be the companies that sense it faster, model it better, and respond with aligned decisions across planning and execution.

The Proof

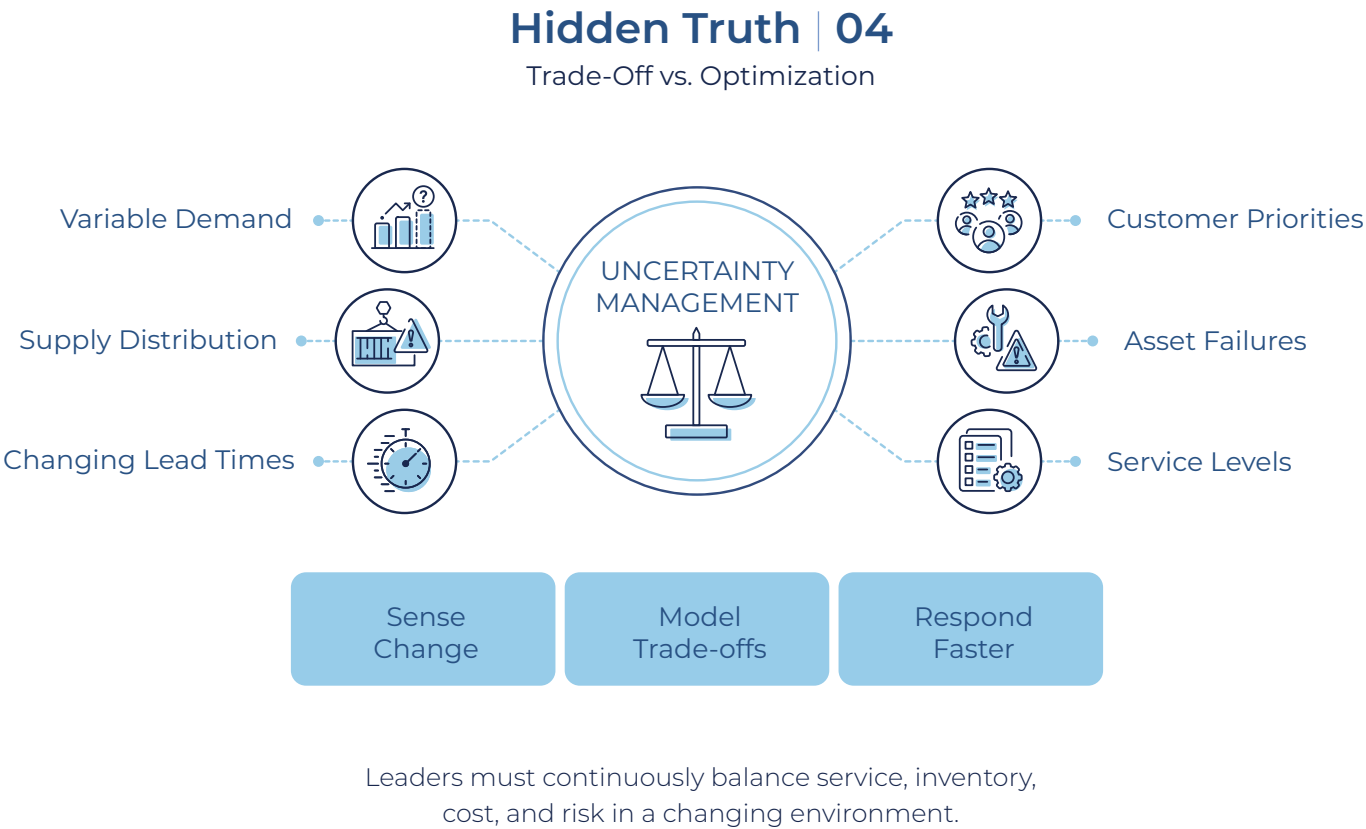
Deloitte notes that customers are increasingly emphasizing service-level agreements that guarantee uptime and are looking for providers who can proactively support equipment before it is out of service, often with customers willing to pay a premium for that capability. Their research also highlights that outcome-based service models require manufacturers to take on extended operational, reputational, penalty, and revenue risk linked to usage.

Service Council reports that the 62% of service supply chain leaders agree that the top reason for the challenges faced by supply chain leaders was that parts lead times are longer than predictive demand signals.

Aberdeen's first-time-fix research reinforces the cost of uncertainty at the execution level: customers' top field service complaint was that the technician did not resolve the issue, cited by **57%** of respondents; organizations with first-time-fix above **80%** reported 87% customer satisfaction and **88%** customer retention, compared with **64%** and **68%** for organizations below **80%**.

Strategic Takeaway

The fourth hidden truth is that service supply chains are built to operate in uncertainty. Demand will change. Parts will fail unpredictably. Customer priorities will shift. Supply constraints will emerge. The answer is not more manual firefighting. The answer is continuous, intelligent decision-making that helps teams balance service, cost, inventory, and risk in real time.



Putting It All Together

Addressing The Hidden Truths of the Service Supply Chain

Core Idea

The future of the service supply chain is intelligent, closed-loop planning and execution.

The next generation of service supply chain performance will not come from planning alone or execution alone. It will come from closing the loop between the two: sensing demand, optimizing inventory, executing service, learning from outcomes, and continuously improving decisions.

Diving Deeper

Historically, many companies have separated planning and execution. Planning teams create inventory and replenishment strategies. Execution teams respond to what happens in the field. But when the two operate with different data, different logic, or different systems, the organization loses speed and alignment.

Closed-loop planning and execution changes that. It connects the plan to what is actually happening. It allows service events, part consumption, failures, customer commitments, lead-time changes, and supplier issues to inform the next decision. It also creates a foundation for focused artificial intelligence (AI): not generic AI, but AI grounded in service supply chain domain expertise, proprietary service data, and real-world decision workflows. AI will not simply make forecasts better. It will help organizations evaluate trade-offs, recommend actions, automate routine decisions, and support planners and service teams with timely, explainable intelligence.

The Proof

Deloitte's 2026 Manufacturing Industry Outlook says the key goal for aftermarket services is proactive planning: ensuring the right expertise, parts, and tools are available at the point of service. It also describes agentic AI use cases that could detect component wear, order parts, reallocate inventory, schedule service, manage part delivery, and optimize manufacturing quantities based on real-time demand and equipment utilization.

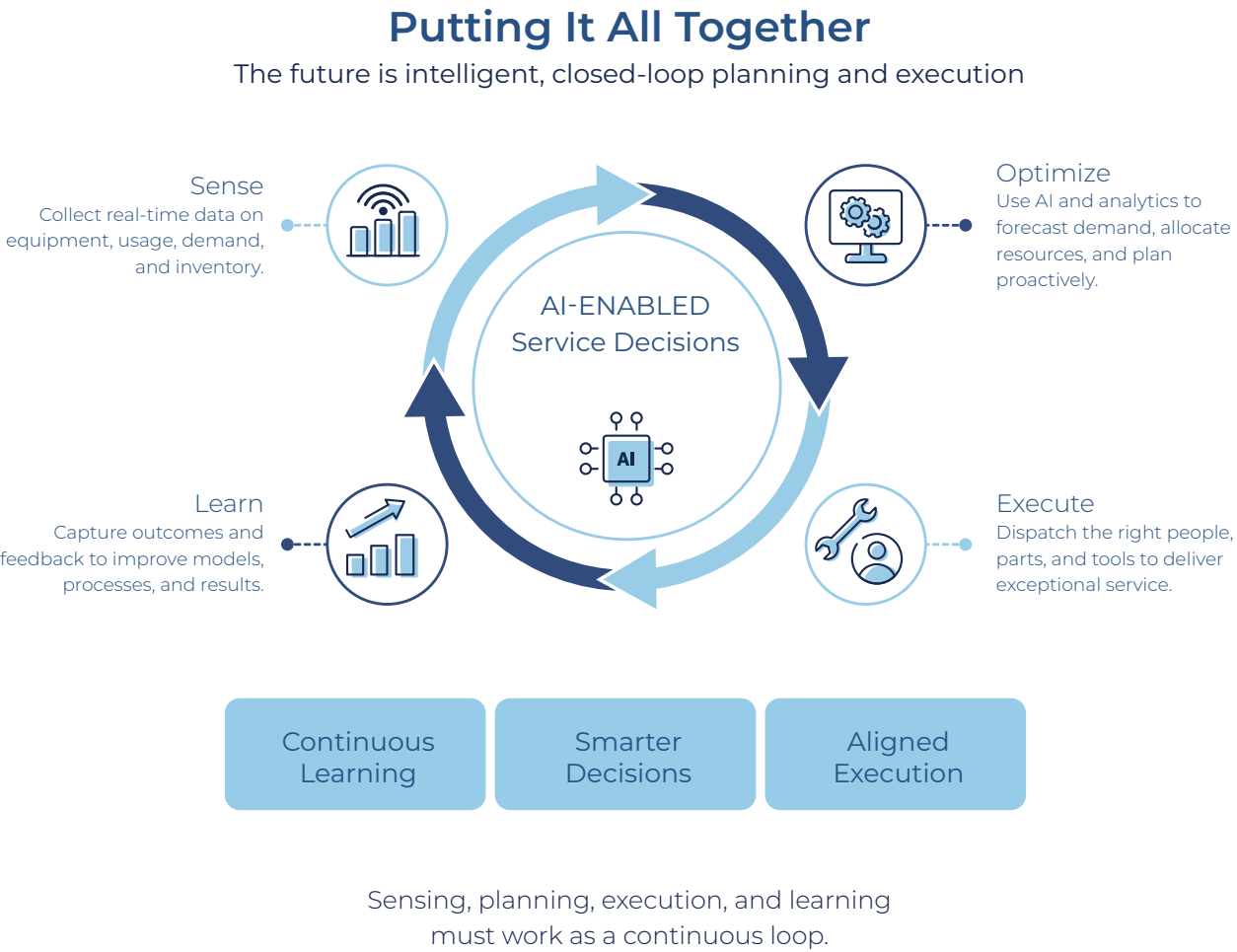
McKinsey similarly describes the newest aftermarket frontier as using sensors, big data, and AI to support predictive maintenance, anticipate part failures, and reduce downtime.

Service Council proposes five ways in which the focus for service supply chain leaders needs to evolve from the legacy mindset towards a strategically coordinated approach:

1. From data visibility to decision agility
2. From planning accuracy to execution responsiveness
3. From partner management to cross-partner integration
4. From efficiency to resiliency
5. From costs incurred to revenue lost

Strategic Takeaway

The future of service supply chain leadership will be defined by intelligent, closed-loop planning and execution. Companies will need to move beyond static plans and siloed decisions toward connected workflows that continuously learn, adapt, and optimize. That is the future Baxter Planning is built to help lead.



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