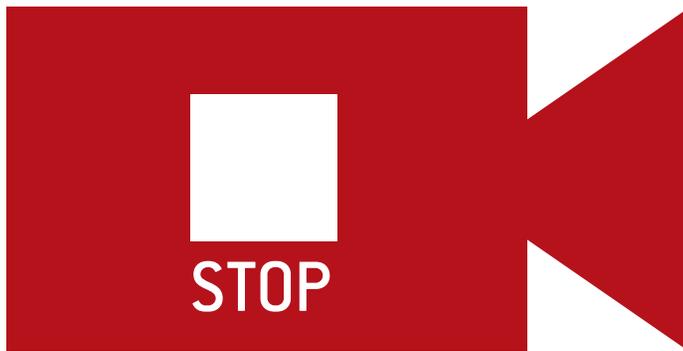


Bridging the Lean Performance Gap



How Manufacturers Can Achieve Real Lean and Real Results



This is a multimedia PDF.

To watch video in this PDF, be sure you are viewing in **Adobe Reader 9.0 or newer**.

Don't have Adobe Reader 9?

[Download it for free here.](#)

How to check your Adobe Reader version.

In your Adobe Reader menu bar, go to "Help," then select "About Adobe Reader" to see what version you are using.

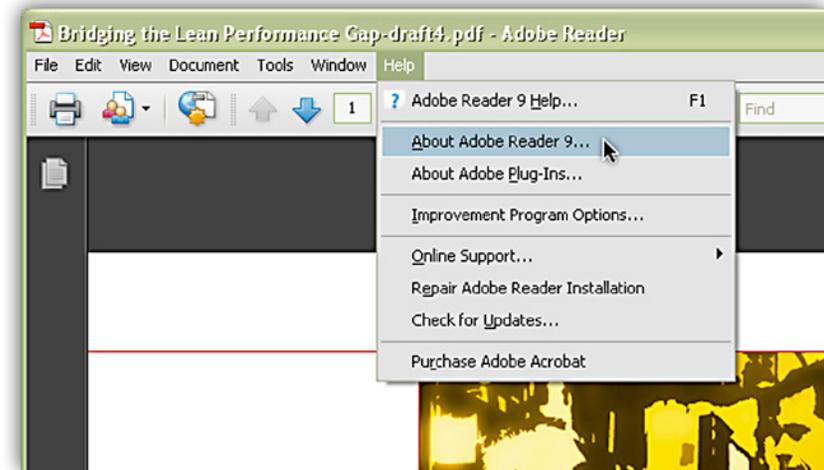
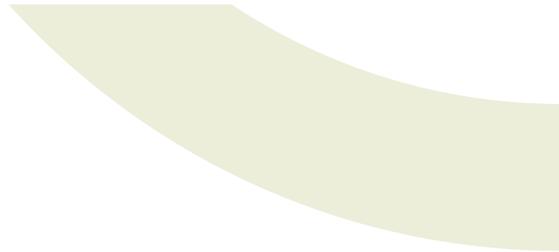


Table of contents

Introduction	5
Chapter 1 – Recognizing the Lean Performance Gap	6
Research on Lean Manufacturing	7
Real Lean vs. sort of Lean	9
Chapter 2 – Why Aren't We Real Lean?	11
Reactionary decisions	11
Uncertain workforces looking for leadership	13
Shifting supply chains	15
No clear direction — fuzzy, changing targets	16
Chapter 3 – Building the Bridge	19
Strategy deployment.....	20
Performance management.....	22
Chapter 4 – Performance Management for Processes and Objectives..	25
Process/function perspectives	27
Corporate performance management.....	28
Operations management.....	29
Customer-demand management	30
Supply-chain management	31
Enterprise asset management	32
Research and product development.....	33
Workforce management.....	34
Logistics management.....	35
Organization objectives	36
Lean and continuous improvement	37
Green	38
Globalization.....	39
Innovation	40
Summary	42

CLICK ON SECTION TITLE
TO JUMP TO DESIRED PAGE. 



CLICK THE ARROW TO
JUMP BACK TO THE
TABLE OF CONTENTS. 



Has your company implemented Lean?

Are you getting all you expected out of Lean?

Do you see other organizations achieving greater productivity, profitability, and market share from their Lean strategies?

Do you perceive a Lean performance gap between your company and your competitors?



Many businesses have improved market leadership, productivity, and profitability through application of Lean strategies. Maybe your firm—or maybe your competitors. Other companies are still searching for Lean improvement—including firms that have tried (but failed) with Lean as well as those that have yet to see the need for Lean. Between the Lean “haves” and the Lean “have-nots” is a corporate chasm, a performance gap that may mean the difference between success and failure.

The past year has taught executives everywhere that business will never again be business-as-usual; manufacturers, in particular, must focus more than ever on satisfying customers while removing waste and unnecessary costs from their organizations.

And they need to do so faster and better than their competitors. *Bridging the Lean Performance Gap* highlights how companies are doing just that by relying on strategic Lean concepts:

- Identifying a unique corporate vision (a True North, a guiding star) that articulates the value your company provides to its customers and its competitive advantages in the marketplace
- Developing specific, actionable goals and objectives at every level of the organization, linked to and guided by True North
- Regularly attaining, checking, and recalibrating goals, and continuously improving the company with the support and encouragement of robust processes and systems to manage performance

The Lean performance gap can be bridged.



CHAPTER ONE

Recognizing the Lean performance gap

None of us have operated in a financial environment like this one:

- Dramatic market swings
- Giant multinationals failing
- Unprecedented global credit crunch
- Crippling downsizings across most business sectors

All of us know companies—your suppliers, customers, or competitors—that have gone out of business or are at risk of failure. **Yet despite dramatic economic and market turmoil, for most companies business continues. There are the rare few firms in every industry, even amid recessionary chaos, that are not only surviving, but thriving.**

How?

For many recession-resistant companies, the secret has been a dedication to real Lean management, broadly and fully implemented across the enterprise. In every industry, there's a growing gap between manufacturers that are truly Lean organizations—with problem-solving executives and employees

focusing on customers, reducing waste, and improving productivity—and those companies whose Lean tools (not strategies) have stumbled, leaving these firms exposed to economic decline. Worse yet are those companies that ignore the efficacy of Lean strategies altogether.

For years, the vast majority of manufacturers hid underperformance behind a calculation of

Cost = Sales – Profit.

During boom times, there was enough cash to go around, and prices could be raised to meet profit targets.

Those days are long over. **Lean manufacturers have learned that they need to operate on a**

Profit = Sales – Cost

formula. This new math makes it imperative for manufacturers to reduce their costs in order to remain profitable.

How widely adopted is this new Lean equation at your company?



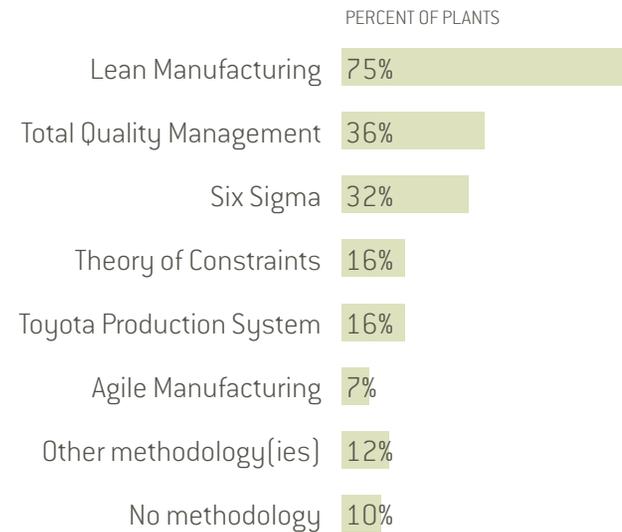
CHAPTER ONE: RECOGNIZING THE LEAN PERFORMANCE GAP

At a glance, it appears that most manufacturers have embraced Lean. With more than a decade of awareness since the debut of Lean principles and techniques in *The Machine that Changed the World*,¹ many manufacturers report that they follow Lean manufacturing as an improvement methodology.

Three-quarters of U.S. manufacturing plants indicate that they follow Lean improvement methodologies,

by far the most widely adopted approach among manufacturers. At the other end of the scale, 10% of manufacturers have no improvement method—what's the likelihood of these plants remaining competitive amid an economic crisis?²

IMPROVEMENT METHODOLOGIES



SOURCE: 2009 MPI MANUFACTURING STUDY

CHAPTER ONE: RECOGNIZING THE LEAN PERFORMANCE GAP

But what does it really mean that so many manufacturers say they follow or have adopted Lean?

Is Lean:

- Practiced by *all* employees in those organizations?
- Used in *all* functions and departments?
- Applied to *all* product processes?
- Orchestrated under *one* Lean vision?

Or is it more likely that Lean is trapped within the four walls of a plant or even just one corner of a plant, seen as purely a “manufacturing” improvement approach with no relevance to other business functions such as finance, supply chain, or product development?

The reality is that **even among plants reporting use of Lean, the concepts are only applied to 50% of all processes. Can half of a Lean implementation impact results in a meaningful way?**

What we see when we examine [research on Lean manufacturers](#) is that a higher percentage lack key principles necessary to be real Lean:

- **Only a third** of Lean plants have a strategy/policy deployment practice in place, a critical component in identifying where improvements are necessary—and vital in managing and linking business/financial needs to operational goals.
- **Only 10%** practice value-stream mapping, a technique to understand how product flows from design to customers, and to spot waste and enhance value throughout that value stream.
- **Only 8%** use Kaizen events and blitzes, which are organized approaches to make quick improvements.
- **Only 10%** focus on elimination of the “seven wastes,” a set of ills identified by Toyota that encompass the countless ways organizations lose time, resources, and money.
- **Only 34%** use PDCA (plan, do, check, act), a problem-solving cycle for identifying the root causes of problems, experimenting with solutions, and then continually repeating the cycle and bettering performance.



CHAPTER ONE: RECOGNIZING THE LEAN PERFORMANCE GAP

The real benefits

of Lean only come when its key, strategic principles, especially strategy deployment and PDCA, are in place. A low percentage of Lean plants (14%) use both strategy deployment and PDCA, which possibly explains why so many manufacturers complain about Lean, asking, for instance, why they're not "more like Toyota" or at least further along on their improvement journeys.

The frustration these executives experience with Lean doesn't reflect an inherent problem with Lean or its underlying principles.

Indeed, even when Lean is applied incompletely and sporadically, there are positive benefits to be gained. For example, we see in the MPI research that all plants that report themselves to be Lean still outpace other manufacturers on many critical measures, including:

- **Return on invested capital of 17%** (median) at Lean plants compared to 11% for plants not using Lean
- **Sales per employee at Lean plants of \$219,643** (median) vs. \$139,733 for plants not using Lean

What the MPI data, other research and field experiences show is that the Lean performance gap is not just between Lean vs. non-Lean, but also between the "real Lean" vs. "perceived Lean" or "sort of Lean."

Sure, partial deployments of Lean can deliver benefits, as noted, and many companies that say they're working on Lean may have only begun their journey: Their Lean experience might ultimately generate a far-reaching range of benefits. But we see other companies in many industries repeatedly missing the full promise of Lean. Why not reap maximum benefit for the challenging yet rewarding efforts of your executive team and workforce in applying Lean? Why not tap into the real power of Lean concepts in the way that companies such as Toyota have? And if you haven't considered Lean, **do you really need more incentive in this economy to begin an organized, comprehensive improvement approach?**



Tough times.

Lean is helping.

Companies are struggling
(even some that think they're Lean).

Real Lean is the real difference.

Where to begin?



CHAPTER TWO

Why Aren't We Real Lean?

Why aren't you real Lean? The first steps in answering this question are identifying and understanding the root causes at play in your company that spurred the question. **Sort of Lean** firms face myriad, common challenges that undermine their abilities to effectively implement improvements during volatile times or even under normal business conditions. These challenges range from short-term decision making, to disengaged workforces, to sluggish supply chains.

Reactionary decisions.

Many organizations today are focused on urgent needs:

- The need to hit quarterly numbers
- The need to appease shareholders' current expectations
- The need to hit analyst targets.

For the short-term, reacting to these needs is reasonable (and occasionally necessary). But developing a growing, Lean business that can thrive long-term requires more than short-term, reactionary decisions. Such choices too often satisfy the

current need at the expense of proactive, long-term investments in the business (systems, resources, improvement initiatives, capital equipment).

In getting to where they are today, Toyota—and the Toyotas in your industry—almost always take the longer-term view of leadership, management, and improvement.

Leadership's objective shouldn't be just to manage, keeping the business *in* business, but instead to succeed long-term. Just as in sports, **playing for a tie often leads to a loss.**

Of course, it's easy now to criticize executives for not looking far enough into the future or planning well enough for the long-term. Who among us had the foresight to predict the deepest recession since World War II? Nonetheless, investments and strategies that could have—should have—been made yesterday for long-term performance tomorrow, are even more difficult to make today given tight margins and even tighter credit. Yet these investments must be made.



CHAPTER TWO: WHY AREN'T WE REAL LEAN?

It's at difficult times like this that aggressive leadership decisions can lead to dramatic results. Toyota's ascent to global dominance began as it was near to disaster, unable to meet payroll, amid tremendous labor strife, and on the verge of bankruptcy.³ Forward-thinking manufacturers are still investing in their organizations even today, realizing that those investments will pay off not only today, but will also offer significant leverage tomorrow as competitors stumble out of the recession.

Some observers call this group of forward-thinking companies "chaos tolerant," in reference to their willingness to adapt to whatever the business world throws at them while continuing to build, grow, and invest.

And even as many manufacturers stand pat until they hear better economic news, a small but **notable percentage are charging forward and injecting capital into their companies.**

- **24%** of manufacturers are spending 10% or more of sales on **capital equipment**, and 25% plan to increase their capital-equipment spending over the next year.
- **25%** of manufacturers are spending 5% or more of sales on **information technology**, and 23% of manufacturers plan to increase spending on information technology.
- **29%** of manufacturers are spending 5% or more of sales on **process improvement initiatives**, and 34% plan to increase spending on process improvement initiatives.⁴

Some senior executives recognize that investments are still necessary. Are you one of these executives?



CHAPTER TWO: WHY AREN'T WE REAL LEAN?

Uncertain workforces looking for leadership.

Employees at every organizational level need direction, coaching, and support (in addition to technical and process-improvement skills training). Obvious, yes, but this requirement is all too frequently ignored amid the day-to-day needs of a business. When business is up and capacity is strained, who can afford the time to train? Conversely, when business is down and margins slim, who can afford the cost to train?

Even worse, despite the lip service many firms give to developing open, trust-based communication and feedback among executives and employees, it's still exceptionally rare, especially at the manager-to-supervisor and supervisor-to-operator levels. There are never enough mentors, and many manufacturing managers just aren't wired to be good coaches. How many of your managers are firefighters (better at jumping in and solving the same problems over and over again) or command-and-control authorities who get results by dictate? Then, too, **coaching and communication opportunities and skill sets have been hit hard by recent downsizings, as mentoring relationships are severed and employees become increasingly anxious about their futures.**

One frequent mistake during a restructuring is to promise new roles to remaining employees—yet not describe the nature of those roles. This leads to uncertainty, and with uncertainty comes a diminished desire to make necessary changes (i.e., improve). In any improvement program, employees must move through four predictable stages of change: denial, resistance, exploration, and commitment.⁵ Employees who get stuck at any point in this progression will be less effective.

To maintain focus in volatile times, **employees need to be supported by visible processes and systems that engage, motivate, and guide them, reassuring them that someone has an idea where the ship is headed even as it makes a few quick turns in order to avoid the reef.** Even in stable firms, a failure to provide ongoing direction and feedback eventually cedes control of the workplace to dissenting voices at the bottom of the workforce and splits the middle group of undecided employees between those with the desire to improve and those tempted to throw in with the disenchanted. Meanwhile, the top performers begin looking for better situations.





COMMUNICATING WITH EMPLOYEES IN BAD TIMES



“In a survey by Weber Shandwick in October of 2008, more than half of working Americans (54%) said their employers had not addressed their concerns about the impact of the current economic turmoil. Yet, 74% said they were getting their information from the **rumor mill** or other employees. While this situation might be common, in this economy, it can be disastrous. Why? Because it makes employees feel like you’re hiding something—maybe even something terrible. Worse yet, **it makes employees feel like they are powerless to change anything, or take charge of their futures. Not exactly the kind of nimble, solution-focused thinking you need to weather a bad economy.**”

To get a good communications campaign going, start with your tone. Address every employee like they are a valued part of the team. Let them know where the company stands financially, even if the news isn’t all that good. Let them know the company’s key goals, and what is needed of employees from every department to meet those goals. Eliminate jargon, stilted speech and paternalistic overtones...”⁶



CHAPTER TWO: WHY AREN'T WE REAL LEAN?

Shifting supply chains.

Many manufacturers fear the disintegration of their supply chains: Key vendors have failed or are failing, putting the availability of critical parts and components in jeopardy. Major customers cancel or unpredictably slash orders leaving manufacturers with months of inventory. Cash-flow management has emerged as a key supply-chain performance measure.

What does all this mean? That **every manufacturer faces increased risk in its supply chain, and needs to ensure that processes and systems are in place to improve the visibility of customer demand and supply performance.** These systems must be sensitive enough to detect early warning signs related to both operational and financial performances, and responsive enough to trigger action when warnings escalate (e.g., backup for critical suppliers, increased scrutiny of troubled supplier operations, assistance for stressed customers via relaxed payment terms, etc.).

As the recession evolved last fall from slump to swoon, many manufacturers were unable to assess and respond rapidly to plummeting customer demand, costing themselves and their supply chains millions of dollars in cash flow, product mark-

downs, obsolete inventory, and wasted effort in producing goods that went nowhere. Describing the Consumer Electronics Show, Harry Wallop of Telegraph wrote, **“The main problem is a glut of inventory.** Companies have, quite simply, got too much stuff in their warehouses. Their only option is to slash prices, or be left with stock sitting on their shelves, constantly depreciating in value. After all, there is little that goes out of fashion faster than a shiny gadget.”⁷

Real Lean companies were better able to avoid surplus inventory, with a tighter focus on customer demand enabling them to better and more quickly anticipate and respond to declining orders with gradual production slowdowns. Sort of Lean firms, however, may have reacted on the plant floor but missed signals further downstream. Many people are surprised to learn that General Motors had implemented Lean and the Toyota Production System (called the **“Global Manufacturing System” at GM**) in its production and assembly facilities, and that GM had Lean successes in those areas. But, now emerging from bankruptcy, the real question is: Were GM’s corporate strategies, such as portfolio management and dealer systems, also Lean?



CHAPTER TWO: WHY AREN'T WE REAL LEAN?

No clear direction—fuzzy, changing targets.

- **Reactionary, short-term decisions that don't consider what might lie beyond the horizon.**
- **Employees without guidance.**
- **Supply chains without collaboration.**

All three issues are tightly linked to a manufacturer's core inability to define a unique path for the company, one supported by a handful of major objectives. What separates your company from others? What are your competitive advantages? How does your company define success, both internally (safety, employee satisfaction, Green), externally (customer satisfaction) and for stakeholders and supply-chain partners (profitability, productivity)? Without a unique path for the company, there can be no clear goals for employees and suppliers.

As noted earlier, most companies, even many sort of Lean companies, lack formal strategic visions and ways to translate those visions into actionable goals throughout their organizations. And even at firms that did maintain well-designed strategies for organizational and supply-chain performances, many of those plans were tossed aside during the current downturn.

Then, too, **carefully crafted corporate goals, even in good times, often become disconnected and meaningless as they filter downward through the organization.** What does EBITDA really mean to a line supervisor or an operator in a work cell? How do individual workers impact metrics important to the CEO?

Only by establishing an overarching direction with a few, well-chosen supporting objectives can all the resources of a company—its leadership, workforce, and supply-chain partners—work together to develop a culture of continuous improvement that brings new value to customers and new profits to the firm itself. **It's important now to transition to goal setting and management in a real Lean context, because while the current recession will end, the road ahead will still present challenges.**



CHAPTER TWO: WHY AREN'T WE REAL LEAN?

Even before the downturn, you and other executives faced major challenges: Energy costs had skyrocketed (and may again), tougher safety and regulatory standards were (and still are) emerging around the globe, and Green/sustainability concerns were (and still are) poised to dramatically change how companies do business in a carbon-constrained world.

The bottom line is that regardless of current conditions, manufacturers need the ability to see, react, and change instantly—while adhering to the goals and objectives that guide them. Manufacturers do have their futures in their hands, and can bridge the Lean performance gap between current shortcomings and long-term improvement as real Lean organizations, focused on customers (delivering precisely *what* they want, *when* they want it, *how* they want it) while driving out costs through waste reduction and improved productivity.

The foundation for the bridge over the Lean performance gap is **a navigational strategy—a True North compass—and supporting goals and targets cascaded throughout the company to all processes, functions, and objectives, along with the means to review and adjust that compass in real-time. That's where performance management comes in.**

Unless you can move quickly toward moving targets based on what *current* business signals are telling you—whether as CEO or CFO, operations manager, production worker, or critical supplier—the best you can hope for is to hit your initial target and never move beyond it, even when conditions dictate the need to do otherwise.



Time to set long-term strategy.

Managers and supervisors must be leaders.

Improvement into the supply chain.

Everyone sees, reacts, and changes.

What pulls all of this together?



CHAPTER THREE

Building the Bridge

So much improvement activity in manufacturing is focused on just that—a single improvement. The improvement is made, the pizza celebration follows, and then everyone goes back to business as usual. What's the likelihood that a single improvement in a single location will dramatically improve operations going forward, or restore the bottom line, or keep the company in business, or even truly satisfy a single customer segment? Have you ever seen a magic bullet like this—much less fired one?

► **Isolated improvement initiatives, even large-scale efforts, rarely support an organization's growth or impact its customer base.**

Real Lean requires that improvements occur constantly, spurred by the needs of customers and encouraged by a culture in which improvement is natural, discussion of problems is a positive workforce characteristic, and firefighting and workarounds are unacceptable. For this to occur, real Lean organizations look to both strategy deployment (the process of defining and cascading goals and objectives throughout a company) and **performance management (the methods, systems, and personnel that enable an organization to set goals and to assess progress toward those goals on an individual, department, and companywide basis).**



CHAPTER THREE: BUILDING THE BRIDGE

Strategy deployment^B

bridges the disconnect between strategy (assuming a strategy does exist) and action, focusing on value for the customer and linking the work and tasks of all employees to financial and business needs. It's a leadership approach that creates a series of well-connected objectives down, through, and across the organization. Strategy deployment is critical because in many sort of Lean companies, operational improvements *are* happening—they're just not hitting objectives that impact a customer or produce financial gain. Interestingly enough, these misalignments emerge both from top-down and bottom-up improvement mistakes.

From the top down, **leaders at many firms overemphasize improvements that keep cash in the company** (e.g., lower capital investments, freezes on new hires and wages). But these executives often fail to think through the long-term effects of these approaches, either on actual finances or, more importantly, on employee motivation and engagement. How long, for instance, will a limited investment strategy really sustain an organization? Can a goal of "limiting investment" guide and inspire employees?

From the bottom up, **workers often focus improvement efforts on problems that matter to them but matter**

little in the overall scheme for creating customer value or generating profit—or their misguided "improvements" simply push problems to other parts of the company and

its supply chain. Yes, they're trying to improve, but without guidance they're left to search for opportunities on their own.

Another common contributor to the Lean performance gap is overemphasis—by both leaders and the workforce—of a single target at the expense of other strategic objectives: For example, organizations have been known to have an overarching push to decrease inventory in the supply chain—you'd think, a Lean objective. But what's missing is a reason for taking out the inventory, and what often results are higher production costs using expensive overtime to respond to sudden spikes in demand or the need for expensive expedited transportation costs, as sparse inventory is transferred from one location to another. Excess inventory represents potential cash that can be saved, but, more importantly, it represents an organizational buffer that hides problems that contribute to overtime and expediting. Take away the buffer and the company runs head first into its problems, whether it's ready to deal with them or not. A more holistic goal in this case, such as incrementally lowering total supply chain costs as the organization is capable, would achieve a better overall result, allowing the workforce to find and solve problems along the way, from the bottom up, even if it means that costs in some parts of the supply chain temporarily increase.



CHAPTER THREE: BUILDING THE BRIDGE

Your strategy deployment should reflect both what your customers value and your competitive advantage; it should capture your organization's reason d'être.

For example, a high-tech consumer goods firm might identify “speed-to-market with cutting-edge innovation” as its True North, with objectives focused on lead time, time to market, and innovation. An industrial equipment manufacturer might select “durable products that improve customer productivity and safety” and support that True North with quality, warranty, and product lifetime objectives. Shingo award-winning author and Lean expert Pascal Dennis, a former Toyota manager, writes, “**A good hoshin makes an emotional impact and creates a sense of excitement. It isn't just a marketing slogan.** Memorable Toyota hoshins include ‘Internationalize’ and ‘Beloved Company;’ although difficult to comprehend by outsiders, [these] conveyed great meaning to team members.”⁹

Can strategy deployment make a difference? MPI research shows that manufacturers using Lean and strategy deployment report sales per employee of \$244,880 (median).

Lean manufacturers without strategy deployment report sales per employee of \$208,000. Similarly, manufacturers using Lean and strategy deployment report total inventory turns of 9 (median); Lean manufacturers without strategy deployment report inventory turns of 8.¹⁰

A well-framed True North and its supporting objectives must be translated beyond the executive suite.

This means having the systems in place to *communicate* relevant goals and objectives across the company and around the globe to those charged with achieving those goals, from division president to line worker—and the ability to check on progress toward those goals. In effect, all managers and employees work from the same script, although each plays a different role and is critiqued based on their own performance. This is important as the effort to cascade objectives through your company begins, enabling you to embed the scientific method—techniques for investigating problems and acquiring knowledge, such as the PDCA (plan-do-check-act) cycle—into your improvement efforts and the culture of the company.



CHAPTER THREE: BUILDING THE BRIDGE

The basis of any company's ability to manage PDCA, especially for large companies, is a formal **performance management** process, and the personnel and system needed to track, assess, and adjust the organization across all functions, processes, and value-stream objectives. **Goals and targets, as well as problems and improvements, must be visible.**

- **How are we doing?**
- **What's happening today, this hour?**
- **Where are there problems?**
- **Have problems been addressed?**
- **Are successes codified and shared?**

It's important that the "system" aspects of performance management ensure the ability to build, incorporate, and update goals and objectives—i.e., when goals are hit, they're moved upward. Functionally, performance management systems also must provide real-time visibility into what's happening throughout other corporate systems and applications. **It cannot play favorites in its ability to make progress transparent, and it must be platform-agnostic in design, integration, and analysis of objectives, goals, and targets—easily pulling data from different departments and diverse systems.**

The last thing any organization needs is another overbearing IT system that requires retraining for individual users, sapping energy and creativity from the organization.

A good performance management system, in addition to executing strategy deployment and PDCA, also allows you to easily incorporate financial planning (prepare realistic financial and operational plans), budgeting (allocate resources), consolidation (rolling up and closing the books), and forecasting (predict future performance, recalibrate True North). Lean is about removing waste. How much non-value effort does your company regularly exhaust pulling together budgets and forecasts?

Enterprise-wide performance management with detail and accountability simply isn't possible at manufacturers using spreadsheet-based approaches to report and analyze operational and financial performance data. And put aside the naive debate that Lean cannot coexist with systems support and information technology. While the white boards, value-stream maps, and A3 reports in use at Toyota and other Lean companies have impact in local settings, **modern global companies need modern ways to share those visuals and the improvement concepts and measures behind them across states, countries, and oceans.**



CHAPTER THREE: BUILDING THE BRIDGE



As VF Corp. grew and its reporting became more complex, it needed more visibility into the financial consolidation process. The global giant, which sells brands such as Wrangler and Nautica in more than 150 countries, had been using distributed architecture to manage financial consolidation; each site had control of its own database. With a new performance management system in place, VF Corp. reduced its databases from 37 to just 1, making its financial consolidation process faster and more secure and helping it adhere to local and global accounting standards and reporting requirements, such as Sarbanes-Oxley.



Read how VF Corp used Infor PM to improve speed, security, and compliance



— Strategy deployment gives everyone direction.

Goals and objectives: One for all, all for one. —

— Performance management instills PDCA.

What will performance management
look like in my company? —



CHAPTER FOUR

Performance Management for Processes and Objectives

With performance management¹¹ in place, real Lean manufacturers can proactively manage their operational and financial performances in concert instead of stumbling into problems, reacting to conditions haphazardly, or being overwhelmed with panic-driven paralysis. **Performance management eliminates chaos and takes the guesswork out of strategic planning, allowing a manufacturer to continually identify problems and uncover opportunities across the entire organization.**

And remember, real Lean is not just about production or the plant floor. No manufacturer only “manufactures.” Products are designed and developed. Components are sourced. Goods are

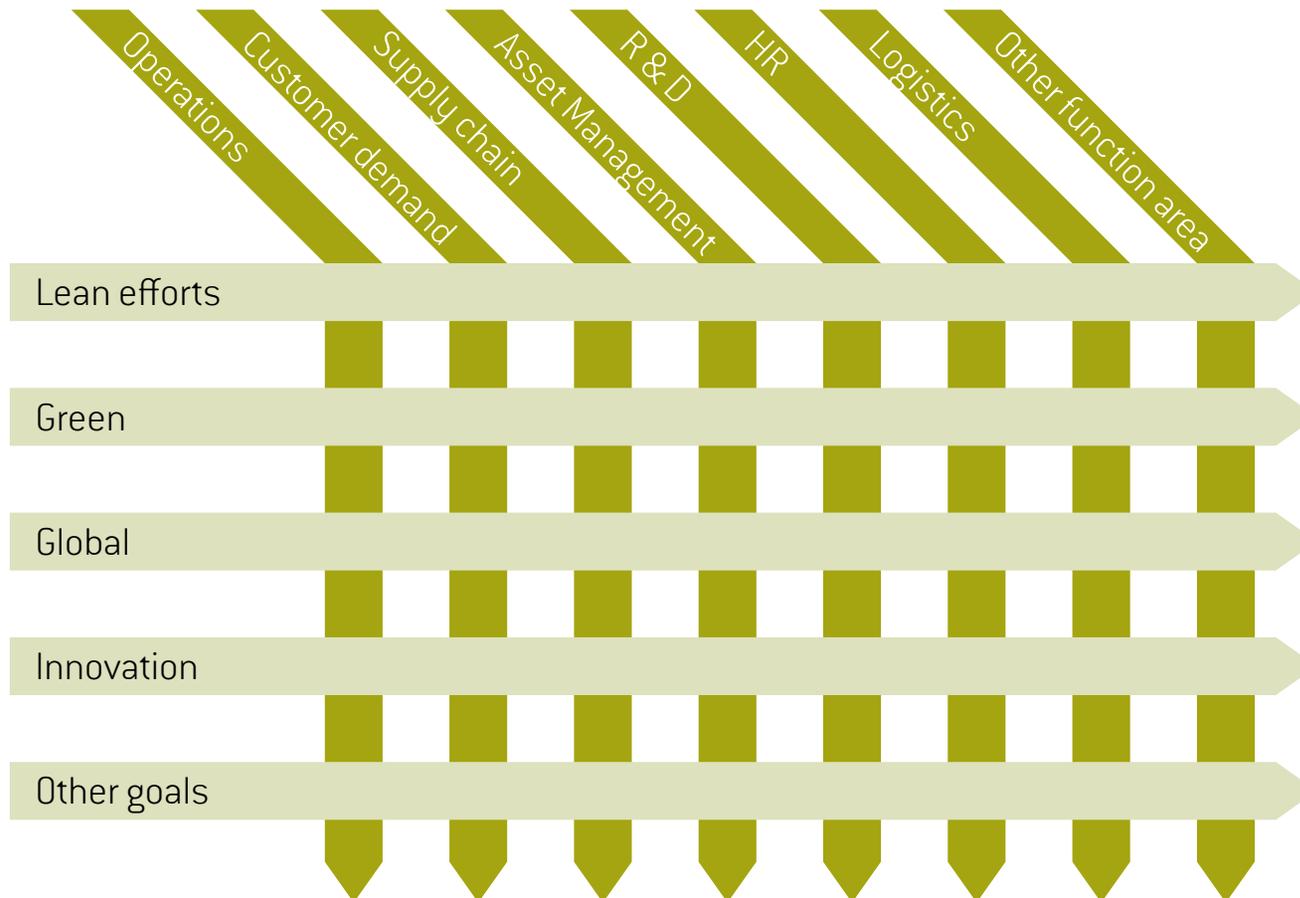
packaged and distributed. New business is sold. The books are closed. Proactive planning and performance management occurs within all functions in a real Lean organization, in addition to touching all the programs and issues that run horizontally throughout a company and across functions.

What follows are two perspectives of performance management in action:

- **Vertical by process/function**, managing goals important to the executives and workforce in that process or function
- **Horizontal by objectives across the organization**, managing goals in which all processes/functions contribute to achievement of an overall objective



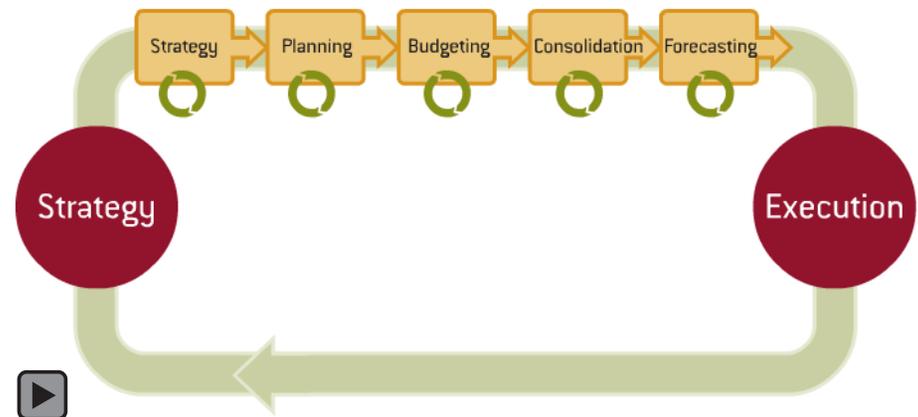
Performance management vertical and horizontal monitoring



Process/function perspectives.

Corporate performance management—As expected, the first priority for performance management is to ensure just that: that performance is managed. With that comes monitoring, measuring, and distribution of information out of the performance management function to set strategy and to plan, budget, and forecast.

Often the group managing the performance management process does not exist as a standalone team, but instead consists of executives and senior management who are expected to lead this effort in addition to their functional roles. Because of this, it's even more important to ensure that the management of performance management has both structure and accountability. For example, the office of finance often plays a significant role in performance management functions, managing the planning, budgeting, and forecasting cycles as well as closing the books. Finance also distributes information that compares projected performance (plans, budgets, forecasts) with actual performance (financial close), ensuring that operational performance aligns with financial performance.



Closed loop performance management

In this corporate context, performance management is a closed loop going from strategy to execution.¹² The entire organization follows a strategy, or True North, that directs the focus and actions of the organization from the highest corporate office to individual workers on the factory floor. The strategy then dictates financial and operation plans, in turn driving budgets that allocate resources. The next step is to close the books and present the actual results. Over time, the results drive forecasts that are used to predict future performance. Once execution happens, the results are then carried back into the next strategy, creating a true closed loop.



Try the easy and fast Infor Corporate Performance Management Assessment.

Assess your company's progress in identifying its True North, cascading objectives throughout the organization, and then managing performance across processes and functions as well as by objective.

[Try the assessment now.](#) ➔



CHAPTER FOUR: PERFORMANCE MANAGEMENT FOR PROCESSES AND OBJECTIVES

Operations management—At the heart of performance management lies the answer to **“How are operations performing, day-in, day-out, hour-by-hour?”** Performance management can bring the *gemba* (translated, in Lean speak, as where the work is done) to senior executives, managers, and shop floor operators in all corners of a global company.

At a tactical level, performance management of operations also can offer computer-based customized dashboards that track key performance indicators (KPIs) for specific roles, and incorporate the means to act on those numbers: KPI histories, links to reports, day-to-day tasks, standardized work instructions, etc.

Too often employees spend much of their day interacting with business applications, searching for relevant information to do their work and consolidating data manually just to see how they’re performing.

Says Bruce Gordon, Infor CTO, “One of the universal problems facing business software users is the deluge of data coming from all directions. This means they spend more time searching for the right information, and less time actually acting on that information to create value.”¹³

A performance management dashboard pushing the *right* information in front of the *right* managers at the *right* moment can mean the difference between operations having opportunities to solve problems at an early stage and the escalation of those problems into issues which ultimately cause missed deliveries, poor quality, equipment failures—and lost revenue.



CHAPTER FOUR: PERFORMANCE MANAGEMENT FOR PROCESSES AND OBJECTIVES

Customer demand management—Manufacturers need real-time customer information on all customers, a complex undertaking for large enterprises: managing customer contacts, accessing customer histories and buying patterns, aligning sales and marketing efforts to current production capabilities (i.e., don't sell what you can't make), and efficiently translating demand into level production schedules across multiple facilities. Lean requires a singular focus on customer demand; but how can customer demand be managed if it's not accurately monitored?

Too often the processes and functions of a corporation closest to the customer are far removed from Lean improvement efforts and the performance management structure that monitors them. For example, **just 24% of US manufacturers report that they've applied their improvement methodology of choice to customer relations.**¹⁴ Shouldn't manufacturers be measuring their progress and ability to:

- Run effective sales and marketing campaigns?
- Promote new Lean capabilities (e.g., just-in-time) to the market?
- **Increase sales productivity?**
- Efficiently manage marketing and sales resources?
- Turn call centers into profit centers?



CHAPTER FOUR: PERFORMANCE MANAGEMENT FOR PROCESSES AND OBJECTIVES

Supply chain management—It’s imperative that manufacturers monitor their supply base for productivity improvements and hidden costs, identify supplier risks (deliverability, quality, and financial stability), and codify follow-up procedures (backup suppliers, measures to support faltering suppliers, Kaizen events alongside suppliers and customers, etc.). At a small firm this may be easy enough, but with a global supply chain, it’s an enormous task, requiring the ability to tap into supplier data across multiple systems.

Real Lean manufacturers approach their suppliers—and the prices and performances of those suppliers—from a “Lean cost” perspective. That is, if we, your customer, ran *your* operations using our Lean strategies and tools, how much better could performance be and how much lower would prices be? **Without good data as a starting point, though, it’s next to impossible to conduct these conversations with supply chain partners around performance and price.** This may explain why so few manufacturers really partner with suppliers and customers: A majority of manufacturers (51%) still describe their relationships with suppliers as a commodity “buy and sell,” and 41% say the same about customer relationships.¹⁵

RELATIONSHIPS WITH SUPPLIERS AND CUSTOMERS

(PERCENT OF PLANTS)

	with suppliers	with customers
Buy and sell (e.g., cost and quality focus)	51.3%	40.6%
Certification (e.g., broad qualifications established)	15.4%	17.2%
Cooperation (e.g., sharing product ideas, best practices)	18.7%	20.3%
Partnership (e.g., sharing resources, intellectual property, cost savings)	14.6%	21.8%

SOURCE: 2009 MPI MANUFACTURING STUDY



Learn how Organic Valley Family of Farms met its supply chain planning challenges with Infor SCM.



To watch video in this PDF, be sure you are viewing in **Adobe Reader 9.0 or newer.** Don't have Adobe Reader 9? [Download it for free here.](#)



CHAPTER FOUR: PERFORMANCE MANAGEMENT FOR PROCESSES AND OBJECTIVES

Enterprise asset management—Few manufacturing inputs can so dramatically affect customers and your margins as enterprise asset management (EAM).

Faulty equipment can cost tens of thousands of dollars in poor-quality or late-delivery penalties. EAM lies at the heart of monitoring and controlling asset performance, energy consumption, and environmental impact (e.g., carbon emissions).

For example, a leading paper manufacturer plans to implement an asset sustainability strategy as part of its [EAM initiative to reduce energy consumption by 5% to 10% on the factory floor for monitored assets, leading to significant cost and greenhouse gas \(CO2\) emission reductions.](#) In real Lean fashion, EAM

reduces waste in asset usage through improved maintenance activities and Lean equipment-related practices (e.g., quick changeovers, andon, poka-yoke, etc.). And through predictive maintenance techniques, EAM can better align resource requirements with equipment performance.

Lean roots within Toyota have a special place for the convergence of man and machine, called “jidoka” or “autonomation”—“providing machines and operators the ability to detect when an abnormal condition has occurred and immediately stop work. This enables operations to build in quality at each process and to separate men and machines for more efficient work.”¹⁶



See why Mohawk thinks Infor EAM is the market leader.



To watch video in this PDF, be sure you are viewing in **Adobe Reader 9.0 or newer.** Don't have Adobe Reader 9? [Download it for free here.](#)



IMPORTANT LINKS: [Global Asset Sustainability: Breakthrough Lean Best Practice Counters Rising Energy Costs white paper](#)

Mohawk video: www.infor.com/customers/mohawk_vid/



CHAPTER FOUR: PERFORMANCE MANAGEMENT FOR PROCESSES AND OBJECTIVES

Research and product development—Product innovation is necessary for business success. But **how do you measure and track the effectiveness of R&D and product development?**

Dow Chemical Executive VP William Banholzer says, “The historical measurements for success in R&D have been: R&D spending (usually expressed as a percentage of sales), new product sales (sales from products introduced in the last five years divided by total sales), and the number of new patents. But I think those metrics are no longer sufficient to judge success. Historically, there was an assumption that spending correlated perfectly with innovation, but that is no longer correct—just look at Bell Labs. They had larger budgets and more Nobel Prizes than any other lab, yet their parent company disappeared. Great science is not enough to ensure business success, and if the business does not succeed, you can’t continue to do science.”¹⁷

The late Lean expert Allen Ward argued that **product development is the creation of operational value streams that run from suppliers to plants, and then out to customers.**¹⁸ In this view, product development has value only if it enables operations to deliver better products to customers. As such, performance management needs to monitor not just the ability to create and release new products, but performance metrics relating to how those new products move into production and through product lifecycles. That includes the performance capabilities to:

- Design and install or adapt equipment to produce the new product
- Coordinate supplier components and materials into design specifications as well as supplier strengths and expertise
- Develop Lean processes (e.g., standardized work) to handle production of the goods
- Move finished-goods quickly to customers and accommodate the eventual disposal of those goods



Learn how Cadbury reduced costs and time to market with Infor PLM.



IMPORTANT LINKS: [Cadbury case study](#)



CHAPTER FOUR: PERFORMANCE MANAGEMENT FOR PROCESSES AND OBJECTIVES

Workforce management—It's trite but true: What is your company without its people? **Lean companies recognize that they must develop people in order to develop better products and processes.** Does your organization:

- Manage talent from hire to retirement, providing the necessary learning and growth opportunities for all employees, from frontline workers to senior staff?
- Evaluate and solve workforce needs, skillfully staffing the company while optimizing payroll expenses?
- Foster the right amount of intellectual pressure and urgency so that the workforce is motivated and challenged but not overwhelmed?
- Strive to continuously improve productivity while maintaining good safety?
- And, of course, apply sound Lean principles and performance tracking systems to workforce administration functions (e.g., many Lean companies have found great success in administrative settings with the technique of value-stream mapping, which helps to make invisible service and paperwork flows more apparent)?

Many organizations don't address this complete set of workforce management issues or even have solid support systems in place to see how their workforce management is performing. The **Next Generation Manufacturing Study** found that 29% of manufacturers had no measurement system or review process in place to review the return from human-capital acquisition, development and retention efforts; another 34% had only ad hoc measuring of basic measures or ad hoc review.¹⁹



CHAPTER FOUR: PERFORMANCE MANAGEMENT FOR PROCESSES AND OBJECTIVES

Logistics management—A manufacturer can perform all its internal operations perfectly—product design, manufacturing and assembly, equipment maintenance—yet still severely damage customer satisfaction and profits if logistics performance is poorly managed.

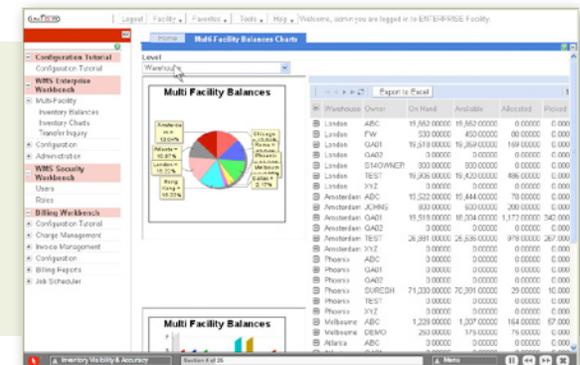
Logistics management can be frustrating because it frequently involves strategies to control what you do not necessarily manage or own (transportation fleets, warehouses). Nonetheless, **well-managed logistics and application of Lean logistics principles** (e.g., developing a “plan for every part,” just-in-time deliveries from suppliers and to customers) **offer substantial opportunities for bottom-line gains:**

- Efficient design of a warehousing and distribution network
- Freeing up cash by better coordinating inventories from suppliers through to customers
- Accurately hitting lead times and avoiding late-delivery charges
- Reducing transportation energy consumption
- Flawless compliance with trade and customs regulations

Monitoring logistics performance (right inventory moving to the right customer at the right time) is crucial in helping a manufacturer achieve a True North goal such as “delighting customers.”



Watch the Infor SCM Warehouse Management demo.



IMPORTANT LINKS: [Infor SCM Warehouse Management demo](#)



Organization objectives

Few organizational objectives are ever achieved by working solely on improvements within vertical functions. Most corporate goals cut across your company—manufacturing alone cannot satisfy customers, nor can R&D alone ensure that a product is Green.

It's critical to manage horizontally across an organization as well, monitoring performance of specific goals and objectives critical to a company's True North. Only by applying the performance-management mindset to these larger goals, and using the same Lean scientific methods and rigor—PDCA cycles, root-cause analysis, employee-engaged problem-solving—to coordinate these broad projects can meaningful improvement ever be achieved. Examples include:



CHAPTER FOUR: PERFORMANCE MANAGEMENT FOR PROCESSES AND OBJECTIVES

Lean and continuous improvement—At the core of Lean thinking is the scientific method of the PDCA cycle (plan-do-check-act), essential for achieving Lean improvements. Organizations must be as rigorous in tracking their overall Lean implementations as they are in measuring specific Lean actions and performances:

- Are Lean improvement events occurring on-time and delivering expected results?
- Are employees receiving the training and skills necessary to participate in Lean improvements (e.g., problem solving, root-cause analysis)?
- Are scheduled gemba walkthroughs and “checking” rituals for supervisors and managers occurring in order to support Lean changes? Are these checks captured in the performance management system?

For example, many Lean manufacturers conduct dozens of kaizen (improvement) events in a year, planning and monitoring these activities to ensure that effort is invested in achieving the right improvements (those aligned with corporate objectives).

It’s important to remember that Lean is really a series of ongoing experiments throughout the organization; a real Lean organization asks, “Have the experiments proven their hypotheses?” Unless a manufacturer has a

way to closely track these events and codify the learning of the “experiments,” it’s difficult to know what’s working and where, limiting a company’s ability to share best practices across an enterprise and out into the supply chain.



CHAPTER FOUR: PERFORMANCE MANAGEMENT FOR PROCESSES AND OBJECTIVES

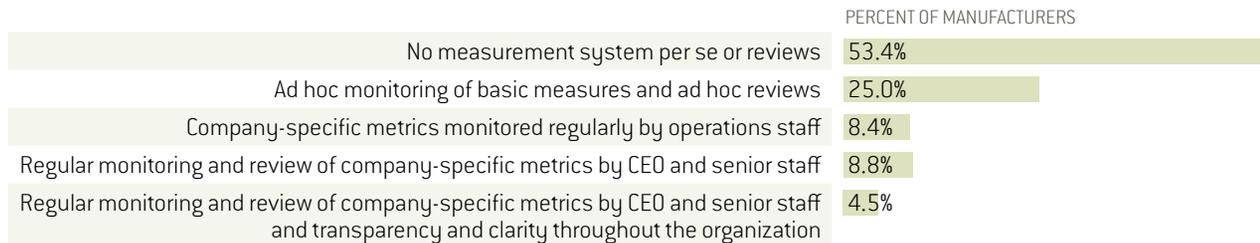
Green—Green efforts can reach anywhere in an organization, and must be managed horizontally. Being Green, like Lean and increasingly in conjunction with Lean, extends well beyond the plant floor. Are you assessing your **Green performances?**

- Front office (e.g., work toward developing a paperless office)
- Production (e.g., recycling of manufacturing wastes)
- Asset management (e.g., energy usage)
- Supply chain (e.g., exploring ways to reduce the major sources of carbon emissions across the entire supply chain)
- Logistics (e.g., optimization of inbound and outbound shipping routes)

- Product development (e.g., compliance with existing or emerging environmental and/or energy regulations)

Major opportunities still exist for manufacturers to gain advantage with Green because, according to research from the Next Generation Manufacturing Study, only 16% of manufacturers believe that Green/sustainability is “highly important;” 16% believe Green is “not important.” **Simply focusing on Green and monitoring Green performance can make a huge difference.** Yet more than half of manufacturers (53%) have no measurement system in place or review process to assess return from their Green efforts (see table below).²⁰

What best describes your measurement system for reviewing return from Green/Sustainability efforts?



SOURCE: NEXT GENERATION MANUFACTURING STUDY, 2009

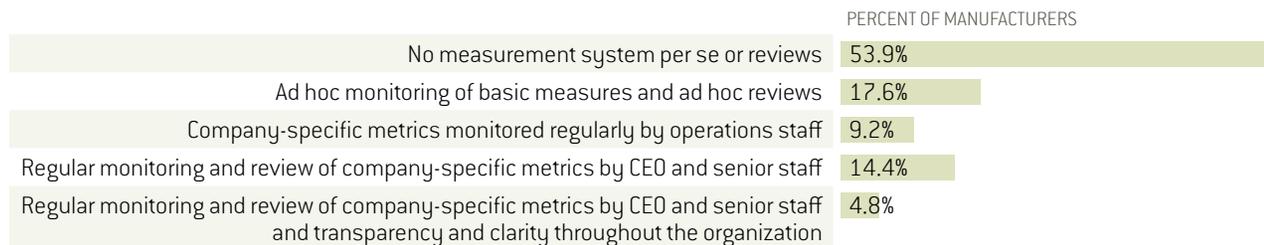


CHAPTER FOUR: PERFORMANCE MANAGEMENT FOR PROCESSES AND OBJECTIVES

Globalization—Most manufacturers today conduct business to some degree on a global scale, both sourcing and selling into overseas markets. Not surprisingly, these firms are constantly challenged to grow, monitor, and improve their global reach. While global reach presents many opportunities, it also presents opportunity for performance management to disintegrate, as goals and objectives can easily be misinterpreted the farther they get from corporate headquarters.

Many manufacturers don't rate their global performance very highly. Only 7% of manufacturers believe they have achieved world-class status at global engagement—"secure business advantages by having people, partnerships, and systems in place capable of engaging global markets and talents better than the competition"—and only another 18% are nearest to world-class status ranking. Lack of a performance management system to guide global efforts has a lot to do with these perceptions. More than half of manufacturers (54%) have no measurement system in place or review process to assess return from their global engagements (see table below).²¹

What best describes your measurement system for reviewing return from global engagement?



SOURCE: NEXT GENERATION MANUFACTURING STUDY, 2009

Applying performance management to global business helps manufacturers hit market-entry milestones; keeps overseas expats focused on core company objectives; assists compliance with a vast and changing array of regulatory, compliance, tax, and duty criteria; and explores, evaluates, and leverages new global market opportunities, partner relationships and alliances, and suppliers.



CHAPTER FOUR: PERFORMANCE MANAGEMENT FOR PROCESSES AND OBJECTIVES

Innovation—Innovation is more than new products—it’s all the ideas emerging from your company to better satisfy customers.

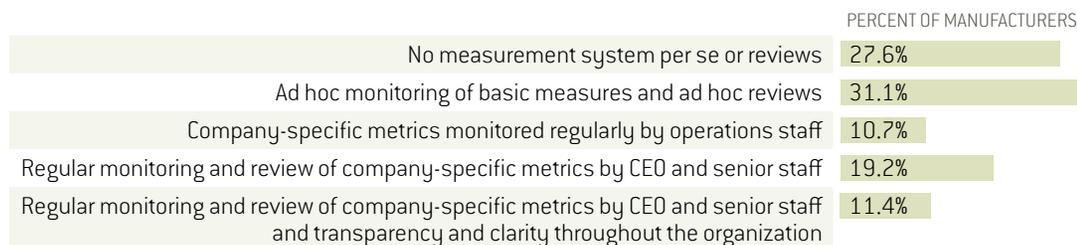
Innovation requires leaders, managers, and employees to look for new ways to operate (process innovation), new ways to go to market (channel innovation), new ways to do business (strategic innovation), and, of course, new things to offer (product innovation).

At the heart of innovation, like individual Lean efforts, are experimentation and the ability to measure, codify, and share the results of those experiments, always raising the bar a notch higher:

- Did the hypothesis play out? Did the innovation work?
- How can it be better? Who can make it better?
- How can we transfer this better way to other or similar processes in the organization?

Most organizations embrace some form of measurement system to track the performance of customer-focused innovation—“develop, make, and market new products and services that meet customers’ needs at a pace faster than the competition”—but 28% still lack any kind of performance measurement system or review process to assess return (see table below).²²

What best describes your measurement system for reviewing return from customer-focused innovation?



SOURCE: NEXT GENERATION MANUFACTURING STUDY, 2009



Strategic vision in place.



Performance management readied.



Process and functional targets
monitored and acted upon.



Companywide goals and objectives
monitored and acted upon.



Finally, this is what real Lean feels like?



Summary

These are, indeed, turbulent times. But recessionary pressures appear to be abating. Your markets may already be healthy. **But even when the economic corner is turned, the old ways of doing business will no longer suffice.** Every firm—yours, your customers', your suppliers'—will be operating with the memory of what it just survived and the determination that it must continuously improve. It will no longer be business as usual.

Bridging the Lean Performance Gap provides you with the keys to get going, to turning your organization into a real Lean company that can compete with any organization:

- Focus on identifying your own True North—one that articulates the value your company provides to customers and its competitive advantages in today's volatile markets.
- Cascade those few, key objectives that support True North throughout the organization, translating them into meaningful goals for every function, department, and employee.

- Monitor and manage performance vertically within processes and functions and horizontally across the organization by objective as if the life of your company depended upon it—because it does.
- Do it all again, over and over, recalibrating the organization based on the latest planning, goal-setting, failures, and achievements.

Whether your company is already real Lean, struggling among the sort of Lean companies, or just now awakening to the potential of Lean, you've got a bridge to cross to improve productivity, profitability and market advantage—and you always will. **The thing about the performance gap is that it's always there, widened by changing customer expectations or competitor capabilities.** You can flinch at the leap required—or you can get busy monitoring and improving performances, and eventually get better.

What are you waiting for?



END NOTES

- 1 James P. Womack, Daniel T. Jones, and Daniel Roos, *The Machine that Changed the World*, Rawson Associates, 1990.
- 2 2009 MPI Manufacturing Study, The MPI Group, 2009. (Note: Plants could select more than one answer. All but one plant following the Toyota Production System was also following Lean.)
- 3 "Lean in Hard Times," Strategos-International, http://www.strategosinc.com/toyota_crises.htm
- 4 2009 MPI Manufacturing Study, The MPI Group, 2009.
- 5 Stephanie Ann Kerr and Guy Parsons, "Changer in a Strange Land," *Lean Transformation Summit*, Lean Enterprise Institute, March 5, 2009.
- 6 "Communicating with Employees in Bad Times," blog by Vest Advertising, Marketing & Public Relations, citing an October 2008 survey by Weber Shandwick. <http://vestadvertising.com/blog/?p=154>
- 7 Harry Wallop, "CES 2009: Can the latest technology beat the recession?" *Telegraph.co.uk*, January 10, 2009.
- 8 Also known as policy deployment, strategy development, or hoshin kanri (as in Toyota).
- 9 Pascal Dennis, *Getting the Right Things Done*, Lean Enterprise Institute, 2006.
- 10 2009 MPI Manufacturing Study, The MPI Group, 2009.
- 11 Defined as, "Methods, systems and personnel that enable an organization to set goals and to assess progress toward those goals on an individual, department and companywide basis."
- 12 Closed loop performance management.
- 13 *Infor MyDay Helps Users Conquer Their Working Day*. <http://www.infor.com/company/news/pressroom/pressreleases/2104120/>
- 14 IndustryWeek/MPI 2007 Census of Manufacturers.
- 15 2009 MPI Manufacturing Study, The MPI Group, 2009.
- 16 *Lean Lexicon*, Fourth Edition, compiled by the Lean Enterprise Institute (Cambridge, Lean Enterprise Institute, 2008).
- 17 "Around Dow talks with CTO and Executive VP Bill Banholzer," Dow Chemical, May 2008.
- 18 Allen C. Ward, *Lean Product and Process Development*, Lean Enterprise Institute, Cambridge, Mass., 2007.
- 19 [MPI's Next Generation Workforces Executive Summary](#), based on data from the Next Generation Manufacturing Study of 2,529 manufacturers, conducted by Manufacturing Performance Institute, 2009.
- 20 The Next Generation Manufacturing Study of 2,529 manufacturers, conducted by Manufacturing Performance Institute, 2009.
- 21 The Next Generation Manufacturing Study of 2,529 manufacturers, conducted by Manufacturing Performance Institute, 2009.
- 22 Next Generation Manufacturing Study of 2,529 manufacturers, conducted by Manufacturing Performance Institute, 2009.



Please feel free to post this on your blog or email it to whomever you believe would benefit from reading it.

THANK YOU.

ABOUT INFOR

Infor acquires and develops functionally rich software backed by thousands of domain experts and then **makes it better through continuous innovation, faster implementation options, global enablement, and flexible buying options.** In a few short years, Infor has become one of the largest providers of business software in the world.

For additional information, visit

www.infor.com.





- ➔ Enterprise Resource Planning
- ➔ Supply Chain Management
- ➔ Supplier Relationship Management
- ➔ Financial Management
- ➔ Enterprise Asset Management
- ➔ Performance Management
- ➔ Customer Relationship Management
- ➔ Product Lifecycle Management
- ➔ Human Capital Management
- ➔ Infor Open SOA - Service Oriented Architecture

To watch video in this PDF,
be sure you are viewing in
Adobe Reader 9.0 or newer.
Don't have Adobe Reader 9?
[Download it for free here.](#)

Copyright © 2009 Infor. All rights reserved.
The word and design marks set forth herein are trademarks and/or registered trademarks of Infor and/or related affiliates and subsidiaries. All other trademarks listed herein are the property of their respective owners. www.infor.com

Infor Corporate Headquarters
13560 Morris Road
Suite 4100
Alpharetta, Georgia 30004
USA
Phone: +1(800) 260 2640
www.infor.com

 **IMPORTANT LINKS:** <http://go.infor.com/introtoinfor2/>