

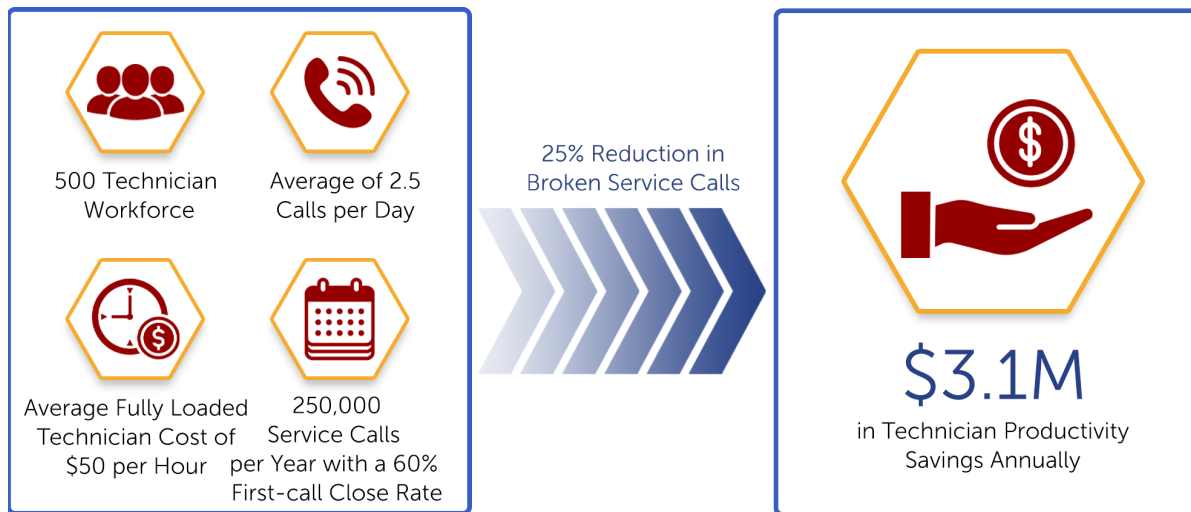
Field Service Inventory Planning

How Is Field Service Inventory Planned?

Field Service Technicians introduce challenges that common Service Parts Planning algorithms used for central warehouses and forward stocking locations do not address. Technicians frequently determine their own inventory needs based on undocumented knowledge and experience that can't be used to scale as your Service Supply Chain evolves. This gap in process, data, and technology represents an untapped opportunity in many service organizations to improve Service Supply Chain performance and improve first-time fix rates.

How Big Is This Opportunity?

A technician's time is a valuable resource; increasing their ability to be productive by reducing the need for return visits due to lack of parts is an incredible opportunity for return on investment.



This example is based on a 25% reduction in broken calls due to lack of part availability. This results in 25,000 fewer broken calls requiring return visits per year. If each return visit takes an additional 2.5 hours of technician time (part ordering, return trip drive time, and additional on-site work time), that's \$3.1M in gained technician productivity annually. Plus a big reduction in dissatisfied customers.

What Makes Field Service Inventory Planning Different?

Networks of physical warehouses are static, both in position and the overall number of locations. Technician workforces are dynamic, they are mobile and change product responsibility. Technician territory assignments can also change frequently to maintain workload balance. These attributes create a unique set of problems.

- **Turnover:** It's not unusual for a technician workforce to have 10% turnover in a year. Newly added technicians don't necessarily service the same population of customers and products as the technician they replace, so field service managers regularly shuffle technician territories and assignments to match their workforce and customer base.
- **Training:** Technician training requirements change over time. As new products are introduced, a limited subset of technicians may be trained to service those products. Understanding which technicians are candidates for parts based on training and call assignment rules is critical.
- **Incomplete or Incorrect Demand History:** Technician inventory can't be efficiently planned using only each technician's individual "demand history." Demand history based inventory planning will always be reactive; as there is no plan until that individual technician has experienced demand. When demand occurs before there's a plan, broken service calls and return visits are the inevitable result. A combination of incorporating installed base knowledge and team/territory assignment knowledge into the plan is critical for success.
- **Plan Stability and Excess Avoidance:** Technicians have limited inventory storage space. Technicians will notice an unstable inventory plan that adds, removes, and re-adds the same part within a short period because they must book those transactions themselves. Plan instability costs money in transportation expense and lost technician productivity, and erodes confidence that a centrally managed plan is doing a better job than they could do on their own. After a time, technicians will demand overrides or simply stockpile additional parts, creating excess and reducing the effectiveness of an inventory optimization strategy.

Prophet by Baxter Planning can help your field service organization improve part availability & technician productivity, resulting in real ROI for your organization.



What Is The Solution?

At Baxter Planning, we don't apply a one-size-fits-all planning model to technicians. Field Service Inventory Planning needs to move beyond traditional multi-echelon inventory optimization models. The combination of Baxter's industry-leading cost-optimization inventory planning algorithms *and* unique features specifically developed to support the planning of field service inventory make Prophet by Baxter the most specialized and successful solution for planning technician inventory available.

- **Cost-Optimization:** Algorithms understands the costs associated with not stocking a part to determine the optimal stock levels.
- **Technician Teams and Territories:** Algorithms understand that multiple technicians may be candidates to service a specific customer or piece of equipment in the future, even if a specific technician hasn't serviced that customer or product recently.
- **Technician Training and Proficiency:** Considers each technician's training and proficiency on individual products and the likelihood of taking specific service calls when planning for technician inventory.
- **CRM or Route Optimization (RO) Call Assignment Rules:** Accounts for call assignment rules in your CRM or RO software and blends territory assignments, training, current technician inventory, and recent technician history when determining future call assignment expectations and required inventory to support those service calls.
- **Inventory Plan Stability:** Multiple factors to maintain plan stability when the cost of change outweighs the projected benefit of change. This limits plan instability, avoiding excess movements and loss of technician confidence in the planning solution.
- **Multi-Echelon Inventory Optimization:** Stock parts at the most total cost-justified (inventory, productivity, transportation mode) echelon of inventory, and consider technician stocking when recommending stock levels at higher echelon locations such as 3PL regional distribution centers and local forward stocking locations (FSLs).
- **Continuous Improvement:** Planning Analytics determines root causes for broken calls due to part availability, allowing planners to address execution and data quality issues to improve service level.

About Baxter Planning

Baxter Planning provides solutions built for the service supply chain. Our software is developed based on proven best practices, industry expertise, and partnerships with our customers to automate inventory planning. We replace spreadsheets and manual processes with a Total Cost Optimization methodology to deliver the best service level at the lowest possible cost.

Want to see how you can save money on excess inventory while delivering on all your service level agreements? Contact our team today at info@baxterplanning.com.

