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What Is a Complete Lean Enterprise?

Michael Ballé, Ph.D., a leading lean thinker in Europe and the co-author of The Gold Mine *and* The Lean Manager*, works with CEOs to develop their own lean approaches to launching and sustaining lean transformations. LEI recently talked with him about the concept of a "complete lean enterprise."*

LEI: You often refer to "a complete lean enterprise" or a "full enterprise" lean, can you clarify what that is?

MB: To me, lean is about getting results through developing people. So, what kind of results do we have in mind? CEOs I know who do lean personally will have results in the order of 2% increase in EBIT and ten to twenty million dollars cash improvement in a company of about 100 million dollars turnover in mature markets, in a period of about two years. Over five years, market share, cash and EBIT results keep coming and most companies show visible growth (both internally and through the first acquisitions). Several industrial firms I know that have been on the lean journey for five to seven years are valued at 10x to 12x their EBIT.

Results are essentially about EBIT and cash, which means, in practice, growing the top line by delivering good products on time, increasing cash by reducing inventories, and reducing costs by eliminating waste and better utilizing capital expenditures. Lean's uniqueness is in reaching such objectives through developing people. Not just *with* developing people as we go, but THROUGH developing people.

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Developing people is about teaching them how to double their results with half the effort, which, in lean comes down to kaizen and respect. Such results cannot come from isolated point-kaizen in production alone. In my experience, results appear when the CEO gets every function of his or her company to practice kaizen, in some shape or form. In essence, full enterprise lean is about responding to the challenge outlined by Jim Womack and Dan Jones in their 1994 Harvard Business Review paper "From Lean Production to the Lean

Enterprise" that called for separate breakthroughs up and down the supply chain to be linked.

So, a complete lean enterprise is a company where first, each function carries out kaizen in some form or shape and secondly where all functions are aligned to making value flow towards customers. For instance, in a lean enterprise our main aim is to make our products or services become *standards* for the customer (i.e., the choice to buy another brand has to be explained and justified). To do so, the entire organization is focused on (1) protecting the customer (quality and delivery), (2) controlling its lead-time, (3) reducing its lead-time and (4) obtaining the resulting cost reductions. Whereas many companies start lean with cost cutting in mind, full enterprise lean starts with understanding customers and offering better value by pulling it through the entire supply chain. Full enterprise lean is about making this a day-to-day reality for all employees and not just corporate wishful thinking. In other words a complete lean enterprise is one where employees recognize the value they contribute towards customers, and how this can be improved.

LEI: You seem to focus a lot on the role of the CEO?

MB: Absolutely. Everybody agrees that senior management support is essential to lean success. However, I'd go a step further. Lean is not just a manufacturing tactic, it's a full business strategy, as Orry Fiume, vice president of finance, and CEO Art Byrne from Wiremold described it in *Lean Thinking*. Lean is what the CEO learns to do with his or her company to make it more competitive. Ultimately, there is no way around the fact that the decisions and positions of the 20 people at the top of any firm have a disproportionate impact on the company's trajectory. Business is a war of opinions, and lean is the method for senior execs to develop opinions based on facts and experiments, not just "good ideas." By changing both their opinions on how to make money on their markets and on what kind of working relationships they want to develop in their organizations, changing minds at the top is transformational for the entire business.

In a lean company, the CEO identifies key challenges to the business model, looks for individual leadership, and asks mid-level managers to radically improve this or that problem. From these kaizen efforts, the CEO learns to first unearth the company policies that create the situation in the first place (usually, not purposefully, but as an unanticipated side effect) and secondly, discovers new ways of solving the problem, or new areas to explore. For instance, I recently had a conversation with a CEO of a $500 million company who, by practicing genchi genbutsu (go and see), realized that his engineers where being overburdened with poor selection of projects and, in turn, let slip a few big mistakes which then generated warranty costs in an order of magnitude of several million dollars, which had a visible impact on EBIT. Obviously there is no easy way of avoiding such mistakes in the future, but the CEO has started working with his

engineering director on the conditions for success, namely, how can they, together, develop engineers better to avoid taking such financial hits?

Where lean is unique is that, in the previous situation, one large part of engineers' training will be on the production shop floor. In this case, the first step of demonstrating to engineers what kaizen spirit is all about was asking them to find out, at the present moment, was what the main source of quality defects in the plant of products they'd designed a while ago but were still in production.

LEI: Sounds great, but how do you do it then?

MB: As Pat Lancaster, founder of Lantech (see *Lean Thinking*) once told me, "Start at the top, find a sensei you can work with and drive it through the line on the shop floor." The key I found is to realize that results are a function of the number of PDCAs [plan-do-check-act] each employee carries out to its full "act" conclusion. As a result, we're focusing on two main dimensions: individual competence development through kaizen and improving working relationships through teamwork.

On the first front, the vision is to redefine each job in terms JOB = WORK + KAIZEN. The difficulty is to find a kaizen topic that will both improve the situation now, for results today, and move the company forward for results tomorrow. Typically, it's the CEOs job to figure out the main challenges in the firm's business model, and find out what the key leverage points are to have a good idea of the generic kaizen needed to be done in each function. For instance, SMED in a press shop is a no brainer to improve technical competence (mostly at the setting stage) as well as accelerate the flow. In other departments, such as engineering or sales, it can be trickier to figure out.

The second important ingredient is a focus on relationships, between one hierarchical level and the next, and across functions in order to make value flow. On this front, lead-time is a great guide. For instance, installing a pull system to control and reduce lead-time across the supply chain, will bring together sales admin, production planning, logistics, production, and procurement. Similarly, using takt time to control development projects lead-time will bring together marketing, project management, product design, manufacturing engineering, production, purchasing and after sales. Similarly, go and see is the principal tool to improve hierarchical relationships by getting managers and their teams agree to the detailed nature of problems together.

Obviously, both dimensions often come together. For instance, the CEO of a construction company started with kaizen at the site management level, and had quick rewards on every project. He then moved on to kaizen in his engineering department, and later sales. But at the very beginning of his journey, he tried to apply "kaizen for every function" to admin departments early on. As he didn't have a specific idea of what needed improvement in the admin department, he

did the usual thing and got some general lean training and workshops done for some admin staff at headquarters. After initial enthusiasm, the whole idea died a natural death because no results were forthcoming.

Later on, as he'd worked for a few years with his construction site managers, he realized that several projects ran into trouble because of delays in supplier selection and contracts. He looked at the procedure, and discovered it had nine steps, including himself, and took several weeks after the site had chosen the supplier just to get approval signed and the paperwork done. Rather than solve it himself, he picked an admin department head to kaizen this issue. He took himself out of the procedure, by simply checking after the selection rather than signing off the selection. In this case, the lead-time vision led to specific kaizen for several admin functions.

LEI: It sounds simple, but not easy. Would you have any tips to share?

MB: It's certainly not easy, but the results are worth it, both in terms of dollars in the bank, and making work more interesting and collegial. Every company and every CEO has a learning path, so it's hard to generalize. Usually, it's easier to start from the manufacturing shop floor. Sometimes, though, we'll start with engineering or even sales. One thing that does appear generally is that teamwork at the top often stumbles on the fact that executives have diverging personal objectives. For instance, the purchasing director's objective of reducing components costs pulls against the engineering and productions objective of securing stable and competent suppliers. One trick I learned from Orry Fiume, is to link top executives bonuses to the same set of objectives on key indicators, so they'll work with each other rather than against each other.

But, at the end of the day, the greatest driver to results is "go and see" by the CEO. The more time the CEO allocates to going and seeing at the gemba in his week, the more money he or she makes, and curiously, the earlier they go home at night – this happens in every single case. As CEOs learn to train their people at problem solving directly at where value is created, they also spot so many issues they can nip in the bud before they flower into the kind of full-blown drama that catches a regular chief exec's interest.

Also, they find that they have a lot less deciding to do, as they're more in control of the process of how their people make decisions. In the case I was mentioning previously, the CEO of the construction company is now delegating a lot of final sign-offs, removing a himself from various authorization processes – and eliminating a bottleneck – but he's also a lot more secure in what happens in the company. He spends two days a week doing go-and-see on the sites, and sees every site once a month. On site, he observes progress with the team, discusses their construction choices, and coaches them on seeing and solving problems. As a result, he's got a pretty good idea on who is who, what is going on at each site and what he should worry about at headquarters. This CEO definitely taught

me something about making money. He realized, he told me some time ago, that to really make money, he shouldn't average out the poor results from bad projects with the good results from successful ones, hoping that the bottom line will be in the black. Rather, he should focus on making sure every project satisfies its customers and delivers the margin. "When every sites makes money," he concluded, "I make money."

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