



Dispelling the myth on lean

Lean thinking was introduced in the classical book by Womack et al “The Machines That Changed the World” in 1990, and has been further elaborated on by the countless literature that followed. However, there is still some misunderstanding on this topic. This article hopes to clarify on the misconceptions and allow the SME community to assess its relevancy to their companies.

Simply put, lean thinking means creating more value for customer with fewer resources. A lean company is a highly visual environment, where the problems and non-value steps are surfaced and employees trained and empowered to resolve them. Successful lean implementation leads to better customer satisfaction through reduced lead time, improved quality and innovation. For the company, it lowers their cost of ownership, increases productivity and empowers the employees toward continuous improvements. What are the common misconceptions that hinders industries and companies from using lean?

Misconception #1 : **Lean is only for the manufacturing industries**

The concept of lean originated from Toyota Production System, which probably led to the misconception that lean is only for manufacturing industries. Lean has been applied successfully to many other sectors such as healthcare, F&B, retail, logistics, hospitality, service outsourcing. In the Singapore Institute of Technology

flagship lean initiative LSDP (Lean Skills Development Programme), the companies onboard the programme ranges from healthcare, hospitality, F&B, service outsourcing to social enterprises. The lean principles (Just In Time, visual management (5S), error proof, standardisations, continuous improvement) are generic. It is even more important to implement lean in a service/ office environment as the non-value steps (known as waste) are not as obvious as in manufacturing.

Misconception #2 : **Lean is for MNC and large corporations**

In actual fact, it is easier to implement lean thinking across SME, where hierarchy and organization silos are less to start with. Lean thinking is not a set of tools or one-time off applications, but a philosophy that requires company-wide involvement (from management buy-in to operational level support) on a continuous basis. Retail and F&B outlets are the fastest to reap the benefits of lean, due to their smaller scale of operations. Some of the companies in our LSDP (Lean Skill Development Programme) initiative have staff strength of between 30-50 employees.

Misconception #3 : **Lean is costly to implement**

Nothing can be further from the truth. How costly can it be when the concept itself calls for elimination of non-

value activities? Lean thinking aims to reduce the total cost of ownership (direct and indirect cost, including opportunity cost). The only cost incurred is training cost to launch the lean initiative in the company. To this end, there are many government incentives and grants currently available to defray the cost. Lean does not depend on economies of scale to reap the cost saving. Instead, it calls for the right-sizing of the hardware and software to avoiding overproduction and inventory. MRP (materials requirement planning) or ERP (enterprise resource planning) software is not required – simple boards (Kanban 看板) are used by procurement to trigger replenishment; pace-maker by shop floor to self-regulate production speed.

**Misconception #4 :
Lean has been associated with automation and thereby manpower reduction, which weakens workforce morale**

Automation of repetitive, mundane tasks is encouraged in lean philosophy so that precious manpower resources can be freed up for more meaningful tasks, thereby increasing employees' job satisfaction. Some examples include taking food order from a tablet so that the waiter/waitress can engage the customers on food and beverage recommendations, and kiosk payment in franchise barber chains that allow the barber to focus on his/her job instead of tallying accounts. In fact, in a lean company, the employees are trained in soft skills such as teamwork and facilitation, and hard skills such as problem solving and technical know-how as part of their learning and development. They are also encouraged to improve their own work continuously, following the concept of kaizen (改善). Most people want to do a good job and achieve results. Lean help employees learn how to identify opportunities for improvement and find more meaning and value in their work. When employees are rewarded for their insight and ideas, they are likely to hold greater loyalty for the company and seek ways to advance the company.

The twin responsibilities of a Lean Leader

Develop your people *and* get the job done...and develop yourself at the same time too!



Image from John Shook, Lean Enterprise Institute

There are some common pitfalls to take note as well. Management support is vital if the lean initiative is to take root and grow as part of the company culture and collective way of thinking. To reap the full benefits of lean, the management must look at their operation flow holistically at a macro level to chart the changes needed going forward (i.e. future state) instead of localised piecemeal improvement. Last but not least, lean is a change and the inertia (resistant to change) is to be expected and managed.

Lean can be applied to a wide spectrum of industries and across all sizes. Cost outlay is mainly in the training and development of lean champions to cascade the knowledge throughout the company. Deployed correctly, it motivates the employees and empowers them to innovate. There are many ways to acquire lean knowledge, from classical classroom training to project based, such as through consultancy. The Lean Skills Development Programme (LSDP) adopts problem based learning, which has proven to be capable of bridging the gap between theories and translating it to practical application within the company context. ■

For further information on the LSDP, you can refer to our website <https://www.singaporetech.edu.sg/lean-transformation-innovation-centre> or email Lean@SingaporeTech.edu.sg.



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Mark is based in Singapore Institute of Technology, LTIC (Lean Transformation and Innovation Center). The center aims to promote and develop lean practices among local enterprises and drive adoption of lean thinking, culture and mindset through the partnership with LEI (Lean Enterprise Institute). Prior to joining LTIC, Mark was a lean six sigma (black belt) practitioner with the private sector for more than 10 years. For further information on the LSDP, please refer to <https://www.singaporetech.edu.sg/lean-transformation-innovation-centre> or email Lean@SingaporeTech.edu.sg.