

MANUFACTURERS' DIGEST

The Industry Guide to Lean Manufacturing
SUMMER 2003

From the Publisher Welcome to the Lean Enterprise Issue

The Lean results achieved in the manufacturing sector are understandably attracting new interest from other industries and other functional areas within manufacturing organizations. Under tightening budgets and the pursuit of maximizing resources, companies in healthcare, insurance, banking, and other service areas are spurring the migration of a unique breed of executives from the manufacturing sector. As this migration is still in its infancy, the results may not be fully appreciated for years to come, but early adopters are already seeing impact.

The Lean Enterprise issue will explore this migration in more depth. To help with the task, we've enlisted two contributors with first-hand experience in the application of Lean to non-manufacturing functions. Mike Gendron, most recently a Senior VP with Hill-Rom, sheds light on reducing waste in the financial accounting task. Hank Kucinski, most recently with Boston Financial Data Services, shares his insights on Lean barriers and keys to success in a non-manufacturing environment. We are grateful for their valuable input and expect to see more of them in the future.

In response to such recent shifts, Stiles Associates has also expanded its search services to include assignments outside of strict manufacturing. For more information on our new focus or to share your thoughts on the subject of Lean outside of manufacturing please visit us online at www.leanexecs.com.

Sincerely,

Linford E. Stiles
President
Stiles Associates, LLC

LEAN THINKING IN FINANCE

Michael P. Gendron



Michael P. Gendron

Lean principles are often thought of as related to a manufacturing environment, the manufacturing process, and tangible products. However, if we relax this strict definition of the "Lean environment" and recognize that any functional activity in an organization leads to a final "product" (be it a piece of paper or decision), we will find that there is a whole world of Lean improvement waiting for us outside of the shop floor.

Every activity in a business is a part of a process, and Lean continues to teach us that any process can be improved. Progressive finance executives have recognized this opportunity and have redesigned their process to improve information flow, eliminate waste and non-value-added tasks, and further enrich employee's jobs. Although the most often highlighted examples of "Lean practices" may be in the hi-tech sector (i.e. Cisco, Dell), all companies can implement dramatic improvements in their financial administrative processes.

This all sounds nice in theory, but what actually happens when Lean is implemented in an administrative function? Consider a \$1-billion-plus company that was spending in the top quartile of manufacturing companies for the "accounting & finance" function. Teams were established to prioritize Lean analyses and to identify and implement process improvements. Team meetings, periodically attended

by the CFO, sometimes struggled with the goals but often celebrated the breakthroughs. Results were startling to team members and management, and the Lean process gained momentum as the benefits compounded. Overall, more than 20,000 man-hours were eliminated from the financial administration of the business and were redeployed to more valuable activities. Some specific examples of the benefits are worth reviewing:

Keeping it Simple

Historically, the company prepared detailed quarterly forecasts, requiring all departments to reforecast all the operating elements of the business. Each quarter, key departments (Marketing, Sales, Manufacturing etc.) created spreadsheets "predicting" more than 100,000 individual data components, balanced the spreadsheets within the departments, and forwarded the information to the Financial Planning Department. All the data were compiled, assembled into various Department, Group, and Division data books, reviewed by the various levels of management, and eventually consolidated into a bound, detailed document, shelved in the financial planning department. A summary of the critical elements of the forecast totaled about 25 pages, and was the final product of the forecast process.

Using Lean techniques, the forecast "data" was reduced to less than 9,000 points of information—a reduction of more than 90%. The reporting departments saved thousands of hours annually, which were redeployed to more value-added

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activities. Forecast and planning cycle times were reduced by more than 50% and hundreds of Supervisor, Manager, Director, and VP hours were saved each quarter. And since the organization concentrated on the quality of the few critical areas, rather than the mechanical balancing of spreadsheets, the quality of the forecast ultimately improved.

Report-Lite

As with many organizations, executives responsible for Manufacturing, Distribution, Sales, or Marketing, etc. received paper-based reports on a monthly, weekly, and sometimes daily basis. These stacks of paper, which were routinely never opened except to review the summary page, became the ever-growing contents of numerous file cabinets (a.k.a. inventory).

The Lean accountants in this company challenged the need to kill those trees and pushed each executive to eliminate the reports altogether. The paper reports were modified to only reflect current needs (eliminating "one-time" reports that had taken on a life of their own), and ultimately reduced by "tens of thousands" of pages annually. Nearly one-third of the reports were discontinued. On-line reporting was substituted for more than 20% of the reports, and the "rain forest" was preserved.

The Lean Payoff

When challenged to focus on non-value-added activity, the Accounts Payable (A/P) Manager shyly stated that T&E reports were often submitted with errors, lacking

receipts and approvals, etc. Cash advances, due to delays in T&E processing, were exploding, requiring additional tracking, reconciliation, and balancing. A/P vouchers were often lost, submitted without proper accounting information, and were not properly approved.

In true kaizen fashion, the processes were reviewed and streamlined. Standard Operating Procedures (SOPs) were written,

"Overall, more than 20,000 man-hours were eliminated from the financial administration of the business and were redeployed to more valuable activities"

training was conducted, and performance metrics were developed. The results of our Lean efforts paid off by reducing T&E and A/P check processing "cycle time" by one-third. And since reimbursement checks were created within 24 hours of receipt of the T&E report, cash advances were virtually eliminated. A further benefit of the above was the disappearance of T&E rework and department overtime. And since standards had now been prepared, the entire process was now set up to move closer to a paperless T&E reimbursement process (e.g. American Express services).

Tracking and Measurement

Monthly financial reports from various subsidiaries were often incomplete,

inaccurate, and late. The CFO's questioning invariably elicited the same defensive response that "they" were not doing their jobs! Further probing into these procedural failures uncovered no helpful information or statistics. It was also discovered that there were no written guidelines for report preparation or content, nor published reporting calendars.

Borrowing again from the shop floor, visible measures were established and implemented and error conditions were investigated for "root-cause." Standards were mutually developed, issued, and adhered to, virtually eliminating 12-14 hour workdays and numerous errors during the closing cycle. Improved business narratives were prepared with this saved time/analytical resource.

These initial outcomes reinforced the CFO's determination to "Lean-out" the financial process, and also energized the organization to improve. The CFO wisely redeployed the resource savings to a higher value-added content, which allowed for improved financial management and personal career enrichment for each of the employees. As these individual successes were celebrated, the Lean-thinking processes began to permeate the entire Finance and Information Technology organization. Spontaneous "savings" began to surface, which once again improved service and eliminated non-value-added tasks.

As "C-Level" executives, we all know that Lean is a way of thinking and not just a manufacturing activity. The challenge is now to the progressive executives everywhere, especially in our "do more with less" times. Lean principals have been proven to work in many industries and activities. Why not apply the process to your administrative environment? ○

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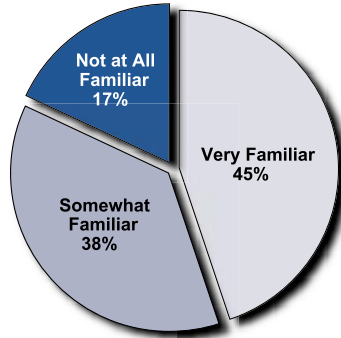
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SURVEY FINDS LEAN HEALTHY AND HOLDING PROMISE OFF THE SHOP FLOOR

Stiles Associates LLC recently surveyed over 100 manufacturing executives in an effort to take a snapshot of their outlook on Lean practices both inside and outside of manufacturing. Here is some of what we found:

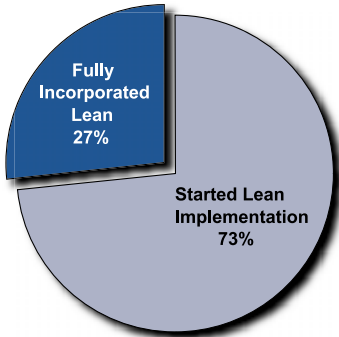
1. HIGHLY FAMILIAR WITH LEAN

83% were familiar with Lean manufacturing and culture, with 45% claiming to be very familiar.



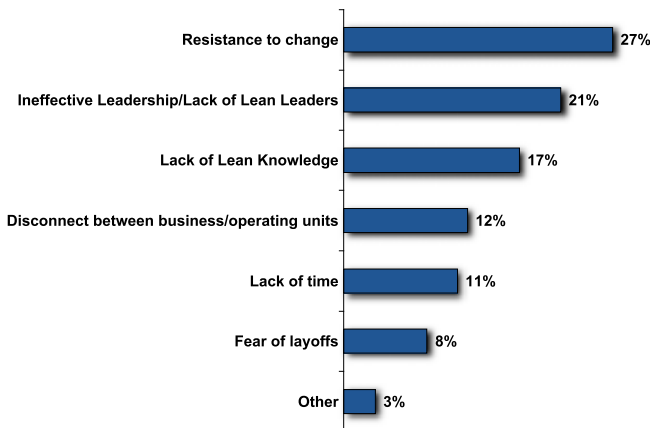
2. MANY ARE MAKING THE JOURNEY

More than half of all respondents employ Lean techniques. Of that group, 73% have officially started and 27% report having fully incorporated Lean practices.



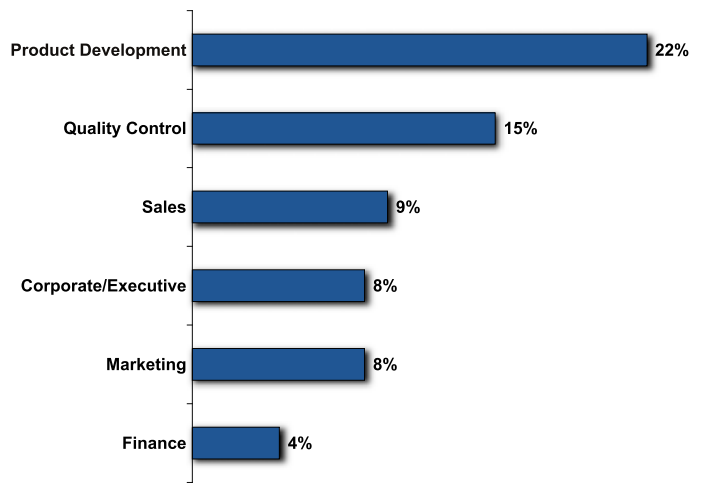
3. CULTURE CHANGING LEAN LEADERSHIP IS KEY

When asked to list the greatest obstacles to implementing Lean, nearly half (47.9%) pointed to resistance to change and ineffectual leadership. Respondents cited "passionate" as being the most critical characteristic (33%) of a Lean leader, followed by "enthusiastic" and "entrepreneurial."



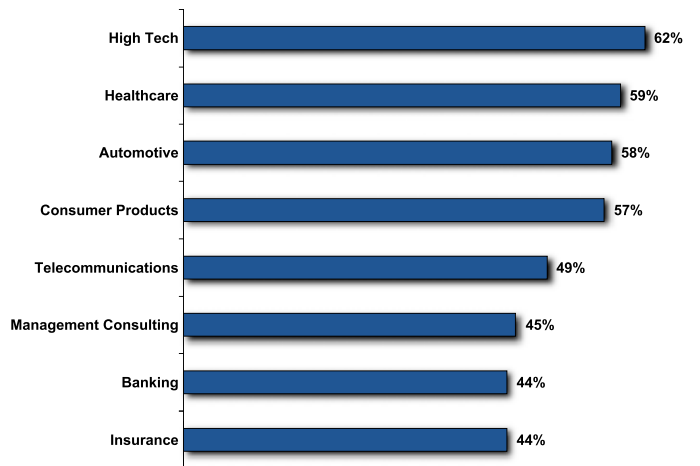
4. LEAN BENEFITS SEEN OFF SHOP FLOOR

Respondents noted that Lean is most frequently applied on the shop floor (41%). However, they overwhelmingly see Lean adding value to operations outside of the shop floor. Areas listed below:



5. LEAN BENEFITS SEEN OUTSIDE OF MANUFACTURING

Nearly 100% of respondents believe Lean principles can be successfully applied to other industries and sectors. Leading listed sectors include High-Tech (62%), Healthcare



(59%), and Consumer Products (57%).

More information on the results available at www.leanexecs.com

CONTINUOUS IMPROVEMENT BEYOND MANUFACTURING – THE KEYS TO GETTING STARTED

Hank Kucinski

Not too long ago in the world of financial services, a fee-lowering strategy was unheard of and counterintuitive to traditional budget planning processes. Today such programs are viewed as critical to building and growing strong customer relations. And while the factors that led to this shift are not new (competition, pricing pressures, consolidation, etc.), progressive companies in the financial services area are finding new ways, including Lean, to combat them.

For example, I've seen Lean bring a teleservicing group that was losing \$200,000 per month back to budget. I've then seen the use of continuous improvement programs reduce the cost per call by over 65% and, within six months, lead the group to beating the monthly budget by approximately \$100,000. Along the way the Service Reps became more empowered, happier, and more secure in their positions.

I've also seen a financial services operational organization in the course of a year use Lean to generate a 22% increase in productivity while reducing the defect rate by over 50% and making the client very, very happy in the process!

But for service industry executives interested Lean, plaguing questions remain: "how do I get started in this revolution" and "how can I ensure success?" The answer for the latter is easy in that there is no guarantee for success, only failure if you don't get started. As for getting started, the first part requires a well thought-out corporate strategy for continuous improvement. More importantly, there must be commitment throughout the organization from the top down to

make it happen. Sounds easy enough, but make no mistake, changing a culture on the level that Lean requires takes dedicated leadership and a strong belief that your most valuable resource is your workforce.

A THREE-STEP PROCESS

Ensuring associate satisfaction within your organization is key. Create an environment in which the associates' work is

*"there is no guarantee
for success;
only failure if
you don't get started"*

aligned directly to the company vision and annual objectives. Communicate constantly and empower the workforce. Encourage them to look at what they do and how they do it, and to then to improve upon it. Instill accountability and clearly express expectations for performance standards and the need to change continuously. Reward those who take risks and have the courage to try things differently. But be aware that 10-20% won't want to make the journey and never will.

The next step is to understand the customer and involve him or her in your operations. Factor in their needs, basic expectations, and demands for performance. Measure them, analyze the data, and develop plans for improvement. Quickly implement the plans and track the improvement with new data. Then exceed all of those and delight the customer as you strengthen a partnership that will help both of you achieve your business objectives.

Step three is to get a handle on your internal operations and determine

process capability in order to determine if it matches the needs of the client. First get it under control and then improve upon it, seeking operational excellence. The use of SPC charts, paretos, cause-effect analysis diagrams, WV diagrams, and a whole host of other improvement tools will be critical tools for such tasks.

REWARDS FOR THE DETERMINED

Financial performance will follow as a result of the steps outlined above. Typical results include increases in productivity by 20% or more per year, defect reduction by up to 50%, and 10% improvement in customer satisfaction (provided measurement systems have been implemented).

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LEAN IMPLEMENTATION RULES OF THE ROAD

Rule One: Without true commitment and support from senior management, the chances of major victory are slim to none.

Rule Two: Expect 10-15% of the population to embrace Lean immediately, 70-80% to just sit and watch, and 10-15% to be totally against the idea. Focus on the top 10-15%, get some victories, and start to convert that large middle population of fence-sitters. Don't over-concern yourself with the last group as the efforts would be non-value added. Welcome them if they so choose, but remember that the choice is theirs.

Rule Three: Implement your program and update it continuously, improving the process of change as well as operational performance. Those who are truly successful in Lean endeavors never forget that continuous improvement is just that – continuous.

Such results are clearly speeding the demand for Lean to migrate into non-manufacturing businesses and divisions. No longer can internal operations be taken for granted; no longer can total concentration on revenue generation alone lead to success; no longer can the customer and his or her needs be left out of the equation! Today financial services,

insurance, health care, and all of the rest are starting to think differently with regard to how they run their companies. Faster, better, and cheaper; productivity and quality; customer satisfaction; all play a part in the running of leading edge organizations. Some corporations do it well and others think they do, but most are at least aware today that those who take it seriously and are committed

will leave the others behind. It is an exciting time for changing cultures in very traditional businesses and for achieving greater profitability and overall growth. It is a time to take the lead! ○

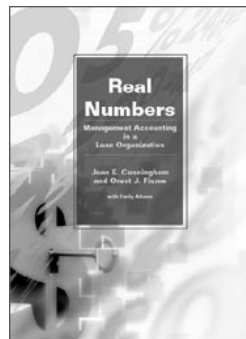
HANK KUCINSKI HAS LED LEAN PROGRAMS IN BOTH MANUFACTURING AND NON-MANUFACTURING ENVIRONMENTS. HIS PAST POSITIONS INCLUDE VICE PRESIDENT OF OPERATIONS DEVELOPMENT FOR BOSTON FINANCIAL DATA SERVICES AND PLANT MANAGER AND INTERNATIONAL PROGRAM MANAGER FOR CONTINUOUS IMPROVEMENT AT POLAROID CORP.

BOOK REVIEW

THE REAL NUMBERS: MANAGEMENT ACCOUNTING IN A LEAN ORGANIZATION

Ted Stiles

The opening of *The Real Numbers* abruptly states that too many accounting departments "teeter on the edge of irrelevancy." Authors Jean Cunningham and Orest Fiume support this warning with numerous examples of the overwhelming challenges faced by traditional accounting departments. These examples vary but largely reflect how most departments are programmed to deliver an overabundance of misleading information in an untimely manner.



Against this backdrop Cunningham and Fiume point to a better way - Lean Management Accounting. They should know, as they hail from two of the textbook examples of Lean Enterprise organizations. Jean Cunningham is CFO and VP of Company Services for Lantech while Orest Fiume is VP of Finance and a Director with The Wiremold Company. As they point out in the book, both are very different companies that have applied similar Lean Management Accounting principals to their organizations with amazing results. In the case of Wiremold, Lean (including in finance) is cited as a major

contributor to the company's staggering valuation spike from \$30 million to \$770 million in less than 10 years.

The Real Numbers not only provides an argument for adopting Lean Management Accounting but a roadmap as well. At the center of the effort is the desire to de-mystify traditional accounting and make the information accessible and understandable to the entire organization. The authors illustrate how this information, provided in real-time, can dramatically empower an organization to pursue its targets with more focus and less waste.

The challenge is that nearly everything Lean Management Accounting represents runs counter to status quo accounting department practices. That which the traditional department embraces - complex metrics, coded jargon, indecipherable reports, and the protective cove of job security that goes along with all of it - must be abandoned for Lean accounting to work. Recognizing this, Cunningham and Fiume dismantle the predictable resistance points with convincing arguments and pure Lean logic.

Beyond addressing the necessary philosophical and cultural shifts, the authors also demonstrate how to move past the more systems-based and administrative roadblocks. The book is loaded with tips and techniques for functional streamlining and building a continuous improvement atmosphere.

Equally valuable, *The Real Numbers* covers the subject of metrics and simplified reporting. Here the authors devote multiple chapters to the topics and delve deep into the details of successful performance measurements (i.e. as opposed to traditional ROI) and cost management versus cost accounting. Through it all the same theme prevails: well-selected metrics expressed simply, visually, and regularly (with the use of trend lines) will foster success.

Consistent with its recommendations, *The Real Numbers* is written to be potent in content and easily understood by financial and non-financial readers alike. This is a good thing, as you may just want to make this book required reading for your entire organization. ○

NEWS & EVENTS

LEI WORKSHOP COLLECTIVE

SEPTEMBER 23 - 25, 2003
JUAREZ, MEXICO

The Lean Enterprise Institute workshops head for the border in September and feature courses on Value Stream Mapping, Creating Continuous Flow, Mixed Model Value Streams, and Material Flow. For more information call 617-713-2900.

QUEST FOR THE PERFECT ENGINE

OCTOBER 7 - 8, 2003
CHICAGO, IL

This two-day event is based on the breakthrough book and designed to offer senior-level executives a top-level exploration of the potential of Lean Business and Six Sigma. The course is conducted by author and TBM CEO/Co-Founder Anand Sharma. For more information call 800-438-5535.

LEAN MANAGEMENT SOLUTIONS CONFERENCE

SEPTEMBER 7 - 11, 2003
ATLANTA, GA

Hosted by the Institute of Industrial Engineers, this annual event is now in its third season. The agenda includes company tours, keynote experts from Delta, Delco, and MIT, and a variety of workshops. For more information call 800-494-0460.

ANNUAL AME LEAN CONFERENCE

OCTOBER 6 - 10
TORONTO, CANADA

Now in its 19th year, the AME conference bills itself as the largest Lean conference in North America. This year's event focuses on leadership and features speakers from throughout the Lean community as well as a keynote address from Rudy Giuliani. For more information call 847-520-3282, ext. 228

Manufacturing Excellency

AUGUST 25 - 27, 2003
CHICAGO, IL

Hosted by Marcus Evans, this event will feature speakers from world class Lean organizations including: Motorola, Honeywell, Ford Motor Company, and Lockheed Martin. Agenda features workshops, case studies, panel discussions and expert-lead sessions. Program highlights include:

- Real Lean/Sigma case studies presented by leading practitioners.
- Discussions on dealing with difficult cultural issues. Learn how to garner buy-in from the plant floor to the boardroom.
- Insight on how to overcome unique Lean/Sigma challenges of new product development.

For more information visit
www.memanufacture.com