•

Executive White Paper

Lean Strategy Advisement

The R(E)volution of Lean



Business Breakthroughs Inc. Telephone (801) 358-5304 www.great-solutions.biz

The R(E) volution of Lean

by Jerry Kilpatrick & Robert Osborne

Lean Works! For some...

Lean Manufacturing as a management tool has taken the manufacturing industry by storm, and companies around the globe have adopted Lean methods in many forms and by many names. Large enterprise companies like Toyota, Dell Computer, and Pratt & Whitney have achieved dramatic reductions in delivery time and lowered inventory levels, while increasing responsiveness to customer demand and improving cash flow.

As evidenced in thousands of organizations, in many different industries, "Lean Enterprise" is one of the most promoted and competitive business models in use today. Published case studies provide one example after another of companies that have substantially reduced waste and associated costs. There are countless testimonials describing how companies rose to leaders in their respective industries by becoming "world class" in Lean. There are documented results of compressing order lead-times by more than 80%, reducing work-in-process inventories by 90%, improving quality to a Six Sigma level, and freeing up 60% of resources. And, the successes aren't limited to only large and well-known organizations—there are also many smallcompany examples.

The good news is that these Lean concepts and tools are not highly complex, and can be easily learned by people of all levels of education and job responsibility. Lean "tools" include 5S, Value Stream Mapping, and concepts/terms like kaizens and kanbans. A search on the Internet or in the advertising section of almost any business magazine will identify hundreds of individuals and consulting firms who tout successful Lean facilitations or who offer education courses to help companies successfully implement Lean.

The bad news is that even as the trend of Lean adoption continues, the success rate is low—less than 20% of companies are successful with Lean.

Why do so many companies fail in their Lean initiatives? If the results are so obvious, and best practices available in the form of published success stories, what's the problem? With thousands of consulting experts and just as many training courses available, why aren't the majority of companies successful with Lean, and why isn't everyone using this incredibly profitable management strategy?

Good questions.

The typical approaches used by most companies today do not provide an optimal return on investment to companies. The "missing link" between Lean goals and successful projects that produce the intended result is a *strategy for Lean*. For companies to reach their desired destination of success with Lean, they must first plan the journey—but many start off with the wrong perspective of success.

Starting Incorrectly—Lack of Strategic Approach

The fact is that people often struggle with the most basic of problems when implementing Lean—where to begin. Where and how people start a Lean initiative is critical to the success of the first Lean project. If the first project isn't successful, there is a good chance that there won't even be a second effort, and the first project won't be successful if there is no measurable impact to the bottom line or to strategic objectives.

Unfortunately, most Lean efforts begin with a tactical approach, rather than a strategic one. This is a key factor in the high percentage of failed Lean programs. Ironically, a tactical approach is advised by most Lean consultants. This is because Lean has evolved from operational improvements outward, and that Lean consultants are either not familiar with strategy creation or are not ready to apply Lean beyond manufacturing. Also, a tactical approach quickly uncovers "low-hanging fruit," and consultants are striving for quick wins and immediate credibility. They're not in it for the long haul with a particular client, and more often than not they're content with a hit-and-run effort.

The more common approaches to Lean are straightforward, tactical at best, and mostly focused on manufacturing or a specific operational process. While there is a growing recognition that the opportunities for Lean exist at an enterprise level, the lack of adoption indicates that companies are starting their Lean efforts incorrectly, with the wrong focus.

Many organizations begin with "how", and applying a specific technique (e.g., 5S) or perhaps with "what" to start first (identifying "kaizens"). Others may focus on "who" and provide training for selected individuals or teams, while some begin with "where" and begin building Value Stream Maps.

Let's explore these further.

Page 1 of 9

Many companies begin Lean by employing a technique called *5S*, or Workplace Organization. The "5" and "S" come from the five Japanese words; *seiri*, *seiton*, *seiso*, *seiketsu*, and *shitsuke*. The English equivalents (keeping the "5S" theme in mind) are: sort, set, shine, standardize, and sustain. Essentially, this is a method for organizing a work area, focused on improving efficiency, safety, layout, and flow.

5S efforts produce some immediate and visible results. Workplaces are indeed better organized. Tools and materials are now maintained in well defined locations, making them easier to find and more quickly accessible for use. Operators notice that their jobs require less effort than before. Supervisors find that it's simpler to identify problems such as inefficiencies, excess inventory, and misplaced equipment. There may be a marginal increase in productivity, even if 5S is used in isolation from other Lean strategies or tools.

But the direct bottom line benefits of a stand-alone 5S program are difficult to measure, and even so, the improvements tend to be isolated. Improved value in the overall system and the impact on throughput is difficult to quantify.

Kanbans

The word *kanban* means *visible record* in Japanese. In Lean lexicon, it is essentially a signal to produce or move product. A kanban may be an electronic signal, an empty bin, a card, a pallet, or a defined area to hold inventory. Kanbans are used to manage inventory—quantity and flow.

In the ideal Lean world, product is "pulled" towards the customer, through the factory, from the supplier in quantities of one—hence the term *one-piece-flow*. However, in many circumstances, it's impractical to produce and move product one piece at a time. So kanbans serve as the "acceptable" compromise; allowing the company to move small, controlled batches of material in a "pull" environment.

The use of kanbans can dramatically reduce total inventory. Since lead-time is almost directly proportional to work-in-process inventory (WIP), kanbans can provide a significant improvement in production lead-time.

But, there can be problems. Using kanbans without other coordinated improvements (such as reducing equipment changeover times) can backfire, resulting in degradation in equipment utilization and even increases in the number of late shipments. Also, note that since kanbans are a compromise to true one-piece-flow, companies that have implemented effective kanban systems sometimes become complacent and do not

address the root causes that created the various needs to maintain inventory, such as long changeover times, imbalanced processes, long distances between work centers, quality problems, and lack of operator cross-training.

Kaizens

Also, known as *kaizen blitz*. This may be the most common starting point for a Lean initiative in US manufacturing companies. *Kaizen* is the Japanese word for *continuous improvement*. This approach involves empowering work teams to rapidly (hence, the word *blitz*) improve specific problems within their areas of responsibility.

On the surface, this seems like a very good idea, and it can generate immediate and measurable benefits. The use of kaizens, especially if championed by management, finally proves to the workforce that the company is interested in listening to and supporting their improvement suggestions. Some of the more common targets for kaizens include; solving an equipment downtime problem, combining two or more machines into a work cell, setting up a kanban, reducing equipment changeover time, and implementing point-of-use storage for supplies (maintaining storage where the supplies are actually used).

But, this program can fall prey to a phenomenon known as "drive-by kaizens"—improvements are implemented stand-alone, without prioritization, and without understanding how changes in one part of the facility might negatively impact other business functions, resources, suppliers, or customers. Other critical problems with this approach are that it tends to overlook consensus, and there is little time taken to actually identify and eliminate root causes—there is more focus on speed of execution than there is on planning or results.

Value-Stream Mapping (VSM)

It's important to note that value stream mapping is a relatively recent addition to the slate of Lean tools. A value stream is defined as all activities and events (both value-added and non-value-added) that a product or service passes through on its way from supplier to customer. In a manufacturing facility these activities include shipping, waiting (in inventory, in a queue to be processed, or even in an oven waiting for adhesives to cure), packaging, inspection, rework, and both manual and automated processing. A VSM includes both the flow of product and information.

The primary purpose of a VSM, specifically a "current state map," is to highlight areas where one-piece-flow breaks down—these points suggest opportunities for improvement (i.e., kaizens). Other purposes of mapping include; measuring the total cycle time, identifying

inventory locations and balances, and determining points in the process where signals to produce arise.

Once a current state map is created, one or more "future state maps" are developed from it, showing where various kaizen events might eliminate root causes for stoppages in flow. The two reasons for creating multiple future state maps are; (1) certain improvements might be logistically-, technologically-, or cost-prohibitive, and (2) there is no single correct future state. The VSM approach is significantly more effective than the other approaches because it prioritizes the improvement efforts.

This technique, like the others, has its drawbacks. One issue is that it involves those individuals who will be impacted by the change much later in the improvement cycle than the 5S and Kaizen techniques—this late involvement of stakeholders tends to create resistance to change.

Value Stream Maps also have an inherent weakness in their inability to capture the dynamic nature of a process, since the measures are often only a snapshot in time. Seasonality, variability in demand and fluctuations in supply and associated lead times are not easily captured or measured in a VSM.

Perhaps the most significant shortcoming with the way VSM is done today is that it tends to ignore the impacts on or impacts from "competing value streams" and support functions. In most organizations there exists more than one value stream-more than one product line, or one product line that produces two or more different items. These different value streams frequently compete for resources; equipment, people, materials, suppliers, etc. Additionally, all organizations have departments that support the operations or production department—accounting, purchasing, quality, maintenance, engineering, etc. If the value stream changes without understanding how it impacts a competing value stream or a support function, this may negatively impact the overall organization.

Training

Many companies start with large-scale Lean training before selecting any specific approach or defining a specific project. The training curriculum for Lean can include not only the previously-mentioned topics of 5S, Kaizens, Kanbans and Value Stream Mapping but also topics like Workcell Design, Conflict Management, Project Management, Metrics/Measurements and Teamwork.

Training is a favorite strategy for consultants—it provides high daily revenues, is risk-free and there's no pressure to deliver any result other than a trained audience.

The value of training is that it's broad-based, provides value to the individuals involved and sends a message that management is serious about implementing Lean. The techniques themselves are relatively easy to learn, and training is primarily techniques-based. Training supports the afore-mentioned strategies of starting at a tactical level, which is where most organizations start Lean.

However, unless the training is carefully coordinated, there is a risk of the learned skills not being applied on a project quickly, resulting in wasted training time and investments. Unless the training is provided to teams that have a clear mandate to provide a solution in a specific area, the training will not produce measurable business results. Training alone does not provide measurable benefits to the bottom line, and is therefore a weak starting point.

Lean Failure Factors

To summarize the challenges, there are many approaches to Lean, some more successful than others.

- Organizations may choose to begin with a tool/technique approach to Lean, applying 5S to a broad cross-section of the business, or identifying a specific problem area for a "kaizen" event as an attempt in "do it yourself" I ean.
- Organizations and instructional companies who offer Lean training and certification programs insist (no surprise) that organizations must learn all about Lean before starting, and that training is the way to best leverage Lean.
- Consultants with specific subject-matter expertise or experience in other similar industries advise that companies begin with the creation of a "current state" Value Stream Map on a selected product line or business area, circling back to apply specific techniques in areas of weakness. This usually results in incremental improvements, visible within that specific area.
- Other consultants advise that a "clean slate" approach be used to envision the future "perfect world" and ideal business model without being encumbered by analysis of the existing value streams.

Each of the above approaches is effective to some extent. Unfortunately, there are even more stories about how Lean *doesn't* work—according to most studies, less than 20% of Lean initiatives accomplish the desired goal or result in a Leancentric organization.

This seems to be a paradox, in that while Lean is an effective management tool and there are many Lean "experts" and books available to help guide the journey, most companies fail in the effort. The pragmatic and honest articles and books on Lean talk about project pitfalls, resistance to change, and the lack of return on the investment. Many Lean consultants begin their sales presentations with warnings about how complex Lean is. Managers who resist adoption talk about how Lean doesn't fit their business model or apply to their industry.

Specifically, the following are some of the more common reasons cited for Lean failures:

- Lack of management support
- Resistance to change (lack of buy-in) from supervision and workforce
- Poor metrics
- Not enough training
- · Little or no impact on profitability
- Ineffective communications
- Not able to sustain initial efforts
- Not expanding improvement from the initial efforts to other departments
- Improvements in one area seemed to have negative impacts in others

How do business leaders resolve this contradictory information and multitude of approaches? Do the companies and individuals who have been successful know something others don't know? Is there a skill set that's only available to a select few? Does Lean really only apply to certain types of industries, organizations, or even more narrowly to very specific process or product families within manufacturing facilities? And, even if a manager has evidence (or faith) that Lean is worth trying, how can he or she avoid being one of the many failed case studies?

Key Observations

Over the past several years, we've personally witnessed many effective and ineffective Lean initiatives. In the book, "The Machine that Changed the World," Womack, et. al., made the case for a Lean enterprise—employing the principles identified and developed by Toyota. And, US companies, primarily the manufacturing sector, accepted the challenge. However, organizations weren't prepared for the aforementioned obstacles and set-backs, especially since their Lean projects were most often started at an operational level with little or no consideration of strategic objectives.

In order to address the paradox that Lean works, but not for most businesses, we decided to focus the research and thinking not on Lean failures, and not even solely on Lean successes. Instead, we chose to study best practices in strategic initiatives and try to identify the common threads among the various Lean successes and failures. The first observation is that the issues noted as "failure factors" appear to be pervasive conditions and not explicit reasons or root causes. Rather than explaining why the Lean enterprise effort failed, these tend to simply be part of the existing

company culture. In other words, these circumstances are not specific to Lean, but would be stumbling blocks to any strategic implementation that the company might undertake. Conversely, those organizations that have overcome these issues during other major initiatives have a much higher probability of being successful with Lean.

The second observation is rather obvious—there's nothing unusual about why companies choose the typical approaches to Lean as defined earlier. The marketing hype around Lean, from articles, books and consulting organizations focuses on a tactical beginning. Also, the tools and techniques are relatively easy to learn and apply in specific areas or to specific problems. Companies are under enormous pressure to increase their efficiencies and reduce costs, and there is a sense of urgency to get started with Lean. Since the tactical or operational approaches are the ones commonly recommended, readily available, and easily understood, it's the logical (not necessarily correct) starting point for Lean.

Finally, the third key observation, perhaps the most important, is that the typical approaches to Lean are for the most part too narrow in their focus and all too often used as stand-alone tactics. The results are sub-optimal improvements that either have too small of an impact on throughput, no measurable bottom line value, or take much longer than they should to achieve the original purpose of adopting Lean.

What's Necessary to Succeed

The conclusion is that Lean initiatives that are successful on a large scale have something in place that failed efforts do not—a Lean strategy, a different way of thinking and a unique strategic focus. Organizations that are dramatically successful with Lean take a much broader view of processes, stakeholders, and business objectives.

A strategic foundation has many components, including principles of development and rules of communication. Development of this roadmap is a dynamic and iterative process, since a business strategy must adapt to changing external pressures, and a framework for Lean must be as agile as a company's customers, suppliers, and outside influences demand.

Seldom, if ever, are "big" problems (such as the ones being tackled by Lean) limited to only one business area, department, or product line—multiple departments and dozens or even hundreds of business processes are linked together in value streams, and there are a myriad of interdependencies and interactions across and between all of these. If these are not understood, the impacts are discovered too late, and proposed or implemented changes suffer, as do the people involved.

Every combination of people, processes, culture, industry, and drive is unique, and some organizations and leaders simply seem to understand how to define and execute a strategy, while others do not. Executing a Lean strategy is similar in many respects to implementing a total quality management (TQM) strategy or a Six Sigma program across the enterprise. These programs have been implemented successfully in many organizations. The difference seems to be that Lean is more likely than TQM or Six Sigma to be initiated without a "top-down" approach or clear business objectives.

The key tool that is missing in the strategic arsenal for Lean is a framework for strategic planning and tactical selection of business processes for the application of Lean. In order to create an optimal strategy, we considered that first there must a way to visualize the business units or "process areas" that might be impacted in a Lean initiative, and that this might help organizations to create an effective business strategy for Lean—this spurred the development of the following framework.

Starting with a Broader Context

One of the "failure factors" of Lean (or any other major change initiative) is the lack of buy-in, resulting in disruptive resistance to change. People are the problem or the solution, depending

on their level of involvement in the beginning and planning of a project. By thinking about the implications and strategic goals of Lean, and by ensuring that as many stakeholder groups are represented as possible, companies can greatly increase the probability of cooperation and the rate of adoption of Lean.

The Business Value System Framework™ (Figure 1) represents the entire business in a single model, and applies to most, if not all, organizations. The BVS Framework™ provides a guide that can help organizations visualize and confirm the "value path" through the business for products, services and information. By identifying all of the process owners and participants in the value stream, organizations can ensure that these people are involved early in the Lean effort, thereby greatly reducing the resistance issue.

Using this framework will also reduce the risk of an overly limited view of the problem areas, or a lack of alignment with an overall business strategy. A standard tactical approach to starting Lean would limit the scope to the Product Process Areas at best, and more likely to the Assemble / Manufacture process itself. The risk is suboptimal improvement that may or may not have a resulting increase in throughput or profitability. And, if there's no bottom line value, the Lean effort will likely stall.

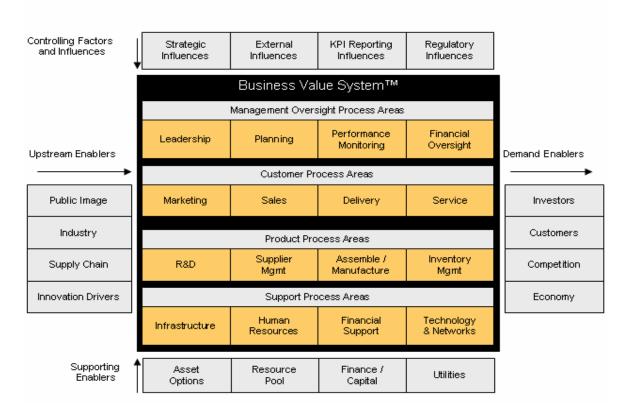


Figure 1: Business Value System Framework™

By reviewing the Business Value System Framework™, however, Lean project owners can easily see that most end-to-end value streams will include components of all four types of Process Areas: Management Oversight, Customer, Product and Support. It's important to note that most, if not all, business transactions cross process boundaries. Consider that Customer Service occurs most often after Delivery, which only occurs after Sales, only possibly after Assemble/Manufacture, which can't proceed without R&D and Supplier Management, which only occurred because of Marketing promotions, and all this only because there was Leadership and Planning with a decision to take the product to market!

It is also easy to see that the Support Process Areas can either make or break the success of the business depending on their provision of necessary resources and assets. Reviewing the Process Areas that are involved in the flow of a product helps to ensure that all of the relevant stakeholders are represented in any Lean project.

This ability to visualize the larger context of the problem area will by nature result in much broader scope for a Lean effort. The Business Value System Framework™ will, if considered during the early discussions of Lean, promote representation from each of the Process Areas involved in each value stream.

Companies Focus the Lean Strategy on the Wrong Thing

Tools like the Business Value System Framework will help to drive a broader view of value, but this will be useful only if done as part of an effective strategy when starting Lean. Most Lean strategies are insufficient and tactical in nature, rather than being truly strategic. As shown in Figure 2 below, a recent study by the Aberdeen *Group* shows that 66% of best-in-class companies believed that "cost reduction in manufacturing and the supply chain" was the key target for a Lean initiative. The other actions are operational, cultural, and quality focused.

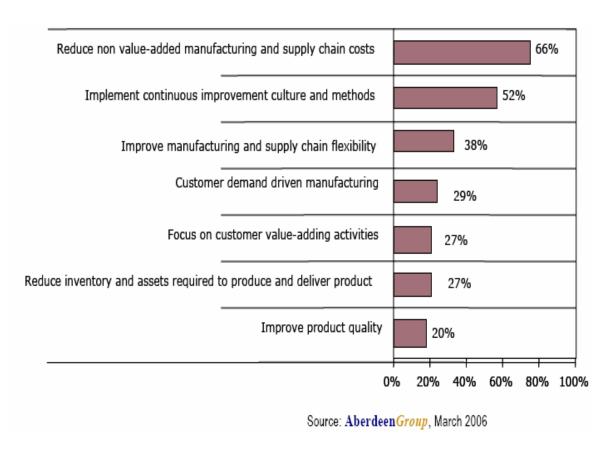


Figure 2: Best-in-class Strategic Actions of Lean

The most surprising observation is not on these "strategic" actions themselves, which are certainly valid at a tactical and operational level. The most striking fact is the absence of even one strategic action that addresses profitability, return-on-investment, or shareholder value. Lean is being viewed as a cost-reduction strategy, not as a market domination one, by the majority of companies. Business Process Reengineering (BPR) was misconstrued as a cost-reduction and downsizing strategy, resulting in a death-knell for BPR as a management strategy. If companies continue to focus on Lean as a cost reducer. rather than a growth-enabler, it is only necessary to look back at the "death" and ineffectiveness of BPR as a prediction of what might happen to Lean. A change in perspective is required.

Breakthrough Lean Thinking

An observation of successful Lean implementations indicates the presence of "breakthrough thinking" principles in both the development of the initial objectives and in application of the various tools and techniques, even though the organizations were not necessarily aware they were using them.

In their book "Breakthrough Thinking: The Seven Principles of Creative Problem Solving," Nadler and Hibino describe their research and utilization of seven key principles for a "comprehensible reasoning approach"—a radically different philosophy for creating solutions. Some of these principles are:

- Uniqueness. Since no two situations can ever be alike, one should logically consider a unique approach to solving the problem.
- Purposes. No situation or problem exists as it's initially described. When people look at issues in a broader context (by identifying higher level purposes), more comprehensive solutions become available.
- Systems. All organizations are complex systems, containing many interconnected facets. Improving or changing one part of such a system will invariably impact other parts, usually in ways organizations do not anticipate.
- Limited Information Collection. The traditional approach to solving problems is to collect as much information as possible it, study the information, and make recommendations. Nadler and Hibino suggest that since people should be focusing on the solution and not the problem, they should spend data collection energies in

- similar fashion—on the solution. Studying the problem and all the related historical events leading up to it will not necessarily lead to effective and comprehensive solutions.
- People Design. "The people design principle gets people to work on the change from the center (themselves) out rather than only from the outside (others) in." (Nadler & Hibino) Essentially, people resist change when they are not personally involved in the planning or implementation of the change. People intuitively know this, but US management still fails to recognize this basic human need. And, failed strategies are the direct result.

There is much documented evidence to support the successful marriage of these principles with other improvement initiatives. Hoffherr & Moran used these principles in the implementation of Total Quality Management. And, Kilpatrick & Osborne continue to use them in Lean, strategic planning, process modeling, project management, and other areas.

Conversely, failed Lean implementations tend to emphasize; "let's not re-invent the wheel" (lack of uniqueness), focusing on Lean itself rather than the *reasons* for implementing Lean (no understanding of purposes), identifying a place to begin without evaluating the impact on the overall organization (no concept of the organization as a system), collecting reams of data (<u>unlimited</u> information collection), and not involving those individuals who will be the most impacted by the changes in the initial planning efforts (not using the people design principle).

Lean as a Growth Strategy

If companies consciously leverage breakthrough thinking and consider the Business Value System FrameworkTM, they will quickly realize that **growth enabling strategies should be the standard approach to a Lean initiative**. The "strategic actions" identified in the Aberdeen *Group* study are more tactical than strategic—more short-term operational in nature than focused on long-term market dominance, proof that organizations are self-limiting in how they approach Lean.

Rather than viewing Lean primarily as a costreduction tool, the best-in-class Strategic Actions of a Lean initiative should contain two key components: Customer Value and Business Value, combining "purposes" into a powerful Strategic Action. Some examples:

Customer Value	Business Value
Decreased cost-per-unit	to support aggressive sales strategies
Lowered cost of product customization	to outperform competition at comparable price points
Decreased time-to-market of new	to establish market stronghold and "set the
products from concept to release	bar" for expectations
Decreased time-to-profit for new products	to produce "on demand" as a competitive
though faster product development	advantage
Increased throughput, reducing cost-per- unit through higher productivity/efficiency levels	to deliver higher revenues with existing resources

Strategic action plans for Lean should combine multiple aspects of the business "system", with a focus on growth and profitability. Each Strategic action target should be unique to a company's business drivers, serve a clear purpose for the business, consider the "systems" interdependencies and involve the people that are key stakeholders—otherwise, the results of the efforts won't be successful.

Defining a Unique Lean Strategy

Companies should review the Business Value System Framework™ and answer the following Strategic Lean Questions to begin the shift in thinking that's needed to move from a cost-cutting mindset to one of growth and market dominance. It is important to note that Operations Performance questions are the LOWEST in priority when it comes to setting strategic goals and defining strategic actions.

Priority # 1: Profitability & Revenue

- Are margins and profits at desired/target levels?
- 2. Are revenues growing?
- 3. Are new sales as profitable as past sales?
- 4. Is cash flow adequate to reward owners/stockholders, cover expenses, service debt, invest in R&D, maintain a skilled workforce, and pursue continuous improvement efforts?

Priority # 2: Ability to Compete

- Is the company or business unit in the top 20% of their industry/niche in the following categories? (If YES, provide statistics/measures for each. If NO, define targets for each. If there are no measures, they should be established and captured immediately.)
 - a. Order fulfillment lead-time
 - b. Customer satisfaction
 - c. On-time delivery
 - d. Time required to develop and introduce new products/features

- 2. Are products/services price-competitive?
- 3. Is the company gaining on the competition, or are competitors taking market share or threatening the customer base?
- 4. Is the company winning as many bids/competitive situations or closing as many new sales as required/targeted?

Priority # 3: Operations Performance

- Are resources working overtime to meet customer demand? Are deliveries/services late? Are resources overworked/stressed?
- 2. Are there process or flow bottlenecks that regularly or periodically impact the ability to meet customers' service and product delivery demands and expectations?
- Has there been a significantly (15% or more) reduction in Cost-Of-Goods-Sold (COGS) or Cost-of-Services-Delivered (COSD) over the past several quarters?
- 4. Has the company been able to significantly (50% or more) improve service, delivery, product, and/or process quality over the past several quarters?
- Has there been a significant (50% or more) increase in responsiveness to customer demand over the past several quarters? (Time it takes to respond to customer requests.)

Evaluating the Lean Strategy (or lack thereof)

If companies are starting or have already started Lean and don't have a strategy in place, they're at risk of failure at worst, and of delaying/reducing benefits at best. Reviewing the Business Value System Framework™ and honestly answering the Strategic Action Questions will be of value. Using the results as input to a Lean strategic planning exercise will help them craft an approach to Lean that will deliver value to customers and help to achieve the desired profit/performance goals more quickly.

If there is a Lean strategy, but it is focused on operational improvements rather than on higher profits and an increased ability to compete, it is an ineffective strategy. Starting at a tactical level, as most organizations do with Lean, results in only limited and short-term improvements and a cost-cutting mentality that ensures long-term loss of market share—Ford, General Motors, Delphi and lomega come to mind. Companies should consider the Breakthrough Thinking principles and remember that cost-cutting the way to prosperity isn't a high probability success strategy. Growth is the key, and revising the Lean strategy as stated in the previous paragraph is advised.

By looking at the business as a "value system" for customers, companies can shift their Lean strategic priorities to growth-oriented targets, not cost-cutting ones. Instead of trying to squeeze additional margins to boost the bottom line (and share price), Lean can and SHOULD help increase sales and response to demand while maintaining and lowering cost-per-unit, therefore enabling us to lower prices, undercut the competition, and win more business.

The R(E)volution in Lean isn't complex. But in order for companies to succeed with Lean, they must shift their perspective to one of growth and recognize that cost-cutting is a by-product rather than the key strategy for Lean. A key part of the Lean strategy must be the expansion of projects to encompass the entire value stream, rather than limiting efforts to tactical efforts. And finally, strategic actions that merge customer and business value, focusing on customers, value, responsiveness and quality.

Businesses that thrive in today's changing environment will capitalize on the R(E)volution, and leverage Lean to do what Toyota and Dell have done—dominate their markets.

To receive a free Lean Strategy Assessment Tool, call 801.358.5304 or email your request to info@great-solutions.biz.

References

Womack, James, Daniel Jones, and Daniel Roos. The Machine that Changed the World. 1st ed. New York: Harper Perennial, 1991.

Pearce, II, John A., and Richard B. Robinson, Jr. Strategic Management: Implementation, Formulation, and Control. 9th ed. Boston: McGraw-Hill Irwin, 2005.

Nadler, Gerald, and Shozo Hibino. <u>Breakthrough Thinking: The Seven Principles of Creative Problem Solving</u>. 2nd ed. Rocklin: Prima Publishing, 1994.

Zenger, John H., and Joseph Folkman. <u>The Extraordinary Leader: Turning Good Managers into Great Leaders</u>. 1st ed. New York: McGraw-Hill, 2002.

Biddle, Jane. "The Lean Benchmark Report: Closing the Reality Gap." March 2006. Aberdeen *Group.* 20 March 2006 www.aberdeen.com>.

Hoffherr, Glen D., John W. Moran, and Gerald Nadler. <u>Breakthrough Thinking in Total Quality Management</u>. 1st ed. Elglewood Cliffs: Prentice-Hall, 1993.

About the Authors

Jerry D. Kilpatrick has worked for three Fortune 500 manufacturing organizations and has more than 25 years of experience in Lean Manufacturing. Jerry is a former Manufacturing Extension Partnership executive, and has been a consultant in the manufacturing sector since 1997, specializing in business process improvement, executive coaching, business assessments, strategic planning, and project management. Jerry holds a Masters of Administration in Industrial Management. He can be reached at Kilpatrick.Jerry@comcast.net or by phone at 206.339.5457.

Robert Osborne has worked in the business process and IT industries for over thirty years. He has held VP positions in sales and professional services for enterprise software vendors and integrators, provided consultative services for dozens of US and international clients and trained over 500 professionals in project management, systems development and business process methodologies and techniques. Robert is the founder of Business Breakthroughs and the developer of the Business Value System FrameworkTM. He can be reached at rosborne@great-solutions.biz or by phone at 801.358.5304.