

Better Service—Happier Customers: PTC’s Solution for SLM

CIMdata Commentary

Key takeaways:

- *Companies are focusing on services to differentiate their product offerings and as a way to improve product design, improve profits, and increase customer satisfaction*
- *Effective Service Lifecycle Management (SLM) is a key factor in developing and maintaining customer satisfaction and loyalty*
- *PTC has developed and acquired a number of best in class service solutions that address key aspects of SLM and that enable a System for Service which helps companies provide world class service so their customers achieve the highest value from the products they sell*

Introduction

Service is much more than the repair or replacement of defective or failing products. It encompasses all activities that ensure products can be used to their full potential—i.e., that the product performs as designed or better throughout its designed life. This critical activity involves a myriad of activities such as field service, warranty and contract management, customer experience, knowledge and technical information management, service logistics, and more.

Historically, in most industries service was an afterthought. However today, delivering excellent service is a critical element in customer satisfaction, differentiating product offerings, improving new product design, and increasing revenue and profitability. Customers expect high quality in the products and services they purchase. When a product fails or is not usable, they expect fast, efficient service to restore it to the expected level of performance. Companies that provide excellent products *and* service are rewarded with improved customer loyalty and the opportunity to expand their product and service sales.

Customers are also beginning to change what and how they buy—purchasing a desired outcome not a product. For example, when buying power-by-the-hour for aircraft engines, customers buy flight hours at a specified performance level. Maintaining a high level of availability is both mandatory and profitable for the engine manufacturer. Delivering services on a long-life product can be much more profitable than the initial sale as services become a steady, long-term, profitable revenue stream. Customers also want maintenance to be proactive—anticipating when service should be performed, not waiting until an outage occurs.

Warranty management is another important service component and business opportunity. Proper and efficient management of warranties can directly, and positively, affect the bottom line as well as a firm’s brand equity. The need to provide improved customer warranty and service response is forcing companies to implement integrated service and warranty management solutions that leverage the full set of information that describes a product. Additionally, providing feedback from warranty incidents into product development and the service supply chain is important for both near-term corrective actions as well as for improving future designs.

With service becoming more important as a key component of customer loyalty and corporate profitability, what are the issues preventing companies from delivering better levels of service to their customers?

The History of Service—Silo Operations

Historically, service has been fragmented across most organizations with multiple, disparate business systems and service-specific product information repositories for tech support, warranty, parts information, and more. Service personnel did not participate in product design and were unable to influence design decisions regarding how a product could best be operated and maintained. Service documentation was also created and maintained separately from product design and development, resulting in missing details or inconsistencies with regards to the information about how the product should be serviced.

Today, many organizations employ different business systems for service, workforce scheduling, task and work order management, spare parts planning and logistics, completion reporting, and warranty claim processing. In such a setting, service personnel must access multiple systems to find what they need to properly schedule, diagnose, and resolve service issues. Thus, obtaining current product configuration information, up to date service documentation, what service parts are needed, etc., is difficult. This frequently results in extending the time required to perform the service and induces service errors that may force a second or third costly service event—resulting in lower customer satisfaction.

Companies are recognizing that service information management and associated processes need to be integrated both within the service ecosystem and with related business systems to provide a single, complete, up-to-date view of service. These companies recognize the need to improve the consistency and availability of service-related information regardless of where it is created and maintained. This is driving the evolution and adoption of Service Lifecycle Management (SLM) as an important investment, critical to long-term business success.

World-Class SLM

Delivering world-class service requires managing service and service related information and processes in an integrated manner during each service event and throughout the useful life of the product. To do so, service content structures need to be developed during product design and maintained until the product is removed from service, decommissioned, or recycled. All aspects of service and warranty support must be managed and kept current with the latest product configurations and specifications as well as any regional and compliance obligations.

Effective service planning and execution requires knowledge of a product's current configuration, its maintenance and repair history, how it is best operated and serviced, and what spares, test, and service equipment must be used to maintain the product or system. SLM incorporates more than just service applications, it encompasses the people, processes, and technology used to define, deliver, and measure service. Service business systems (e.g., service parts management, service knowledge management, field service management, warranty management, and service analytics) need to be integrated to share service information so that pertinent information is readily available and clear, concise, and valid thereby eliminating data re-entry, conflicts, and missing information that result in service errors.

Effective SLM also means being proactive—tracking the usage of a product in service and determining and notifying the customer when a service event should be scheduled. The SLM solution can then provide the service technician with the needed service information

proactively (e.g., service procedures, approved parts lists, and training materials) and pre-order the parts or kits needed to perform the service and make sure they are available at the needed location.

SLM solutions should also provide the ability to capture and analyze service related information—what type of problems, how frequently they have occurred, which products are failing, and when and where. Analytics can then be used to spot patterns and trends so that preventive actions can be initiated proactively.

Finally, effective service management includes closing the loop, providing feedback to product requirements, design, quality, and manufacturing so that next generation products are designed and built to perform better and provide customers with higher on-going value.

PTC's SLM Solution

PTC believes, and CIMdata agrees, that effective SLM is key to a company's long-term success. PTC states that its strategy for addressing SLM is an approach that encompasses key aspects of the service lifecycle built on three legs:

- Best-in-class solutions that individually address specific service business problems or opportunities such as technical information, service parts management, field service management, etc.
- An SLM solution that provides cross-solution visibility to enable optimization of all service operations and enable service planning, execution, and analysis
- Total product lifecycle visibility to maximize product and service performance, establish long-term customer relationships, and increase service revenue and company profits, which PTC refers to as 'product and service advantage'

To deliver on this strategy, PTC has been executing a long-term strategy to build and acquire leading solutions to create a comprehensive SLM portfolio including Arbortext, Creo and Windchill for product support planning and technical and parts information delivery; 4CS for warranty management; and Servigistics for service parts planning and optimization, field service execution, and service knowledge management. PTC states that all solutions are being further developed on a universal enterprise framework so that service information and processes can be optimized to flow seamlessly and transparently across service functions and other enterprise business systems.

PTC is delivering nine solutions for key service areas. These include: Technical Information, Service Parts Information, Service Knowledge Management, Warranty and Contract Management, Service Parts Management, Field Service Management, Service Parts Pricing, Service Depot Management, and Service Network Management.

Start with Single Solution or the Entire Suite

Each PTC service solution addresses a specific SLM related function or operation and are offered individually or together to make up a total SLM environment. According to PTC, its SLM approach enables companies to get started toward a strategic service IT environment a 'step at a time' to address specific business needs. PTC SLM solutions can be combined with PTC's Windchill solution and others, and also integrate with business systems, including ERP, CRM, and non-PTC PLM applications.

PTC claims benefits include the ability to capture and manage up to date knowledge about products and related service information and processes, and be able to access and use that information whenever and wherever needed. Service can be more effectively planned and

executed, saving time and money for both the service provider and the customer. Service personnel will have the latest and most accurate information about the product to be serviced (e.g., product configuration and service processes) so they can perform their service correctly and on time, every time. Integration with other PTC solutions is intended to help ensure that up front service planning is in accordance with product requirements and that all service issues are captured and incorporated into new product development.



Figure 1 PTC’s System for Service Solution Components

Summary

Better service creates happier and more loyal customers. Effective Service Lifecycle Management is the key to creating those happier customers. It spans everything from installation, to maintenance, to how to use, and the feedback to improving product design and manufacturing. Excellence in SLM can make the difference in retaining customers. It also improves the bottom line—delivering service more efficiently and at lower cost, and providing the ability to increase service revenues.

PTC offers a comprehensive SLM vision and strategy for enabling companies’ ability to deliver advanced services. PTC’s SLM solutions address almost all aspects of service and warranty management and can be used with or without other PTC solutions. When coupled with PTC’s product development environment, a comprehensive solution to manage products from concept through end of life is available from a single solution provider. Companies looking to improve their service capabilities should evaluate PTC’s SLM solutions.

About CIMdata

CIMdata, an independent worldwide firm, provides strategic management consulting to maximize an enterprise’s ability to design and deliver innovative products and services through the application of Product Lifecycle Management (PLM). CIMdata provides world-class knowledge, expertise, and best-practice methods on PLM. CIMdata also offers research, subscription services, publications, and education through international conferences. To learn more about CIMdata’s services, visit our website at <http://www.CIMdata.com> or contact CIMdata at: 3909 Research Park Drive, Ann Arbor, MI 48108, USA. Tel: +1 734.668.9922. Fax: +1 734.668.1957; or at Oogststraat 20, 6004 CV Weert, The Netherlands. Tel: +31 (0) 495.533.666.