Building Capability for Success with Lean: THE CRITICAL COMPETENCIES

When a nation emerges from economic collapse to become the world's second largest economy in thirty years, world economists take note. When that dramatic recovery is fueled by a small number of companies, one of which, Toyota, ultimately emerges as the largest auto manufacturer in the world, business leaders also take note. At the heart of Toyota's success (emerging from near bankruptcy in the early 1950s, to having billions in cash on hand today) is something we in the West know as "Lean." That "something" has been studied and implemented, with varying degrees of success, in Western companies for the past (30) years, first in manufacturing and now in health care, the service industry and the administrative side of manufacturing. And 30 years into our experiment with Lean, we are learning that achieving and sustaining Lean operating conditions is a relentless and endless pursuit.

What Is This Thing Called Lean?

Lean is sometimes defined as "a set of concepts, principles and tools used to create and deliver the most value from the customer's perspective, while consuming the fewest resources and fully utilizing the skills and knowledge of those who do the work."

More succinctly, Lean is problem solving and its close cousin, continuous improvement, by the people working at all levels of an operation as part of their jobs. That means problem solving and continuous improvement not just by managers and "Lean specialists," and not just in special Rapid Improvement Events and Value Stream Improvement projects. It means the every day, all day long, day in and day out, solving of hundreds and thousands of problems, by everybody in an operation responding to things that don't fit and aren't working as they should within the scope of his or her job and responsibilities. Why so much focus on problem solving? Because customers change...markets change...demands and resources change...and operational performance changes. And the truly Lean organization must be equipped to deal effectively with all these changes. A business cannot sit still and survive.

What Characterizes an Operation Based on Lean Principles? Among other things, a Lean operation is one with no excess manpower, for example, one person per process staffing with no pool of backup workers, and minimum in-process stock, minimum stock in buffers, and no or minimum emergency stock.

A Lean operation is one typically characterized by work planned for every moment in a process with non-value added activities eliminated, minimum wait time, quality checks built into the process, and no build-ahead, in other words, *no slack*. The work in a Lean manufacturing operation proceeds at a *demanding pace*, progressing according to takt time in continuous flow, with model mix in the flow. Work of all types is designed so that problems are forced to the surface, made visible and immediately recognized so that countermeasures can be directed at root causes, in other words problems have *no place to hide*. Finally, Lean operations are *managed as interdependent systems*, not collections of silos with isolated tasks. That means machines serve people wherever possible, but workers must constantly serve the line to maintain its movement. It also means that workers must depend on supervisors and managers for constant support and attention to their needs so that workers have what they need when they need it so that work can proceed without delay or interruption.

What Competencies Are Required in a Lean Operation?

A truly Lean operation is a challenging place to work, one that requires everyone involved, from director to mid-manager to front line employee, to possess specific competencies in order to achieve and sustain Lean operating conditions.

In our experience, these competencies include the following for contributors at all levels, working in all types of businesses:

Persistence, which we define here as discipline in maintaining procedures, standards and schedules, at least until they are improved or discontinued;

Grasp of the Situation, that is, diligently seeking both reliable data and information from others to reach conclusions and make decisions on a broad basis of facts and confirmed patterns and trends;

Take and Share Responsibility, in other words, willingly shifting among the roles of individual contributor, team member and team leader as situations and tasks require;

Personal Integrity, defined as making decisions, taking actions in work relations and handling business issues in ways that demonstrate consistent commitment to openness, honesty, mutual respect and shared success;

Company/Business Perspective, that is, considering the needs and objectives of the business as a whole and able to focus on priorities beyond his or her own, or those of the immediate group;

Development of Self and Others, here defined as demonstrating flexibility in actively seeking to learn new skills and jobs, and willingly sharing knowledge and skill with others.

Process Management, that is, monitoring performance data and visual indicators, and using systematic problem response to control process functioning and assure targeted results;

Sensitivity, defined here as consistently treating others with respect for their capabilities, and dealing with them in ways that build and preserve working relationships

Problem Solving, that is, going beyond temporary fixes and seeking to grasp what is actually happening with problems, finding their causes and preventing the problems from reoccurring.

Why Are These Competencies Integral to Effective Lean Operations?

They are integral because individual contributors (ICs) must be fully engaged and responsible. Unlike ICs in other operations, ICs in a Lean operation can't merely fill a position, going through the motions of carrying out prescribed tasks.

Instead, they must be engaged in what they are doing and why they are doing it, assessing whether what they are doing is contributing as intended, whether it is the right thing to do and whether it is enough to do. In other words, achieving and maintaining Lean operations depends on ICs going beyond the minimum, using their discretion to see when more than the minimum is required, and being engaged enough to take the initiative to step up and step in when needed.

Responsible means ICs taking responsibility for their own performance and managing that performance within the scope of defined expectations and work standards. It means trying to work in the ways defined as normal or standard, recognizing when things have gone from normal to abnormal, and responding with individual problem solving or alerting others when individual problem solving will not suffice.

For those who are aware of Lean's focus on standardized work, it may sound strange to hear that a responsible employee is expected both to maintain the required level of performance AND take initiative. That is one of the paradoxes that characterize Lean. Standardized work is intended to make it easier for ICs to achieve expected outputs while retaining sufficient mindshare to attend to quality, timeliness, recognition of abnormality and problems that threaten their own work, the operation as a whole, and the ability to deliver to customers.

Fundamentally, a Lean operation requires engaged and responsible employees at all levels, who are: able and willing to shift, adapt and learn; able and willing to think as a business person of the company and contribute as and where needed for the success of all; and able and willing to take responsibility for their performance and address problems within the scope of their jobs.

What Do ICs Need to be Engaged in and Responsible for?

In a truly Lean operation, ICs need to be continuously engaged in and responsiblefor the following: **Confronting obstacles and competing demands** without being deterred, maintaining focus on schedules and targeted results, and systematically following up on decisions and changes;

Going beyond initial impressions and assumptions to find out what is actually happening, comparing current conditions to requirements and clarifying gaps in performance, & shifting focus from immediate issues to step back and realistically assess their importance & urgency;

Reaching out to draw others into projects when needed and freely joining others to support their efforts when asked, taking leadership when appropriate for the larger good, and readily following the lead of others, contributing as needed.

Preserving the trust of co-workers by following through on commitments, freely sharing credit where due, and taking responsibility for own performance without deflecting blame or making excuses;

Considering the purpose of one's own responsibilities in the context of company needs and goals, making decisions consistent with company priorities and values, assuring timely delivery of the value and quality promised before pursuing elimination of waste, and considering the impact of one's own plans and actions on other areas to avoid potential conflicts and anticipate barriers;

Realistically assessing one's own capabilities and being self-directing in seeking to acquire skills and knowledge, examining both the outcomes and process of decisions and actions and reflecting on the reasons for both successes and failures, contributing to the development of others by sharing, coaching and questioning.

Using visualization tools to indicate normal or standard operating conditions and to make abnormal situations immediately apparent, following defined processes and established procedures without shortcuts or work-arounds, initiating problem solving when intended results cannot be achieved and following a systematic cycle of Plan, Test, Evaluate and Adjust to resolve problems;

Stopping and listening to the observations and ideas of others, hearing their explanations and proposals without interruption, acknowledging their concerns and contributions, making good faith effort to explain their own intentions thoroughly, responding to questions honestly, participating openly in exchanges of ideas, asserting their own opinions without alienating others, and leading in seeking common ground and opportunities for agreement;

Focusing on the real problems in workplace issues by confirming actual conditions, systematically investigating the reasons problems exist, selecting practical and feasible countermeasures to problems that address their root causes, and following through on implementation efforts until the expected impact of countermeasures is confirmed.

Traditionally jobs are described by position descriptions and defined in terms of tasks and activities, and decision making authority—or the lack of it. In a Lean operation it is recognized that not everything needed from a position can be defined in advance and that in fact it is limiting to try to do so. Rather, the focus in a Lean operation is on the role that the occupant of a position is responsible for playing in the operation as a whole. Role is not about filling a disconnected slot and performing discrete activities and tasks. It is about being part of a larger system and contributing to the successful performance of that system by one's performance and contribution. It is also about the individual thinking about what he or she needs to contribute and why.

A person's role consists of a combination of the following:

- the position the IC occupies in a group or function within an operation or company,
- the purpose of that group, function, operation or company,
- the processes the IC works in or is responsible for,
- and the IC's performance in terms of delivery, quality and cost of the contribution required from the IC and his or her group, function, operation and company.

That includes being able and willing to respond when things do not go as planned in the part of the operation one is responsible for. It means being a problem solver within the context and scope of the part of the operation that the IC "owns", to ensure that his or her performance contributes as needed. And, from the employee perspective, that feeling of "ownership" is what is engaging and motivating about their role and responsibility in a Lean work environment.

What Are the Responsibilities of Leaders in a Lean Operation?

At base, the responsibilities of leaders in a Lean operation are to:

I) make sure that ICs are working on things that are in the greatest service of the customer and the business as a whole and 2) create, sustain and improve the working environment and working conditions that enable ICs to do their work with as little interruption and interference as possible, at whatever level that work is performed.

Making sure that ICs are working on the right things at whatever level means leaders have to be actively engaged in understanding the business situation of the organization, determine what it needs to focus on for survival and success, and translate those aims into concrete things to be worked on and problems to address in the organization. Creating, sustaining and improving an enabling environment means both **I**) building capability within the system, the work processes, and the vertical and horizontal relationships within the operation and the company so that they are aligned to help the department or function achieve the aims that have been identified for success, and **2**) helping ICs at whatever level develop the knowledge, skills and job handling abilities to perform as expected and assuring that they have easy access to the resources, information and support they need to do their jobs and perform in their roles. What Competencies Do Lean Managers and Leaders Need to Fulfill These Responsibilities?

In our experience, these competencies include the following for all managers and leaders within a Lean organization: **Develop Strategy,** that is, grasping the demands and threats that conditions and trends in the environment create for the company, and responding by focusing the function, department or unit on the critical few improvements in performance and capability needed for long-term success;

Deploy and Align, defined here as translating company strategies and objectives into concrete performance and improvement goals for the function, department or unit, and actively participating in reviews and discussions to assure plans and progress have the needed business impact;

Build Capability, that is, effectively leading development of performance capability at the organizational, operational and individual levels as demonstrated by the unit's consistent contribution to the success of the business;

Create Enabling Environment, in other words, demonstrating a recognition that employees creating value for customers are the most essential part of the operation by striving to maintain a workplace and atmosphere where employees can perform their responsibilities successfully;

Deliver Results, here defined as setting and consistently meeting safety, quality, delivery, volume, timing, cost and productivity targets for performance by the function, department or unit that meet the needs of the operation or business;

Facilitate and Influence, that is, taking leadership in the organization when appropriate by engaging others in sound processes for thinking through problems and issues and by advocating consistency with company values and policies in decision making and relationship; and

Coordinate and Collaborate, defined as initiating or joining problem solving efforts and projects with other functions, departments and units to address shared concerns and achieve needed results, and consistently working to make these efforts productive.

These capabilities on the part of Lean leaders make it possible for engaged and responsible employees to be informed and aware, self-directed, self-managing and self-initiating problem solvers. And they are the capabilities Lean leaders need to perform their own roles effectively in a Lean operation or organization.

Conclusion:

Following this brief look at the roles and responsibilities of Lean ICs and leaders, it should be apparent that what we have described is not business as usual or employees working as usual in most American companies.

Workers in Lean operations are expected to step up and contribute what workers are not typically expected to, which is why the identification of the "Lean requisite" competencies is so important. Furthermore, if you are going to put these requirements on employees and expect them to be engaged, thoughtful and responsible performers and problem solvers, you need to ask whether you have the type of culture, environment and leadership that will enable their success.

For example, do employees know or believe that:

- They are allowed to point out and react to problems at their level?
- Their supervisors believe the employees are capable of addressing problems at their level?
- They have the means and support to address problems at their level?
- Addressing the problems they recognize is critical to the common good, i.e., the performance of their group, their department and the company?
- They have tools to distinguish normal and abnormal and the ability to self-manage their work performance to a large extent?
- Addressing problems matters, i.e., that it is worthwhile for the company, their group, their department and themselves personally?
- Addressing problems will lead somewhere, e.g., to growth, job satisfaction, a step toward advancement?

If the answers to these the majority of these questions is No, then creating these condition will need to be part of the work of becoming a Lean operation or organization, or the full benefit of having individual contributors and leaders with the capabilities described here will be difficult if not impossible to realize.

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