

Connected Service: Equipment Knowledge as a Competitive Power

[Joe Barkai](#)

The Risk of Market Commoditization

In so many businesses, competing on price alone is a stressful and often futile business strategy. When the only protection a company has against competition is lower price, an aggressive new entrant offering an even lower price for the same product or a service can disrupt the business overnight, luring customers away from an established business that had cultivated customer loyalty for decades. Indeed, low-cost products and services often conjure thoughts of subpar quality and poor customer service, but by the time the newly-recruited customer discovers it, the damage has already been done and is difficult to reverse. As the old adage goes, it costs much more to regain a lost customer than to keep an existing one.

McKinley Elevator Corporation is a family-owned business that installs and services residential elevators and accessibility lift products for homes, public facilities, and businesses. McKinley has a strong industry reputation for quality customer service but is constantly at risk of losing market share to other service providers, and under pressure from elevator manufacturers seeking distributors in a highly commoditized and price-competitive market.

Dedicated to delivering high quality customer service, McKinley implemented a mobile, cloud-based field service software from ServiceMax. The software automated paper-based contracts, parts ordering and service scheduling, and gives remote technicians instant access to customer data and parts inventory, resulting in service technicians able to perform installation, maintenance, and service tasks more effectively and efficiently.

Downtime is Not an Option

Superior response time to service events, and first-time fix rates are the hallmark of customer service operations. But for someone who depends on a wheelchair lift in an office building or a residential elevator for mobility and quality of life, the service story may unfold differently. For these individuals, a broken lift is a significant—even if temporary—setback.

For people with disabilities, downtime is not an option.

And for public facilities and businesses that are required by law to provide mobility equipment, an out-of-service sign means not only that they are letting citizens with limited mobility down, but they may also be out of compliance.

McKinley wanted to look at service excellence differently. Rather than focusing on fast response time to satisfy the service contracts, it wanted to define operational goals that directly reflect the experience of the users whose quality of life depends on the equipment and service McKinley delivers. McKinley embarked on a technology and business strategy initiative to improve the availability and safety of its equipment by detecting potential problems in advance, well before the customer is faced with the dreaded OUT OF SERVICE sign.

McKinley started an in-house proof of concept project to retrofit and instrument lift equipment with sensors that collect and transmit the status of the equipment wirelessly to its service operations office. The sensor data is analyzed, and if a service-related issue is detected, ServiceMax's field service management platform generates a service ticket and schedules a service call before customers is even aware of the problem.

The initial project proved the concept and the promise to offer an improved quality of life to customers. McKinley needed to "industrialize" and scale the initial project quickly.

A partnership between ServiceMax and Internet of Things company PTC provided the large-scale capabilities McKinley needed in order to take the connected service capabilities to the market. PTC and ServiceMax integrated the field service software into PTC's ThingWorx IoT platform to enable a seamless flow between equipment-generated service events and the creation of a service ticket and dispatching service personnel.

The Power of Knowledge

Connected equipment and real-time equipment status form the foundation of an effective and efficient service organization. Early-warning indications and remote diagnostics allow a service organization to dispatch technicians promptly, ensuring they are equipped with the necessary parts and information to restore assets back to safe operation quickly.

Over time, as the organization continues to monitor and analyze equipment information, the combination of real-time sensor information, data analytics and domain expertise will enable the company to turn the information it collects into deeper insight and actionable knowledge that will improve both customer-facing goals and internal performance targets such as first-time fix rate and equipment uptime.

But this experience and knowledge confer benefits that have an equally profound impact outside the boundaries of equipment maintenance and repair operations, benefits that are not revealed when using the traditional transaction-oriented field service metrics.

For instance, ongoing analysis of information about a wide range of installation types and usage patterns (of the kind that McKinley installs and maintains) offers valuable insight that can be used to improve product design, installation practices, and service technicians training. In return, investing in improving these facets will have further impact on asset uptime and field service efficiency, and allow efficient allocation of scarce service technicians.

Another significant operational improvement opportunity is in spare part inventory, which is notoriously difficult to manage cost-effectively. Combining historical data of part failure rates with analytic algorithms, organizations can optimize part stocks in the warehouse and technicians' service vehicles, reducing inventory costs and improving repair time.

Forward-thinking distributors and value-added resellers such as McKinley see additional opportunities to leverage the insight garnered from connected service. McKinley is happy to share its experience and knowledge with the equipment manufacturer, creating a value-based competitive advantage in a market that is highly cost-driven and can change overnight.

From a Commodity Business to a Value-Centric Business

Monitoring the status of connected equipment remotely allows dispatching service personnel to rectify problems quickly, ideally before the user is faced with a broken system.

But connected service does more than improving the responsiveness and the efficiency of service operations; it is changing the conversation altogether.

Rather than focusing on price differentiation and traditional service-level metrics such as response time, a connected service strategy transforms customer service from a price-centric transactional model to an outcome-based service model that delivers relevant well-defined customer value. At McKinley, for the users of lift equipment, this value is in helping people with disabilities maintain their dignity and quality of life. For public sector organizations and businesses, the value is expressed in better service and corporate citizenship, public image, and compliance.