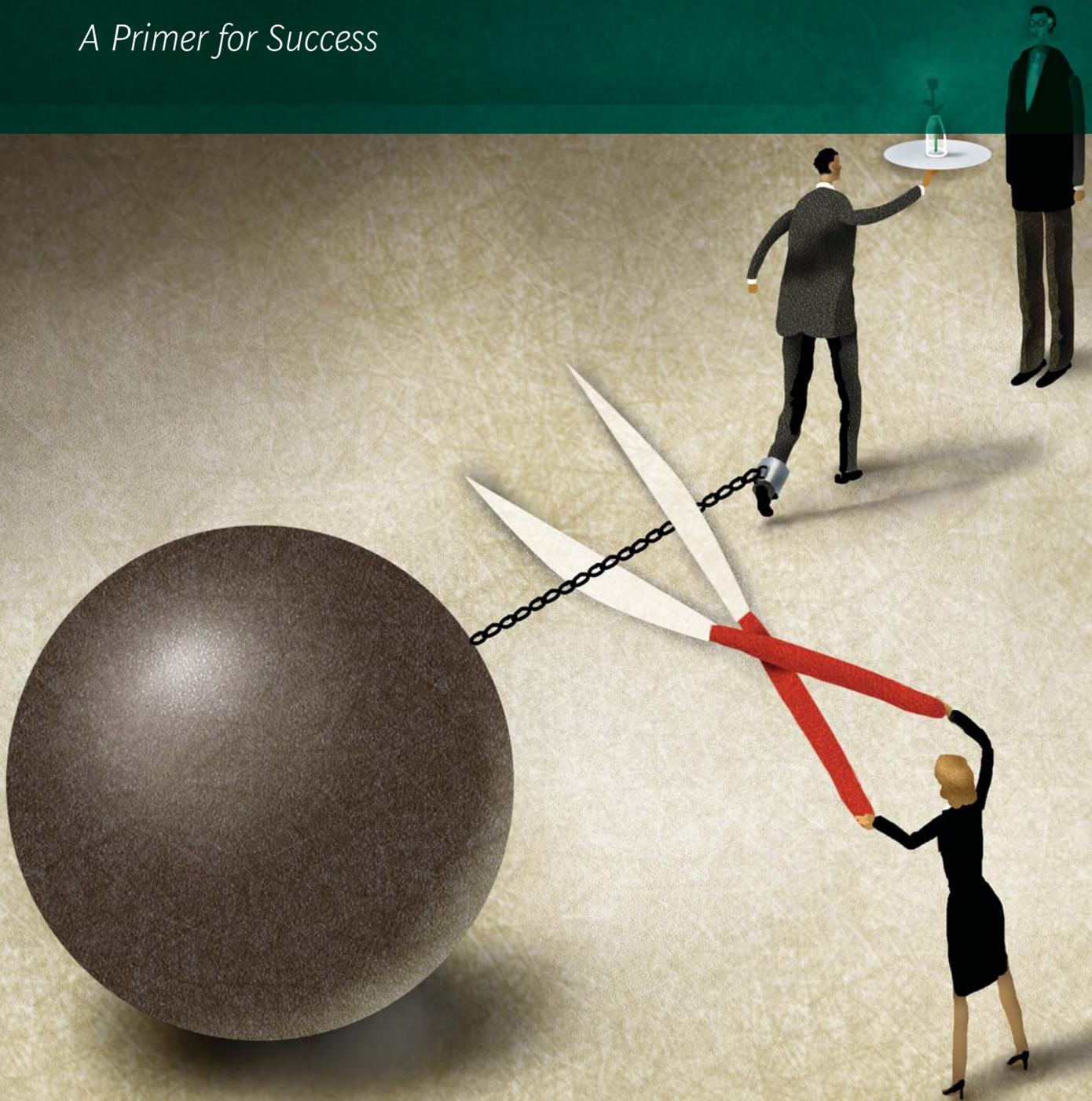


BCG

THE BOSTON CONSULTING GROUP

Lean Services

A Primer for Success



The Boston Consulting Group (BCG) is a global management consulting firm and the world's leading advisor on business strategy. We partner with clients from the private, public, and not-for-profit sectors in all regions to identify their highest-value opportunities, address their most critical challenges, and transform their enterprises. Our customized approach combines deep insight into the dynamics of companies and markets with close collaboration at all levels of the client organization. This ensures that our clients achieve sustainable competitive advantage, build more capable organizations, and secure lasting results. Founded in 1963, BCG is a private company with 77 offices in 42 countries. For more information, please visit bcg.com.



THE BOSTON CONSULTING GROUP

Lean Services

A Primer for Success

Devesh Raj and Olaf Rehse

November 2012

AT A GLANCE

The principles of lean production and industrialization can be applied to service functions as well as manufacturing lines. By rethinking and streamlining service processes, most companies can cut expenses by 10 to 30 percent and sharply improve the satisfaction of internal and external customers.

UNDERSTANDING THE PROBLEMS

Key reasons for inefficient service processes are a lack of standardization and consistency, exceptions and rework that slow throughput, and an inability to analyze and manage the drivers of work force productivity and customer satisfaction.

GETTING IT RIGHT: SIX SUCCESS FACTORS

BCG's work with companies at the forefront of lean services reveals six success factors: identify and map key processes, reduce complexity, standardize work modules, harness the power of "big data," set and track performance metrics, and cross-train to increase productivity.

CREATING A LEAN CULTURE

In companies whose performance improvements are sustained over the long haul, lean is a mindset as well as a methodology.

WHY HAVE COMPANIES BEEN so slow to apply lean principles and techniques to service processes such as finance, human resources, accounting, health care, and customer service? One reason is that the waste and inefficiency that can interfere with services are rarely obvious. Unlike in factories, where idle workers and stacks of inventory are clear signs of broken processes, waste is usually hidden when it comes to services. It tends to lurk between functions, departments, or regions, so companies see only glimpses of the problem. Another obstacle typically lies with the white-collar service workers themselves, who may be resistant to the idea that their work could be standardized.

But the lack of standardization and consistency in service processes is costly. Complex, inefficient processes are slower, have higher error rates, and decrease overall responsiveness and customer satisfaction. They also increase risk and jeopardize compliance in regulated industries such as health care and financial services. There's a human cost, too: when people spend too much time on low-value tasks, they have less time for more-rewarding, higher-value work.

The principles of lean production and industrialization can be applied to service functions as well as manufacturing lines, with one big difference: the costs to be tackled stem from labor, overhead, and low customer satisfaction, not physical inventory. By rethinking and streamlining service processes, most companies can cut expenses by 10 to 30 percent and sharply improve the satisfaction of internal and external customers.

Understanding the Problems

Manufacturers have long known that standardized processes and lean production increase productivity, decrease waste, and enhance capacity utilization. Our modern industrial society was built on the ideas of task specialization, division of labor, and automation, all of which paved the way for mass production. In the 1950s, Toyota revolutionized auto manufacturing with its lean production system and the principles of an integrated, end-to-end process viewpoint that combines the concepts of waste elimination, just-in-time inventory management, built-in quality, and worker involvement.

These same principles can be applied to service processes. Moreover, an end-to-end process viewpoint is critical in order to see and eliminate waste. Process “waste”—in the form of excess steps, redundant activities, and tasks that add no value—cannot be compartmentalized. Inefficiency in one part of a process spills into other parts and other processes.

The waste and inefficiency that can interfere with services are rarely obvious.

Many service functions lack the ability to analyze and manage the factors that affect work force productivity, such as exceptions and rework.

Inconsistency is a problem for many service processes. As an experiment, a company we worked with sent identical customer-service tickets to ten different operators in a call center for technical support. We were surprised by the huge variation in processing times among the operators: the quickest one was about six times faster than the slowest—a far greater difference than the 20 or even 50 percent variation we were expecting. Further analysis revealed that some operators used simple computer shortcuts, such as hot keys and macros, that increased their speed. The company had no training or knowledge sharing to improve performance overall, however, and no incentives to encourage operators to work more quickly. As long as the overall group was keeping up with the load, individual productivity was not measured or rewarded—even though some operators were processing far more tickets than their peers. This mismatched output hurt morale among the top performers.

Another typical observation with service processes is a variation of the “80-20” rule: **a small percentage of work typically eats up a disproportionate amount of time.** We asked the head of an internal-support function how much time it took to process a typical transaction. He didn’t know, but one of the clerks thought the processing time was less than five minutes. A time-tracking study showed that estimate to be fairly close—about 75 percent of the transactions took less than five minutes. But the remaining 25 percent of the transactions—the more complex ones—accounted for 60 percent of the total time expended every day.

Exceptions such as these can be a huge drain on productivity and are typical for many service processes. For instance, finance functions throughout the world perform basically the same activities, such as paying bills, generating invoices, and balancing the books. But their inputs and outputs—as well as the processes they follow—vary greatly. What finance functions do share is a great deal of rework and many exceptions, all of which add time and cost. Like many internal functions that are not customer facing and don’t generate revenue, finance has tended not to focus much on productivity and process efficiency. But this laissez-faire attitude is costly, and for service companies with customer-facing processes, it can hurt the business.

In manufacturing, the customer doesn’t see or care about the production process itself, as long as workers aren’t abused and the product is acceptable. **But in health care, banking, travel, and other service industries, the customer is the product moving through the process—and experiencing firsthand the frustrations of inefficiency.** Satisfaction is critical, whether the customer is internal or external. And a lack of satisfaction is costly when it prompts customers to take their business elsewhere.

Many service functions lack the ability to analyze and manage the factors that affect work force productivity, such as exceptions and rework. In a manufacturing plant, targets for output and capacity utilization are set and tracked, but most service organizations are unable to measure performance in these areas. Intermittent cost-reduction efforts tend to use high-level benchmarks, not process improvements, and sharing of best practices within companies is usually quite limited.

Getting It Right: Six Success Factors

Making service processes more lean presents a variety of challenges. It often requires creative thinking—but old habits die hard. For instance, when paperwork moves online, the steps of a process may still be performed in a sequential order, even though they could now be done in parallel. Rethinking old ways of working can lead to fresh insights. Many companies also find that starting small, with a pilot in a key area, can be a way to build momentum and enthusiasm—especially among white-collar workers, who may be resistant to the idea that their work could be standardized in the first place.

Our work with companies at the forefront of lean services reveals six factors that increase the odds of success.

IDENTIFY AND MAP END-TO-END PROCESSES

Because processes typically cross functions and departments, few people involved with them have a complete picture of the end-to-end workflow, and interdependencies and interfaces are often hidden. This can result in costly inefficiencies and high error rates. For instance, to prepare for service delivery to new customers, a network service provider routinely tested each of the eight segments of the connection separately, starting at the user's location, proceeding to the central office, and so on. This was a labor-intensive, time-consuming process. So the company tried an experiment—and discovered that doing one end-to-end test was much quicker and yielded a far lower error rate.

Before a service process can be improved, its steps must be wholly transparent. A detailed analysis of processes and subprocesses often reveals inefficiencies, “work-arounds,” and complexities—as well as significant opportunities to improve performance. Look for handoffs and steps that waste time or add no value, and analyze information flows to identify silos and roadblocks.

This end-to-end focus was critical for a technology service provider with a slow, complex service-provisioning process. Setting up service for a new customer involved five functions: sales, customer service, customer support, field operations, and equipment management. Job specialization had led to a typical order being handled by ten people, with much elapsed time between handoffs. By simplifying and automating parts of the process, decreasing the number of job categories by 50 percent, removing interfaces between departments, and empowering employees to fix errors earlier in the process, the company was able to shorten provisioning time by 35 percent and reduce costs by 40 percent.

Doing a detailed process analysis was also critical to the success of a regional hospital that set up a lean program aimed at reducing the length of patient stays without hurting the quality of care. At hospitals, the length of stay is a key measure of effectiveness and efficiency. A shorter stay means that beds turn over more quickly and hospitals can treat more patients without investing additional capital. An analysis of the hospital's administrative processes revealed a number of problems and bottlenecks. For instance, sometimes it would take two days for a patient to get an intravenous line, usually because of a lack of communication. Such problems could easily delay discharge. The process analysis identified these bottle-

A detailed analysis of processes and subprocesses often reveals inefficiencies, “work-arounds,” and complexities—as well as opportunities to improve performance.

necks so that solutions could be designed to systematically reduce the length of stay—and significantly boost the hospital’s operating profits.

REDUCE COMPLEXITY WHEREVER POSSIBLE

Complexity is a major obstacle to process efficiency. **Flag and eliminate any variations, disruptions, rework, or exceptions that slow the workflow.** As manufacturers know, nonstandard products can be a costly drag on productivity. The same is true in services. Rethink and redesign the process to eliminate elements that sap efficiency. Remove any exceptions from the general process and have specialists handle them. This allows employees to work more quickly and productively, with fewer interruptions.

Taking this approach transformed the customer service operations of a major European telecommunications company. The company’s problem-resolution process had become a nightmare. One customer with a connection problem called the service center five times and spoke to 12 different people in a variety of departments, and still was unable to resolve his problem. **By separating standard service problems from exceptions early in the process—in effect creating an “express lane” for standard problems—the telco was able to reduce costs and head count while dramatically improving service levels.**

DEFINE AND STANDARDIZE DISCRETE WORK MODULES

Break each process into discrete, repeatable pieces with distinct inputs and outputs. Each piece should be big enough to involve a meaningful amount of labor and transaction volume but small enough to address the core complexity of the process. Then standardize these repeatable process steps.

Besides increasing speed and efficiency, standardization can reduce errors.

Besides increasing speed and efficiency, standardization can reduce errors. Consider cash reconciliations at a bank, a task that involves comparing entries and lowering the bank’s exposure if there’s a mismatch. In a typical big bank, many small groups use different technologies, processes, and standards to perform separate reconciliations. That can lead to costly mistakes. A lean approach allows a bank to standardize uniform processes and increase the accuracy and quality of output.

HARNESS THE POWER OF “BIG DATA”

Dramatic advances in computing power and processing speed now allow companies to gather vast amounts of data and perform complex analytics. The resulting insights can minimize waste, lower costs, and sharply improve process performance.

For instance, the backbone of one global corporation was an IT and network infrastructure that supported a variety of mission-critical applications. The system sent out frequent status alerts. Some of these were routine and informational; others were critical warnings. Handling these alerts was not an automated process: technical support staff had to evaluate the importance manually—a nearly impossible task given the large volume of alerts (millions per month). However, an analysis of the alerts indicated that only a small fraction of them really mattered. On the basis of that insight, a new process was put in place: real-time analytics looked for patterns that might precede a potential problem. As a result, the company was able to identify potential issues up to one hour in advance of their occur-

rence. With a smarter prediction methodology and plenty of time to react to real problems, the company required fewer people to monitor alerts, and system problems were less likely to lead to service interruptions.

SET AND TRACK PERFORMANCE METRICS

Once process work has been broken down into discrete pieces, those pieces can be measured and target benchmarks can be established. One provider of outsourcing services tracked the amount of time that service workers spent on different tasks. These time logs provided managers with valuable information on how factors such as workload size, complexity, or day of the week affected workers' speed and productivity. Armed with these data, managers could track the actual time spent on specific tasks, understand the drivers of productivity, and fine-tune their operations for far greater efficiency and cost savings. A simple but critical insight: bigger workloads led to higher productivity, up to a specific "overload" point. By comparing worker averages over time, the company was able to identify and reward high performers, create standard benchmarks (such as labor time per task), and set performance targets for speed and volume.

Detailed data on how much time employees spend each day working and how productive they are at their tasks provide managers with a true measure of work force productivity and utilization. This provides value in three areas. First, the feedback stimulates people to improve their own performance. Second, the data allow companies to coach and improve their workers. And finally, the insights make it possible to set performance benchmarks and improve overall process excellence.

CROSS-TRAIN TO INCREASE PRODUCTIVITY

In some service functions, employees have uneven workloads at different times of the day, leading to periods of frenetic activity mixed with periods of downtime. A major European retailer cross-trains employees so that, for example, cashiers can shelve products and department specialists can provide customer service when it is needed. The company is known for its operating efficiency and low prices. Similarly, workers in the fast-food industry often share the workload by wearing different hats: taking customer orders, serving food, and so on. This sharing of duties to increase productivity and customer satisfaction is rarely seen in corporate service processes, but it can sharply improve overall productivity levels.

Creating a Lean Culture

Implementing lean services is really an exercise in change management—and one that is most effective when people at the front lines are involved and engaged in problem solving. For instance, service workers are the best source of customer insight and suggestions for process improvements, so it's important to involve them in any lean initiative. Employees are less likely to resist new ways of working if they've had a hand in the redesign and understand how they'll add value. Done right, lean becomes part of the culture, as people continue to think of ways to improve what they do.

In companies whose performance improvements are sustained over the long haul, lean is a mindset as well as a methodology. Make continuous improvement an

Implementing lean services is really an exercise in change management—and one that is most effective when people at the front lines are engaged and involved in problem solving.

integral part of the culture by encouraging participation at all levels and designing incentives to promote engagement. Many people rise to the challenge of competition—against other teams for productivity awards or against themselves to better their own performance in terms of end-customer satisfaction or cost. Individual and team incentives such as recognition or bonuses can further energize workers and ensure that performance improvements are ongoing.

Continuing commitment from the top also ensures ongoing success. By assigning knowledgeable and dedicated full-time employees to a lean-services program, company leaders send a clear message that lean is a priority. With committed resources, lean programs gain traction more quickly and show results sooner, which helps build momentum and enthusiasm.

Although a team of experienced, dedicated specialists can help to kick off a lean initiative, the ultimate goal must be to build lean capabilities among employees so that continuous improvement can happen without an outside catalyst. To this end, companies should aim to develop lean champions and trainers who can teach lean methodologies and tools to others within the organization—ensuring that results are sustained going forward.

FOR DECADES, MANUFACTURERS have used lean tools and techniques to improve productivity, reduce waste, and get more from their assets. But the same lean methodologies can be applied to service processes, where inconsistency and a lack of standardization increase errors, slow response times, and hurt customer satisfaction. By following the six success factors and creating a culture that supports and sustains lean results, companies can significantly reduce overhead, energize employees, and lay the groundwork for ongoing improvement.

About the Authors

Devesh Raj is a partner and managing director in the New York office of The Boston Consulting Group. You may contact him by e-mail at raj.devesh@bcg.com.

Olaf Rehse is a partner and managing director in the firm's Düsseldorf office. You may contact him by e-mail at rehse.olaf@bcg.com

Acknowledgments

The authors would like to thank Katherine Andrews, Gary Callahan, Martha Craumer, Catherine Cuddihee, Angela DiBattista, and Sara Strassenreiter for their contributions to the editing, design, and production of this report.

For Further Contact

If you would like to discuss this report, please contact one of the authors.

To find the latest BCG content and register to receive e-alerts on this topic or others, please visit bcgperspectives.com.

Follow [bcg.perspectives](https://www.facebook.com/bcg.perspectives) on Facebook and Twitter.

© The Boston Consulting Group, Inc. 2012. All rights reserved.
11/12



BCG

THE BOSTON CONSULTING GROUP

Abu Dhabi
Amsterdam
Athens
Atlanta
Auckland
Bangkok
Barcelona
Beijing
Berlin
Boston
Brussels
Budapest
Buenos Aires
Canberra
Casablanca
Chennai

Chicago
Cologne
Copenhagen
Dallas
Detroit
Dubai
Düsseldorf
Frankfurt
Geneva
Hamburg
Helsinki
Hong Kong
Houston
Istanbul
Jakarta
Johannesburg

Kiev
Kuala Lumpur
Lisbon
London
Los Angeles
Madrid
Melbourne
Mexico City
Miami
Milan
Minneapolis
Monterrey
Montréal
Moscow
Mumbai
Munich

Nagoya
New Delhi
New Jersey
New York
Oslo
Paris
Perth
Philadelphia
Prague
Rio de Janeiro
Rome
San Francisco
Santiago
São Paulo
Seattle
Seoul

Shanghai
Singapore
Stockholm
Stuttgart
Sydney
Taipei
Tel Aviv
Tokyo
Toronto
Vienna
Warsaw
Washington
Zurich

bcg.com