

**Customer Annuity –
successful companies will make
customer service and after-sales support
their competitive advantage**



UPS Supply Chain SolutionsSM

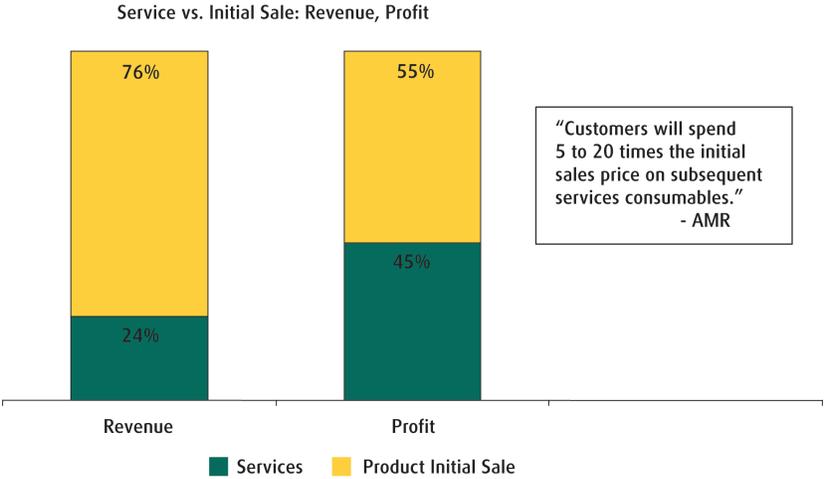
Customer retention is more of a challenge in the current business environment than at any other time in history. However, this situation also presents unique opportunities that can be capitalized on to drive increased revenue at reduced costs for longer-term market share growth. Does your company have a strategy specific to customer annuity? If so, are you struggling with certain inefficiencies that customer annuity programs seem to inflame? This paper provides thought-provoking insights that can be supplemented by real know-how and experience.

The quality and delivery of after-sales service is becoming increasingly crucial...

Undeveloped source of revenue

In the competitive high-tech marketplace, companies gain competitive advantages over their rivals by continuously innovating and creating new products with increasingly shorter life-cycles. In this competitive marketplace, the after-sales service market represents an under-developed revenue stream that can help high-tech companies increase revenue while satisfying customer commitments and retaining residual market share. The quality and delivery of after-sales service is becoming increasingly crucial as businesses do everything they can to be more cost-effective and profitable.¹

Figure 1:



¹ “Cornerstones of Post-sales Service Excellence,” UPS-Supply Chain Solutions, 2003

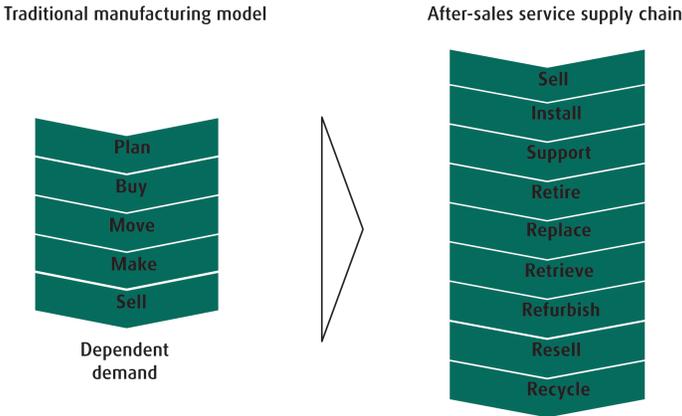
Research conducted by AMR on service lifecycle management found that divisions of manufacturing companies that provide parts, maintenance, and other services to customers — after the original product sales — generate 40 to 50 percent of profits for their companies and nearly 25 percent of annual revenues. How does your company perform in this area of generating increased returns through after-sales service efforts?

A supply chain’s unique requirements

Often underestimated by most executives, the service supply chain is complex and includes field service, reverse logistics, network design and critical inventory location decisions that are tied to service level agreements (SLAs) not existent in the manufacturing supply chain (see Figure 2).

Figure 2: The service supply chain is more complex than the manufacturing supply chain

Although underestimated by most executives, the service supply chain is more complex...



Frequently, companies emphasize the efficiencies of the outbound supply chain for new product sales and then the same outbound process for aftermarket service parts. While existing operations should be leveraged for after-sales support, do not expect the outbound supply chain to adequately satisfy the nuances of post sales. The judgment and complexities associated with managing an extended service organization keep many companies from providing world-class service and fully capturing the value of each customer relationship. Consider the limitations being placed on customer offerings due to reliance on outbound processes and personnel.

Fortunately or unfortunately, depending upon the type of after-sales service supply chain operated, high tech companies are expected to offer aggressive field service capabilities. To meet these service level commitments, after-sales support must do more than simply

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reverse existing processes. There needs to be a methodical, comprehensive way to view primary after-sales components that focuses on three areas or “pillars.”

These three pillars — organizational alignment, field service and returns management — are the foundation of the customer annuity supply chain. Each of these pillars should constantly evolve to meet the increasing demands of a client base.

Organizational alignment - functional responsibility for customer base

As the business world enters the 21st century, high-tech companies will need to continue to evolve not only in meeting the demands of customers, but also in understanding long-term needs and in developing strong relationships that can outlive the short product life cycles that are common to high-tech organizations (see Figure 3). The companies that clearly understand their customers and create supply chains to support this new insight will create a sustainable competitive advantage in an otherwise brutally hostile market.

Figure 3: Evolution of responsibility for customer retention

Customer Marketing	Customer Management	Customer Service	Customer Integration
1970's	1980's	1990's	2000+
Improved Business Functions	Cross Functional (Enterprise-Wide) Improvements	Outbound Logistics	Customer Collaboration and Reverse Logistics

In the future, successful companies will make customer service and after-sales support the underlying theme of their organizations — a combination labeled *Customer Annuity*. However, creating a market-oriented culture across the entire organization is difficult.

For example, in a recent UPS Supply Chain Solution consulting services engagement with a leading high-tech equipment manufacturer, the results of a periodic customer survey indicated declining customer satisfaction. The initial feedback pointed to poor after-sales service support for its products which are expensive and have a long useful life.

Although the initial assignment was to focus on a spare parts availability problem, as supply chain analytics and interviews were conducted, it became apparent that the availability of spare parts was just one component, albeit an important component, of customer dissatisfaction. Ultimately, the engagement focused on the shared responsibilities required to create a successful after-sales service program, including broader access to information, greater visibility between divisions of the supply chain, and standardized communications between sales, service, marketing, finance, and operations. Each of these cross-functional areas profoundly impacted customer service and were previously underestimated in their effect.

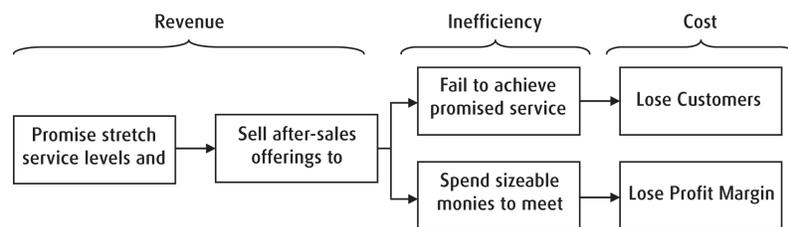
Although one or two areas might appear to be the focus, every area has to be involved. “C-Level Sponsorship” promotes cooperation throughout the highest levels of the organization resulting in greater customer care — retention and acquisition — and ending in market dominance. But this starts by focusing the entire organization on after-sales support and then leading that culture at the executive level.

Field service – elusive costs and criteria

While the rewards for entering after-sales offerings are promising, too often companies do not spend the time developing the infrastructure, i.e. systems, policies, processes, that enables clear management expectations and metrics (see Figure 4). While the costs of field service vary, they typically revolve around two key areas: labor coordination and inventory management.

One of the key issues in any field service is visibility.

Figure 4: Inadequate after-sales service model



One of the key issues in any field service is visibility. Personnel are expected to interact on a primarily subjective role with clients. Schedules are not shared; communications with field representatives are lacking; and no work standards are in place to focus expectations on the characteristics of a given route. Management has a difficult time evaluating true performance because of the overwhelming numbers of variables involved.

...the consultants' recommendations led to savings of \$16 million annually...

Management must assign critical tasks to each individual in the field, quantify the expectations around a given task, and manage to those expectations. Field personnel should be able to offer explanations for any deviations to a specified work day and assist in modifying work standards to make them more reasonable. Real-time communications are now available to make planned days more flexible according to immediate needs and priorities. To rephrase a public message from the past, "It's 3:00 p.m. Do you know where your field reps are?"

There are numerous examples of savings that can be gained through improved measurement and control of field reps. One example is a \$500 million company that manufactures and delivers consumable products throughout the United States. This organization was challenged by field dispatch requirements and seasonal peaks in demand. The company asked UPS to design an efficient model expanding the delivery capacity of the fleet to overcome the demand peaks.

By developing work standards, employing specialized technology to optimize delivery routes, managing time and resources more effectively, and suggesting a reduction in field representatives, the consultants' recommendations led to a savings of \$16 million annually for the organization without impacting service or delivery.

Another critical element is synchronizing inventory placement to optimize demand and supply. Management should understand the true costs of service through tiered customer models. Beyond understanding the profile of the customer base, managers should also categorize the inventory into a Pareto-type model that keeps certain components or products readily available for customer bases matching pre-defined criteria. What is your company's understanding of the profit models of various types of service agreements?

Do you have visibility into distributed field stocking locations so that the transfer of parts can quickly flex otherwise static staging levels? Are multiple organizations effectively collaborating to improve field inventory positions? If not, responsibility for planning and inventory levels will never be accepted by either the operations or field service groups.

The following example illustrates the importance in aligning inventory with the end customers and service level agreements as well as the importance of visibility in field service. A manufacturer of semiconductor production equipment provides fabrication sites that require immediate service with parts around the clock. This urgency is rooted in the staggering costs of customer downtime,

...consider the ROI that could be achieved with minimal focus.

where a one-hour delay can translate into millions of dollars in lost productivity. Time loss is so critical, this organization has stringent SLAs stipulating that specific delivery windows be met or significant financial penalties will be exercised against the manufacturer. The most significant challenge was that the organization's field service network could not optimally back up these agreements and service its end customers. In some cases, SLAs were not met and enormous expenses were incurred.

To overcome this challenge, the manufacturer leveraged UPS's delivery system to assist in an inventory placement strategy to support the SLAs. In addition, the semiconductor equipment manufacturer used UPS Supply Chain Solutions' inventory tools to gain inventory visibility at its field stocking locations. As a result, the service levels now reach more than 99 percent satisfaction.

If your company is not continually improving in these critical areas and driving to documented objectives, consider the ROI that could be achieved even with minimal attention.

Returns management – rewards and barriers

The returns process requires an investment in technology and business processes that makes inventory visible across the supply chain. Contract Manufacturers (CMs) recognize these opportunities and have gobbled up leading disposition service organizations over the past several years. They understand the financial rewards of strengthening offerings, reducing costs, and increasing customer satisfaction through materials' returns processing and refurbishment.

Many companies have contracted deals wherein third-party providers are being paid to remove assets that have market value. In a recent survey of 125 product manufacturing firms, one research firm estimated that during the average product lifecycle 50-70 percent of the total potential revenue from the average product lifecycle is un-served by many companies.²

It is not uncommon for high tech companies to experience 10-20 percent returns due to customer dissatisfaction alone. It is true that the more complex the product is, the higher the percentage of returns due to several factors including: more variables that can go wrong, greater numbers of unqualified operators, and often regulated end-of-life disposition. Creating a "closed loop" approach to the supply chain that includes used equipment and replacement parts for refurbishment, reuse, or sale as raw material can result in significant growth strategy.

² Service Lifecycle Management, *AMR Research Report*

...it's highly likely that the inefficiencies are draining profit and effectiveness.

Yet, there are a number of barriers to an effective reverse logistics program which must be considered:

- Poorly defined processes and lack of system support may cause lack of visibility of the current costs associated with reverse logistics.
- Due to the variable nature of returns, both processes and systems must maintain a degree of flexibility to manage the returns process.
- Few product designs take into account the impediments to disposition that a product's composition can bring.
- A lack of clear understanding of financial hurdles and repercussions can result when entering into a bargaining position with potential business partners.
- Lack of training, counter-company policies and few incentives are all too often the primary barriers to advantageous reverse logistics programs.
- Paperwork and poor workflow processes tend to plague reverse logistics operations.

If your company hasn't focused on reducing the inefficiencies in each of these areas, it's highly likely that the inefficiencies are draining profit and effectiveness. While many companies have begun to recognize the need to address reverse logistics, few have looked at the opportunity strategically, established explicit contribution objectives, or created formal processes/metrics for asset refurbishment, resale or disposal. Leadership in this area provides competitive advantages that will diminish over time as competitors follow suit.

Take for example a manufacturer and integrator of automated-data collection and mobile computing solutions that faced a severe reverse and refurbishment logistics challenge. Given the scope of its products and customers, this organization needed to maintain a streamlined supply chain for efficiency and effectiveness.

At that time, it was handling returns and refurbishment in four of its own locations in North America. It quickly became apparent that the company could not process its returns through its supply chain infrastructure and achieve the efficiencies and service it needed. A decision was made to outsource returns and refurbishment to a provider with expertise in these areas which also had the required infrastructure and technology. As a result of outsourcing, the organization improved its customer service and achieved new-found efficiencies and customer satisfaction.

...the after-sales service markets represent an enormous opportunity.

Conclusion

Historically, the traditional supply chain has received 80 percent of the IT investments while only 20 percent has been applied to customer annuity. As mentioned earlier, the customer annuity supply chain is significantly more complex, but the after-sales service markets represent an enormous opportunity. Companies in general, and high-tech manufacturers in particular, can capture lost profits and create an annuity stream of revenue from customers. The obstacles to overcome are not insignificant and require a suitable culture, a complete understanding of the supply chain, and a framework to follow for execution.

The high-tech manufacturer that focuses on customer annuity will build loyalty that transcends the rapid product lifecycle changes created by technology. The company that can implement an effective customer annuity program will find itself rewarded with increased profits and a competitive advantage that will be hard for others to duplicate.

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