

Our point of view

Service Parts Supply Chains

Introduction

Management of service parts supply chains often takes a back seat to managing original equipment manufacturing and distribution. Too bad, since post-sales support often yields the firm's highest profits.

Many supply chain challenges differentiate the service world. Among them include more SKUs and many more stocking locations, low and intermittent demand over a long service life, the option to repair defective materials, and contractual entitlement to high service. See Figure 1.

Common pitfalls

In addition to the characteristic difficulties of the service business, teams responsible for service supply chains often fall into common traps.

Running a Not-for-Profit. Service managers often make decisions "in the customer's interest" that unnecessarily punish their own firm.

Perpetuating Organizational Uncertainty. Unclear roles and responsibilities make service supply chain decisions difficult in a business focused on new product sales.

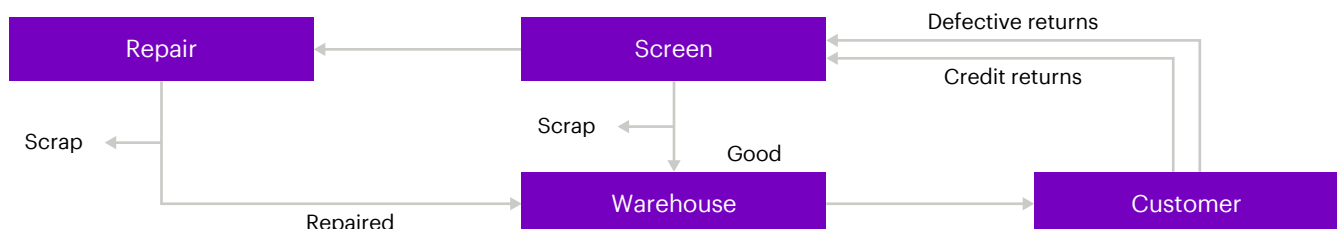
Aiming for the Wrong Target. Firms should focus on their customer's machine uptime rather than line-item fill rates out of the DC.

Ignoring Part Dependencies. Plan for successful repairs. Missing one low-cost part can jeopardize a standard multi-part repair consuming several expensive parts.

Declining to Act. Obsolete inventory costs money sitting on the shelf. Firms benefit by routinely jettisoning excess material when it no longer provides sufficient value.

Pinning Hopes on Software. Two critical prerequisites enable software success. First is a service-focused problem statement. Second is well-maintained data.

Figure 1
Reverse Supply Chain Flows Cost-effective repair and reuse of returned products and parts



Useful Approaches

While the problems may differ between original equipment and service supply chains, the same rational approaches for addressing the problems apply. Address the challenges with rational, data-driven techniques.

First, define an appropriate supply chain network. Start with central and forward distribution siting decisions, then add critical decisions about outsourcing.

Second, set stock lists and inventory targets for each location. Base these on historical demand, the local installed base, failure rates, etc. Overall service objectives and inventory budgets also figure into the decision.

Review part classification decisions regularly. Is it economical to return a part for repair? Should an unused part be returned to the DC? Finally, regularly review business processes and metrics for all the above, plus exception reports for managing day-to-day operations.

Case Study

A high-tech manufacturer suffered a familiar problem: high depot inventory but service levels far below target.

They had leaned heavily on rules of thumb and gut feel for stocking decisions, and their part data was a mess.

We helped them ID the parts critical to customer success. We used historical demand to set stock lists and safety stock targets by location. Service soared, inventory dropped 25%, and revenue went up 5%. The project enjoyed a 4:1 payback in the first year. See Figure 2.

Figure 2

Depot Inventory & Service Tradeoffs
Strive to operate on the efficient frontier

