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How Mature is Your Service Parts Planning Operation?



INTRODUCTION

In today's Service Supply Chain (SSC), disruptions are no longer occasional—they have become the new normal. From global inventory shortages and unpredictable demand patterns to labor constraints and evolving customer expectations, service leaders are facing what we call the Service Experience Storm. This storm is reshaping the landscape of aftermarket service, where agility and precision are critical to delivering exceptional customer experiences while maintaining cost efficiency.

The question is: How equipped is your Service Parts Planning operation to weather this storm? The answer lies in understanding your organization's maturity level across critical dimensions of your SSC strategy.

This is where our Service Parts Planning (SPP) maturity matrix becomes essential. More than just a tool for evaluation, it's a framework to guide decision-makers through the challenges of today's SSC environment. It allows enterprises to assess their readiness to handle disruptions, identify operational gaps, and prioritize areas for improvement. Whether you're struggling with reactive planning or working toward proactive optimization, measuring your SPP maturity ensures you can adapt, recover, and thrive—even when the Service Experience Storm intensifies.

It's time to assess where your organization stands, prepare for what's next, and take control of your Service Supply Chain's future.



Planning for Impact Begins with Understanding Your Current Maturity

In today’s fast-evolving service landscape, knowing where your Service Parts Planning operations stand is a critical step toward improving operational performance, controlling cost, and delivering exceptional customer experiences. For organizations looking to elevate their service capabilities, assessing planning maturity levels provides the clarity needed to turn aftermarket operations into a growth engine.

Understanding your current maturity level enables progress on multiple fronts:

Deliver Consistently Strong Service Experiences

Evaluate whether your people, processes, and tools can reliably meet Service Level Agreements (SLAs) through effective Service Parts Planning. This alignment is essential to minimizing downtime, earning customer trust, and supporting long-term loyalty. Research from The Service Council shows that top-performing service organizations achieve a 92% first-time fix rate, while average performers reach 82%. For low performers, that number drops to 52%¹.

Strengthen Financial Value and Growth Potential

Improved planning maturity translates directly into better first-time fix rates, more reliable service, and lower operating costs. According to Bain & Company, service leaders outperform peers by more than 20% on key metrics like first-time fix and spare parts availability. Bain also notes that companies with Net Promoter Scores above 90 consistently excel in both areas—highlighting the strong connection between parts planning, customer satisfaction, and long-term business value².

Pinpoint and Close Costly Gaps

Highlight the gaps in planning processes, tools, and team alignment that may be driving up costs and limiting service performance. With this clarity, you can take focused steps to optimize inventory levels, improve forecasting, and align resources, laying the groundwork for cost efficiency without sacrificing service quality.

Prioritize the Right Improvements

Maturity models serve as a benchmark for where your operations stand—and where they need to go. This framework helps you focus on the most impactful areas for improvement, driving steady progress toward best-in-class performance.

Enable Smarter, Data-Driven Decisions

Understanding your maturity level provides transparency across the Service Supply Chain. It equips leadership with the insights needed to do what is needed in order to refine their planning process to become a more mature SSC.

Accelerate Purposeful Transformation

Moving from reactive, fragmented planning to a predictive, integrated strategy starts with a clear baseline. With this insight, you can adopt the right mix of technology, expertise, and process improvements to support sustainable transformation.

The 4 Pillars of Service Parts Planning Maturity

Service Parts Planning plays a critical role in shaping the performance of the Service Supply Chain. But planning success doesn't come from a single tool or team—it comes from building strength across four interconnected pillars.

When these pillars are misaligned or underdeveloped, it can lead to inflated costs, poor part availability, technician inefficiency, and missed Service Level Agreements. That's why assessing your maturity level across all four areas is essential. The following pillars help you evaluate where you are today—and what to prioritize next.

Pillar 1 Strategic Importance	Pillar 2 Service Parts Planning Solution	Pillar 3 Service Parts Planning Team	Pillar 4 Service Parts Planning Metrics
<p>This pillar measures how the organization values and prioritizes Service Parts Planning. At lower maturity levels, service is seen as a cost of doing business. As maturity increases, it becomes a strategic contributor to profit and growth— led by an executive who owns a dedicated service P&L and is empowered to make investment decisions aligned with business goals.</p> <p>⚠ If left unaddressed</p> <p>Service Parts Planning remains reactive and underfunded. Its value is unclear to the business, which limits its ability to influence customer experience or financial outcomes.</p>	<p>Your planning tools shape how effectively you manage parts availability, forecast demand, and control costs. Early-stage organizations rely on spreadsheets or use ERP systems not built for service. Mature organizations invest in purpose-built platforms that support global inventory visibility, automation, and AI-driven forecasting.</p> <p>⚠ If left unaddressed</p> <p>Teams struggle to scale. Without the right tools, planning becomes manual, error-prone, and reactive—leading to stockouts, overstocking, and excessive use of expedited freight.</p>	<p>People are central to planning success. In low-maturity environments, there is no dedicated team—service parts are managed informally or reactively. As maturity improves, organizations establish specialized planning roles that collaborate across regions and with Field Service to ensure consistent part availability where it matters most.</p> <p>⚠ If left unaddressed</p> <p>A lack of ownership leads to siloed decisions, missed opportunities, and operational inefficiencies that affect both technician performance and customer satisfaction.</p>	<p>Metrics provide the visibility needed to track performance and drive improvement. Early on, KPIs are not consistently tracked—or not tracked at all. More mature organizations monitor key planning metrics like fill rates, excess and obsolescence, and expedited freight. These KPIs are directly tied to business goals like cost optimization, SLA performance, and customer satisfaction.</p> <p>⚠ If left unaddressed</p> <p>Without consistent measurement, performance is unpredictable and difficult to improve. Stock imbalances go undetected, and the organization cannot accurately assess the impact of planning decisions.</p>

Why These Pillars Matter: Improving in one area is helpful but sustained success happens when all four pillars are developed in parallel. A strong planning foundation requires clear strategic support, purpose-built tools, empowered teams, and actionable metrics. When those elements are in place, Service Parts Planning becomes more than a function—it becomes a competitive advantage.

The Road to Planning Maturity: What It Looks Like at Every Level

Now that you've seen how maturity is built across the four pillars, it's time to look at how those pillars come together at each stage of organizational growth.

True Service Parts Planning maturity isn't about improving in one area and calling it done. It's about how everything works together. Your systems, your people, your data, your alignment—when they mature together, performance improves across the board. But when one element lags, it holds the others back.

The five levels below illustrate what maturity looks like in practice, from early struggles to high-performing operations. Use this progression to identify where your organization stands today and what's needed to move forward with purpose.

**Level 1
Low Maturity**

- Frequent stockouts, excess inventory, and firefighting drains resources
- No visibility into true cost drivers or planning effectiveness
- Service Parts Planning is reactive, disconnected, and unmanaged

**Level 2
Basic Maturity**

- Planners spend more time gathering and reconciling data than making informed decisions
- Tools are limited (often spreadsheets), and processes lack structure
- Field Service and Service Parts Planning operate in silos, creating misalignment and rising costs

**Level 3
Moderate Maturity**

- Strategy and structure begin to take shape, but gaps remain
- Purpose-built tools may not be in place, limiting scalability and automation
- Forecasting and inventory placement are still largely reactive

**Level 4
Strong Maturity**

- Planning teams are aligned and supported by better tools and processes
- Shared KPIs and cross-functional collaboration improve visibility and performance
- Predictive insights and automation are possible but not yet fully leveraged

**Level 5
High Maturity**

- Planning is strategic, proactive, and fully integrated across the Service Supply Chain
- Operations are highly automated and continuously optimized using real-time data
- Planning performance directly supports executive priorities such as growth, sustainability, and customer experience

How to Use the Maturity Matrix

Think of the maturity matrix as your quick diagnostic tool. It's designed to help you assess where your organization stands across the four key pillars of Service Parts Planning: Strategic Importance, Planning Solution, Planning Team, and Metrics.

You may find your organization is strong in one pillar but lagging in another—and that's expected. The goal isn't a perfect score. It's clarity. By identifying where the gaps are, you can prioritize the right next steps and make more informed decisions that move your planning function forward.

Use the matrix to:



Benchmark your current state



Uncover improvement opportunities



Align teams around a shared view of maturity



Guide investment and transformation efforts



	Pillar 1 Strategic Importance	Pillar 2 Service Parts Planning Solution	Pillar 3 Service Parts Planning Team	Pillar 4 Service Parts Planning Metrics
Level 5 High Maturity	Service is a strategic driver of profitable growth. Our service leader has a seat at the executive table, manages a dedicated P&L, and receives budget allocation that reflects service's contribution to revenue and profit.	We use a purpose-built global solution to manage Service Parts from supplier through technician trunk stock. AI improves planning accuracy and automate repetitive tasks.	We have a dedicated global team for Service Parts Planning that collaborates with regional teams and Field Service technicians.	<ul style="list-style-type: none"> • DC/FSL fill rates: >95% • Trunk stock fill rates: >90% • Excess and obsolescence reserves: <10% of total service parts inventory • Expedited freight: <10% of total freight spend for unplanned expedites (excluding planned expedites per Total Cost Optimization)
Level 4	Service parts business is a recognized key contributor to EBITDA. It's managed as a part of the global supply chain, manufacturing, or customer support.	We use a general supply chain planning system with some features adapted for service parts.	Planners are regionally focused and coordinate across regions only when part shortages arise.	<ul style="list-style-type: none"> • DC/FSL fill rates: >90% • Trunk stock fill rates: >85% • Excess and obsolescence reserves: <15% of total service parts inventory • Expedited freight: <20% of total freight spend for unplanned expedites (excluding planned expedites per Total Cost Optimization)
Level 3	Production is prioritized over aftermarket service. Investments favor production despite its lower profit contribution.	We rely on ERP systems for service parts, working mostly offline and feeding min/max data into Material Requirements Planning (MRP) to generate orders.	Planners are regionally focused only on Distribution Center (DC) and Forward Stocking Locations (FSL). Technicians manage their own trunk stock and order parts in emergencies.	<ul style="list-style-type: none"> • DC/FSL fill rates: >85% • Trunk stock fill rates: >80% • Excess and obsolescence reserves: <20% of total service parts inventory • Expedited Freight: <20% of total freight spend for unplanned expedites (excluding planned expedites per Total Cost Optimization)

	Pillar 1 Strategic Importance	Pillar 2 Service Parts Planning Solution	Pillar 3 Service Parts Planning Team	Pillar 4 Service Parts Planning Metrics
Level 2	Service is seen as the cost of doing business to keep customers happy.	We use Excel spreadsheets to manage the Service Parts Planning and stock levels.	Some staff support service parts, but mostly act as expeditors for the field.	<ul style="list-style-type: none"> • DC/FSL fill rates: >80% • Trunk stock fill rates: >70% • Excess and obsolescence reserves: <25% of total service parts inventory • Expedited Freight: <25% of total freight spend for unplanned expedites (excluding planned expedites per Total Cost Optimization)
Level 1	The business doesn't recognize the value of service parts.	No planning system in place. We react to customer demand and order or make spare parts as needed.	No dedicated service parts team. Parts are pulled from manufacturing inventory as needed.	<ul style="list-style-type: none"> • DC/FSL fill rates: <80% • Trunk stock fill rates: <70% • Excess and obsolescence reserves: >25% of total service parts inventory • Expedited Freight: >25% of total freight spend for unplanned expedites (excluding planned expedites per Total Cost Optimization) • KPIs are not tracked.



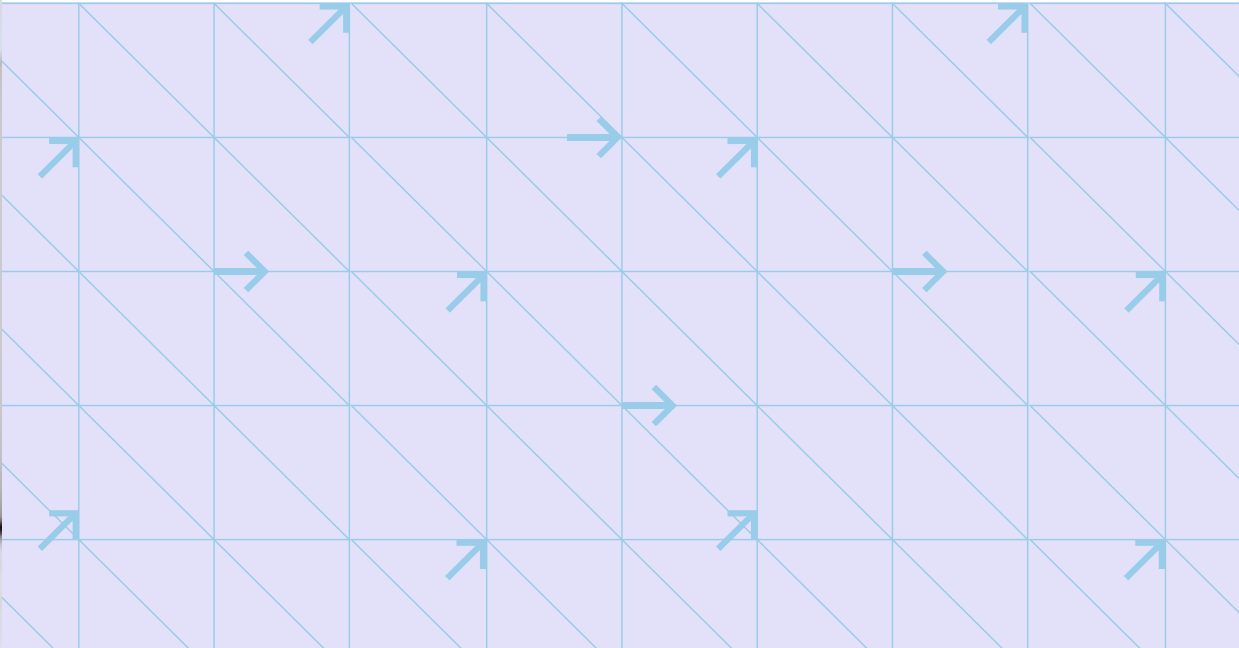
How to Advance Your Maturity Level: Practical Guidance Across the Four Pillars



Service Parts Planning maturity doesn't follow a straight line—and it's rarely consistent across the organization. You might have a strong planning system in place, but limited strategic support or underdeveloped metrics. That's normal.

The goal isn't to be perfect across all areas. It's to understand where you stand today and make steady, focused improvements where they'll drive the most impact.

This section offers actionable guidance to help you move up if you're at Level 3 or below in any of the four planning pillars. The recommendations below are informed by Baxter Planning's field expertise and experience working with leading service organizations.



Pillar 1
Strategic Importance

Current Gap

Service is treated as a cost center, with limited visibility, influence, or investment.

How to move up a level:

- ↑ **Connect planning to business value.** Demonstrate how effective Service Parts Planning improves key metrics like EBITDA, customer satisfaction, and margins.
- ↑ **Tell the story with data.** Package wins and planning KPIs into executive-ready snapshots that show planning's contribution to business outcomes.
- ↑ **Align with strategic priorities.** Link your planning road map to broader company goals such as digital transformation, sustainability, or growth initiatives.

Pillar 2
Service Parts Planning Solution

Current Gap

You rely on spreadsheets or outdated tools, with limited visibility and poor integration

How to move up a level:

- ↑ **Assess your current tools.** Identify where gaps exist in forecasting, automation, or connectivity with field systems.
- ↑ **Build a business-led case for investment.** Position system upgrades in terms of their ability to reduce costs, improve service levels, and scale with growth.
- ↑ **Adopt purpose-built technology.** Invest in a planning platform designed specifically for service, one that supports global inventory visibility and automation from supplier through trunk stock.

Pillar 3
Service Parts Planning Team

Current Gap

Planning is not a formalized or strategic role. Staff may be multitasking, reacting to issues, or operating in silos.

How to move up a level:

- ↑ **Define ownership.** Clarify who is responsible for Service Parts Planning at every level—global, regional, and field.
- ↑ **Invest in expertise.** Upskill your team with training or partner with experts to accelerate maturity and introduce best practices.
- ↑ **Foster collaboration.** Ensure planners coordinate with Field Service, Supply Chain, and Operations to improve forecast accuracy and alignment.

Pillar 4
Service Parts Planning Metrics

Current Gap

KPIs are inconsistent, disconnected from business goals, or not tracked at all.

How to move up a level:

- ↑ **Focus on the right metrics.** Track KPIs that reflect service outcomes and operational efficiency—like DC/FSL fill rates, excess and obsolescence, and expedited freight.
- ↑ **Establish baseline targets.** Use benchmarking to set clear, realistic targets and measure progress.
- ↑ **Make metrics actionable.** Tie KPIs to accountability, performance reviews, and continuous improvement plans. Share them across teams so everyone is aligned on what good looks like.

No matter your starting point, progress is possible. Use these tips alongside the maturity matrix to identify your biggest opportunities and prioritize the steps that will have the greatest impact on service performance, cost control, and customer experience.

Advancing in Service Parts Planning Maturity: What It Really Takes

Improving Service Parts Planning maturity is more than an operational initiative—it's a lever for driving business resilience, customer satisfaction, and financial performance. As Service Supply Chains become more complex and customer expectations continue to rise, organizations must evolve from reactive processes to more intelligent, integrated planning strategies.

Yet progress isn't automatic. Each stage of maturity introduces new challenges from disconnected systems and reactive planning to misaligned teams and underleveraged data. What sets high-performing organizations apart is how leaders choose to address these gaps.

At every level of maturity, organizations should:

- **Invest in purpose-built planning capabilities that deliver more than spreadsheets or one-size-fits-all ERP add-ons**
- **Align Field Service and Service Parts teams around shared KPIs and measurable business impact**
- **Leverage data to make informed trade-offs between service levels, inventory investment, and customer experience**
- **Scale planning operations to support goals like sustainability, margin expansion, and risk mitigation**
- **Position planning not as a back-office function, but as a strategic enabler embedded in executive decision-making**

Whether your organization is laying the foundation or fine-tuning a mature strategy, success depends on having the right mix of systems, skills, and governance in place—and knowing when to bring in specialized expertise to accelerate progress.



Why Baxter Planning

True maturity in service operations requires more than just effective planning. It demands a holistic approach that unites every phase of the Service Supply Chain. That's why Baxter Planning offers BaxterPredict, an end-to-end, AI-powered platform purpose-built to optimize planning, automate execution, and resolve issues in one unified solution.

By breaking down silos and harmonizing workflows, [BaxterPredict](#) gives your enterprise a powerful advantage to move beyond operational complexity and achieve sustainable, scalable success.

As your organization evolves, the platform evolves alongside you, infused with real-time insights, advanced analytics, and intelligent automation to ensure continuous improvement across people, processes, and systems.

But software alone isn't enough. The most resilient service organizations also rely on experienced people to guide planning strategy, drive adoption, and close capability gaps. That's why Baxter Planning also offers [Planning as a Service \(PaaS\)](#)—a flexible model that allows you to extend your planning team with seasoned Service Supply Chain experts. PaaS delivers specialized knowledge, ongoing planning execution, and measurable outcomes.

Whether you're solving for today or planning for tomorrow, Baxter Planning empowers you to operate with more confidence, more control, and more clarity at every level of maturity.

Take the next step toward leveling up your Service Supply Chain. [Contact us](#) today and discover how Baxter Planning can partner with you to unlock your full potential.

→ [Request an Expert Assessment](#)

Sources:

1. The Service Council. Summary Findings: 2022 KPIs & Metrics Benchmark Survey. The Service Council, Feb. 2022
2. Bain & Company. Field Service Is Changing Rapidly. Can You Keep Up? Bain & Company, 25 Oct. 2022



ABOUT BAXTER PLANNING

Baxter Planning is a global leader in Service Supply Chain software, delivering a Service Experience Advantage to the world's most innovative enterprises for over 30 years. The end-to-end BaxterPredict platform empowers organizations to optimize service parts planning, execution, and resolution, driving superior customer experiences, fostering long-term loyalty, and fueling business growth.

By combining purpose-built technology, award-winning AI, decades of practitioner expertise, and a commitment to true partnership, Baxter Planning consistently delivers industry-leading outcomes for its clients.

The company is headquartered in Austin, Texas, United States, with offices around the globe. For more information, visit www.baxterplanning.com