# INTEGRATED MANAGEMENT SYSTEMS AND LEAN THINKING: ORGANIZATIONAL EXCELLENCE

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Key tools for the new competitive business in full compliance with regulations.

Philip P. Crosby stated that "The biggest problem of management, to realize what he has said, could be easily solved if someone would listen to it," and that "What should be clear to everyone is that people adapt to the standards of their leaders – if the management thinks that people are not involved in what they do, then they will be not really". Hence the Quality Management System and Management Systems with the structures we know today. Evermore Crosby wrote:

- "Quality is free. It's not a gift, but it's free. What coast is the lack of quality, all the actions that have to do with the work that are not done right the first time"
- "The quality is the result of an environment and a culture built with great care"
- "Quality does not cost anything, but no one will ever know until we will be able to set up a system that can measure it"
- "Quality must be built up, must not be controlled"
- "Good things happen only if you have planned them, the bad things captain by themselves"

Tracing the history of the systems and their tools of use, it's been over twenty years since Womack and Jones in the book *"The Machine That Changed the World"* coined the term "Lean Manufacturing" and when, a few years later, same authors published *"Lean Thinking: How to create value and banish waste"*. With these two volumes were revealed to the Western world which were the principles that were the basis of the Toyota production system (no more mass factory - Ford style - but factory that produced based on customer requirements eliminating all waste) and what was Lean by the interpretation of the authors.

In fact the Lean thinking can be sum up by five principles:

- specify precisely the value from the point of view of the customer for each specific product;
- mapping the value stream for each product;
- ensure that the flow will not be interrupted to reduce the time of crossing;
- make the production influenced by the Customer;
- follow the perfection ("zero defects" value in the shortest time).

Since then, the meaning of Lean has evolved. Today Lean is no longer linked only to "manufacturing". We can see Lean principles applied in R&D area with the *Lean Product Development*, in the *Procurement* area with the *Lean Supply Chain*, in accountancy with the *Lean Accounting* and, in general, in the offices with the *Lean Office*. In essence, Lean is output from the production department, becoming a guideline for efficient and effective business management: the *Lean Enterprise*.

At this point the question is: how can the Lean, born to manage the production departments in companies of mass production, be applied to realities so different from one to another, including utility companies and service? To answer this question we must first understand what it takes to move from one existing working system to a Lean organization that works successfully through the adoption of a systematic approach typical of management systems.

Contrary to what you can expect, despite the Lean principles seem so easy to understand and put into practice, many attempts to implement ended disastrously, and have led people to say that "Lean does not work here" or " Lean is the stuff for Japanese "or even" Lean cannot work with our staff, "etc. …

In fact, the most common mistake is to think that the introduction of the "rules of the game" is enough to make things work, but do not take sufficient account of that *old habits* die hard, especially when they are deep-rooted by years of daily behavior (the pioneers of the BBS – *Behaviour Based Safety* – know what it means to act effectively on the standards of behavior in order to improve the level of safety in the workplace). Roles, tasks and responsibilities are, together with awareness, activation key process and system of values and performance where improvement has no chance of being carried forward until people do not realize that it is absolutely necessary.

If you think of the behavior in the personal sphere, it becomes easy to see that the "bad" habits such as *smoking, nail biting, fidgeting with pens and key rings* cannot be changed in a single solution and, after modification, such conduct may reappear. The reason is that human habits procure a sense of comfort. The same is true in the workplace, where the old ways resurface despite the will to change, because even in the work they make us feel more at ease, and their change is as difficult as changing habits personal. The word "change" is the basis of the Deming cycle (PLAN_DO_CHECK_ACT), then of the modern management systems, where the process of transformation of the fundamental components of the processes (person_product_interument_environment) tends to continuous improvement.

In parallel to the physical changes dictated by Lean (Visual Controls, Standard Work Leaders, daily Processes of responsibilities, Discipline of Leadership, Kanban, Supermarkets, etc …) is necessary to develop the right culture in the company, which makes people aware of their habits than the new expectations. But be careful: this is not a measurable targets to be achieved only with the duties, responsibilities and objectives; corporate culture is formed through the application of a management method strongly focused on discipline, on daily practice and the use of tools to establish and maintain a persistent and intense focus on Lean processes. *Sensei Wakamatsu*, the greatest living expert on the Toyota Production System, some time ago said that despite cited as pillars of the Lean the *Just in Time* and *Autonomation*, the real strength lies in the base of these two pillars: intelligence and the wisdom of man. It is therefore with confidence in these qualities that we educate and develop the skills, expertise, wisdom, insight, the wisdom of its employees. In turn, collaborators formed in this way, will educate other people in the same manner thus starting a twirl of improvements which is known as Yukidaruma (snowball). Using his intelligence staff continues to multiply initiatives for improvement (*kaizen*) to fit to the *gemba* (company), getting closer and closer to the point of view of the customer.

In other words, for the proper *management of change*, people need to be guided to respect the process and not to change their behavior with respect to these rules. The key to success is therefore in the leadership of the Manager, be they operational or senior management, and in their ability to change their leadership style: from a model to imitate to the beginning of change, when the change is at an early stage mature. Tied to this ability is the ability to engage people in work. This means allowing people who know more about the work – the people who make the work – to be the architects of improvement. And this is as true in the production departments then in offices.

Here, therefore, that the principles of Lean, as well as that of a process through integrated management systems, can be applied in any company that is looking for a transformation from a traditional company to a model of success.

It is with the same methodology that management systems must be introduced in the company in order to obtain the required results. Indeed, the introduction of a quality management system, rather than safety or environment can be a disaster, despite the presence of manuals and detailed procedures, if the resistance to change have the upper hand.
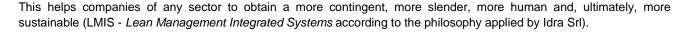
There are known several cases of companies that showed with pride to its customers certifications "on the wall" of the Direction but then had to resort to "spring cleaning" in the days leading to a renewal audit, blame the workers in this or that department if the 'audit had not been successful, and then go back to work "as we have always done." This attitude lies mainly in the low conviction by management that what is expressed by the standard is really *worth* to be pursued and then, once the necessary actions for the acquisition or renewal of certification are made, does not provide an example and does not carry checks needed to push employees to change their behavior in this sense.

This, speaking in Lean terms, is one of the greatest waste that a company can have in it: not creating the right *corporate culture*. In contrast, the acquisition of a certificate must first come from a firm and immovable conviction that this result represents a value and as such must be protected from possible failures, developing together with operational procedures as well as process ones (such as checks do, who has to do, how often should be done, who should intervene against behavior different from what's set, etc …).

In the same way in which in Lean are developed checklist for the maintenance of order and cleaning or to verify the effectiveness of Value Stream Mapping, also in the introduction of a management system is unthinkable not to develop the functionality test points of the processes and to define responsibility and frequency of audits.

The introduction in the company of a management system or the adoption of Lean are both *important changes* that take time to arrive at the best level of operation, except the principle of continuous improvement. And both of them are based on the ability to involve all staff on these issues. The method for a correct implementation, is the same for both:

1. Knowing your business
2. Laying the foundations: define processes
3. Understanding value against waste
4. Stabilizing processes
5. Visibility and visual checks
6. Improving pulled from below and not pushed from above
7. Preventing relapse to old habits: processes error-proof
8. Monitoring and improvement: Metrics.

This helps companies of any sector to obtain a more contingent, more slender, more human and, ultimately, more sustainable (LMIS - *Lean Management Integrated Systems* according to the philosophy applied by Idra Srl).

The vision of the future can germinate in the present if people begin to think that can carry out their activities in a better way, in a more effective and efficient in comparison to what they do today. And this is the real strength of the Lean culture that can be leveraged to strive for *perfection* through continuous improvement .

Last but not least, we remember the need for any implemented management system in an organization to have an adequate information system support. In view of this consideration Idra S.r.l. has developed the software solution in *Idra-Studio*, structured in five modules independent of each other but interfaced and therefore able to share data and actions both in the form of analysis and report.

➢ Module 1 – Occupational Health, Safety and Hygiene at Work, Environment and Occupational Medicine;
➢ Module 2 - Management scheme certification and ISO 14001:2004 activities;
➢ Module 3 - Management scheme certification and OHSAS 18001:2007 activities;
➢ Module 4 - Management of Training and development of Human Resources (HR Management);
➢ Module 5 - Maintenance Management.

The Team of IDRA S.r.l. is at disposal for any further deepening of the topics treated in this article, and in general, to support businesses in designing, realizing and maintaining the systems involved.

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