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"Lean management and employee engagement: a review of the literature"

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Firma dello studente

JESSICA BELTRAMINI

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PREFACE

Motivated and engaged employees contribute more in terms of organizational productivity and support in maintaining a higher commitment level, leading to a superior company's performance (Mehta and Mehta 2013, p.208).

This paper, with the help of a review of the literature, tries to study the strategic role played by lean management in establishing a philosophy of continuous organizational improvement, leading to an extensive profitable utilization of human capabilities.

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CHAPTER 1

The lean production

Toyota company, from the twenty years immediately after World War II, is the pioneer of a wake-up message to organizations, managers, employees and investors: there is a better way to organize and manage customer relations, the supply chain, product development and production operations. This new way is called lean production because it does more and more with less and less (Womack and Jones 2003, p.9).

The lean approach has rapidly diffused to every corner of the world embodying the Kaizen culture defined by Jenkins (2017, p.2) as the "continuous quality improvement using small, low-cost, low-risk changes that add value or eliminate waste".

The elements of a lean business system are: designing the product, coordinating the supply chain, dealing with the customer, producing the product from order to delivery, and managing the combined enterprise (Womack, Jones and Roos 1990, p.viii)

These elements combined in a mutually supportive way create the complete lean business system that is explained by the father of the Toyota production system, Taiichi Ohno, as the action of looking at the time line, from the moment the customer gives an order to the point the cash is collected. Reducing the lead time line by reducing the non-value adding wastes (Obara 2015, p.15).

To understand the relevance of lean production principles, that allows them to be applied equally in every industry across the globe, it's necessary to put in contrast this innovative production system with the other two existent production ways: craft production and mass production (Womack, Jones and Roos 1990).

Craft production is characterized by a manufacturing process by hand without automation where highly skilled workers and simple but flexible tools are used to create a customized product endowed with tangible and intangible values. According to Womack, Jones and Roos (1990) producing one item at a time leads to ah high cost of production constituting the major drawback of the system.

Mass production manufactures large quantities of standardized products, using unskilled or semiskilled workers and assembly lines or automation technology. According to Womack, Jones and Roos (1990), this grants low cost results but without product variety and creates a boring, dispiriting working environment for the workers.

The lean producer, by contrast, combines the advantages of craft and mass production, while avoiding the high cost of the former and the rigidity of the latter. Toward this end, lean producers employ teams of multiskilled workers at all levels of the organization and use highly flexible, increasingly automated machines to produce volumes of products in enormous variety (Womack, Jones and Roos 1990, p. 11).

Lean production (a term coined by IMVP researcher John Krafcik) is “lean” because it uses less of everything compared with mass production: half of the human effort in the factory, half the manufacturing space, half the investment in tools, half the engineering hours to develop a new product in half a time. It requires keeping far less than half the needed inventory on site, results in many fewer defects and produces a greater and ever-growing variety of products (Womack, Jones and Roos 1990, p. 11).

Lean philosophy involves small progressive steps aligned with a goal: perfection, consisting in “continually declining costs, zero defects, zero inventories and endless product variety” (Womack, Jones and Roos 1990, p. 12).

To have an idea of how the Toyota production system was created, we must go back to the late 1930s, when Toyota entered the motor-vehicle industry, specializing in trucks for the military. Here Ohno developed simple die-change techniques to change dies frequently—every two to three hours versus two to three months¹—using rollers to move dies in and out of position and simple adjustment mechanisms. Because of the easiness of the new techniques Ohno hit upon the idea of letting the production workers perform the die changes. By the late 1950s Ohno had eventually perfected his technique for quick changes: time was reduced from a day to three minutes, the need for die-change specialists was eliminated and costs were reduced passing from enormous lots to small batches of stamping because of the elimination of huge inventories and thanks to the almost instant evidence of mistakes (Womack, Jones and Roos 1990, p.51-52).

The fundamental requisite for this approach was extremely skilled and a highly motivated workforce. If workers failed to anticipate problems before they occurred and didn’t take the initiative to devise solutions, the work of the whole factory could easily come to a halt. To

¹ Mass production’s standard lead-time

create this environment, Toyota created the idea of “the company as a community”: it offered to its employees 2 guarantees - one was for lifetime employment; the other for pay steeply graded by seniority rather than by specific job function and tied to company profitability through bonus payments. Employees became owners of a full set of rights that went far beyond what most unions had been able to negotiate for mass-production employees in the West. In return Toyota expected that most employees would remain with the company for their working lives. Employees agreed to be flexible in work assignments and active in promoting the interests of the company by initiating improvements rather than merely responding to problems (Womack, Jones and Roos 1990, p.52-53).

Onho reasoned on the importance of being an employee that actually adds value to the products, so he grouped workers into teams, with a team leader, who had to work together to best perform the operations. The team leader had to assemble tasks, coordinate the team and fill in for absent workers. After the teams were running smoothly, Onho set the time aside periodically for the team to suggest ways collectively to improve the process. This continuous incremental improvement process is called kaizen in Japanese (Womack, Jones and Roos 1990, p.55).

To avoid the mass-production practice of passing on errors to keep the line running, practice that caused errors to multiply endlessly, Onho instructed workers to stop the whole assembly line if a problem emerged that they couldn't fix: the whole team would come over to work on the problem. In mass-production plants, problems tended to be treated as random events (repair each error and hope it didn't recur). Onho instead created a system of problem-solving called “the five why's”. Production workers were taught to trace systematically every error back to its ultimate cause (by asking “why” as each layer of the problem was uncovered), then to devise a fix, so that it would never occur again (Womack, Jones and Roos 1990, p.56)

The focus of everything was the quality of the goods delivered to the customers. Considering the supply chain, Onho developed a new way to coordinate the flow of parts within the supply system on a day-to-day basis: the just-in-time Kanban Toyota system. The idea was based on the fact that parts would only be produced at each previous step to supply the immediate demand of the next step. Containers carried parts to the next step and as were used they were sent back to the previous step becoming the automatic signal to make more parts (Womack, Jones and Roos 1990, p.61).

Toyota's flexible production system and its ability to reduce production-engineering costs let the company supply the product variety that buyers wanted with little cost penalty (Womack, Jones and Roos 1990, p.64).

Concerning the link between the production system and the customer, for mass production it was very simple, there was no product variety and most repairs could be handled by the owner, the job of the dealer was simply to have enough cars and spare parts in stock to supply expected demand. Toyota on the other hand created "aggressive selling": the basic idea was to develop a long-term, indeed a life-long, relation between the assembler, the dealer, and the buyer by building the dealer into the production system and the buyer into the product development process. The dealer became part of the production system as Toyota gradually stopped building cars in advance for unknown buyers and converted to a build-to-order system in which the dealer was the first step in the Kanban system, sending orders for presold cars to the factory for delivery to specific customers in two to three weeks. Toyota gradually built up a massive database on every households ever showing interest in a Toyota product and on their buying preferences. Established customers were treated as members of the "Toyota family", and brand loyalty became a salient feature of Toyota's lean-production system (Womack, Jones and Roos 1990, p.65-67).

Every worker was actually adding value to the car. Toyota believes in having as little space as possible so that face-to-face communication among workers is easier and there is no room to store inventories. On average, less than an hour's worth of inventory was next to each worker. The parts were on more smoothly and the work tasks were better balanced so that every worker worked at about the same pace. When a defective part was found, it was sent to the quality-control area (where it was subjected to "the five why's") to obtain a replacement part (Womack, Jones and Roos 1990, p.79).

At Toyota, every worker can stop the line, but the line is almost never stopped because problems are solved in advance and the same problem never occurs twice. We observe almost no rework area at all because almost every car is driven directly from the line to the boat/trucks tacking cars to the buyer. No buffers, no parts warehouses at all: minutes of inventory (Womack, Jones and Roos 1990, p.79-80).

The work pace was harder than the one existing in a mass-production layout but yet there was a sense of purposefulness not simply of workers going through the motions with their minds elsewhere. This was due to the fact that workers were lifetime employees with fully secure jobs in return for a full commitment to their work (Womack, Jones and Roos 1990, p.80).

The truly lean plant has two key organizational features: it transfers the maximum number of tasks and responsibilities to those workers actually adding value to the product on the line, and it has in place a system for detecting defects that quickly traces every problem, once discovered, to its ultimate cause. This in turn means teamwork among line workers and simple but comprehensive information display (*andon* boards) system that makes it possible for everyone in the plant to respond quickly to problems and to understand the plant's overall situation. It is the dynamic work team that emerges as the heart of the lean factory. Workers need to be taught a wide variety of skills-in fact all the jobs in their work group so that tasks can be rotated, and workers can fill in for each other. They need encouragement to think actively, proactively, so they can devise solutions before problems become serious (Womack, Jones and Roos 1990, p.99).

Workers respond only when there exists some sense of reciprocal obligation, a sense that management actually values skilled workers, will make sacrifices to retain them, and is willing to delegate responsibility to the team (Womack, Jones and Roos 1990, p.100).

The drawback of lean production is to be seen as a "management by stress" because managers continually try to identify slack in the system (unused work time, excess workers, excess inventories) and remove them (Womack, Jones and Roos 1990, p.101).

But when embracing the lean perspective, what for outsiders can be perceived as stressful for the insiders is perceived to be the input for a continuous personal improvement leading to higher goals.

The elements of a lean business system

Designing the product

Companies that have mastered lean design offer a wider variety of products and replace them more frequently than mass-production competitors (Womack, Jones and Roos 1990, p.120).

There are four basic differences in design methods employed by mass and lean producers. These are differences in leadership, teamwork, communication, and simultaneous development. Taken together, lean techniques in these four areas make it possible to do better job faster with less effort (Womack, Jones and Roos 1990, p.113).

Concerning the leadership, in western teams the leader is more properly called a coordinator whose job is to convince team members to cooperate. It's a frustrating role because the leader really has limited authority so few teams' leaders report enjoying it. Moreover, the team leader is in an extremely weak position to champion a project within the company. Extremely different is the situation in lean systems, where the team leader carries great power and is the most coveted in the company. It's the best position from which to orchestrate all the skills needed to make a wonderfully complex manufactured product come into being (Womack, Jones and Roos 1990, p.114).

Concerning the teamwork, the team leader assembles a small team, which is then assigned to a development project for its life. Employees come from functional departments of the company and retain ties to them. By contrast, in most Western companies a development project consists of individuals who are on short-term loan from a functional department. The project itself is moved from department to department and is worked on by totally different people in each area (Womack, Jones and Roos 1990, p.115).

From the communication side, many Western development efforts fail to resolve critical design trade-offs until very late in the project, this because of the reluctance to confront conflicts directly. In lean systems by contrast, team members sign formal pledges to do exactly what everyone has agreed upon as a group. So, conflicts about resources and priorities occur at the beginning rather than at the end of the process (Womack, Jones and Roos 1990, p.116).

The final technique separating lean from mass production in product development is simultaneous development. This technique, in the case of Toyota industry, consists in beginning the die production at the same time the body design is started thanks to a direct,

face-to face contact between the die designer and the body designer. The end result of this intense communication together with clever scheduling is the production of a complete set of production-ready dies for a new car in one year, exactly half the time needed in typical mass-production die-making (Womack, Jones and Roos 1990, p.117-118).

Coordinating the supply chain

At the very outset of the product development, the lean producer selects all the necessary suppliers. Suppliers involved in the projects are the companies supplying the same parts for the producer's other models and are long-term members of the assembler's supplier group. Significantly they are not selected on the basis of bids, but rather on the basis of past relationships and proven record of performance (Womack, Jones and Roos 1990, p.149).

Taking as example Toyota case, lean producers assign a whole component - for example, seats - to what they call a first-tier supplier. This supplier is in charge of delivering complete seats to the assembly plant. The first-tier supplier typically has a team of second-tier suppliers - independent companies that are manufacturing specialties. These companies may, in turn, engage helpers in a third or even fourth tier of the supply pyramid. These latter companies make individual parts according to drawings supplied by the second-tier firm (Womack, Jones and Roos 1990, p.149-150).

At the heart of lean supply lies a different system of establishing prices and jointly analysing costs. Continuing the car industry example, first, the lean assembler establishes a target price for the car or truck and then, with the suppliers works backwards figuring how the vehicle can be made for this price while allowing a reasonable profit for both the assembler and the suppliers. It is a "market price minus" system rather than a "supplier cost plus" system that allows to continually decline prices over the life of a model (Womack, Jones and Roos 1990, p.152).

To make just-in-time work at all - a system in which empty boxes sent from the assembler back to the supplier are the signal to make more parts - yet another innovation of lean production is essential: production smoothing. Lean production is characterized by extraordinary flexibility in shifting the mix of products manufactured. At the same time the system is extremely sensitive to fluctuations in the total volume of products made. So, practitioners of lean production work very hard at *heijunka* (production smoothing) in which the total volume the assembler manufactures is kept as constant as possible. Moreover, another reason for practicing production smoothing is to ensure a steady volume of business

for the suppliers. In this way, employees and machinery can be used much more effectively than in the West, where they are constantly faced with sudden changes in the volume and mix of orders at very short notice. Thus, to buffer against sudden surges in ordering by the assemblers they are forced to hold unnecessary stocks (Womack, Jones and Roos 1990, p.154).

In Japan, assemblers give suppliers advance notice of changes in volume. If the changes are likely to persist, the assembler will work with the supplier to look for another business. The assembler will not, as in the West, suddenly pull such activities in-house so it can keep its own staff working. In Japan, there is a commitment to share the bad time as well as the good. (Womack, Jones and Roos 1990, p.154-155).

In a lean production system, with no reserve stocks, a faulty shipment could prove catastrophic leading the company to a halt. Yet, taking as example Toyota, this disaster almost never happens in practice, despite the fact that parts are not inspected until they are actually installed on the car or truck. This is due to two reasons: the parts supplier knows what faulty parts can mean and takes pains not to let it happen. And, in the rare event a defective part is found, the assembler's quality-control department goes rapidly through the "five why's". Both the supplier and the assembler are determined to trace every defective part to its ultimate cause and to ensure that a solution is devised that prevents this error from ever happening again (Womack, Jones and Roos 1990, p.155).

A final feature of lean supply is the way the relationship is managed. The supplier associations are events where all the first-tier suppliers to an assembler meet to share new findings on better ways to make parts. These meetings would never be possible among mass-production suppliers. They know that sharing any findings about how to make parts cheaper with less effort will only ensure that they lose the next bidding round to their rivals. By contrast, suppliers to a lean producer know that as long as they make a good-faith effort to perform as they should, the assembler will ensure that they make a responsible return on their investment. Active participation in mutual problem-solving through the supplier group is an act of simple self-interest: sharing with other group members means that the performance of the whole group will improve, and every member will benefit (Womack, Jones and Roos 1990, p.156-157).

Dealing with customers

The real reason for these production efforts is the consumer (Womack, Jones and Roos 1990, p.173).

In lean systems the goal is to develop a direct link between the manufacturing system and the customer. A strategy totally different from mass-production's one where the dealers were kept small and isolated. In this way they haven't incentives to share any information on customers with the manufacturer and salespeople aren't really interested in the customer's needs or desires. They want to close the deal as soon as possible and once it is signed, they haven't further interest in the customer (Womack, Jones and Roos 1990, p.174,177-178, 184).

Toyota sales staff in each dealership is organized into teams of seven or eight, an organization very similar to the work teams in the assembly plants in the factory. These teams are multiskilled and are trained in all aspects of sales – product information, order taking, financing, insurance and data collection. They are also trained to systematically solve customers' problems as they arise. Each work team begins and ends the day with a team meeting and each month the entire team takes a day to solve systematically any problems that have cropped up, using the "five why's" (Womack, Jones and Roos 1990, p.185).

Selling of cars door-to-door is unique to Japan. Team members draw up a profile on every household within the geographic area around the dealership, then periodically visit each one, after first calling to make an appointment. During the visits the sales representative updates the household profile and systematically feed this information back to the development teams. On the basis of collected information the sales representative suggests the most appropriate specification for a new vehicle to meet this particular customer's needs. In this way a vast majority of cars in Japan are customer ordered (Womack, Jones and Roos 1990, p.185-186).

Because the customer is buying a car tailored to his or her needs, the salesperson doesn't need to discount the product in order to get rid of a car that the customer would rather not have – thing that often happens in Western countries. Moreover, the dealer will fix any problems the owner encounters with the car even after the end of the formal warranty. So, once a contract is signed, the order goes directly to the factory. When the car is ready, in ten days to two weeks, the sales representative personally delivers it to the new owner's house (Womack, Jones and Roos 1990, p.187-188).

A key objective of every distribution channel in Japan is to build and nurture lifetime channel loyalty. Once a new car is delivered, the owner becomes part of the company's family: frequent calls from the person selling the car and the representative will be sure that the car is working properly (Womack, Jones and Roos 1990, p.190).

Thus, as shown, the lean approach to dealing with customers is significantly different in concept from the mass producer's approach. The Japanese selling system is active, not passive; indeed, the Japanese call it "aggressive selling". Rather than waiting at the dealership for customers attracted by advertising and publicly announces price cuts, such as factory rebates, the dealer's personnel periodically visit the households in the dealer's service area. When sales lag, the sales force puts in more hours, and when sales lag to the point that the factory no longer has enough orders to sustain full output, production personnel can be transferred into the sales system (Womack, Jones and Roos 1990, p.190).

Second, the lean producer treats the buyer-or owner-as an integral part of the production process. The elaborate data collection on owner preferences for new vehicles is fed systematically to development teams for new products, and the company goes to extraordinary lengths never to lose an owner once he or she is in the fold. Third, the system is lean. The whole distribution system contains three weeks' supply of finished units, most of which are already sold (Womack, Jones and Roos 1990, p.191).

Japanese companies are well aware of their selling costs, particularly for door-to-door sales, just as they are of their costs in every other area of production. They believe that the most promising way to cut back these costs lies in the area of information technology. The distribution is a fully integrated part of the entire production system. It is a system that provides a high level of service to the customer and a high level of real feedback to the manufacturer. Lean distribution will inform the front end of a system that is driven by the needs of the customers, not by the needs of the factory (Womack, Jones and Roos 1990, p.193-194).

We've seen as lean production is a superior way for humans to make things. It provides better products in wider variety at lower cost. It provides more challenging and fulfilling work for employees at every level, from the factory to headquarters (Womack, Jones and Roos 1990, p.231).

The lean enterprise

The steps of production, from the day a new product design is initiated to the day it is purchased by the customer, are only part of the total production process. For these steps to succeed money must be available to underwrite the multiyear development effort, a highly trained and motivated staff must be in place and activities occurring at different places around the world must be coordinated. Lean producers must approach the tasks of finance, personnel management and global coordination in a very different way. Collectively the lean approach to these activities, if it can be perfected, will complete the lean enterprise (Womack, Jones and Roos 1990, p.197).

Mass production provides no career progression for production workers. The lean enterprise, by contrast, strives to provide every employee with a clear career path, although these are very different from those of mass production. In the Toyota case, every employee begins by working on the production line for some period of time. The aim of management is to allow workers in the factory to increase their ability to solve problems. Management gives employees increasingly challenging problems to solve in order to test continually their skills. Higher pay comes largely on the basis of seniority, with performance bonuses as well. Thus, lean manufacturers try to make employees understand that their capacity to solve increasingly difficult problems is the most meaningful type of advancement they can achieve, even if their titles don't change (Womack, Jones and Roos 1990, p.203, 204).

Lean thinking

One word of Japanese we really must know is “*muda*”. It means waste. Any human activity which absorbs resources but creates no value: mistakes which require rectification, production of items no one wants so that inventories and remained goods pile up, processing steps which aren’t actually needed, movement of employees and transport of goods from one place to another without any purpose, groups of people in a downstream activity standing around waiting because an upstream activity has not delivered on time, and goods and services which don’t meet the needs of the customer (Womack and Jones 2003, p.15).

Fortunately, there is a powerful antidote to *muda*: lean thinking. It provides a way to specify value, line up value-creating actions in the best sequence, conduct these activities without interruption whenever someone requests them, and perform them more and more effectively. In short, lean thinking is lean because it provides a way to do more and more with less and less: less human effort, less equipment, less time, less space, while coming closer and closer to providing customers with exactly what they want. Lean thinking also provides a way to make work more satisfying by providing immediate feedback on efforts to convert *muda* into value. And, in striking contrast with the recent craze for process reengineering, it provides a way to create new work rather than simply destroying jobs in the name of efficiency (Womack and Jones 2003, p.15).

The critical starting point for lean thinking is value. Value can only be defined by the ultimate customer. And it’s only meaningful when expressed in terms of a specific product which meets the customer’s needs at a specific price at a specific time. Value is created by the producer (Womack and Jones 2003, p.16).

Lean thinking therefore must start with a conscious attempt to precisely define value in terms of specific products with specific capabilities offered at specific prices through a dialogue with specific customers. The way to do this is to ignore existing assets and technologies and to rethink firms on a product-line basis with strong, dedicated product teams. This also requires redefining the role for a firm’s technical experts and rethinking just where in the world to create value. Realistically, no manager can actually implement all of these changes instantly but it's essential to form a clear view of what’s really needed. Otherwise the definition of value is almost certain to be skewed. In summary, specifying value accurately is the critical first step in lean thinking. Providing the wrong good or service the right way is *muda* (Womack and Jones 2003, p.19).

The value stream is the set of all the specific actions required to bring a specific product through the three critical management tasks of any business: the problem solving task running from concept through detailed design and engineering to production launch, the information management task running from order-taking through detailed scheduling to delivery and the physical transformation task proceeding from raw materials to a finished product in the hands of the customer. Identifying the entire value stream for each product is a step that almost always exposes enormous amounts of *muda* (Womack and Jones 2003, p.19).

So lean thinking must go beyond the firm to look at the whole: the entire set of activities entailed in creating and producing a specific product, from concept through detailed design to actual availability, from the initial sale through order entry and production scheduling to delivery, and from raw materials produced far away and out of sight right into the hands of the customer. The organizational mechanism for doing this is what we call the lean enterprise, a continuing conference of all the concerned parties to create a channel for the entire value stream, dredging away all the *muda* (Womack and Jones 2003, p.20-21).

Creating a lean enterprise does require a new way to think about firm-to-firm relations, some simple principles for regulating behaviour between firms, and transparency regarding all the steps taken along the value stream so each participant can verify that the other firms are behaving in accord with the agreed principles (Womack and Jones 2003, p.21).

Once value has been precisely specified, the value stream from a specific product fully mapped by the lean enterprise, and wasteful steps eliminated, it's time for the next step in lean thinking: make the remaining, value creating steps *flow*. The lean alternative is to redefine the work of functions, departments and firms so they can make a positive contribution to value creation and to speak to the real needs of employees at every point along the stream, so it is actually in their interest to make value flow. This requires not just the creation of a lean enterprise for each product but also the rethinking of conventional firms, functions, and careers and the development of a lean strategy (Womack and Jones 2003, p.21,24).

The first visible effect of converting from departments and batches to product teams and flow is that the time required to go from concept to launch, sale to delivery, and raw material to the customer falls dramatically. What's more lean systems can make any product currently in production in any combination, so that shifting demand can be accommodated immediately. This produces a onetime cash windfall from inventory reduction and speeds return on investment. It is because the ability to design, schedule and make exactly what the customer wants just when the customer wants it means you can throw away the sales forecast and

simply make what customers actually tell you they need. That is, you can let the customer pull the product from you as needed rather than pushing products, often unwanted, onto the customer. The demands of customers become much more stable when they know they can get what they want right away and when producers stop periodic price discounting campaigns designed to move goods already made which no one wants (Womack and Jones 2003, p.24).

As organizations begin to accurately specify value, identify the entire value stream, make the value-creating steps for specific products flow continuously, and let customers pull value from the enterprise, something very odd begins to happen. There is no end to the process of reducing effort, time, space, cost and mistakes while offering a product which is ever more nearly what the customers actually wants. Perfection is the fifth and final principle of lean thinking (Womack and Jones 2003, p.25).

The most important spur to perfection is transparency, the fact that in a lean system everyone - subcontractors, first-tier suppliers, system integrators, distributors, customers, employees - can see everything and so it's easy to discover better ways to create value. What's more, there is nearly instant and highly positive feedback for employees making improvements, a key feature of lean work and a powerful spur to continuing efforts to improve (Womack and Jones 2003, p. 26).

Converting a classic batch-and-queue production system to continuous flow with effective pull by the customer will double labour productivity all the way through the system (for direct, managerial, and technical workers, from raw materials to delivered product) while cutting production throughput times and reducing inventories by 90 percent. Errors are typically cut in half, time-to-market for new products will be halved and a wider variety of products can be offered at very modest additional cost. This is the *kaikaku* bonus released by the initial, radical realignment of the value stream. What follows is continuous improvements by means of *kaizen* en route to perfection. Firms having completed the radical realignment can typically double productivity again through incremental improvements within two to three years and halve again inventories, errors and lead times during this period. The combination of *kaikaku* and *kaizen* can produce endless improvements (Womack and Jones 2003, p.27).

Thus, lean thinking can be summarized in five principles: precisely specify value by specific product, identify the value stream for each product, make value flow without interruptions, let the customer pull value from the producer and pursue perfection (Womack and Jones 2003, p.10).

CHAPTER 2²

Employee engagement

People in the same organization can contribute in different ways to the collective success.

There are many causes to this phenomenon, but the key ones are on the one hand the role that each person has within the organization - in relation to his or her personal characteristics and aspirations - and on the other hand, the synergies or conflicts that may arise in teamwork.

Misalignment between people and their role and between people and their working environment are the major causes of low productivity, lacking empowerment, resistance to change and high turnover.

One of the aims of any lean transformation, responsible for its sustainability over time, is to create alignment in and among people. Respect for people, one of the principles of the “Toyota way”, creates the conditions to develop employees’ engagement.

Engagement in *Treccani* encyclopaedia is defined as “commitment and active participation to problems”. Anglo-Saxon definitions define it as “the action to obtain commitment or the act to be engaged”. Thus, engagement is both the effect of organization’s actions aimed at obtaining commitment and of the individuals’ propensity to be committed in a context or in an activity.

An engaged person expresses greater energy, commitment and works for the majority of the time in a state of “flow”, that’s to say in a deep involvement of himself or herself in the present activity that is translated to a total focus on the objective into a sense of positivity and gratefulness intrinsic to the action of carrying out own’s tasks. In this state of mind, the person will be more productive, loyal to the organization and satisfied by himself or herself and by his or her activity.

Nowadays, two persons over three aren’t engaged in their work and one over five hates it. The interesting fact is that the majority of people are satisfied with their work and some people are grateful to have it. The direct consequence of what just stated is that some people don’t desire to do what they are doing but at the same time they aren’t enough unhappy to change their

² This chapter has been inspired by, adapted from and translated from: FURLAN, A., a cura di., 2018. *Allineamento per il successo*. 1° ed. Milano: Guerini next srl, p. 101-143.

work. Being satisfied by own work doesn't imply achieving results, on the contrary, the person remains in a state of slight apathy, low productivity and scarce willingness to bring improvement. The result is a severe loss of productivity for the organization and a waste of time for the people, who spend their life doing activities without a sense for themselves and that don't bring satisfaction to them.

Workers who keep staying in their workplace despite a clear misalignment between their role and their characteristics constitute a drama for the organization. They are people with no emotional bonding with their work, leading to mediocre productivity and performance, with no possibility of improvement. But the drawbacks exist for the person too: he or she hasn't the possibility to express him or herself in a context aligned with his or her needs and talents.

One person over three, fortunately, loves his or her job, he or she is satisfied by it and desires to improve himself or herself and to increase his or her positive impact on the company. It is the act of improving and of taking care of something that makes arise the love for that thing. Thus, the factor that makes the difference in the results and in the personal satisfaction is the long-term commitment.

Japanese people call this feeling of care *Monozukuri* that literally means "doing things" but, it has the ethic meaning of being passionate to what you are building, that can be translated into the gradual and constant aspiration to perfection and to the creation of value. This consists in creating the right product for the right customer in the easiest possible way.

Commitment is the first step that leads to successes and to the desire of continuing achieving it over time. This is the input for *Kaizen*, the improvement process made of small steps that daily create more value and distance from those who don't practice it or create discontinuous improvements. If commitment is not present or decreases before the arrival of the result, the person will not feel autonomous, able, he or she will not arrive to a visible progress and will be demotivated in carrying out his or her work. Thus, someone with higher capabilities will need to accomplish his or her activity: who doesn't create value, destroys value for himself or herself and for the others.

How can we motivate workers to be committed to their work? It's not possible. This a well-known question in all organizations but it is wrong. It's not possible to motivate someone, because people very often are already motivated by something that they don't find in their daily work. Motivation is the energy's intensity that we address towards what we are doing. It's the intensity with which we go towards pleasure and we move away from pain. We can

try to rise the illusion of motivation building these conditions artificially: anyway, through threats and fear, we'll produce result in the short run but not a commitment in the long run.

We can create motivation also using economical incentives. But this solution is suitable to simple works, moreover the risk is to transform a person who believes in what she or he does in a mercenary.

These two ways to motivate people to be committed from outside inhibit the learning process, create limits to mental abilities, don't create long-term satisfaction and decrease loyalty and trust towards the organization. Anyway, they are used nowadays because they seem effective in the short run.

What does motivate people actually? Some people go naturally towards pleasure, they are ambitious, they are confident to be able to do something to achieve what they want, they trust to be able to meet objectives also in case of failure. Other people tend to be motivated when they protect their safety or the one of the team. These people need to be protected and to avoid conflictual situations.

The question that leaders and organizations can ask themselves is: "What is the natural motivation of people? How let it occur? How to create favourable conditions for it? Which obstacles to its creation must be removed?"

People are complex and changeable human beings but there are some fundamental drivers that define their engagement.

The roots of engagement are within each individual and often are different among them. In some cases, individuals are engaged despite a "toxic" boss, team, organization. The motivational driver for them is the personal desire to achieve something with a meaning for themselves and the pleasure of living the experience of doing that. These people have a need of satisfaction that can be reached only by themselves and by their own contributions and achievements. From the point of view of the organization, the difficulty is not to motivate these people but to recruit and to keep them.

For others, the temptation is to be not committed nor engaged to keep energy and to do the minimum requested to earn the salary. They find sense outside the working environment, in the family or in other activities. This way of thinking brings these people to necessitate guidance and the presence of their supervisor to solve problems on their behalf. They give up on the meaning and on the satisfaction of making progress. Without long-term commitment

progresses aren't possible, achievements will be minimal and personal satisfaction will be low or absent.

Temptation to not be committed arises also when the capability to do own's job is high. These people can do their job better than their superior, for the organization they have become unique for some tasks, why would they need to do more? The answer is again: just for themselves. People tending to self-improvement increase the relevance of what they do and their personal mastery, both sources of meaning, self-esteem and satisfaction.

Focusing on improvement brings another big benefit: "the presence in the present". It is impossible to work in an automatic way while you are improving, routine becomes a continuous experiment made of small and big daily surprises. One of the most important tasks of modern leaders is not to motivate people but to transform the working day of people into a series of experiments aimed at the continuous improvement both personal and professional. Who doesn't improve worsens or slowly becomes inadequate.

Individual alignment is based both on the way of thinking himself or herself and his or her situation but also on the talent he or she has and that wants to express, on the need of meaning and contribution he or she wants to provide to others and on the values and beliefs shared with the social group he or she lives in.

First level of alignment is between the individual and himself or herself.

To discover and to decide to use own's talent as much as possible, to decide to be present and to be committed to own's activity, to find meaning in what you are building and to find joy in what you are doing in the present, it's a matter of individual work.

This alignment necessary starts from a personal initiative and from an individual work for which each one is directly responsible.

To trigger this, companies nowadays use more and more the coaching instrument in an evolutionary and intentional manner, to allow people to make a positive difference with respect to themselves and to the context where they work.

The second fundamental type of alignment is between personal talent and professional role.

The recruiting company is often satisfied when the person has capabilities and knowledge in line with what it needs to create value. This is important but not enough to say that the person is in line with the system of values and beliefs that make the company a consistent and coherent social system.

The talent is represented by a series of personal characteristics for which you are more suitable to do something with respect to the others. Talent is not a scarce resource, just the specific talent requested by a specific role. Each person has talents because each person has needs that motivate him or her to find ways to satisfy them.

If you find specific personal needs coherent with the organization's needs for that role you create alignment between talent and role.

It's not useful to put a person, who needs to innovate, experiment and express new things, in a role where structure, predictability, precision and consistency in the results are the key. You'll create a demotivated worker.

Those who have the fortune to express their talent in what they do, feel gratified for the feedback they receive and for the results they can produce.

This feeling reinforces the talent creating a virtuous circle.

If you force a person to work in an area misaligned with respect to his or her talent, to the best the person will acquire a competence, to the worst he or she will be a disappointment.

Those who act in an aligned way with respect to their talent will acquire autonomy in what they do creating solid bases for a long-lasting engagement.

The third type of alignment would exist between the need to express oneself and the professional role.

Not always people reach what they want but almost always they obtain what they need.

There exist several types of needs, but generally speaking, they can be associated to the self-confidence, confidence in the own's social group, or to the achievement of a vision or of an objective.

When there is alignment between the need of personal fulfilment and the aim of the organization, people are intrinsically motivated, committed and willing to improve what they do.

The fourth type of alignment is the one between own's values and personal beliefs with the values and believes of the professional group.

When in a social group there isn't alignment between expressed values and acted values, the person has two choices: or he or she gets out of the group because his or her values are

incompatible or he or she keeps staying there but in a state of misalignment and incomprehension.

Values have the ambition to regulate behaviours and behaviours express the affective values of the person even those that the person doesn't tell or doesn't know to have. If declared values coincide with acted values, you create a coherence that attracts those who have the same values and rejects those who don't own them. This condition contributes to create a solid trustful relationship in the group.

It is in the moment when you try to change the common way of thinking, feeling and operate of a company that this becomes explicit. It's in that moment that it's possible to highlight those who are aligned and those who are not with respect to the evolution of the system of beliefs and values of the organization.

When there is alignment with the values and beliefs of the social group, people feel aligned to their context.

It is important to specify that the engagement is not so linked to the economical value received by the person for what he or she does, but it depends to the intrinsic value that they create doing things, thinking in that way, chasing that objective with that group of people.

Key is the organization's alignment: to create the conditions for a professional context that favours the alignment of people.

It is essential a tension towards the objectives and a fair treatment of people, but these are not the factors that allow the born of engagement.

Each social group is characterized by a series of assumptions, values, beliefs that make it what it is. To recruit and keep aligned people, the company must be able to communicate these values with words and actions. All companies have an identity but not all are able to communicate it in a resonant way. Communicating company's values and beliefs doesn't consist in the action of writing a sentence with a good sound on a wall or on the website. It's a consistent expression in the words and facts about the reason for the company's existence and for its beliefs.

Then, it's important to choose and promote people with beliefs, values, aspirations coherent with those of the organization. During the job interview, it is important to find out the previous activities of the candidate but also, it's fundamental to understand which assumptions, beliefs, values are at the base of the key choices in their life and work.

Moreover, it must be analysed if the latter can be naturally aligned with the context in which they want to enter.

When we pass from an individual that carries out a work in autonomy to a task that creates interdependences between persons, engagement factors can be found in the interactions. The quality of the interactions is based on the trust that team's members have between them and on the cognitive alignment towards the common objective.

In all the cases in which different people work together to obtain a result, we improperly speak about team. A team is a real team only when it builds synergies higher than the sum of the single members' contribution. Synergy means knowing each other enough to trust each other and to discuss to reach agreements. A series of mental and executive processes must be elaborated in workgroups. Thoughts, intentions, expectations, feelings implicit in the individual reasoning must be explained and this is very difficult but necessary.

In lean methodology we speak about *Hitozukuri* that means “constantly developing technical abilities and the capabilities to solve problems together with the others in an atmosphere of reciprocal trust”.

If the synergy is not necessary, it is better to use single individuals or groups of work because making a team works is more expensive in terms of coordination.

Where, as it is the case for lean transformations, synergy is the fundamental element, it's important to keep attention on two factors: the unique comprehension of objectives and the trust in the team. A team needs a safe climate and a clear challenge. Interactions must be based on the safety knowledge that colleagues are able and are doing their best.

What allows the synergy to exist is the unique comprehension from everyone of the objectives and the open sharing of critical information of each member of the team, possible because of the reciprocal trust.

Sometimes working in an environment characterized by trust seems impossible. Non-compatible characters, political climate, power games, low professional estimate are obstacles to the creation of this climate. In these cases, it is possible to start from searching the quality of interactions that characterize a team where people trust themselves and respect themselves to let the trust creating itself as a result of the quality of these positive interactions.

In the majority of lean transformations *Hitozukuri* is necessary to reach the results. Unfortunately, this is not culturally settled in the Western world. It's often taken for granted or not considered.

Aligning people towards the True North

Fujio Cho when became president of Toyota in 2001 had a mission: to make the Toyota way explicit. People in Japan learned it on the job and passed almost all their carriers in Toyota but, even if the model is apparently simple (continuous improvement, and respect for people), workers, in particular non-Japanese ones, needed a more detailed guide.

Toyota recognize that the ideal of individuals that improve themselves and their processes everyday to reach “best quality, lowest cost, shortest lead time” is a dream. This dream is named “True North” because it offers a vision of what would happen in an ideal work. We will never be perfect, but we can tend to perfection.

Fujio Cho described the True north of Toyota, defined the Toyota way, like a “an ideal, a standard and a lighthouse that guides Toyota population likes a global organization” (Liker and Trachilis, 2014).

This means that in Toyota anyone is guided by the same vision of the True North and works with the aim to reach it.

The true north is not only the ideal, the direction towards which seeking but also the way to follow, the values to apply and the respect to reach the fish line.

The Toyota system is based on 5 key concepts.

Challenge: anyone in the company, from leaders to blue collars is constantly stimulated to improve himself or herself and the company’s processes. Challenges make you adapt and become stronger.

Kaizen mind: mind oriented to the continuous improvement. Awareness that with devotion and with a structured process of problem solving, it’s possible to face any challenge.

Genchi genbutsu: go and see. This approach leads to go to see and learn first-hand, without basing on indirect reports. You must see with your eyes in the physical place where the problem is present.

Team work: efficient teams are made of highly prepared people, and when they are part of a team, they do their best to reach objectives.

Respect: respect for the others. Respect for customers, for the company’s members, for the team’s members, for the partners and for the community where the company lives.

The True North doesn't indicate just the final destination but also the way, the values and the behaviours to be followed to reach it.

We know that engagement is the effect of company's actions to obtain the commitment of people and the propensity of the individual to be committed in a context or activity.

If the motivation is something intrinsic to the person, it is also true that the actions of the organization and the context can make the difference in the creation of an environment able to remove obstacles creating conditions favourable to its manifestation.

A person's motivation is determined by his or her predisposition to the objective's reach (the intrinsic factor). For this reason, it's important to be aware of everyone's exigences and specific characteristics. Motivation is also determined by the bunch of actions realized by the company that determine the context and that can be used to generate engagement.

To favour motivation, particular infrastructures or investments are not needed, but it's fundamental to have clear ideas about key factors and being able to address them in the best way.

Thus, the mere individual propensity to be committed in a context or activity is not enough. We want people motivated to reach the company's objectives, we want that the company's challenge becomes their challenge, we want that people work as if the company was theirs. This is engagement: something more than individual motivation, it's the motivation to go towards the right direction – the True North of the company.

People are the most important value of a company and the change aimed by all companies is achievable only thanks to the capability to be able to inspire them, guide them and develop them towards the right direction: the True North.

The world engagement seems to be a binary concept: it seems that people can be totally motivated or not motivated at all.

Whereas, "Gallup Engagement Hierarchy" (Winseman 2002) demonstrates that people engagement is articulated in 4 levels. More we are able to activate engagement factors more people will align to the True North. More people will feel engaged and higher will be the level they'll reach in the Gallup's model.

At the lowest engagement level, called "base" by Gallup, people feel engaged when they know what the company expects from them and have at disposal what it is needed for the requested work. At this level, people think, first, to what they obtain from their work.

To the second level, the person is aware of the value of his contribution to the company and try to leverage on his or her qualities. This level has been called “support to the boss” because the person, motivated by the appreciation of his or her superior, tries to do his or her best for the boss.

To the third level, there is the “team work”, through which the awareness is extended to the contribution and to the role that the person has inside his or her team. Pushed by the membership to the group of work, the person directs his or her capabilities to align himself or herself with the mission and the strategy of the company.

The last level, the higher manifestation of engagement, called by Gallup “rise” happens when the person seeks to go beyond what the job asks and becomes the engine of the improvement, the innovation and the rise of the company.

Gallup model is very similar to the Maslow³ pyramid, who stated that people are motivated to satisfy determined needs, identified following a pyramid that express the hierarchy of human needs. Following his theory, the satisfaction of the needs of one level leads to the achievement of the next level.

It’s important to understand that the engagement shows up like a pyramid divided in different hierarchical levels.

Engagement needs a minimum base to manifest and each level can develop in a higher one, using the “engagement’s generators”.

To align people towards the True North and so to generate engagement, it is necessary first of all to know the factors, present inside the organization, that nurture it and that create a favourable context.

There are four factors or generators that can produce engagement.

First, it’s the person who must be intrinsically motivated for what he/she does and for who it does it.

Then the strategy. It must answer to the needs of the customer and be efficient to engage people, it must align people towards the True North. Indicating to people the direction and the way to be followed, the True North allows them to verify their contribution for the finish line, together with showing a dream for his or her own future and that of their families.

³ A famous psychologist of the XX century.

The leadership. It's able to generate engagement when, instead of just manage people, it is at their service and helps them to make a good job. The aim of nowadays leader is to develop people finding out their best part.

The performance management. Thanks to the constructive comparison between the coach and the coachee on the obtained results and thanks to the sharing of what to do to improve oneself continually towards the True North, we assist to an exponential growth of people, the manager coach, jointly to the comparison of performances must carry the development of the person trying to facilitate the rise of multiple talents that everyone has inside him or herself.

The presence of generators of engagement, analogously to what it is used to do in the production to measure the production efficiency (OEE – Overall Equipment Effectiveness) can be measured.

The engagement's production, that is called OEE (Overall Employee Engagement) is a function of the efficiency of the strategy, of the leadership and of the management performance.

The strategy is the sum of decisions that refer to the value proposition of the company and to the organization of its value chain. The strategy comprehends also the description of the action plan, of the necessary behaviours that must be put in practice to concretize the values and to realize the long-term objectives of the company. The True North is made of values and long-run objectives.

Too often the strategy is seen as an armour that the company uses to defend itself from the competitors present in the market and that answers to the question: "what do we do differently from the others?".

Citing Porter's words: "The strategy is a question of choice: we can't offer everything to everyone" (Porter, 1998).

The strategy is an instrument to motivate, mobilize and inspire people to reach a common finish line and to make them feel part of something bigger. The True North is this, the North star that guides, the compass that indicates the direction for the entire organization. The True North doesn't reflect where we are now but where we want to arrive. The challenge that it represents would be comprehended by all and the willingness to reach it and the way to go too.

Knowing the point of arrival generates engagement in the people because it gives a sense of certainty in the future and allows to measure the contribution of each one in relation to the finish line to be reached.

A strategy, to be effective to create alignment towards the true north must have two principal characteristics: focus and develop people towards the true direction and make people feel part of something bigger.

A strategy to be effective not necessarily has to be complicated but must be communicated, transferred, declined and applied to all the company's levels. Moreover, it must be followed in time and realized in an excellent way.

Each worker must be mobilized and must feel enhanced, must first understand and live the strategy, having clear how to contribute with his or her own's role to its achievement. Once the strategy has been defined, it must be declined in all the functions. It must be clear, at each level, why it is important and how to make it every day.

One of the instruments used by lean management to align the various functions of the strategy is the "*hoshin kanri*" the "compass" that entails the declination of company's objectives in the various functions, in a way that everything is coordinated and that everyone can be directed towards the True North.

Making understood and declined the strategy, is not sufficient to align people towards the true north. A good strategy must begin with the question "Why?". To engage people, it's necessary to make them understand why it's important to realize an activity and what benefits can derive from it, for him and for the company. It's not enough to say that a certain activity must be performed or that a certain decision must be implemented. Only if people understand why that they must perform these activities can do their best to realize them.

Toyota represents one of the most efficient examples of utilization of the strategy as a mean to motivate and develop person's engagement. Ritsuo Shingo, ex-president of Toyota China, defines the True North as: "the maximum possible quality of our products and services to satisfy our clients (highest quality, lowest costs and shortest lead-time) can be achieved only through the continuous development and respect for people, the Toyota Way".

The True North is a state that can't be achieved completely, it stimulates to improve constantly and not to stop in the search of the best for the customer. This is what generates engagement. In Toyota, workers feel part of something big because they know that the company's successes are shared with all and not just with the top positions.

A clear articulation of the True North, that highlight the “why” of the organization and an efficient process of strategy execution that translate the True North in concrete actions is not enough to align people to it. The alignment of people towards the True North requires leaders able to support people with talent and to stimulate their continuous improvement. Just a leadership at the service of people will be credible and capable to engage them to contribute to the True North, to align them to it.

People are perfect machines. They aren't like computers that if programmed make exactly what someone asks to do. People can not understand or not follow always the same instructions and sometimes even not come to work. Understand how to motivate and how to bring out the best of people, nowadays is the principal task of the leader.

Peter Drucker, the founder of modern management and of management by objective, thought that to obtain the maximum return from people, it was necessary to define an objective, monitor its advance and reward people for having reached what requested.

This system has been criticized because it created vicious behaviours. W. Edward Deming, the famous pioneer of total quality, sustained that defining objectives pushes people to reach them in any way. This leads to results of low quality. Moreover, an objective defined for a department would create an opposite effect for another (Deming,1982).

What it is intended as credible leadership is defined as “Servant leadership” by Robert K. Greenleaf (Greenleaf, 1970). Traditional leadership implies the exercise of power to reach the results, the servant leadership reverses the pyramid for power, putting at the top the collaborators' need and helping them to develop in the best possible way.

To obtain the expected results and to align people towards the True North, it's necessary an effective leadership process. Leaders are effective when they are at the service of people, operate with transparency and stimulate the continuous improvement.

Leaders must spend their time in the “*Gemba*”, a Japanese term that is translated into the “real place”, the place where value is created. Often, we intend as *Gemba* the factory, but generally speaking it is the place where we work. Entrepreneurs of the past were aware of its importance and where operative, whereas nowadays managers often are far away the *Gemba*, spend most of their time in their office, in meetings and less and less looking people and processes to stimulate their improvement. The presence of leaders in the *Gemba* is fundamental: it gives a signal to the workers. We all are aware that the company processes are not perfect. This means that everyday workers commit to solve small and big problems in

their work. The presence in the *Gemba* makes understand that what happens has a fundamental importance and creates the occasion to look together, understand together and answer together to the problems that we daily face. Living a problem in an indirect way, through a report or the speech of another person makes it think that the problem is caused by the person that has find it out. Whereas living the problem directly, first-hand, push to think to the true cause of the problem. The effective management of the *Gemba* requires that leaders have the capability to see and answer in an objective way and are willing to give their contribution to solve problems. A good leader knows that it's better to start form the capabilities of the person, making questions ad offering own's work, instead of starting from his or her limitations and giving orders. Making question is a way to put oneself at disposal, to help own's collaborators to advance in the challenge or in their improvement patterns. Give orders is a way to show power that inhibit the search of solutions.

It's thanks to this leadership style that we are able to align people towards the True North and to engage them in order to move them towards the right direction, to be listened to, to be helped in the overcoming of the difficulties and in the achievement of the objectives make people feel appreciated, valued and important for the company.

The best solution in terms of engagement in which a manager could find himself or herself is when people identify themselves with the challenges and the objectives of the department or of the company. To arrive to this point it's important to engage them, include them and make them aware of the daily threats of the company, working with transparency and sharing information. Only in this way we can give substance to the daily *Kaizen*.

We often listen that "it's not possible to improve what is not measurable". Even if it's true that measuring the performance is not always immediately stimulating. To measure, visualize and discuss a department's results, sometimes could seem a report card that highlights some gaps related to the achievement of the requested results.

Leaders have an important role in creating a context where the results' sharing is stimulating and where to put in evidence what is missing to achieve them is seen as an opportunity of improvement. The best instrument that leaders have to make stimulating challenges in the *Gemba* is the application of the right measure of pressure.

The principle of Goldilocks, stating that our brains are stimulated at the maximum when the complexity, the challenge is not too high and neither too low (Liker and Trachilis,2014), reinforces the fact that having problems give the possibility to improve and this is what really matters.

In the application of this concept the good leader doesn't blame and doesn't put too much pressure during a situation not totally under control. He or she encourages, helps and supports the achievement of solutions, giving the best of himself or herself and bringing out the best from people that work with him.

The transparency, that's to say, the measurement, the visualization and the discussion of the results and of the gap, the differences between actual results and expected results, help leaders to deal with the challenge's level. When results are good, we must increase the challenge's level to continue stimulating people and thus the improvement. In other moments, when the results don't easily arrive, we must be comprehensive and willing to help. The leader's capability to protect his or her collaborators filtering pressures from outside to create a context where people feel stimulated to the maximum, is the key to generate engagement.

The third ingredient, necessary for the alignment of people to the True North is the continuous process of monitoring, measurement of performances and encouragement of the desired behaviours. In other words, the performance management's process.

People to keep being committed need positive reinforcements, need to win their personal challenges achieving the prefixed results. This is good for the morale and for the awareness of own's means and leads to people's engagement, for the new motivation and for the renewed conviction to be able to do it.

To be able to win every day, it's necessary to have a good performance management's process. Typically, the responsibility of the management of this process is of the human resources, but the leader has the task to make of it an engaging moment and a moment of growth recruiting people oriented towards the company's objectives and True North.

An effective management of the process of performance's valuation creates value in the company and favours the creation of a meritocratic and transparent climate. The management of performance is effective when it evaluates systematically and objectively the competences and the performance and when it creates opportunities of professional development for the growth of the person.

Having as object of discussion the workers' performance, even if this is not positive, it can improve and change a person. People don't want to be compared with the others, they want to be compared to themselves over time. The most productive and effective instrument for the evaluation of the performance over time is the coaching.

One of the most exhaustive definitions of coaching is the one of Sir John Whitmore, universally recognized as the father of coaching: “the objective of a coach is to blow up the potential of the coachee and thus his or her performance, through the increase of awareness, responsibility and trust in oneself (Whitmore, 2009).

To be a good leader it's necessary to be a good coach. The task of the coach is to allow the coachee to achieve prefixed results. To be a good coach means bringing out the best of people in terms of results for the person, for the company, and for the entire company. To allow this, it's necessary that the coaching session, the moment of comparison on the performance is objective and of improvement, for the collaborator and for the supervisor too.

Comparison on the performance has a positive significance on the results and on the alignment towards the True North and on the engagement's level of the person towards the achievement of prefixed objectives.

A good system of performance management must be based on this cycle:

Objectives shared and aligned towards the True North; action plan to achieve them; personal development's plan; shared auto evaluation and valuation, both intermediate and final.

The respect of these four phases produces alignment of people towards the True North and generates engagement for the objectives' achievement. The value added by the process' management depends on the ability and experience of the coach and on his or her ability to seize low signs and the improvement opportunities, together with creating a climate which is never blaming but and always collaborative with the coachee.

The achievement of results leads to the creation of a virtuous cycle that gives trust to the person and stimulates her or him to the achievement of new successes, reaching the True North. To make a person express his or her maximum potential it's necessary to put her or him in the best conditions for a continuous growth. This requires the individuation and the creation of new opportunities for the professional development.

This leads the person to new motivations and reinforces the commitment to achieve results. The development of people is a key factor for the companies that base their value on the intellectual capital and for each company that would like to keep up with the innovation and the changes in the organization of the work. The definition of growth path and of carrier in national and international companies, the development of leadership and talents, the mapping of the role's competencies are the aspects on which many companies are working and

investing. To develop and make people growing it's necessary to know their competences, measure the result and evaluate the potential.

But if this phase, defined of assessment, is important, what is more relevant is to be coherent with the development of people. The base concept (respecting the principle "respect for people" of the Toyota Way) is that in each person exists a talent that must be identified and developed in order to express at their best their own capabilities.

Thus, to align people to the True North and to generate engagement it's necessary to guide people towards the right direction and to indicate them the way, the values and the behaviours to reach it. Anyway, to indicate to people the direction and the way is not enough. We must engage people in the company's dream, making them feel to be part of something bigger where their contribution is fundamental. To do this, leaders must always be present in the *Gemba*, near collaborators to help them and encourage them to do always better. Then, we must put in practice a good performance management's process. Living it cyclically as a big opportunity of growth for oneself and for own's people. The performance management' process must not be limited to the objective evaluation of the performance but must be addressed also to the personal talent's development to who must be allowed to express at the best for his or her professional growth and for the entire company too.

To align people towards the True North, the strategy is to develop to the true direction, to be part of something bigger. The Leadership is at the service of people and to create transparency. Performance management is to systematically evaluate and to create opportunities.

CHAPTER 3

Lean management and employee engagement

Lean production changes how people work. Most people-including so called blue-collar workers-will find their job more challenging as lean production spreads and they will become more productive. But at the same time, they may find work more stressful because a key objective of lean production is to push responsibility far down the organization ladder: responsibility means freedom to control one's work – a big plus-but it also raises anxiety about making costly mistakes. Lean production calls for learning far more professional skills and applying these creatively in a team setting rather than in a rigid hierarchy. If employees are to prosper in this environment, companies must offer them a continuing variety of challenges (Womack, Jones and Roos 1990, p.12).

Thus, the success of a Lean manufacturing program depends far more on organization-wide leverage of lean manufacturing tools than it does on the tools themselves. To this the organization must add the human relations aspects that earn buy-in and engagement by all members of the workforce, to the extent that workers will react immediately and decisively to the presence of waste. The synergy of the human and technological aspects of lean form a universal code for the achievement of world-class results in any enterprise and which allow to put into practice unprecedented bottom line results (Levinson 2012, p.1).

In the lean philosophical system, people don't play a secondary role, they aren't the components of the concept, they are the centre, the lean mindset's source and main drivers. During a lean implementation, to have a successful transition into the new system, there are two key human factors: the commitment of managers and the involvement of lower level employees (Essays, 2013).

Kaizen meaning continuous improvement, is considered to be the tool for employee engagement and improvement thanks to its ability to meet three basic human needs: to connect, to be creative and to be in control. People arrive to have a key role in the *Kaizen* revolution because during their work they carry out the bulk of improvement – from surfacing problems and opportunities, to designing, testing, and implementing countermeasures. Instead, organizations not implementing lean are characterized by supervisors, managers and leaders mandating the improvements. The consequences are people working as numb order-takers instead of engaged problem solvers as in lean organizations (Martin, 2013).

Recent analysis of employee engagement from MSV Research and Dale Carnegie Training confirms that kaizen improves the key drivers of employee engagement. They identify three strong factors nurtured by kaizen workplace that correlate with employee engagement: relationships with supervisors, belief in senior leadership and pride in working for the company. A more personal and enjoyable relationship with leaders, managers, supervisors generates engagement. The creation of a meaningful working employee-employer relationship is based on the conviction that managers are both leaders and partners with the aim to help employees' development and improvement. The second key consideration is that managers must know how the business is actually run on the front line, they must be part of the business in this way senior leadership actually understands problems faced by employees. Kaizen events promote employee empowerment asking them feedback to optimize processes and programs. The last driver of employee engagement is being able to take pride in the work accomplished. Whereas in traditional work environment, employees are told how to complete their jobs and are encouraged to refer to management if things go wrong, Kaizen allows workers to play an active role thanks to the fact that employees work with leaders and not for leaders. A critical thinking is thus developed and substitutes the feeling of helplessness and mindless typical of a standard work environment (Enna, 2013).

A review of the empirical evidence

The first empirical evidence that deserves to be analysed is the one that explains the importance of engagement for a company.

The relationship between engagement at work and organizational outcomes has been analysed in detail by Harter, Schmidt, Agrawal, Plowman and Blue's (2013) study.

The purpose of their study was to discover the relationship between employee engagement and performance in 192 organizations; to investigate the consistency and generalizability of the results across organizations and to express the usefulness of findings for executives and managers. The relevance of the study is given by the methodology used. The authors used a meta-analysis statistical technique to avoid distortion of results thanks to a combination of results (for multiple time periods) from 263 research studies with disparate findings. 192 were the analysed organizations, in 49 industries and 34 countries. In total 1,390,941 employees were studied. The study documents how the quality of an organization's human resources is the leading indicator of its growth and sustainability. Selecting the right people is key because of their role in taking decisions and actions that everyday affect the company's success. Internal motivations, drivers and the way they are treated influence their actions (Harter, Schmidt, Agrawal, Plowman and Blue, 2013).

The hypotheses examined in the study were 2:

Hypothesis 1: Business-unit-level employee engagement will have positive average correlations with the business unit outcomes of customer loyalty, productivity, and profitability, and negative correlations with employee turnover, employee safety incidents (accidents), absenteeism, shrinkage (theft), patient safety incidents (mortality and falls), and quality (defects), (Harter, Schmidt, Agrawal, Plowman and Blue 2013, p.10)

Hypothesis 2: The correlations between engagement and business unit outcomes will generalize across organizations for all business unit outcomes. That is, these correlations will not vary substantially across organizations. And in particular, there will be few, if any, organizations with zero correlations or those in the opposite direction from Hypothesis 1 (Harter, Schmidt, Agrawal, Plowman and Blue 2013, p.10).

The relationship between employee engagement and performance has been analysed for nine outcomes and the strongest effects were found for customer loyalty, productivity, employee turnover, safety, absenteeism, patient safety and quality (Harter, Schmidt, Agrawal, Plowman and Blue 2013, p.26).

From the study it emerged that engagement is most highly correlated with sales than with profits. The author's opinion is that day-to-day employee engagement has an impact on customer perceptions, turnover and quality that are in close proximity with this financial variable (Harter, Schmidt, Agrawal, Plowman and Blue 2013, p.25).

Findings reported in this meta-analysis confirm the substantial correlation between engagement and performance (it is related to each of the nine performance outcomes studied) and show the generalizability of them across companies which means that the correlations were consistent across different organizations. Moreover, engagement is changeable and varies by business unit or workgroup (Harter, Schmidt, Agrawal, Plowman and Blue 2013, p.30).

Thus, lean manufacturing practices, made of organizational routines for improvement and adaptation, enhance company's profitability, but the pathway to competitive advantage and long-term organizational survival depends upon the creation of a lean culture in the company.

With a lean culture you develop new patterns of thinking and behaviour creating a way of managing that generates initiative among everyone in the organization to adapt, improve, and keep the organization moving forward (Rother 2010).

With a lean culture, all employees - from high-level managers to front-line staff - are responsible for continuous improvements, adaptiveness and superior results. The organization will be able to adjust to unpredictable, dynamic conditions, increasing value and delivering better services and products to customers.

Thus, lean culture positively affects profitability by improving employee engagement.

According to an article published by Forbes on a study⁴ jointly released by the Workplace Research Foundation in cooperation with the University of Michigan: the evidence is coming in fast that the more intrinsically motivated employees are the better returns there are for shareholders (Serchuk 2009).

⁴ The National Benchmark Study: Employee Motivation Affects Subsequent Stock Price,2009. Workplace research foundation and university of Michigan.

The study took place over seven years, from 2001 through 2007, and a survey data from 3,490 employees at 841 corporations that were listed in the Wall Street Journal 1000⁵ was examined.

The study found that as employee motivation improved, the firm's stock enjoyed higher subsequent returns the following year, spanning times both good and bad. As an example, in 2002 the Standard & Poor's 500 returned negative 22%. Yet the study found that for every five points added onto a firm's Employee Motivation Index-how the study kept score-it returned an additional 2% in stock price the following year (Serchuk 2009).

Let's analyse in detail the study.

As predictor of employees' performance, the research chose the intrinsic motivation (IM) that was assumed to be associated to a performance metrics of the whole organization: the cash value of dividends paid to stockholders at the end of the fiscal year.

Assessment Tool: An anonymous survey about working conditions based on 11 rating questions regarding: teamwork, leadership, training, pay & benefits, and ethics & fairness; 5 cross validation questions about perceived efficiency, perceived quality, perceived value and/or profit, perceived customer satisfaction, and perceived employee motivation; and 2 demographics questions about job level and company name.

Sample Frame: 1000 companies each year (7 years of analysis) chosen by the Wall Street Journal for their WSJ1000 analysis (based on their stock return during the 10 years).

Time Period for the Study: From January 2001 to 2006. During the 7 years of the study and 3490 employees from 841 corporations took the survey.

Format: survey by phone; survey using paper and by web interface.

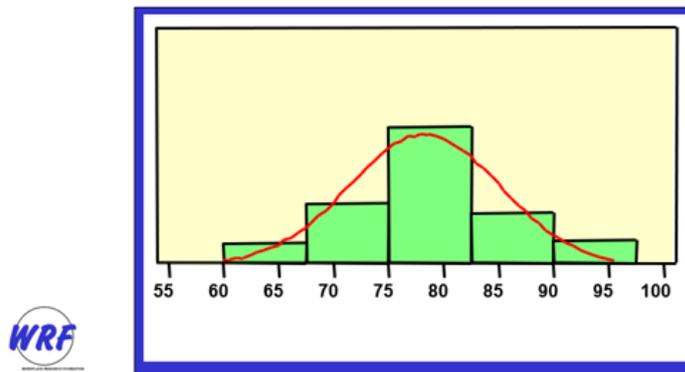
Sampling: random samples

In the following, I'll report the study's results using original graphics and tables as reported in the original research.

⁵ an index of firms that encompasses 98% of U.S. gross domestic product

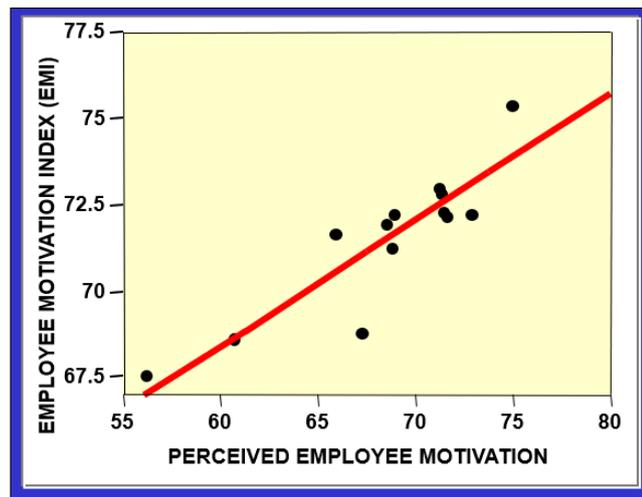
As Evidence of validity of the results, perceived quality - averaged by industry - is represented by a normal curve meaning that distributions in data are similar- The Cronbach's alpha coefficient is very high (.88) meaning that the reliability is high thus that the multiple-questions Likert scale surveys are accurately measuring the variable of interest (Samuels 2009).

Evidence of Validity: The Survey Generates Normal Curves



The study proposes another evidence of validity: the perceived employee motivation tracks actual EMI (employee motivation index).

Evidence of Validity: Perceived Employee Motivation Tracks Actual EMI

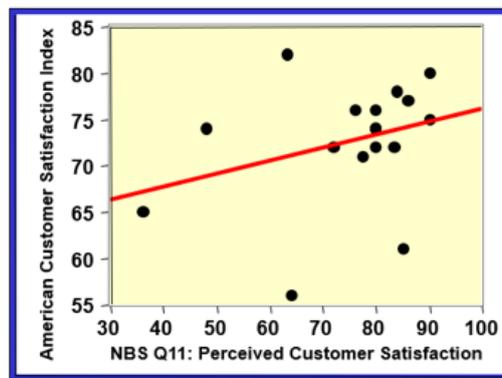


Statistical Note: Plot shows means by Sector; n = 13, p < .00001, r = .89. Data come from NBS interviews conducted in 2004.

As third evidence of validity, the research shows how the scores for Perceived Customer Satisfaction from the NBS⁶ survey are highly correlated with scores for Actual Customer Satisfaction from the American Customer Satisfaction Index (ACSI).

The significance of this finding is given by the fact that the groups of respondents of the two surveys were employees and customers, thus different groups and the words and methodology of the surveys were different (Samuels 2009).

Evidence of validity: perceived customer satisfaction correlates with actual customer satisfaction

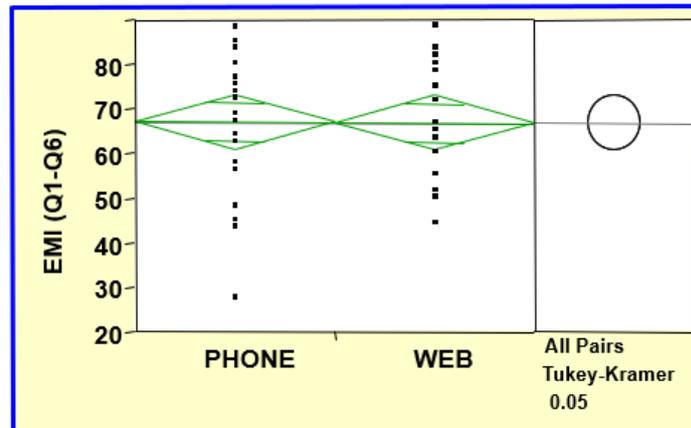


Statistical Note: Correlation is shown between NBS Question 11 and ACSI Scores aggregated by participating companies from 2001 to 2005; n = 17, 4250 (companies, ACSI interviews); $r = .31$, $p < .0001$.

In a test-retest comparison of data, no significant difference, between mean EMI scores from web-based interface and phone interviews, was found (Samuels 2009).

⁶ National Benchmark Study

Evidence of Test-Retest Reliability: We find no significant difference between formats

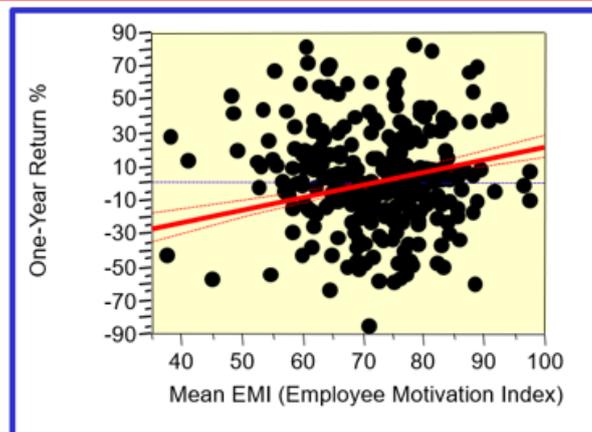


Statistical Note: Surveys and retests by phone were completed during 12/2003 and 1/2004; R-Square = 0; n = 44, F = .001; Mean EMI using Web = 66.8; Mean EMI using phone = 66.9; Least Significant Number is 164,251 at alpha = .05.

The results of the research showed preliminary evidence of linkage.

In 2001 EMI predicted 1-year Stock Return for the Remainder of the Fiscal Year

In 2001 EMI Predicted 1-year Stock Return for the Remainder of the Fiscal Year

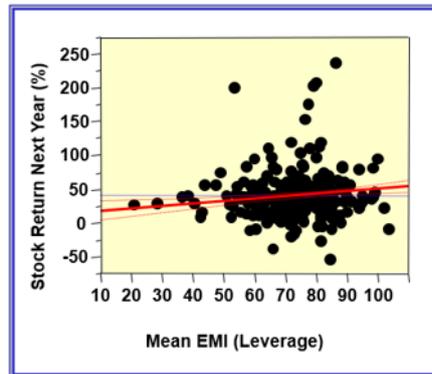


Statistical Note: Calls were made from 1/6/2001 to 6/30/2001; Stock data come from the WSJ's Shareholder Scoreboard 2/25/02.

In 2002 EMI predicted the NEXT YEAR'S Return to Stockholders.

The study reports that the higher the Employee Motivation Index, the higher the total Stock dividend paid to shareholders during the NEXT fiscal year. Specifically, every 5-point rise in EMI yielded an additional 2% return the next year (Samuels 2009)

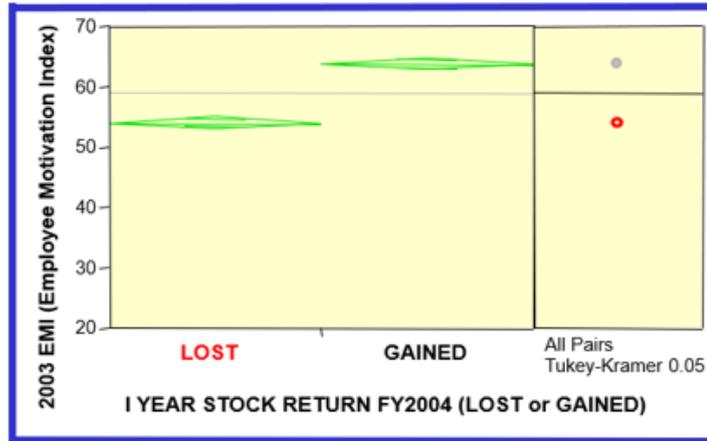
In 2002 EMI Predicted the NEXT YEAR'S Return to Stockholders



Statistical Note: Calls were made during the Winter of 2002; Stock data come from the WSJ's Shareholder Scoreboard published on 3/8/04 for FY 2003. R2 = .49; F = 10.2; aggregated by company, n = 272, 796 controlling for Industry & Headcount; $p < .0001$; Beta = .004 $p < .003$.

In 2003 EMI again predicted the next year's return to stockholders. Thus, the research proves again that companies whose stock lost value during FY 2004 had lower scores on the employee motivation index (EMI) in the previous year than companies whose stock gained value (Samuels 2009).

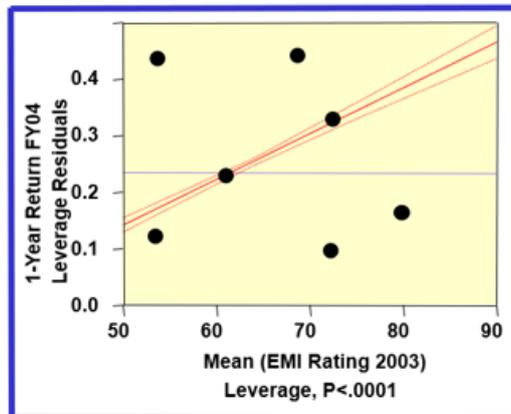
In 2003 EMI AGAIN Predicted the NEXT YEAR'S Return to Stockholders



Statistical Note: Surveys were filled out during the Winter of 2003; Stock data come from the WSJ's Shareholder Scoreboard published on 2/28/05 for FY 2004. $R^2 = .45$; $p < .0001$; aggregated by company, $n = 10, 210$. Correlation is also very high and significant: $r = .70$. The improvement in Ethics & Fairness bodes well for next year's Sales ($r = .72$, $n = 10, 210$) IACS ($r = .24$, $n = 10, 210$) and EBITDA ($r = .25$, $n = 10, 210$) all p 's $< .00001$.

In 2004 EMI also predicted the NEXT YEAR'S Return to Stockholders:

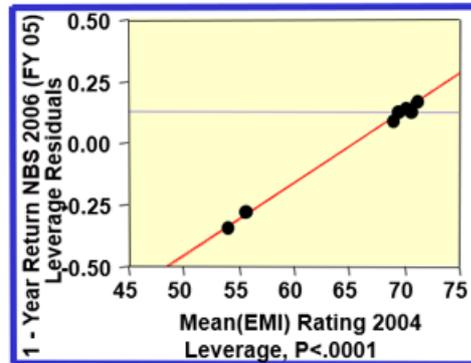
In 2004 EMI also Predicted the NEXT YEAR'S Return to Stockholders



Statistical Note: Surveys were filled out from 10/2004 to 2/2005; Stock data come from the WSJ's Shareholder Scoreboard published on 2/28/05 for FY 2004. $R^2 = .50$; $F = 154.1$; $p < .0001$; aggregated by company, $n = 7, 313$. $Beta = 0.008$, $p < .0001$, controlling for Headcount

In 2005 EMI again predicted next year's return to stockholders. The higher the EMI, the higher the Stock dividend during the next fiscal.

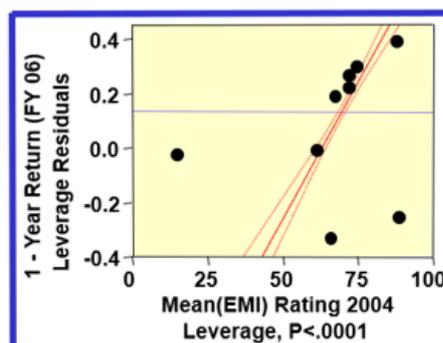
In 2005 EMI again Predicted NEXT YEAR'S Return to Stockholders



Statistical Note: Surveys were filled out from 10/2005 to 3/2006; Stock data come from the WSJ's Shareholder Scoreboard published on 2/27/06 for FY 2005. $R^2 = .99$; $F = 88509$; $p < .0001$; aggregated by company, $n = 9, 231$, controlling for Headcount and Sector as determined by Yahoo.

In 2005 EMI even predicts the following year's Stock Return as well: the higher the Employee Motivation Index, the higher the subsequent Stock dividend.

In 2005 EMI even Predicts the following year's Stock Return as well



Statistical Note: Surveys were filled out from 10/2005 to 3/2006; Stock data come from the WSJ's Shareholder Scoreboard published on 2/26/07 for FY 2006. $R^2 = .36$; $F = 65.4$; $p < .0001$; aggregated by company, $n = 9, 231$. $\text{Beta} = 0.02$, $p < .0001$, controlling for Headcount.

The study found out that increasing investments in employee engagement by 10% has the potential to increase company's profits by \$2,400 per employee, per year. Moreover, highly engaged employees are 38% more likely to have above-average productivity (Samuels 2009).

Thus, proved the relationship existing between engagement and company's results we can focus on the positive effect of lean organization on improving this engagement.

We can start our discussion, taking as example a case study carried out by the university of Agder, Norway.

The research covers the approach to continuous improvement work, and the affect it has on the organization's employees, of Fibo-Trespo a company based in the south of Norway. The company produces laminate bathroom panels and counterparts and has 107 employees. It started a lean revolution in 2007 to react to the slowing down of its growth becoming leaner and thus more competitive: from 2015 it is one of the leading organizations of the sector (Støle, Ekeren, Kalsaas and Briseid 2015).

Running a production company within a high cost country like Norway must be considered a challenge. According to the government budget, this country is at the very top of the scale, in terms of labour-cost per hour in the world. For industrial workers alone, the average salary is 64% higher compared to industrial organizations within the EU. Meaning that Norwegian companies must increase efficiency, deliver high quality, while reducing costs in order to remain competitive internationally and avoid outsourcing (Støle, Ekeren, Kalsaas and Briseid 2015, p.10).

The aim of the study, considering Fibo-Trespo as a whole unit, is to see if the changes to implement a lean philosophy had anchored, and if the company has managed to establish a culture for continuous improvement, among employees. In other words: to determine the effect of lean continuous improvement into the organization's workforce, in particular on its engagement. Leading the researchers to measure the engagement among employees towards lean continuous improvement and formulating as research question: "How to increase employee engagement in lean continuous improvement at Fibo-Trespo" (Støle, Ekeren, Kalsaas and Briseid 2015, p.4,11).

In this study, employee engagement refers to an employee's ability to perform to the extent of their full potential in their given roles. Indications of engagement among employees concretizes into measures such as motivation, value of work tasks, abilities for self-development and learning, and social relations (Støle, Ekeren, Kalsaas and Briseid 2015, p.11).

The research is divided into three different phases. Firstly, an exploratory research method aiming towards establishing the concrete research problem ("How to increase employee

engagement in lean continuous improvement at Fibo-Trespo?”). Secondly, data collection through a quantitative survey and interviews data, where the research problem is investigated in an organizational scale. Finally, a bridge between the empirical data and the theory is built to create a solution that aims at solving the research problem (Støle, Ekeren, Kalsaas and Briseid 2015, p.12).

The exploratory phase shows that Fibo-Trespo has succeeded well with their initiatives, projects, and has developed knowledge and focus on improvement work within the organization. However, the changes, not necessarily had become transcendent to the intended degree - meaning that changes don't reflect peoples work in all levels of the organization. There is evidence of a need to further improve how people in the organization think and act when approaching improvement work. Employees looking for ways to improve must become a natural habit, instead of something that needs to be crossed of a commotion list. Thus, this context justifies the creation of the research problem of the study: “How to increase employee engagement in lean continuous improvement at Fibo-Trespo?” (Støle, Ekeren, Kalsaas and Briseid 2015, p.15).

The study, measuring the level of employee engagement towards lean continuous improvement (using inspections, meetings with employees, interviews and engagement surveys), aims to see if the changes during lean initiatives have anchored in the organizational culture. Increasing employee's engagement will lead to greater performance in a lean improvement work, thus increased performance in general. Key is considered to be the role of engagement for a successful implementation of the lean philosophy (Støle, Ekeren, Kalsaas and Briseid 2015, p.15).

Engagement surveys and open interviews were conducted to map the organizations approach to lean continuous improvement and the employees' level of engagement. Firstly, because the level of engagement will determine how much employees are willing to give in their roles, when working on lean continuous improvement. In this way, the researchers were able to see in what areas the organization has succeeded in establishing a framework that leads to engagement, and what areas might be improved (Støle, Ekeren, Kalsaas and Briseid 2015, p.74).

There is evidence that several operators of Fibo-Trespo, after the conversion to lean philosophy, think differently when they are operating machines, they demonstrate huge knowledge of various lean tools and high-performance results thanks to high levels of engagement towards continuous improvement work. Key to be noticed is the response rate of

87%, that must be considered high, and can by itself tell us something about the level of engagement within the organization. The high response rate increases validity in data and secures that the data reflect a holistic view of the organization, and not just a sample (Støle, Ekeren, Kalsaas and Briseid 2015, p.74,75).

From theory we know that engaged employees offer the most of themselves in their roles at work, and that in the other end of the scale we find the “burned out” employee that is disengaged at work. The survey results show a high level of engagement and that employees at Fibo-Trespo give a lot of themselves in their roles in improvement work. Overall results from the survey show that, the workforce at Fibo-Trespo takes great pride in working on continuously improving. The opportunity to improve their own and others work routines and practices, has been embraced (Støle, Ekeren, Kalsaas and Briseid 2015, p.74,75).

Thus, the result of the study is positive, the success of the organization, thanks to learning and training initiatives to spread lean knowledge, in engaging people can be stated with certainty.

A key contribution of the study is the suggestion of some successful measures that allow to keep rising employees’ engagement.

The first proposal is to create a *quality assurance practice for general improvements*. This practice consists of a simple card with reflective questions that aims at creating awareness towards general improvements, and secure that all improvements serve the purpose of improving the current situation, thus add value to employees and the performance of the organization. It is important to maintain employees’ freedom and authority to conduct general improvements. The quality assurance practice does not take this authority away from the employee but intend to make employees think about the value and meaning of the improvements by taking time to reflect upon why the improvement is necessary and how it improves the current situation, as well as what it takes to conduct it. Typical questions of quality assurance will be: why is there a need for improvement? What will be achieved with this improvement? What resources are needed to conduct the improvement? Will the improvement add value to the performance in its intended functional area? (Støle, Ekeren, Kalsaas and Briseid 2015, p.84,85).

A second interesting consideration made in the study is the need to *remove numerical quotas for general improvements in each level of the competence system*. By removing false indicators of employee performance, we alter the organization’s basis for assessing it, with the aim to be sure that general improvements are conducted on the right premises and not because of personal or financial gain. Otherwise the risk is to have employees that think more about

the rewards than the improvements themselves. This consideration together with the previous one will increase the value of improvements and intrinsic motivation because the focus is on the meaning of conducting improvements rather than on the reward associated with it (Støle, Ekeren, Kalsaas and Briseid 2015, p.85,86).

Important is also the development of a *proper standard for rotation within teams*. Agreements between team's members regarding workloads, variation in work tasks, ability to dictate work pace, must be reflected in the rotation practice in order to secure that every team utilizes a rotation practice that ensures variation in work. Otherwise a high pace monotonous work will take away employees' opportunities for self-realization and self-development reducing employees' engagement (Støle, Ekeren, Kalsaas and Briseid 2015, p.86).

The final recommendation the authors of the study make is to *refresh the knowledge within initial lean methods and tools through seminars* that allow employees to conduct more valuable and meaningful improvements thanks to a higher understanding and knowledge (Støle, Ekeren, Kalsaas and Briseid 2015, p.86).

Fibo-Trespo has launched several initiatives in their journey to run a "leaner" production, and increase their competitiveness, these changes have anchored in the organization. The results from the data collection's analysis were undeniably very positive and prove the organizations success in engaging people. With the suggested practices engagement will be increased even more (Støle, Ekeren, Kalsaas and Briseid 2015, p.91).

Another study worthy of attention is the one of McDuffie (1995): "Human Resource Bundles and Manufacturing Performance: Organizational Logic and Flexible Production Systems in the World Auto Industry". The author tested the relationship between HR practices and economic performance of lean companies in the automotive sector using an international data set based on surveys made to 62 assembly plants in 1980-90.

He proved that interrelated and internally consistent HR practices create multiple, mutually reinforcing conditions that support employee motivation and skill acquisition. According to his study, flexible production systems, as lean production is, have an organizational logic that puts together HR practices with manufacturing ones to achieve simultaneous improvements in productivity and quality. In this environment, motivated, skilled and adaptable workers are required to deal in an effective way with the problems highlighted by the reductions of inventories and other buffers. This line of argument demonstrates that human resources are a primary source of sustainable competitive advantage for the firm. The author demonstrates

how employee knowledge about products, processes and customers if embedded in routines and social interaction patterns creates difficult to imitate capabilities (Macduffie 1995, p.198).

Innovative human resource practices are likely to contribute to improved economic performance only when three conditions are met: when employees possess knowledge and skills that managers lack; when employees are motivated to apply this skill and knowledge through discretionary effort; and when the firm's business or production strategy can only be achieved when employees contribute such discretionary effort (Macduffie 1995, p.199).

Interactions between and among managers and employees are shaped by the bundle of interrelated overlapping HR practices which allow workers to acquire skills in several ways: from training off-the-job and on-the-job, job rotation and problem-solving groups. This bundle is also key to provide incentives to boost motivation like performance-based pay and participation in decision-making (Macduffie 1995, p.201).

Macduffie' s study of human resource capabilities in a flexible (lean) production system highlight the central role given to workers. The latter have knowledge of the production process and have developed the analytical skills to identify problems' root cause in this way they can first identify and then solve the problems. In a lean context multiskilling practices are carried out to develop the problem-solving ability essential to deal with the decentralization of production responsibilities (such as quality inspection and equipment maintenance). Example of these practices are extensive off-and on-the-job training, job rotation within and across teams and group problem-solving activities (Macduffie 1995, p.201).

The author explains also that only the alignment between individual interests and company's ones will push workers to be engaged in problem-solving: flexible production is characterized by such "high commitment" human resource policies as employment security, compensation that is partially contingent on performance, and a reduction of status barriers between managers and workers (Macduffie 1995, p.201).

The sample used by the author to justify above reported findings is made of 62 plants during 1989-1990 divided into "volume" and "luxury" (price of over \$23,000) categories. Plants were chosen to achieve a balanced distribution across regions (Japan, U.S, Europe, Korea, Taiwan, Mexico, Brazil, Australia) and companies. Questionnaires were sent to the plant manager who distributed different sections to the appropriate departmental manager or staff group.

The study's chosen descriptive statistics are explained below⁷.

Dependent variables

Labour productivity

Labour productivity is defined as the hours of actual working effort required to build a vehicle at a given assembly plant, standardizing for vehicles' size number of welds, absenteeism.

Quality

The variable measures the number of defects per 100 vehicles.

Independent variables

Production organization measures

To operationalize the "organizational logic" of flexible and mass production systems, the author developed three component indices-Use of Buffers, Work Systems, HRM Policies- and an overall Production Organization Index.

Use of Buffers. This index measures a set of production practices that are indicative of overall production philosophy with respect to buffers (for example, in-coming and work-in-process inventory), with a low score signifying a "buffered" system and a high score signifying a "lean" system. Work Systems. This index captures how work is organized, in terms of both formal work structures and the allocation of work responsibilities, and the participation of employees in production-related problem-solving activity. A low score for this variable indicates a work system with a narrow division of labour that is specializing in orientation, and a high score indicates a "multiskilling" orientation.

HRM Policies. This index measures a set of policies that affects the "psychological contract" between the employee and the organization, and hence employee motivation and commitment. A low score for this variable indicates a "low commitment" set of HRM policies and a high score indicates "high commitment" policies.

Production Organization Index (POI). This index is constructed in both an additive form, as a simple average of the three component indices, and a multiplicative form, as the product of component indices. For both forms, a low POI score indicates a traditional mass production system and a high POI score indicates a flexible production system.

Control variables

⁷ Variables' description is retrieved from Macduffie 1995, p.205 – 208.

Total automation. The main technology variable, the automated percentage of direct production steps, captures the level of both flexible and fixed automation.

Plant scale. This variable is defined as the average number of vehicles built during a standard, non-overtime day, adjusted for capacity utilization.

Model mix complexity. This measure is based on the mix of different products and product variants produced in the plant. It includes the number of distinct platforms, models, body styles, drive train configurations (front-wheel versus rear-wheel drive).

Parts complexity and Product design age. This variable is defined as the weighted average number of years since a major model change introduction for each of the products currently being built at each plant.

In this paper the author has investigated and proved two hypotheses left unresolved by previous research: that innovative HR practices affect performance not individually but as interrelated elements in an internally consistent HR "bundle" or system; and that these HR bundles contribute most to assembly plant productivity and quality when they are integrated with manufacturing policies under the "organizational logic" of a flexible production system : lean management (Macduffie 1995, p.217).

Overall, the evidence of the author's study's results strongly supports the hypothesis that assembly plants using flexible production systems, which bundle human resource practices into a system that is integrated with production/business strategy, outperform plants using more traditional mass production systems in both productivity and quality. These results provide the strongest statistical evidence to date of a positive relationship between innovative human resource practices and economic performance, particularly given the comprehensive international sample, the presence of strong control variables, the high reliability of the context-specific measures of performance and HR practices, and the discovery of statistically significant interaction effects in a small sample (Macduffie 1995, p.218).

I continue my review of the literature speaking about the "lean production systems and worker satisfaction: a field study" by Sim, Curatola and Banerjee. This work shows the positive motivational effect on employees' well-being of lean systems. In terms of higher perceived employment security, lower effort-reward unfairness, higher job satisfaction, and higher overall satisfaction (Sim, Curatola and Banerjee 2015, p.79).

The authors visited a manufacturing company located in the Eastern United States and took a random sample of 35 % of the production employees to fill in questionnaires. After validity

checks the number of useable surveys was 135. The survey was made of Likert scales measuring 7 constructs: lean practices (how employee saw the climate of continuous improvement); effort-reward fairness, job satisfaction as a result of the work philosophy, perceived job security and organizational support; training and empowerment/ autonomy.

To gain a better understanding of the effects of organizational design on perceived job security, effort-reward fairness, job satisfaction and ultimately overall satisfaction in lean manufacturing systems, a field study has been conducted by the authors on a company that recently changed to lean production. Results provide suggestions on how managers can rely on strategically linked performance measures as an effective competitive tool. The HR and manufacturing 'bundle' are positively related to overall satisfaction (Sim, Curatola and Banerjee 2015, p.93).

These results, according to the authors, have some important implications: The increase in the responsibilities and abilities of front-line workers is argued to increase job satisfaction; empowerment as a mean of giving the authority to make decisions to that level or people in the organization, which by virtue of available knowledge and closeness to the activity concerned, is most able to make a correct, quick, and effective decision. Moreover, the authors state that empowerment in lean production is a two distinct constructs: a choice (or freedom) concerning procedures, and an increase in accountability arising from decentralization of authority, power sharing, and participation in decision making (Sim, Curatola and Banerjee 2015, p.94).

Authors believes that employee involvement programs may result in substantial new responsibilities, which can create pressures and psychological tensions, lean practices provide challenging goals intended to expose workers to opportunities for utilizing their cognitive skills (Sim, Curatola and Banerjee 2015, p.94).

Thus, the study suggests that companies that embrace 'true' empowerment of workers, among others, can often reap the many advantages of lean practices. Moreover, the study found out that when management nurtures the employees, they provide the support, which enhances the employees' feeling of less effort-reward unfairness, leading to higher job satisfaction (Sim, Curatola and Banerjee 2015, p.95).

The final issue detected by the study is when lean becomes excessively so, with detrimental effects. Managers need to monitor worker's overall satisfaction. Thus, the signalling effect of 'worker's overall satisfaction' is one gauge the firm can use to sense whether the firm is

heading toward excessive leanness, decreased satisfaction and, ultimately, suboptimal performance (Sim, Curatola and Banerjee 2015, p.95).

Above review of major empirical studies demonstrates the strategic role performed by employee engagement in achieving a superior company's performance and shows the key role played by lean management in fostering a mind-set oriented towards continuous improvement leading to constant motivation and commitment.

CHAPTER 4

Last considerations

The literature review of this thesis shows how lean management is the key revolution for the company's success, growth and survival.

The key factor leading to a successful lean transformation is to be aware that lean is not a collection of tools that could be deployed for a quick win, instead it is a bedrock of the company culture. Successful companies know that when there is a problem to be solved you must be absolutely 100% dedicated to continuous improvement and to the root cause problem-solving tools that are there (Green 2017).

Essential is a greater focus on engaging employees in improvement. The input comes from the bottom to the top versus the top down. The strategic workplace is the one where employees are safe, focused on achieving business goals and feel that they are working at a place where they "want to work" (Green 2017).

Workforce has a tremendous number of ideas. We need to capture them and really react to them, not acting on employee suggestions is a tremendous demotivator and a failure of leadership. Manufacturing leaders must become more like teachers, taking information from employees and working on problem-solving. Despite all the technology changes in manufacturing, people are what really makes the whole system go (Green 2017).

Team leaders in the plants are key to changing the culture and achieving the company's goals. Their job is to be ambassadors and to make sure employees understand that they are the most important forces in the operations. Employees must report what the problems are so the company can work to solve those problems together (Green 2017).

The industry nowadays faces a major challenge: attracting and retaining talent, young talent. In order for companies to remain viable in the future, they can't have a talent drain. Once those young people enter the company, they need to be provided with a more flexible work environment that recognizes the need for a healthy work-life balance (Green 2017).

It is important for companies to provide manufacturing employees with a career path rather than expect to hire people and then have them do the same job for 10 years. No talent is going to accept that (Green 2017).

This issue is well known by lean management that manages to solve it assuring new roles to workers.

Traditionally, supervisors identified and solved problems, made critical decisions and ensured all work was completed in a timely and accurate manner. But today's supervisors must spend more time planning the improvements required to make their organizations leaner and more responsive (Chaneski, 2004).

The direct consequence of this new approach is that the role of the worker has changed. They have responsibility for management; they must recognize by their own what to do, how to do it and when it needs to be done. According to Chaneski (2004) the motivation for the worker to accept this greater responsibility comes from the desire to be competitive in order to be part of the change and retain the jobs.

The author describes 6 changes responsible of an effective, customer-focused organization with high employee morale.

To be valuable to the organization the worker must be willing to learn new skills. In a lean enterprise flexibility is key and the ability to perform different tasks is critical. Every worker must recognize the importance of offering ideas to the management to find ways to do things better. Workers must make decisions, even if decision-making isn't a risk-free activity. With practice they must gain confidence. Workers must share responsibility for implementing change. They must contribute to the driver of change, they must loose passive behaviours in order to ensure a successful transition. Workers must understand that improvement is constant and endless, competitors learn the same techniques you are using and get better than you. It's a race where you can never feel to be arrived. Last, gentle peer pressure to push employees happy with the status quo is necessary. The fundamental aim is to eliminate obstruction to change (Chaneski, 2004).

Employee engagement comes from a workplace approach creating the right conditions for all organization's members to be the best version of themselves each day, to be truly committed and motivated to reach the organization's mission (goals and values). In this way they become a key driver of the organizational success and of their own well-being.

Unfortunately, engagement in the workplace is an often-misunderstood concept: few managers and organizations actually understand how to empower employees, their most important assets (McMahon 2016).

According to Tim McMahon (2016) there are 5 ways to improve employee engagement in a lean organization: encourage open communication: using surveys, suggestion boxes and team meetings an organization must allow employees to express their ideas, perspectives and concerns; support employees in their work and growth: to favour employees' personal development it is fundamental to provide them with education and learning opportunities, training and coaching; collaborate and share on problem-solving: employees must be empowered allowing them to work through problems or issues on their own, or collaboratively in order to increase their sense of empowerment and engagement; share more, not less: to keep everyone pointed in the same direction an organization needs to inform employees about what's going on, in this way they can stay in touch with other's work and directly see how everyone's work is fundamental to reach the company's mission; culture of continuous learning: companies must increase the number of knowledge workers using training programs, workshops, brainstorming sessions, and focus group discussion. This will improve performance, increase the pace and sustainability of growth and outcompete competitors (McMahon 2016).

Thus, employee involvement cultivates an atmosphere of collaboration, increases retention of talented staff, and intensifies dedication and commitment. Employees develop a sense of ownership over proposed changes when they are involved. Employee engagement can not only make a real difference, it can set the great organizations apart from the merely good ones (McMahon 2016).

Engaging employees is the process of enabling them to think, behave, act, react and control their work in more autonomous ways providing the tools, training, resources, encouragement and motivation workers need to perform at the optimum level (McMahon 2016).

Lean culture contributes to create engagement in 3 ways according to Zoberis (2014).

Lean Culture Means More Employee Feedback

Within a lean manufacturing culture, we surpass the implementation orientation that actually impedes the progress of an organization and the development of people's capabilities and we embrace a do-it-yourself problem-solving mode (Rother 2010, p.7).

According to Mike Rother (2010), the ability of a company to continuously improve and adapt lies in the capabilities of people to understand situations, learn from them and solve problems developing smart solutions. Companies must be sensitive to the signals launched by the unclear and unpredictable outside world and must be able to deal adequately with them. Thus, for the adaptiveness, competitiveness and survival of the organization it is fundamental to have all the workforce improving day by day.

In this way the entire workforce is charged with solving the workplace problems, creating a strong intellectual capital. Systematic improvement and adaptation go beyond just a problem-solving technique, creating a firm-specific behaviour routine. The management challenge is to develop and maintain this behaviour. In a lean environment we give to employees the opportunity to be active parts of the improvement's initiatives taken at the process level that is where advances and adaptation tend to take place (Zoberis 2014, Rother 2010).

How can we approach process improvements? According to Mike Rother (2010) there are 3 ways.

Workshops

A team of people are temporally put together to focus on a particular process. They are an occasional project-style improvement effort lasting up to 5 days (Rother 2010, p.25).

Value-stream mapping

It is a method used for keeping an eye on the overall organization to help ensure the process-level improvement efforts. Looking at the flow of material and information and the associated lead-time, across multiple process, it reveals improvements potentials and places (Rother 2010, p.26).

The action-item list

It is the most widely used approach for process improvement. It consists in open points lists used to try to manage the improvement process, listing improvement ideas and action items to

be implemented at a process. They originate from recording process problems, brainstorming, problem-solving activities, waste walks, value-stream mapping (Rother 2010, p.28).

These lean projects give your employees the chance to provide feedback on current processes and then directly address those concerns themselves. By soliciting and using workers' feedback, you increase employee engagement with your company. Not only does a lean culture foster a habit of continual feedback, but it equally encourages employees to get involved in making a solution happen – whether that's in the boardroom or on the manufacturing floor (Zoberis 2014).

Lean Culture Means More Team Collaboration

In a lean organization, from day-to-day activities to process improvements, employees have several occasions to work together in teamwork and to communicate and collaborate across departmental boundaries thanks to the rupture between the different functions of the organization. Cross-training allows the company to save on training costs and to allow workers to develop a wide skillset favouring a smooth business process (Zoberis 2014).

Lean Culture Means More Development Opportunities

Lean culture increases employee engagement also through personal and professional development of the workforce.

Thanks to a no-blame focus on the process failures are not stigmatized, instead they are used to learn and move forward. Thus, people are assumed to do their best and that problems are caused by the system within which people work, focusing on the reason of the problem it can be understood and a solution that improves the process found (Rother 2010, p.141).

Moreover, according to a lean culture, it is okay to celebrate success, but we should always be looking ahead and focusing on a target condition and the next step: the benchmark to beat is yourself and your current condition (Rother 2010, p.158).

Of course, improvement doesn't happen automatically or autonomously. Managers and leaders must work hard every day to teach it and keep it going in an effective manner. Their primary task is to increase the improvement capability of people, the essence of company's strength (Rother 2010, p.185-186).

Leadership is crucial to a lean manufacturing mindset and leaders must continually involve the team in new projects and innovative ways to better service company's clients. This higher level of engagement with new projects and methods means more employees are ready to take on leadership positions in the future (Zoberis 2014).

The development of continuous improvement and adaptation, in a lean culture, considerably depends on coaching activities that consist in a mentor/mentee dialogue. This teaching method is practiced at all levels throughout the company. To each employee it is assigned an experienced colleague -a mentor- who guides him/her during the improvement process and dealing with work-related situations. It is a two-man rule, thus the mentor in turn has his or her own mentor. This relationship is not necessarily linked to the organizational hierarchy. The important consideration to highlight is that the mentor doesn't direct the mentee to the solution but rather wants to learn what and how the mentee is approaching the situation in order to teach the routine of improvement (Rother 2010, p.187-190).

Thus, crafting a lean culture requires a continuous investment of your time and resources, but the venture is well worth it: with a more engaged workforce, your business is better prepared to improve processes, develop future leaders and turn a higher profit (Zoberis 2014).

The role of leaders in a lean environment

Over the past two decades, the world has embraced lean-management thinking. What was once a set of ideas for building better cars now drives better work in general—and better results—in every- thing from the world’s largest companies to a new generation of start-ups and in every sector from healthcare to IT to financial services to non-profits. Lean transforms the entire organization, creating new forms of leadership, new ways of working together, and, above all, shared mind-sets and behaviour that strengthen an organization’s capabilities and performance (Surak 2017, p.5)

Business leaders need every worker to be more engaged. That makes the role of the leader even more critical in sustaining an environment where engagement can thrive.

A few organizations are therefore realizing what the phrase “continuous-improvement culture” really implies: the very practices that support continuous improvement must themselves improve continuously. What these leaders are called on to lead is a continuous-improvement system that’s focused on people (Surak 2017, p.6)

Fundamentally, organizations are fighting commoditization: faster innovation means that any competitive advantage solely from technical excellence is now more fleeting than ever. Instead, what increasingly matters is a whole range of human capabilities related to how companies communicate and work with customers. In this environment, lasting competitive advantage comes from the ability to learn faster, respond faster, and develop deeper ties to customers. Technologies will naturally play a crucial role, but the most promising opportunities are revealing themselves to the organizations that best manage the human beings who shape, use, and revise the new capabilities every day (Surak 2017, p.7)

What distinguishes these leaders is that they are not only redoubling their efforts with lean to create new operating models that deploy human skill with unmatched agility and responsiveness but also focusing on delivering value. As a result, such companies can respond to new problems in real time. Rather than wait for decisions to march up and down a bureaucratic citadel, teams of workers can rely on their own skills (and managerial support) to test and implement new solutions on their own (Surak 2017, p.7).

Exceptional lean companies win in the short term and thrive in the long term. This system of learning and continuous improvement becomes a virtuous cycle of more engaged workers coached by more capable managers whose more agile organizations can make more effective decisions. The complete lean management system gives any business the opportunity to face its toughest competitive pressures—to compete through learning—by building an agile, responsive, and adaptive enterprise focused on finding and attacking a wealth of new challenges (Surak 2017, p.9).

In a lean management system, one of the essential responsibilities that leaders have is to serve as role models for finding new ways of working. The leaders' perspective lets them see improvement opportunities for the system as a whole, as well as the entire range of innovations that people are starting to apply both inside and outside the organization. A leader's task is to bring those insights together so that the system can keep improving (McKinsey 2017, p.17).

Once an organization has created a new way of working, a new danger looms: that it stops evolving. Leaders therefore recognize that it isn't only the business—or even the larger organization—that has to keep changing. The fundamental management systems that define how people get their work done must evolve as well. With new, better ideas constantly arising, it's up to leaders to adapt them to their management systems so they help people at every level become more effective (McKinsey 2017, p.50).

To keep its performance improving, an enterprise must keep its management system improving, too. Fewer than 30 percent of organizations succeed in improving both their performance and their long-term health. The enduring transformations undergo repeated problem-solving cycles—identifying issues, finding root causes, implementing countermeasures, and taking the time for reflection. These cycles re-examine not just how the companies operate but also how they think about their operations. Their rigorous use of this basic structure expands their capacity for change and strengthens the interrelated disciplines of the lean management system: delivering value, developing people, discovering new ways of working, and connecting broad strategy to goals and a meaningful purpose. Holding (Cook, de Raedemaeker, Fabianowicz, and Fantoni 2017, p.52)

The problem many organizations face with lean management is how to respond to the performance advances the initial effort often produces. Ideally, organizations would continue

to pursue improvement, compounding the early impact. But, paradoxically, early success may instead play out negatively in several ways (Cook, de Raedemaeker, Fabianowicz, and Fantoni 2017, p.53).

Serious dangers are the risk to lose business purpose, leading an organization to get side-tracked. A deeper issue is the risk to focus on tools instead that on ideas leading to people that haven't fully assimilated the ideas and thus are simply experts in the tools. Another failure is changing workers' behaviour but not mind-sets. In this case people reflect old mind-sets persisting even after the apparently successful initial transformation. Finally, the last key advice is to build with balance: the entire company – as a system must accomplish the continuous improvement journey. No single part of the company will remain stronger for long unless the rest get stronger as well (Cook, de Raedemaeker, Fabianowicz, and Fantoni 2017).

Transforming an organization's performance usually means changing its culture—and that means its leaders must change how they lead (Jenkins 2017, p.60)

Few organizations undertake a transformation with the goal of changing their own culture. Their focus is on the transformation itself: an intense, organization-wide program to boost both performance and organizational health. But once they start realizing benefits, they want to keep achieving them. Thus, they quickly realize that the new ways of working are so different that making them stick is impossible without a cultural change (Jenkins 2017, p.60).

That means the leaders will need to change themselves. The transition is not easy. As with everyone else in the organization, leaders will need to know not only what they need do differently, but why changing their behaviour matters - not just to the organization's success, but to their own. Moreover, almost by definition leaders have more years of old habits to unlearn. As a result, most will need meaningful support over an extended period of time to master this new way of leading (Jenkins 2017, p.60).

So, what must leaders change? According to Jenkins (2017, p.61) there are three essential, fundamental behavioural shifts that represent a profound break from the typical way that large organizations have long encouraged leaders to behave.

The first is the ability of leader of asking questions rather than giving answers. Leaders often see their main value to the organization as providing answers and have the idea that they should be at the centre of problem solving. Whereas, learning how to listen, reflect, and trust

in the team is the strategic capability of leaders. They must be aware that the people closest to a problem generally understand it best (Jenkins 2017).

The second shift is the habit of leaders of digging for root causes of problems rather than looking for quick fixes because when problems aren't fully solved, they inevitably return - creating still more waste that the organization could have avoided. Thus, this is a new era where leaders are recognized and valued for building people's problem-solving capabilities (Jenkins 2017).

The third behaviour involves connecting the future to today by translating the organization's purpose and business objectives into practical targets that people can work toward each day. That constant cycle requires leaders to understand and explain how their people's work contributes to the organization's ambitions. And they must understand their people's goals as well, recognizing that work is more engaging when it has meaning to the individual (Jenkins 2017, p.63).

The hope for any organization is that instilling a continuous-improvement culture becomes a catalyst that makes further improvement easier. To achieve the ongoing, incremental impact they want leaders and managers must fundamentally change how they lead and manage (Eichfeld, Golding, Hamilton, and Robinson 2017, p. 64).

Good daily management rests on a few basic disciplines: understand how people are actually delivering for customers, give people regular feedback and coaching, teach people how to solve problems, and create a physically and emotionally safe environment where people can engage in meaningful dialogue about their work (Eichfeld, Golding, Hamilton, and Robinson 2017, p. 65).

Four leader behaviours - be supportive, focus on results, seek different perspectives, and solve problems effectively - accounts for the variance in leadership quality between strong and weak organizations. The more consistent leaders and managers are in these behaviours—in other words, the more they turn the behaviours into a new standard for how they work—the more continuous improvement they are likely to achieve (Eichfeld, Golding, Hamilton, and Robinson 2017, p. 65).

For continuous improvement to take off, the vast majority of management must consciously work together, as one very large team, to execute these disciplines every day as “leader standard work.” (Eichfeld, Golding, Hamilton, and Robinson 2017, p. 65).

At organizations that are transforming themselves through lean management, four success factors make a major impact in helping make capability building permanent (De Raedemaecker, Feijoo, Jacquemont, and Tamayo 2017, p.75).

Providing good service has never been easy. And service expectations are only rising: unprecedented technological change and access to data have made customers better informed and more demanding than ever, while the rise of social media gives them more power to publicize their experiences—making each customer interaction more important. And the way many organizations are achieving this impact is by adopting and reinforcing the four integrated lean-management disciplines: delivering value, enabling people, discovering better ways of working, and connecting strategy, goals, and meaningful purpose (De Raedemaecker, Feijoo, Jacquemont, and Tamayo 2017, p.75).

One of the four - enabling people to lead and contribute to their fullest potential - is especially critical in transforming a large organization, as well as in ensuring that it will continue improving into the future. At its core is a strong focus on capability building at all levels, which then becomes an integral part of how the business operates. Capability building thus involves more than just teaching people how to complete their day-to-day tasks. Instead, it focuses on a broader set of skills that increase each employee's value to the organization, such as learning to reach problems' root causes, or providing effective feedback. With the greater value that more skilled people can create, the organization will enhance its unique competitive position. That means tailoring the capability building to the organization's business context, culture, and needs—especially to the factors that allow the organization to create value (De Raedemaecker, Feijoo, Jacquemont, and Tamayo 2017, p.76).

Once an organization knows which capabilities it must build, though, the next challenge is to start building them quickly and at scale - two prerequisites for a transformation to build credibility across an organization and sustain its momentum. That's where additional factors come into play. Those large organizations that have most dramatically accelerated their capability building have integrated four success factors, which together support the transformation and the organization's continued progress once the major changes are in place (De Raedemaecker, Feijoo, Jacquemont, and Tamayo 2017, p.77).

First, management must remember to engage every level of the organization: capability building is necessary at every level. Then they must create excitement and pride. For capability building to endure, people must see it as representing an opportunity for the future rather than a critique of past practices. The best programs therefore communicate a well-

defined value proposition that encompasses each level of the organization and reaches well beyond promises of career advancement. In this type of environment, people see capability building as a way to build an individual reputation. Over the longer term, robust capability building can raise the profile of a company as a desirable place to work and deepen the connection people feel to their employer. Then it's fundamental to apply a range of learning techniques. Workers need a mix of concrete experience, reflective observation, abstract conceptualization, and active experimentation. In practice, this means that as much of the learning as possible should occur in the actual workplace, ideally based on actual work during the course of the workday. The final step is to embed capability building in HR processes so that they become part of the organization's culture (De Raedemaeker, Feijoo, Jacquemont, and Tamayo 2017, p.78 - 80).

CONCLUSION

Companies can achieve the highest results when they build their transformations around the capabilities that their people need in order to make full use of their talents. Once people see the value they can create, they engage more deeply in their work in ways that give an organization not just short-term performance, but the long-term flexibility and resilience that are essential to thrive over the long term (De Raedemaeker, Feijoo, Jacquemont, and Tamayo 2017, p.80).

As an organization's management systems become more mature, leaders expand lean management's reach well beyond parts of the business that resemble the assembly lines where lean ideas originated. And doing so creates a single culture that guides how the entire enterprise does its work (McKinsey 2017, p.89).

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