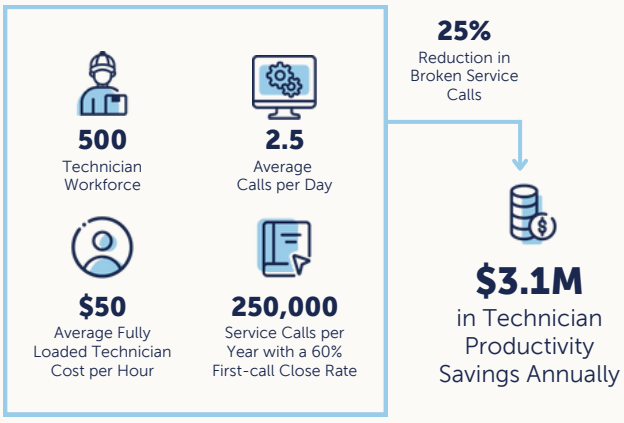
Field Service Inventory Planning

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 (SSC) evolves. This gap in process, data, and technology represents untapped opportunity for many service organizations to 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. Resulting 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 and less fuel used for repeat visits.

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

Technician turnover can average around 10% 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. They 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.

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 Planning's industry-leading cost-optimization inventory planning algorithms and unique features specifically developed to support the planning of field service inventory makes BaxterProphet 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

Analytics determine root causes for broken calls due to part availability, allowing planners to address execution and data quality issues to improve.

BaxterProphet can help your field service organization improve part availability and technician productivity, resulting in real ROI.

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.