

Time travel thanks to lead time reduction

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Would you like to step into a time machine and take a look into the future? Well now, you can! By reducing the lead times in all our processes, we end up in the future sooner than we would otherwise do, and so we are essentially time travelling.

To make the switch to a sustainable economy fast enough, we need to develop and market a whole range of new technologies at lightning speed. This not only requires investment in technological research, but also a faster development process. For example, the rapid development of corona vaccines is due not only to some breakthroughs in science, but also to a better organisational approach.

Unprecedented potential in lead time reduction

There is still lots of low hanging fruit in the area of lead time reduction, both in product development and in production. Many companies have been committed to cost reduction for years and are now at a point where further cost reductions become very difficult. For example, reducing the product cost by 5 per cent is often a hell of a task, while reducing the lead time by 50 per cent is often achievable. How can this difference be explained?

The lead time from an order to the delivery of a product is the sum of the different process times and the waiting times between the successive process steps. In practice, waiting time often accounts for more than 95 per cent of the total processing time. Reducing lead times therefore comes down to reducing the waiting times between processes. Due to a one-sided focus on direct costs, companies mainly focused on improving the process steps themselves, neglecting the long waiting times between processes.

The benefits of reducing direct labour costs are obvious, while the benefits of reducing lead times are often much more radical but less well known. As a very new engineer, I was asked by my then employer to take a fresh look at the factory to see where improvements could be made. I went into production for a few days to observe the processes and come up with suggestions for improvements. Frankly, there were hardly any ideas in those proposals that would really make a difference. It would be a few years before I realised that the reduction of our surplus stocks could bring in millions of euros. So I had not seen the greatest potential for improvement, even though our warehouse was very large.

Benefits of shorter lead times

The benefits of reducing lead times are considerable and can be summarised in three categories:

1. Impact on turnover and profit

Short lead times in the development process allow new products to be brought to market faster. This offers a double advantage: profit margins are higher at the beginning of the life cycle and it is easier to gain market share because competition is still limited. Short lead times in the production of existing products allow for faster customer service, increased customer satisfaction and growth as a company. For many companies, focusing on reducing lead times can therefore be a key element in their growth strategy.

2. Reduction of (indirect) costs

Long lead times lead to many forms of wastage. The long lead times make production planning more difficult. Urgent customer queries cause major disruptions in a system with long lead times. As a result, a lot of time and energy is spent on planning consultations and speeding up orders.

Long lead times also mean that materials are left lying around for a long time. As a consequence, a shortage of space soon arises and stocks accumulate. Stocks involve a lot of hidden costs. Keeping stock not only requires working capital, but also increases warehouse costs. Stocks that are kept in warehouses for a long time age, get damaged or lost and become unsaleable. The cost of keeping stock is usually underestimated, but typically amounts to 15-25 per cent of the value of the stock.

3. Higher employee satisfaction

Companies with a long lead time are characterised by a lot of frenzy to get things done. Employees have to deal with dissatisfied customers, are put under pressure and experience stress. Also characteristic of organisations with a long lead time is the silo thinking of the departments, which further deteriorates relations between colleagues.

Fortunately, there are plenty of simple ways to shorten lead times. This form of time travel requires no major investment and is within reach of everyone who wants to take a fresh look at their

processes. An excellent approach to reducing lead times is Quick Response Manufacturing (QRM). QRM is a company-wide growth strategy focused on lead time reduction to create a competitive advantage in a rapidly changing world. More information on QRM can be found here.

(Source picture: https://nl.dreamstime.com)

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