Transferring lean management infrastructure for increasing productivity

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Abstract: *These years, manufacturing function have been transferred rapidly and globally from matured countries to emerging countries . In this paper is about the critical elements for successful transfer of lean management among sites and countries. Based on this general descriptive analysis, current global transfer activity of Lean as well as its future direction is also described. According to the gradual progress of lean management transfer, necessity of its refinement/reinforcement is recognized and some research subjects are proposed for contributing further encouragement of its global activities. In this paper, based on this understanding, requisites for transfer of lean management are discussed through investigating global activity of Lean and specification of infrastructure enabling its smooth transfer is examined.*

Keywords: Lean Management, Global Transfer, TPM, KAIZEN, TQM

1. Introduction

These years, manufacturing function have been transferred rapidly and globally from matured countries to emerging countries . Even global industries, which have multi-national basis, are trying to make aggressive direct investment to new operation sites where low procurement cost of manufacturing resources and rapid economic growth are expected . However, in such situation, there are usually serious shortages of labour resources with necessary skills, facility resources with necessary function as well as proper maintenance function, suppliers with required performance etc. Then, companies have another burden of these new management problems.

To overcome these tough problems, management technology such as improvement methods carries out significant role for many years in Japan. This technology is

supposed to perform its relevant role to cope with new dimensional management problem solving in current ongoing rapid globalization. On the other hand of this aspect, serious shortage of management engineers in younger generation is pointed out. This phenomenon is not only the case in Japan, but also in most of matured countries depending on its seriousness. In industrializing countries, on the contrary, structure of population maintains almost Pyramid shape and it is recognized to be a serious problem how to transmit the know-how of management technology to mass of young generation. Shortage of skilled management engineers, who are the drivers to contribute performance of manufacturing function, is now world common biggest problem.

In this paper, based on this understanding, requisites for transfer of lean management are discussed through investigating global activity of Lean Management and specification of infrastructure enabling its smooth transfer is examined.

2. Literature review

The face of manufacturing has changed in the space of a decade. The advent of the Internet and ubiquitous implementation of Web-based technologies and business strategies—so integral to today's commerce that one almost has to labor to remember what business life was like before their existence—have dramatically changed the marketplace. Local has become global. Push has become pull. Time has become real time. Monolithic enterprises have given way to extended supply chains, and the considered focus of manufacturing executives now has to expand beyond their own companies per se to include suppliers, partners and, above all, customers.

Today, the real cost reduction opportunities for many companies are in the linkages to suppliers and customers. As orders are processed through digital channels, demand changes moment by moment. In order to respond to such change—and keep the costs of responding at minimum levels—companies must have the capabilities to meet demand as it occurs.

Conventional mass production manufacturing models lack the flexibility to respond as rapidly as necessary in today's marketplace. Push-based mass production models that evolved from a bygone era result in extended lead times, excess inventory, poor quality and a vicious cycle where high inventory translates to longer lead times and a value stream that is no longer responsive to the customer and the changing needs of the customer. An accounting mentality of "low per piece cost" led to pursuit of volume – at the piece part level – with questionable decisions about manufacturing equipment, flows, organization, etc. taking place. Volume covered all ills – whether it is high setups, quality issues or any of a number of other problems.

Before the emergence of Toyota Production System in 1940, mass production which came from Henry Ford in the early 20th century, famously for the Ford Model-T was popularized around the world for many years, a large number of companies adopted this revolutionized production system, even now, many industries are still only appropriate for mass production rather than lean production. Because of the weak economic environment after World War II, companies in Japan could not afford too much cost in manufacturing products as western companies;

they had to explore some other production patterns with less cost and high efficiency. The automotive manufacture Toyota was the one that succeed in contriving a novel production system that had the contribution to reduce costs, increase efficiency and produce better quality compared to mass production. Consequently, this remarkable production pattern, as one of key factors of the success of Toyota makes Toyota prosper and become one of the most important automotive manufactures in the world.

In 1990, Americans James P. Womack and Daniel T. Jones extracted the most important and essential principles of Toyota Production System and created a new production philosophy named "Lean production" in the book The Machine That Changed the World (Womack & Jones, 1990). Lean production is a combination of mass production and craft production . Mass production which was from USA and famous for Ford Model can produce a large amount of standardized products once on the production lines, however, the lack of variety and flexibility could be resulted due to the standardized production, which means it is not flexible to change or redesign those products that are already on the production lines. Craft production is a traditional production technique that was used in the earlier time of manufacturing. During that period, the order was very few, sometimes only one or two and every product was produced manually. As the consequence, high variety and good quality could be achieved but less output. Therefore manufacturers can produce products that completely satisfy the customers' need.

The reason why lean production is designed is that the manufacturers want to have more competitive in the market, meet varieties of customers' need, acquire higher quality of products, and obtain more profit. Lean production aims to surpass the quality of craft production and reduce the waste of mass production. The products which are manufactured using lean production strategy will have both the craft production' good quality and mass production' large amount, as well as the lowest waste and cost. There are 7 deadly wastes (Taiichi,O., 1988) defined by Toyota (see the table.1).

Table 1. *The seven deadly wastes*

Waste Category	Description	Countermeasures (Lean Tools)
Overproduction	Making something before it is truly needed. This is considered a particularly serious form of waste because it leads to excess inventory (e.g. safety stock) that typically masks many other underlying problems and inefficiencies.	• Pace production so that rate of manufacturing matches the rate of customer demand (Takt Time). • Use a pull system to control how much is manufactured (Kanban). • Reduce setup times so that smaller batches can be economically manufactured (SMED).

Waste Category	Description	Countermeasures (Lean Tools)
Waiting	Time when work-in-process is waiting for the next step in production. It can be truly illuminating to look at the time interval from order to delivery and ask – how much of that time is actually spent on true value-added manufacturing.	• Design processes so that the flow is continuous and there are minimal (or no) buffers between steps in production (Continuous Flow). • Use standardized work instructions to ensure that a consistent method and consistent times are used for each step of production (Standardized Work).
Transport	Unnecessary movement of materials, work-in-process or finished goods.	• Make sure work-in-process is not placed into inventory (Continuous Flow). • Design a linear, sequential flow from raw materials to finished goods (Value Stream Mapping).
Motion	Unnecessary movement of people.	• Ensure that work areas are neat and organized (5S). • Work with plant floor employees to brainstorm improvements in their work areas (Kaizen). • Consider alternate arrangements of equipment that reduce motion (Value Stream Mapping).
Over processing	More processing than is needed to produce what the customer requires. This is often one of the more difficult wastes to detect and eliminate.	• Review sales and marketing requirements and compare them to finished goods (Hoshin Kanri). • Look for potential simplifications to the manufacturing process (Kaizen).
Inventory	Production (raw materials, work-in process, or finished goods) that goes beyond supporting the immediate need.	• Refer to Overproduction countermeasures (Takt Time, Kanban, and SMED). • Reduce or eliminate buffers between steps in production as these also hold inventory (Continuous Flow). • Bring raw materials in only as they are needed (Just In Time).

Waste Category	Description	Countermeasures (Lean Tools)
Defects	Production that is scrap or requires rework.	• Design processes so they are less likely to produce defects (Poka-Yoke). • Design processes to detect abnormalities so they can be immediately corrected (Jidoka). • Look for the single most frequent defect and determine why it occurs (Root Cause Analysis). • Create work instructions that provide a consistent way of manufacturing the part. (Standardized Work).

Five fundamental and essential principles of lean production are briefly explained following and also some examples of the principles can be found in literature:

• **Value**. Precisely identify the value according to the final customer's perspective, which means that companies should precisely understand the specific requirements from the customers view not from the companies viewpoint.

• **Value stream.** This is a route of all specific actions required to produce a product from the raw materials to the end customers. In this step, enormous numbers of muda will be exposed by using a tool called Value Stream Mapping (VSM) which greatly helps to identify and reduce the waste in the value stream. Three types of activities are indentified in this step: Value-adding activities, Non-value adding activities and Non-value adding but necessary activities.

• **Flow.** Design the value-adding activities to be a continuous and smooth single product flow, which leads to short lead time, less cost, good quality and no inventory between processes.

• **Pull.** It is the most famous and important principle of lean production. Pull strategy indicates that not produce anything until receive a customers' order, which means manufacturing is pulled by end customers completely. It is the opposite of push strategy that suggests that manufacture a large amount numbers of products in inventory in advance according to demand forecasting, which would result in high inventory, unnecessary over producing and slow response to changes.

• **Perfection**. Pursuing perfection is the final essential of lean production and also the result of continuous improvement. The aim of perfection is to find and eliminate all muda (wastes) in the processes in order to provide customer with better products or service. Continuous improvement, Six Sigma, TQM (Total Quality Management) and visual management, and etc. are usually used to gain perfection.

Moreover, some ***tools and techniques of lean production*** based on those five principles above are presented: Eliminating non-value adding activities, Continuous improvement, Flexible information system, Takt-time, Standardized work, Visual control, Just-In-Time (JIT) production and delivery, Multi-team-based working, Integration

of suppliers. There are 25 (Masaki, I., 1997) very useful Lean tools that were standardized in the last 20 years (see the table.2).

3.Culture difference and organizational changes

The relationship between lean production and culture is just the same as the relationship between the footstone and the building. Same footstone can be built into different buildings which are varied and decided by architects, cost and functionality.

Lean production concept is the footstone and the basic principles are the same; culture, policy and people like the architects, cost and functionality, they will decide which principles of lean production concept should be used, where they should be applied, how many of the principles should be adopted and to what extent they should be utilized in terms of different conditions.

In fact, a different culture is not the essential problem for implementing lean production, but is something within it. It is unavoidable that different countries have different local custom and different industrial environments: labor density, degrees of development, industrialization, education, traffic situation, price of land and so on. All make companies have to be taken into account when putting lean production into practice because factor variations could lead different results when applying lean production, and sometimes, lean production is not suitable at all in some extreme situations. Therefore, finding the appropriate principles of lean production is the crucial step for companies executing lean production successfully.

In short, culture differences indeed exist in different geographical regions. Nevertheless, the essential factors of affecting the implementation of lean production, just as mentioned above, is not the culture itself but something within it and companies' policies are another fundamental aspect for carrying out different lean production. The implementation of lean production changes the structures of organization and administration of companies dramatically, but it indeed makes a positive impact on administration performances and the overall competitiveness.

Table 2. *Top 25 Lean tools*

Lean Tool	What Is It?	How Does It Help?
5S	Organize the work area: • Sort (eliminate that which is not needed) • Set In Order (organize remaining items) • Shine (clean and inspect work area) • Standardize (write standards for above) • Sustain (regularly apply the standards)	Eliminates waste that results from a poorly organized work area (e.g. wasting time looking for a tool).

Lean Tool	What Is It?	How Does It Help?
Andon	Visual feedback system for the plant floor that indicates production status, alerts when assistance is needed, and empowers operators to stop the production process.	Acts as a real-time communication tool for the plant floor that brings immediate attention to problems as they occur– so they can be instantly addressed.
Bottleneck Analysis	Identify which part of the manufacturing process limits the overall throughput and improve the performance of that part of the process.	Improves throughput by strengthening the weakest link in the manufacturing process.
Continuous Flow	Manufacturing where work-in-process smoothly flows through production with minimal (or no) buffers between steps of the manufacturing process.	Eliminates many forms of waste (e.g. inventory, waiting time, and transport).
Gemba (The Real Place)	A philosophy that reminds us to get out of our offices and spend time on the plant floor – the place where real action occurs.	Promotes a deep and thorough understanding of real world manufacturing issues – by first-hand observation and by talking with plant floor employees.
Heijunka (Level Scheduling)	A form of production scheduling that purposely manufactures in much smaller batches by sequencing (mixing) product variants within the same process.	Reduces lead times (since each product or variant is manufactured more frequently) and inventory (since batches are smaller).
Hoshin Kanri (Policy Deployment)	Align the goals of the company (Strategy), with the plans of middle management (Tactics) and the work performed on the plant floor (Action).	Ensures that progress towards strategic goals is consistent and thorough – eliminating the waste that comes from poor communication and inconsistent direction.
Jidoka (Autonomation)	Design equipment to partially automate the manufacturing process (partial automation is typically much less expensive than full automation) and to automatically stop when defects are detected.	After Jidoka, workers can frequently monitor multiple stations (reducing labor costs) and many quality issues can be detected immediately (improving quality).

Lean Tool	What Is It?	How Does It Help?
Just-In-Time (JIT)	Pull parts through production based on customer demand instead of pushing parts through production based on projected demand. Relies on many lean tools, such as Continuous Flow, Heijunka, Kanban, Standardized Work and Takt Time.	Highly effective in reducing inventory levels. Improves cash flow and reduces space requirements.
Kaizen (Continuous Improvement)	A strategy where employees work together proactively to achieve regular, incremental improvements in the manufacturing process.	Combines the collective talents of a company to create an engine for continually eliminating waste from manufacturing processes.
Kanban (Pull System)	A method of regulating the flow of goods both within the factory and with outside suppliers and customers. Based on automatic replenishment through signal cards that indicate when more goods are needed.	Eliminates waste from inventory and overproduction. Can eliminate the need for physical inventories (instead relying on signal cards to indicate when more goods need to be ordered).
KPI (Key Performance Indicators)	Metrics designed to track and encourage progress towards critical goals of the organization. Strongly promoted KPIs can be extremely powerful drivers of behavior – so it is important to carefully select KPIs that will drive desired behavior.	The best manufacturing KPIs: • Are aligned with top-level strategic goals. • Are effective at exposing and quantifying waste. • Are readily influenced by plant floor employees.
Muda (Waste) Scheduling)	Anything in the manufacturing process that does not add value from the customer's perspective.	Eliminating muda (waste) is the primary focus of lean manufacturing.

There are also some changes caused by implementation of lean production, including reducing workforce and identifying duties of the rest, training employees to be multi-skilled, building cross-functional teams or departments, blurring boundaries among departments, building convenient and fast information system and so on.

Actually, the failure of lean production in some traditional companies is caused by the failure of organizational changes. Thus, administration and organization management are crucial for implementing lean production. Communication and education are two keys to apply lean production successfully:

• ***Lean production emphasizes cooperation and teamwork, thus communication*** is an absolutely indispensable part to achieve lean production successfully. Some evidence

shows that most of poor communication happens among departments or external companies, such as supply chain. Therefore, communication needs to be carried out not only within workers and teams, but also among departments, it should be penetrated the whole companies from management level to shop floor operators, from internal to external and from suppliers to customers. Managers should work and communicate with shop floor workers closely and frequently in order to get information about manufacturing accurately and in time, and then plan economic scale schedules, which leads to improve efficiency, reduce cost and time.

• ***Education*** is another important factor to organizational changes caused by lean production especially for traditional companies. Employees are accustomed to traditional manufacturing style, and might reject these new concepts at the beginning; moreover, employees may feel difficult to learn these new concepts without managers' help. Consequently, in order to help workers to adapt lean production as soon as possible, managers need to: first, explain clearly what the lean production is and why they need to implement it; second, provide some materials or training lessons to help workers to join in lean production process; last, show a implementation plans and point out the goal they will achieve. In addition, some encouragement policies such as remuneration system are good and easy for workers to understand the complex goal of lean production.

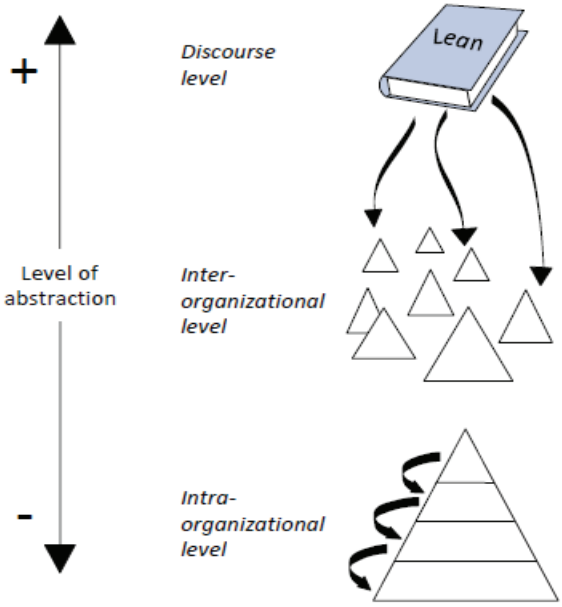
4. Transfering lean production infrastructure

The translation of management concepts, according to the proposed model is to be interpreted as a circular process, feeding on and feeding back to the discourse. Given a certain point in time, we can identify a set of institutionalized practices and ideas in the management discourse.

Coming from a period where organizational culture, participative strategies and customer focus has been predominating factors in the management discourse, we are perhaps starting to see a move transferring lean production from a normative to a rational management discourse. Management concepts are reconstructed and commoditized and then disseminated to organizations through the process of inter-organizational transferring. Once inside the organizational framework, the concept will be met by networks of actors. Based on the transferring competence within the organization, different modes of interpretation of the encountered idea will be applied and the idea will be transferred by individuals and networks of actors within and outside the organization (e.g. consultants, business partners etc.) intra-organizational transferring. The transferring competence within these networks will determine the basis for application of the concept. Since the concepts themselves are always more or less ambiguous in nature they need to be transferring to fit the context, thus creating a need for transferring competence within the transferring network in the organization.

In order to provide a concept with strong inscriptions, it would need to be adapted to a specific branch of industry, a certain category of organizations, or limit its applicability in some other way. A management concept with the universal range of applicability as argued (Womack ,1990) requires weak inscriptions, so that the concept can be interpreted to fit the organization that chooses to take it in.

Fig. 1. Lean production from the academic discourse to practice within organizations



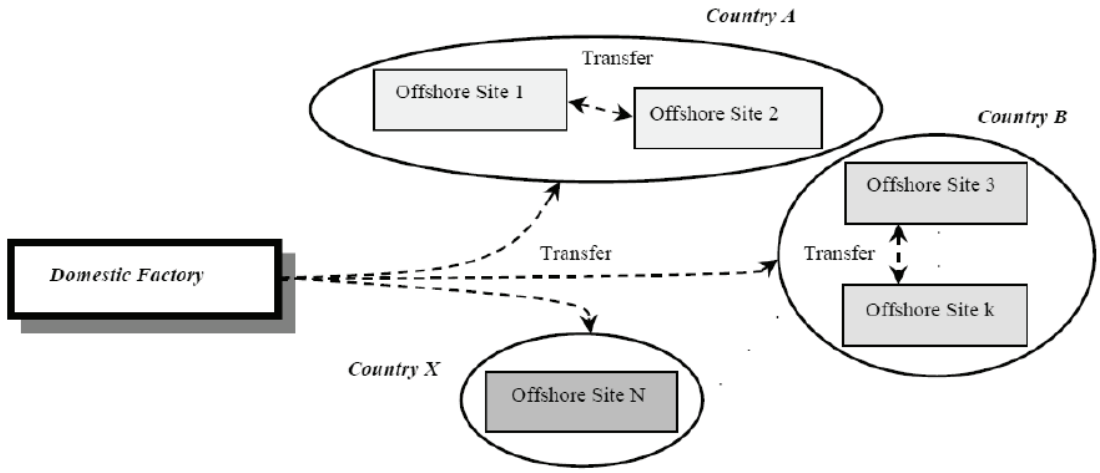
During the intra-organizational transferring process, the concept will be subject to many possible modes of transferring. When considering several networks and/or actors within an organization, framework can be expanded to include combinations of the two modes of translation, i.e. translations that are both intentional and unintentional at the same time. When the opinion of one translating actor or network differs from that of another, this combination may come into play. The management concept is interpreted in different ways and conflicting action programs are produced. The strongest action program will be the one that has supporting devices with the strongest inscriptions. If a concept related action program has sufficiently strong inscriptions, it could be seen as a prescription and the possibility/risk of further transferring of the concept is minimized. This allows us to speak of direct application of the idea, provided that the practice undergoes actual change and the application is successful. If the idea does not deliver the promised results, the effort will most likely be characterized as a failure. The application may then be seen as a potential success story that may be taking out of context and fed back to the discourse by similar means as discussed above, strengthening the discourse surrounding the idea. If, however, the transferring networks within the organization have insufficient transferring competence, the inscriptions in the idea and the devices mobilized in its support may be too weak to ensure an effective application. The idea may be further transferred to suit the needs of other networks, leading to decoupling between the transferring and the effectuating networks.

5. Direction and requisites of future lean management

Nowadays, Lean is one of the well known management scheme all over the world because of its rapid globalization. Therefore, in this chapter, the feature of this scheme together with improvement tools is investigated to extract the essential elements for successful global transmission. Due to recent rapid globalization, Lean scheme has to reinforce various aspects of its feature and there are 3 major directions. These are now progressing in terms of simultaneous improvement:

1) Geographically horizontal expansion (See Fig. 3).

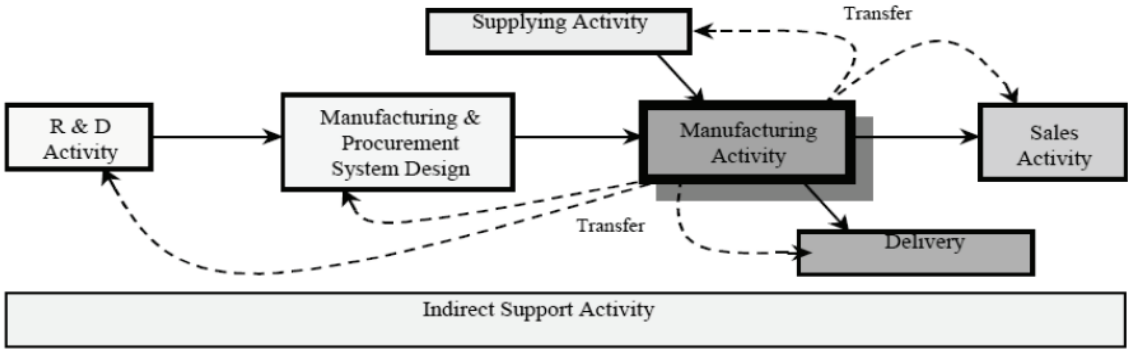
Fig. 3. Geographic Transfer of Lean Management Infrastructure



This extension is improvement technology transfer to offshore sites operating under various business environments. This activity is classified into 3 categories, i.e. transfer from mother factory to offshore factory in the same country, transfer among offshore factories originated in the same country and transfer among offshore factories originated in the different countries.

2) Functionally horizontal expansion (See Fig. 4) .

Fig. 4. Functionally horizontal expansion



This extension is to transfer improvement technology from manufacturing to other business functions, which has been developed and accumulated in manufacturing industries, especially in its major function, i.e. factories. This includes transfer to R&D, sales, production engineering such as process design, purchasing, delivery divisions. Further, transfer to other industries such as service sector is also in this scope.

3) Vertical transfer.

This extension is to reinforcing the linkage between corporate strategy and improvement activities which is different perspective from above pattern of transfer. This indicates not only physical transfer of technology to horizontal sites/functions but also qualitative enhancement based on the rational linkage with these is extremely important for improvement of company performance.

The reasons and incentives to promote lean management transfer can be summarized into 2 major issues:

1) Reinforcement of manufacturing function. Necessity to respond the world trend of qualitative and to the quantitative requirements for manufacturing industries and necessity to respond to the maintenance requirement of world resources through ultimate elimination of loss.

2) Establishment of transfer business of lean management and its refinement. Promotion of lean recognition as an advanced country in this area and establishment of its exporter's stand point and establishment of world-class training/education function as a leading country in this area.

6. Transfer methodology for Romanian manufacturing organization

Lean Manufacturing is currently the most effective management system activities of an organization. Doing Business in Romania, located in a permanent changing, requires rapid adaptation to market requirements. Globalization of markets means increasing competition in domestic markets. Since there is a divine right to stay in business, every company in Romania must realize that sooner or later solution on the market survival is an ongoing effort to increase competitiveness. Lack of productivity is evidenced by the average weekly working, 45.9 hours in Romania, compared to 38.2 hours in the EU. Regarding the distribution of working hours in Romania only 13% of employees working less than 30 hours week and more than a fifth of the population say that out weeks working over 60 hours, respectively an average of 16.6 hours per day in Romania - well above average of other European countries. The analysis of the indicators mentioned above, working in Romania long day, and the general perception is that the pace is very intense, but recorded low productivity, limited competitiveness, and a gross national product than below the European average. It is indeed clear that the need for improving skills with direct consequences on labor productivity and competitive performance.

Before applying Lean Manufacturing principles and tools is necessary knowledge of the situation, on which you can choose the strategy of improvement and determining priorities for action. Lean Thinking uses a proven methodology with clients in its approach.

The approach is as follows:

- Deeply analyze and understand the current situation.
- Initial Pilot Activity. Create a value stream based on lean principles.
- Integration. Replicate to other areas

while taking the pilot to the next level of improvement.

This may seem simplistic; however the need to deeply understand the actual situation (versus what should be happening) is exactly what leads us to create a base line understanding of the "real current state". The path forward is based upon the company's understanding of their reality against the principles of lean. The path forward is a step by step approach. Lean Thinking consultants have the experience to be the sensei (teacher) on this journey. The activity is structured to ensure a "learning by doing" approach. Process improvement without acquisition of knowledge and lean skills is a superficial outcome and has been proven to be not sustainable. As a guideline, the following would be the typical of the methodology used:

1. Preparation. (1 – 2 days) ; (2 – 4 weeks in advance of start date):

➤View operations with key leadership stakeholders.

➤Identify suitable pilot value stream for activity.

➤Clarify expectations and the role of leadership.

➤Confirm participants for initial activity.

➤Develop Communication Plan for all employees.

2. Initial Analysis. (1 – 2 weeks) :

Cross functional team including a representative from top management. Team size depends on size of organization. Around 5 – 8 members - ideally from within the value stream.

➤Create the Material and Information Flow Diagram (Value Stream Map) of the selected pilot: Initial draft – clarifying customer's perception of "value"; Validate information by actual checking of the processes; Clear identification of the points of mura and muri ; Communicate with pilot line key members for confirmation.

➤Develop a Future State Map and Action Plan for the pilot: Provide training in appropriate lean thinking and methodology to enable the team to create the future state model line; Validate with leadership and process owners the proposed future state and plan.

3. Pilot Line Implementation Activity. (6 – 12 months typically):

➤Introduction of visualization of abnormalities and real time practical problem solving activity (RTPS) at the process.

➤Application of lean methodology and team member training to achieve the following: Stability ; Flow ; Pull / Level ; Kaizen.

➤Daily follow up by Process Leaders to practice the Lean Leadership roles and behaviors.

➤"Learn by doing" together and reflecting on progress and issues.

➤Continuous communication of activity and results to all employees.

4. Integration (2 – 5 years typically):

Scope of expansion depends on the following:

➤Will of Senior Leadership.

➤Robustness of the pilot line for sustainability.

➤Capacity of the organization to expand.

➤Ability of the model line members to support and guide the expansion to other areas as the "internal sensei".

Many companies have implemented lean. Not all are truly successful in their efforts. To ensure your success with the implementation of Lean it is important to understand some of the key factors. Companies that have realized a sustainable transformation have some common key success factors:

1. Senior Leadership actively engaged in the activity at the process.

2. Company functions are aligned and share a common philosophy, principles and concepts of the company direction.

3. Change is managed through the core business process owners:

• internal "lean experts" play a coaching role to support the core;

• accountability is clearly defined and rests with Management .

4. Lean is not perceived as "a program"

• Toyota have been on this journey for 60 years and they admit there is still so much waste;

• some companies use the term "company lifestyle change".

5. Strong supporting department engagement for kaizen:

• maintenance / Engineering have strong kaizen capabilities and responsiveness;

• supporting Business Departments are pulled in to breakthrough problems and process / system improvement opportunities.

6. Emphasis is on creating a heightened understanding of flow.

• issues that stop the flow of value are taken very seriously;

• Muri and Mura are considered Management responsibility ;

• not a "tools based approach" ;

• selection of "Lean team members" is the future company leaders.

Founder of the Toyota Production System – Taiichi Ohno was once quoted as saying *"No company will be able to successfully apply TPS unless they are facing a crisis"*. He believed it was this crisis which forced Toyota to explore and breakthrough with their Toyota Production System.

7. Conclusions

The purpose of this paper has been to contribute to the knowledge base concerning the transferring of management concepts with a specific focus on Lean Production. The underlying ambition has been to take a holistic perspective on the matter and demonstrate how different theoretical perspectives can be combined to form a model for analyzing these processes of transferring. This leads to potential communication difficulties when discussing the matter, which could be reduced through an increased awareness of the different perspectives that are associated with the concept as well as the processes that produce them.

Within industry, the concept cannot be said to be associated with a certain set of practices, but rather seems to be a label that is used to describe a variety of applications. Taking these results together indicates that it is unreasonable to expect the concept to provide certain results, but rather that these are determined by the way the concept is interpreted and translated within the organization that seeks to implement it.

Although weak inscriptions (ambiguity) of management concepts are required at the discourse level, these can cause problems when a management concept is brought inside an organization. It is indicated that insufficient transferring competence will lead to weak inscriptions, which in turn may lead to an uncontrolled and potentially ineffective

translation process, increasing the risk of undesired decoupling. Transferring should not be approached normatively. Just as with Lean Production, one cannot say that translation is good or bad, but is dependent upon the situation. One should therefore not generally strive for a certain 'level' of transferring within an organization.

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