Industry White Paper

More Value for Your Service Dollar

Better Service at Lower Cost Through
Service Lifecycle Management

Introduction

An IT infrastructure and the capital equipment that serves as its foundation must generate a profitable return for the business that owns it. For the most part, there is no reason for a business to own or lease a piece of IT equipment unless it somehow helps to generate revenue. Although the connection between this equipment and the revenue it contributes may not be absolutely clear — equipment must make money or demonstrate value beyond the cost to purchase and maintain it. Whether the equipment is a vending machine or self-service kiosk that directly pulls in revenue, a personal computer supporting the back office functions of the business, or production equipment helping to produce the products that will be delivered to customers, capital equipment that is out of service or not functioning properly can not make money.

Service Lifecycle Management (SLM) is a strategic way for organizations to ensure that capital equipment is making a profitable return for their business. Making a profitable return is based on two things — ensuring uptime and proper performance for the equipment, and doing so at an optimal cost to keep expenses down. SLM is a business strategy, first introduced by industry analyst AMR Research, aimed at increasing the amount of time that a machine is up and running and concurrently reducing the total cost of ownership. By attacking both ends of the value equation, revenue and cost, SLM promises to provide a significant return for companies that depend on capital equipment.

SLM provides increased service value by employing a philosophy that moves businesses away from reactive service and towards predictive, proactive, preventive service. By identifying and addressing potential problems before they are noticeable problems, companies that adopt an SLM approach avoid the more significant expenses of unplanned repairs and the revenue loss from unnecessary equipment unavailability. The result of this proactive approach is better service at a lower overall cost. Leading companies today are adopting SLM as a business strategy by adopting the SLM concepts into their own service departments, or increasingly, by transferring the service headache over to a service company that delivers SLM capabilities as a part of their service offering.

Why is SLM Important?

Now, more than ever, companies rely on enabling technology to serve their customers and make a profitable return for their shareholders. Because of this reliance, keeping a company's IT equipment in optimal working order has become a strategic issue. From personal computers to high availability devices like servers and mainframes, suppliers address this need by improving the performance and reliability of this technology. Smooth flowing business relies heavily on the ability to properly maintain, upgrade and repair the underlying capital equipment to minimize downtime.

Downtime impacts the profit and loss statement on both sides, because it results in both lost revenue and increased cost (see Table 1). It has also become a much more public problem. Technology problems, which previously were not visible to customers, have moved from internal problems to customer-facing problems. The introduction of self-service kiosks, Internet commerce, computer networks, direct on-line connectivity to customers, and even modern phone systems, means that downtime can't be swept under the rug. Shortening downtimes through rapid service response is crucial and is a key tenant of SLM.

SLM also focuses on addressing proactive and preventive processes that increase availability and reduce the need for emergency repairs that can drive service costs up. Service costs, when not managed properly, can be a significant burden on profitability. While repairing and maintaining equipment is an absolute must, it is a cost center for the business. On the other side of the equation, properly maintained and working equipment results in less downtime and higher revenue. In this way, SLM impacts value by simultaneously increasing revenue while reducing the total cost of service. Service companies that must deliver uptime as a part of their Service Level Agreements, or SLAs, are adopting SLM to provide increased levels of equipment performance at a lower total cost.

Revenue / Cost	Impact	Examples
Revenue	Lost Orders	Sales person or website unavailable to take order
	Lost Billing	Inconvenienced customer not charged due to late delivery
	Lost Customers	Sales person or website unavailable to answer inquiry or complaints
	Missed Sales	Kiosk / vending machine out of order
	Damaged Reputation	Teller machines not functioning leading to customer frustration
	Delayed Cash Flow	Invoices delayed because of equipment failure
Cost	Diminished Productivity	Manual processing of payments
	Equipment Rental	Photo copy machine temporary replacement
	Increased Delivery Costs	Late shipment sent express because production equipment was down
	Overtime / Temporary Employees	Embossing machine down for repair creates backlog
	Penalties / Late Fees	Network down breaks service level conditions with customers

Table 1: Revenue Loss and Cost Resulting from Downtime

What is Service Lifecycle Management?

Service Lifecycle Management is a business initiative focused on improving the value gained from capital equipment by managing service operations more effectively. SLM is a structured approach to optimizing the service level of a piece of equipment, or of a collection of equipment. SLM accomplishes this through the automation and optimization of service-oriented processes throughout the working life of a piece of equipment through retirement. In order to reduce the costs of downtime and increase revenue opportunities, SLM focuses on reducing the inefficiencies in maintaining capital equipment.

A significant emphasis in Service Lifecycle Management is changing the philosophy away from reactive, break/fix thinking to proactive monitoring and prevention of problems. An effective SLM program monitors trends to determine when a proactive approach to upgrades, patches, or replacements will be more cost-effective than fixing problems after they occur. Predicting problems before they occur in order to avoid them, allows service to be performed on a routinely scheduled basis as opposed to a costly emergency repair basis. Emergency repairs increase cost in many ways, including increased transportation costs, lower utilization of technicians, and increased costs for replacement equipment purchased from unfavorable sources and overtime. More importantly, planned maintenance allows for the loss of revenue to be reduced because alternative plans can be put in place, or maintenance can be done at off-peak hours.

SLM also focuses on efficient processes from the initial customer contact through resolution. Calls may come in from the customer on the phone, via e-mail, directly from self-monitoring equipment, from a handheld device, by fax, from an onsite technician, or other methods. Regardless of the source, the call must be efficiently captured and tracked. Once the call is received, SLM focuses on making sure that the call is handled efficiently.

Even better, SLM asserts that the service call should be avoided if possible. Assuming that SLM has not prevented the problem in the first place, self-service and remote maintenance mechanisms may provide an alternative to a call from a field service technician. But if a call must be made, SLM provides an integrated approach between the Call Center, Field Service, and Depot Repair entities so that the right technician shows up with the right information, the right parts, and the right tools for the job — the first time.

In addition, the SLM approach promotes standard responses to common problems, so that technicians don't have to reinvent the solution every time. Once on site, the technician should know the history of the equipment so that they can quickly diagnose the problem. Through shared knowledge and access to the right information, the technician can get the job done — and done right. The technician should be in touch with the depot and the call center on a real-time basis, so that the service organization and the customer know the status of the problem and the resolution at all times. Through visibility, communication, and accountability, the impact of the downtime can be reduced. If the users of the technology have visibility to what is happening, they can plan the appropriate response to reduce cost and revenue loss. In addition to fixing the problem on hand, the technician should also be notified of any required preventive maintenance at the site so that future field service calls can be avoided.

Enable SLM with Technology

Service Lifecycle Management is a set of business processes that promote increased return on investment (ROI) for capital equipment through reduced downtime and lower total cost of ownership. These processes require a high level of communication and coordination across multiple parts of the business, including the customer, the field technicians, the call center, and the repair depot. Service organizations must embrace technology that offers real-time information sharing and integration in order to achieve the revenue and cost benefits. A fundamental requirement of the SLM approach is to have one place to look for information relating to the health of an asset, regardless of whether it is in working condition or being rebuilt at the depot. This information must be accurate, up to date, and easily accessible by all parties involved — particularly the customer.

Two primary things are required in the systems that support SLM — integration and real-time information. The first fundamental requirement for SLM systems is integration. Integration of the SLM process is the key to the way equipment-centric and service-centric companies run efficient businesses. All relevant information about an asset must be readily available for those that are trying to keep the machine in top working order in the most efficient manner. Service planning and field technicians alike need access to the service history, spare parts inventories, as well as warranty and service call information in order to effectively do their part in maintaining the asset. Service organizations today can't afford to rely on disconnected systems and processes and expect to provide the needed level of value.

The second fundamental requirement for SLM systems is accurate, real-time information. To make optimal dispatch and scheduling decisions, service organizations require a current picture of where their field technicians are and what they are doing. In order to make optimal repair decisions, field technicians should have full visibility to the repair history and service part inventories. In order to plan for the most effective inventory levels, parts planners require access to trends and current service requirements. In order to make the most cost effective service decisions, the business must have ready access to service level agreements and warranty information. In order for customers to remain satisfied, they must be able to access up to the minute status and actions surrounding a service request. Efficient and effective service repair requires real-time information that is readily accessible.

An Example of Technology-Enable SLM

Mobile technology can play a key role in enabling real-time information and improving communication. For example, DecisionOne, a leading information technology support and service organization, provides field service and remote technical support for a major on-line travel reservations company. In order to keep their reservation systems operating for their customers and generating revenue, the organization has employed DecisionOne to support the system hardware and software in over 2,000 locations. In order to meet service level agreements that include a 4-hour on-site response rate, DecisionOne relies on internally-developed solution known as ServiceTrack. ServiceTrack provides real-time access to service call, depot, and asset information for both DecisionOne and the reservations system. To keep the information up to date and accurate, DecisionOne technicians are always connected to real-time call status, customer history, and technical information via a Handspring Treo 300 device over a Sprint wireless network. By providing real-time access of information to field technicians, DecisionOne ensures that the technicians always have the right information at hand.

Through the Treo devices, DecisionOne technicians also provide status information back to the ServiceTrack system. This real-time feed of information allows the reservations company to check on the status of a service request at any time and get up to date information. Additionally, DecisionOne keeps better records of the service call and other service-related information by capturing the information at the source — the technician in the field. By utilizing advanced systems, wireless connectivity, and their own ServiceTrack system, DecisionOne provides excellent service to its customer. Through technology-enabled service, DecisionOne has improved service levels at the reservations company and done so with significantly lower cost of service.

User Recommendations

- Companies that rely on capital equipment to provide value to their customers should look to Service Lifecycle Management to improve ROI.
- SLM initiatives should focus on integrated business processes, enabled by real-time systems.
- Companies should adopt SLM to move away from break-fix approaches to more proactive, predictive approaches.
- Companies that don't have the ability to deliver on SLM internally should consider outsourcing service to a company that provides SLM-enabled service.

Summary

Service Lifecycle Management can provide significant value by decreasing the downtime of capital equipment, and doing so at a reduced cost due to increased efficiencies. By adopting SLM as a business objective, companies can increase the value of the service that they provide. Whether a company chooses to service their own equipment or outsource service to a dependable third party, SLM initiatives should be explored for their potential business value and ROI.

About the Author

Jim Brown has over 15 years of experience in management consulting and application software focused on the manufacturing industries. Jim is a recognized expert in software solutions for manufacturing and has broad experience in applying enterprise applications such as Product Lifecycle Management, Supply Chain Management, ERP and CRM to improve business performance. Jim is a frequent author and speaker on applying software technology to achieve tangible business benefits. Jim can be reached at **jim.brown@tech-clarity.com**.