

Summary

In this literature thesis is explained what lean is and how the principles and methods of lean can be used in office environments. The principles of lean evolved in the early 20th century in the automobile industry in America. Ford is seen as the initiator of the principles as they are used today. Later, around 1970, the ideas and principles of Ford were seen by the Japanese and taken to Japan. There they were adjusted and implemented at the Toyota factory. This is why lean is often called the Toyota Production System.

Lean is a complete combination of principles and methods that are called the lean principle when they are all used together. The lean principle is also named Lean Manufacturing, the Toyota Production System or Just-In-Time Manufacturing, depending on what literature is used. In the end they all refer to the same couple of methods and principles but they differ in the amount of depth in one or two of the principles. The principles and methods that are referred to are:

- The elimination of waste. Waste can be overproduction, unnecessary transportation, waiting time, stock, unnecessary movement, supporting processes and errors.
- The 5S principle. 1 Seiri of Sort. 2 Seiton of Set in order. 3. Seiso of Shine 4. Seiketsu of Standardise. 5. Shitsuke of Sustain
- Value Stream Mapping or VSM. A way of visualizing the processes
- The Pull method. Customer demands depicts what is produced
- Just-In-Time or JIT. Making sure deliveries are done when products are needed
- Single Minute Exchange of Die or SMED. Shortening change over times.
- Andon and Poka-yoke. Error proofing
- Kaizen. Continuous improvement of processes
- Kanban method. A signaling method to visualize what is needed.

To get all these principles working in a factory a carefully planned approach is needed. A pilot team has to be put together which are starting up the first carefully chosen process to improve by using lean. When the first lean process is working and the rest of the company likes the results, further implementation can start. Office environments can be seen as a special type of production environment. They also produce for a “customer” (which can be internal as well as external to the company). Because of these major similarities, lean can be introduced in almost the same way as in the production environments. It is very important that it is kept in mind what methods and principles can be applied to what part of the office processes.

Not everything about lean is as fantastic as is sometimes implied. Lean has a major impact on personnel and how they see and do their job. Another point is the fact that current processes are improved which means no new alternatives are considered. This can have the consequence that good alternatives are not used