Performance-based Supply Chains Drive Total Lifecycle Value

Post-sale services is becoming an increasing component in revenue and profits.

BY MICHAEL BURKETT

We find that for many industries post-sale service represents 50 to 70 percent or more of a company's profit. Even industries not associated with long product lifecycles like life science or consumer products are finding that post sale services improve customer retention and loyalty. Success depends on a complete understanding of end-user value with visibility to customer performance and requirements translated to service and new products executed across a partner value network. Buyers don't just want a product or a service but a relationship with a partner that provides a total value solution.

Manufacturers are evolving through the stages of maturity necessary to be successful in performance-based service supply chains. While the goal may appear simple, the path to success is wrought with pitfalls. Organizations that are not aligned and measured to drive total lifecycle value fail to make the right business trade-off decisions between original equipment sales and the services that follow. Entering into performance based lifecycle contracts remains a challenge as both customer and supplier work through the service level agreements and metrics required.

Manufacturers no longer can separate the delivery of original equipment from the services that follow. Customers are seeking a solution to their needs that combines original equipment and post-sale services. As manufacturers accept that these two phases are intertwined, they see the necessity to take a total lifecycle view of products and services delivered to customers in an effort to own a customer for life. This requires risk-tradeoff decisions that must incorporate both parts of the business.

Post-sale services are not new but are increasingly recognized as a critical revenue and profit stream for the business. An AMR Research study conducted in 2002 found that post-sale services accounted for 24 percent of revenue but 45 percent of profits on average for the firms surveyed. Jeff Immelt, CEO of General Electric, speaking on the 4Q 2007 earnings call, was asked about the outlook for services revenue with a contract services agreement (CSA) backlog that grew 17 percent to $109 billion. He responded, "The way this will likely transpire the next three [to five] years is that services [will] continue to grow year in and year out 10 to 12 percent even as equipment slows down at some point."

The term "value-based" looks outside-in from the customer's viewpoint and emphasizes the final outcomes of the products and services purchased. We see this value-based approach applied across industries. The Department of Defense (DoD) has issued a directive to develop performance outcomes that focus on warfighters' needs by delivering a system that is operationally available, reliable, and effective, as well as offering a minimal logistics footprint at a reasonable cost (see *World Trade*, June 2008, "Performance-Based Logistics Redefines DoD Procurement"). This requires a combination of original equipment and services to ensure the desired outcome is achieved.

In automotive, General Motor's OnStar service provides continued communication support to drivers of its vehicles. Even pharmaceutical providers recognize the role of post-sale services to benefit total patient health: Pfizer's programs, called LifeREWARDS in Europe and GETQUIT in the U.S., provide on-line continued support to patients using its CHANTIX prescription medicine to help adults stop smoking.

Transition to service value is a journey many are just starting

While the benefits of post-sale services are clear, our research finds the transition to value-based, outcome-driven products and services can be difficult. Not all businesses are ready for pure value-based service tied to performance

The organization that operates in a responsive break-fix mode is on one end of the maturity spectrum. This company has one organization responsible for selling original products and another organization selling warrantee and service contracts. These organizations are measured independently. Therefore, they sub-optimize each part of the business and do not look at total lifecycle value to the customer.

On the opposite end of the maturity spectrum is the company that measures total lifecycle value of the combined original product and post-sale services delivered to the customer. The final measure of value delivered is performance-based, such as the uptime or availability of a process, or based on the output of that process. It would be misguiding to state that manufacturers are at the most mature stage of this transition even if they wish to be.

The manufacturers we speak with describe service as complex: no contract is the same customers require different service levels depending on maturity. An example of the time it can take to agree on a performance-based logistics (PBL) contract was presented at the 2007 Defense Logistics Conference, with representatives from the U.S. Air Force and Lockheed Martin discussing the lessons learned as they partnered on the F-22A Raptor. The relationship began four years ago and is still being finalized as they solidify metrics and service-level agreements (SLAs).

Here are some of the highlights of their negotiations:

- Metrics took two years to mature, and the PBL negotiations still continue.
- There was a change in culture, with Air Force depot employees now reporting to Lockheed Martin.
- The business case for a multiyear contract is difficult with one-year budget dollars.

PBLs are not new to the department of defense. However, the complexity and sophistication of the agreements are evolving. They come in different levels, with many at the lower component management level, such as the management of tires and wheels. Fewer are at the full-system capability level, but the Boeing C-17 Globemaster is approaching this level, and the F35 Joint Strike Fighter hopes to achieve it.

Performance-based contracts require customer and business alignment

Manufacturers wrestling with the evolution toward performance-based contracts must consider the maturity of their customer base to accept these contracts. They must also look at whether their business model and supplier relationships will support these contracts.

Some of the important considerations include:

- **Customer demands vary where one size does not fit all** – Keeping the customer satisfied is an altruistic goal, but don't underestimate how important a role this relationship plays in executing a performance-based service contract. Customer requirements vary, calling for different types of service agreements. We have found that the customer has a profound impact on not only the contract deliverables but on the ability for a manufacturer to successfully define the value of a contract and to execute upon the agreement.
- **Organizations must align to achieve total lifecycle value** – Alignment of incentives across the organization is central to taking a value-based view of the product and customer lifecycle. This combines the value of the original equipment plus the services required to deliver the desired performance. This does not work well if the business is not measured and aligned consistently with this value stream approach.
- **Partner networks are forming to support post-sale services** – General Norton Schwartz, Commander of U.S. Transportation Command (USTRANSCOM), summed up the partnership theme at a recent defense logistics conference when he stated, "It's all about keeping promises to our troops. Help us do this." He was speaking about the need to focus logistics and the supply chain on delivering capability to soldiers in battle, and not simply managing inventories of parts.

A similar requirement exists in commercial industry where value chain networks are becoming more prevalent due to outsourcing. Cisco gets an estimated 90 percent of its final product from supply chain partners. Boeing is in the process of creating its GoldCare program to support the new 787 Dreamliner, where

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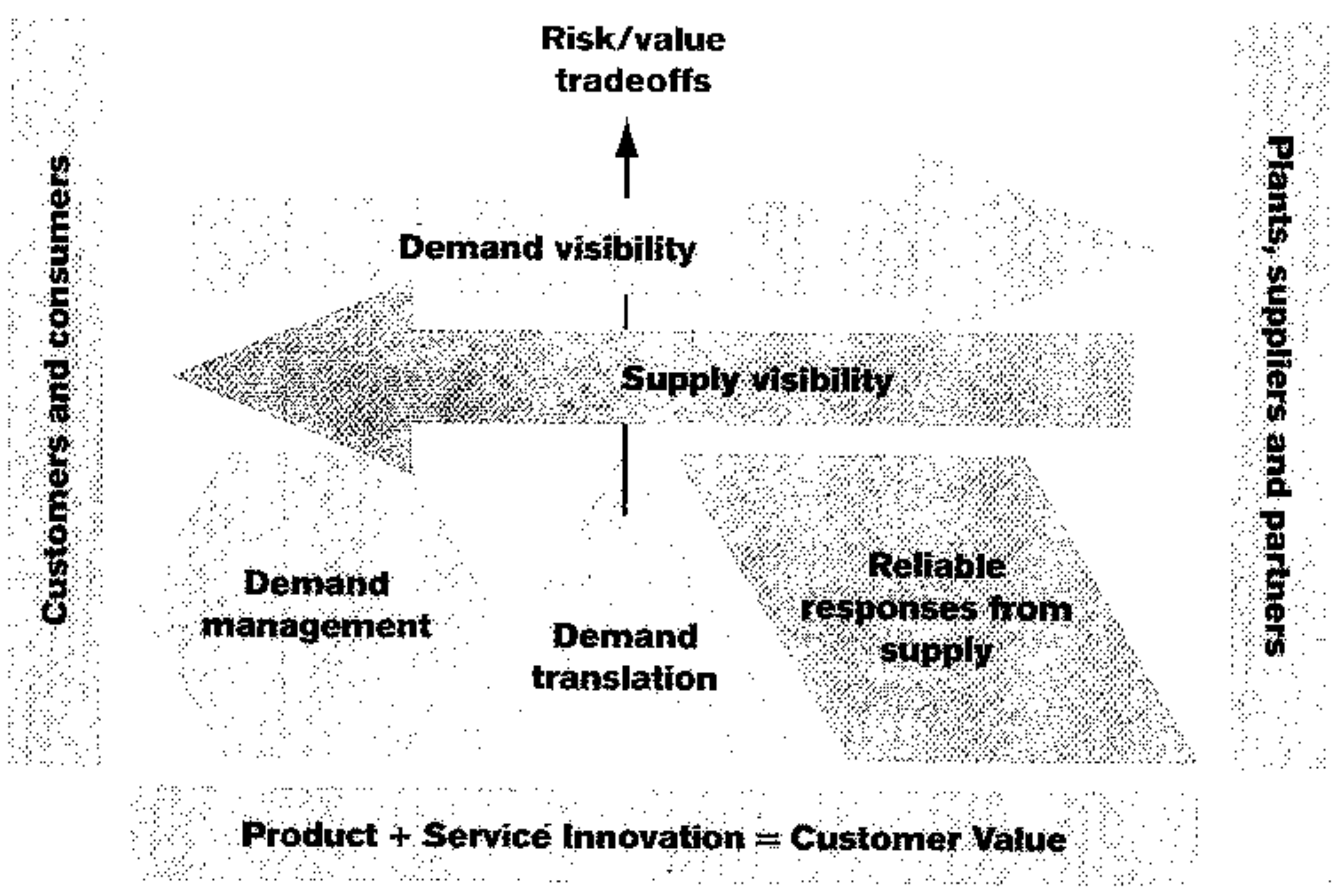
Customers are seeking a solution that [illegible]

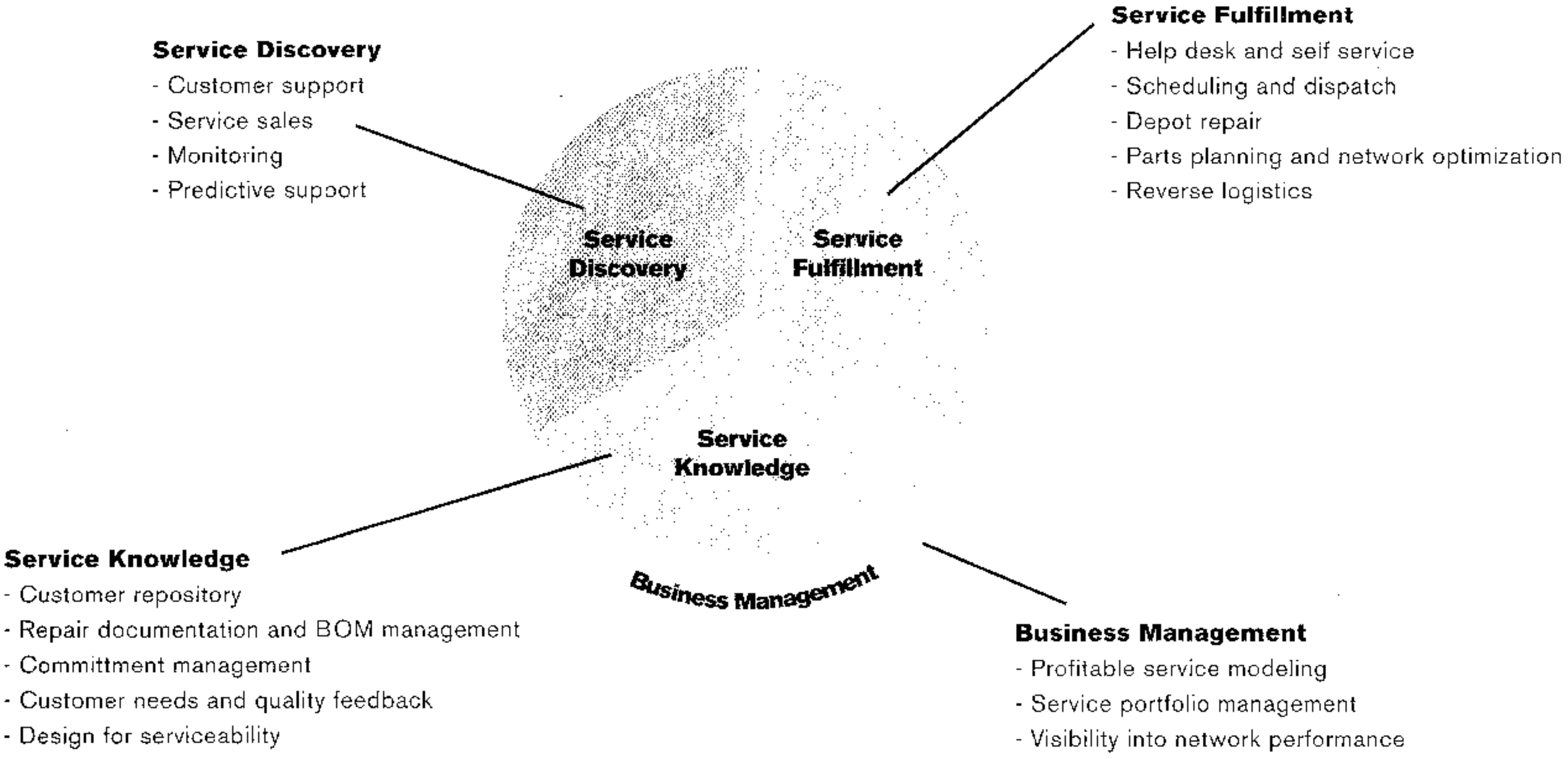
Product and services combine for total value



Risk/opportunity tradeoffs are inherent

Source: AMR Research, 20

Service lifecycle management framework



Source: AMR Research, 2008

more than 50 percent of the product is manufactured by partners. Automotive and consumer product companies have the added challenge of working with a network of dealers and independent service organizations to meet the end-customers needs. For suppliers to original equipment organizations there is an added conflict where both suppliers and OEMs are pursuing service revenue and a long-term customer relationship.

A Service Lifecycle Management framework to deliver performance

A large defense prime contractor summed it up well: "PBL contracts demand more data to be successful. It's necessary to mine that data deeper, get cost roll-ups on total systems versus components, identify redundancy, analyze mean-time-between-failure reliability data, and optimize spares and service technician placement." Most manufacturers we speak with emphasize the importance of process and organizational change supported by technology to scale and institutionalize the behavior, as well as to add processing and decision support capability that would otherwise be unavailable. The AMR Research service lifecycle management framework (SLM) is a guide toward where opportunities for process and technology improvements lie.

The SLM framework includes the following processes:

- **Service Discovery** - Determine when service is required through activities including equipment monitoring and mobile field service communications.
- **Service Fulfillment** - Execute on service from planning and delivering spare parts to conducting repair and installation, as well as optimization of these processes
- **Service Knowledge** - Keep track of what assets exist and the service agreements in place. Communicate valuable data to product development for continuous improvement
- **Business Management** - This ensures the profitability of service contracts through financial reporting and analysis, with scenario analysis on optimizing the service network

Conclusions

Customers are looking for complete solutions to their business process problem. Manufacturers are responding by combining original manufactured product with continued post-sale services to provide total value. Many of these contracts are paid based upon final performance requiring the manufacturers delivering these services to take a total lifecycle view of the products and services delivered. Not all contracts are completely performance-based nor is every customer prepared to accept one. It is an evolutionary process with both providers and customers at different maturity levels. Success requires a clear understanding of the organizational changes required, inclusion of partner networks, and the use of technology to optimize and scale the business. WT

Michael Burkett is Vice President Value Chain Strategies AMR Research.