

Lean logistics and the techniques in warehousing

Nowadays, most logistics companies have incorporated **lean thinking** into their complex supply chain management to improve not only the logistics process, but also their internal organisation and thus gain competitive advantage. Lean thinking is a business methodology that originated from the manufacturing methods used by the Japanese car industry (for example Toyota) and which aims at perfection and at maximising product or service value by eliminating any form of useless waste due to organisation inefficiency. Companies that incorporate lean thinking into their supply chain, benefit from improved customer service, less negative environmental impact, improved safety and even a sense of ownership, involvement and responsibility among employees.

Lean Logistics aims at recognising and eliminating the wasteful activities in the logistics process that slow down product flow and speed, in particular in warehousing. Its focus is to ensure customer satisfaction, which doesn't mean cutting costs, but enhancing the quality of the service.

The main logistics waste, both material and in time, is often caused by:

- defects and mistakes, due to little focus on quality
- excessive waiting for material, people or customer orders
- not engaging employees in the best practices to improve efficiency
- lack of organisation in warehouses and useless walking around searching for materials or tools.



Lean is good... ..waste is bad.



Lean logistics exploits a 5 step strategy called “5S” (which all start with “S”, both in the original Japanese and in English) which consists in organising the workplace in a clean, efficient and safe manner to reduce waste and enhance productivity. Cleaning involves more than sweeping the floor and putting a fresh coat of paint on the walls: it means organising the workplace and establishing a set of rules to respect and a means of visual communication, so as to make the most commonly needed items or areas easy to find and access.

The 5 Steps are:

- **sort** and separate what is needed and what is not needed in the area
- **simplify**, by storing needed items in a set place, that is easy to reach and to use. Clearly identify locations for all items so that anyone can find them and return them once the task is completed
- **shine** and clean the workplace and equipment on a regular basis in order to maintain standards and identify defects
- **standardise** and revisit the first three of the 5S on a frequent basis and confirm the condition using standard procedures
- **sustain** the standards and continue to improve every day.

**1 Translate these sentences into English.**

1. Il “pensiero snello” è una strategia operativa nata nel mondo automobilistico ma oggi applicata in settori diversi per aumentare l'efficienza, eliminare gli sprechi e cercare la perfezione.
2. La maggior parte delle compagnie di logistica hanno adottato questo metodo di pensiero per migliorare i loro processi e ottenere un vantaggio sui concorrenti.
3. L'inefficienza organizzativa causa spreco di tempo, materiali e risorse, quindi applicare il “pensiero snello” al complesso processo logistico può, soprattutto nel magazzino, migliorare il suo servizio, ridurre i tempi e i costi e creare un migliore clima di lavoro collaborativo.

**2 Read and choose the correct option.****Benefits of Applying Lean Logistics in Lean Supply Chain**

In recent years, lean logistics **1.** become invaluable to many companies around the world. It can be described as a process to identify and eliminate **2.** of time, effort and material from the supply chain, so as to **3.** efficiency. It is achieved by optimising teamwork, productive management and cross-functional operations to make them move faster and cheaper. **4.**, it is a general idea of bringing efficiency **5.** the logistics process. By using lean principles, one of the **6.** benefits for manufacturers is to reduce inventory risk. If the supplier produces inventory or goods before there is actual demand from the **7.**, it can lead to increased holding cost of the inventory. Moreover, it also increases the risk of the inventory becoming **8.** By using lean logistics, the supplier manages the inventory by keeping it **9.** , thus reducing such risk. Lean logistics limits delays and improves the service, because it decreases the lead time from order to **10.** In conclusion, the key feature of lean logistics, that is the elimination of waste of time, materials and efforts, also cuts costs. **11.** supply chain inventory, in fact, keeps the capital free for other investments to generate greater **12.** The success of any manufacturing company depends **13.** the quality of product delivery and customer satisfaction. Manufacturers **14.** apply logistics thinking in the supply **15.** can achieve both of these goals.

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|----------------|--------------|---------------|-----------------|
| 1. a. can | b. will | c. has | d. had |
| 2. a. debris | b. lack | c. lost | d. waste |
| 3. a. decrease | b. increase | c. stop | d. make |
| 4. a. However | b. Moreover | c. Therefore | d. Because |
| 5. a. at | b. for | c. to | d. with |
| 6. a. most | b. main | c. mainly | d. mostly |
| 7. a. seller | b. sales | c. customer | d. producer |
| 8. a. outdated | b. requested | c. functional | d. out of order |
| 9. a. low | b. high | c. bulky | d. modern |
| 10. a. sales | b. buying | c. delivery | d. selling |
| 11. a. few | b. less | c. a few | d. a little |
| 12. a. money | b. success | c. profits | d. sales |
| 13. a. from | b. by | c. over | d. on |
| 14. a. which | b. whose | c. who | d. whom |
| 15. a. cycle | b. chain | c. service | d. programme |



3 Listen to how Lean Thinking can be simply applied to our life. Complete the summarising table.

Lean thinking in daily life

5S: organisation **1.** developed in **2.** in **3.**
manufacturing

Why: to optimise the **4.** and make it clean and **5.**

5 steps: sort, **6.** , **7.** , standardise and sustain

Why in life: to be more **8.** and **9.**

Sort: get rid of old **10.** to be able to find what you **11.**
more easily

Straighten: always leave important things like **12.** in the same place

Shine: never let the dishes **13.** in the sink, wash them
14.

Standardise: follow a weekly **15.** to do your house chores, like washing
16.

Sustain: don't forget to do your washing regularly **17.** week

Advice: **18.** can be kept only if standardise and **19.** are
applied **20.**



4 In pairs discuss how Lean Thinking and 5S methodology could be applied in class and at home to improve your study method. Share your ideas with the rest of the class.

