Help, our productivity growth is going down! Another four tips to boost your productivity (part 18)

18 August 2021, 02:00

Pascal Pollet

Belgium is the fourth most productive country in the world, but our productivity growth has been sputtering. In this series we present some practical tips to boost productivity in the office and on the shop floor.

In the first part of this series we discussed the productivity of Belgian companies. Productivity growth in our country has almost come to a standstill in recent years. Some hope that investment in new technologies will bring about a breakthrough. However, implementing advanced technologies is no guarantee of success. MIT Technology Review recently reported that hundreds of AI applications were built to detect COVID-19, but none helped.

In order to support Belgian companies with their productivity improvements, we collect a number of tips that we will publish at regular intervals. These tips are not aimed at advanced technologies, but at improvements that can be achieved by everyone.

Tip 75: Avoid mistakes with poka yoke

Errors lead to rework, scrap, inspection work, customer complaints and soured relationships. The tactic of choice to reduce error rates is to make the processes error-proof. This can be done by installing mechanisms which either help to avoid errors or which easily detect errors, so that they can be corrected in time. This approach was popularised by the Japanese Shigeo Shingo and is also known as 'poka-yoke'. Examples of everyday poka-yoke include a USB stick that can only be plugged in correctly, round sewer covers that prevent the cover from falling into the pit, which is unavoidable with square covers, web forms that require you to fill in everything...

Examples of poka-yoke in production are, for example, a two-hand operation, a foam board with cut-outs that make it easy to see if everything is there (see also tip 63), or systems with sensors such as counting scales. Coming up with a good poka-yoke is not always easy and requires some creativity. The video below shows a practical example of how to make errors easier to spot.

Accept marketing-cookies to watch this video. For FireFox users, disable the ‘Enhanced tracking protection’ of your browser to view this video.

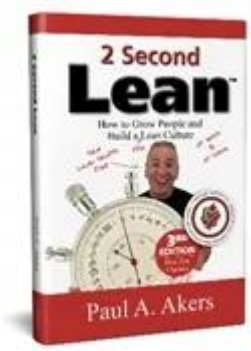
Tip 76: Standardisation, also for non-repetitive environments

The differences in productivity between people doing the same job are often very large. For example, the most productive employee will often be able to do twice as much work as the least productive one. These differences can partly be explained by different working methods. By systematically looking for the best-known method (= the 'standard') and teaching it to everyone, productivity can be increased. This process of work standardisation is very valuable, but unfortunately has acquired a somewhat negative connotation. Standardisation does not have to mean that everything is laid down from the top down. You only need to introduce standards when they are necessary for improvement. A well-functioning process does not need standardisation. Standardisation is not a top-down story either. Good standards are created in close consultation with the employees doing the work and are tested by the employees concerned before being implemented.

Standards often emerge in environments with repetitive, short-cycle work, such as in the automobile. Standardisation can also be applied to non-repetitive work. A lot of time is often lost in adjusting a machine or solving malfunctions. Inexperienced employees often do not understand the interaction between the different settings and their impact on the product. They then start to turn all the knobs at random, which completely disrupts the process. Good standards that describe the sequence of adjustment actions and the range of parameter changes for each problem type can save a lot of time.

More information on standardisation can be found in this excellent article and in this article series.

Tip 77: Start with 2 Second Lean



Most improvement projects are largely left to staff members, consultants and managers. The operators - who know the processes best - are expected to embrace the changes and not show any resistance. It should therefore come as no surprise that many top-down initiatives fail because the necessary support is lacking.

Paul Akers of the American company Fastcap resolutely opted for a different approach. At the start of the day, Fastcap reserves a time slot in which all employees are given the time to set up their workstations better (see tip 44) and make small '2 seconds' improvements. By focusing on small improvements, the bar is deliberately set low, and everyone can contribute and experience success. This first time slot is followed by a morning meeting in which progress is discussed and staff are further trained in improvement. Paul Akers also encourages everyone to make videos of the improvements to inspire each other (see tip 50). This bottom-up improvement approach is very simple and powerful at the same time. Consultants and complex change management programmes are no longer necessary. Several companies have meanwhile successfully adopted this approach

and report large productivity gains.

A good overview of Paul Akers' '2 Second Lean' approach, a series of testimonials and a step-by-step plan can be found here.

Tip 78: Form production cells

Many companies have a functional layout (job shop), where similar machines are grouped together. This is not always the best choice. An alternative is to group the machines into cells by product family. A cellular layout offers numerous advantages. This way, the orders remain in the cell from the first step until the last step, avoiding transport back and forth to intermediate warehouses. The shorter distances between the workstations allow working with smaller transfer lot sizes, which reduces the turnaround time in the cell.

Production cells also have a positive impact on employee motivation. The cell staff are in close contact with each other, which allows them to solve problems themselves in coordination. A cellular layout also invites cross-training of employees (see also tip 7). Cross-training makes it easier for employees to help each other with their work and to think of improvements together. The fact that the employees do not only carry out one step, but become responsible for the production of the entire product, results in more ownership.

Finally

Do you have any tips to share? Send them to us, so we can share them and become more productive together. The best tipster gets a nice gift! We would like to thank Jaap van Ede and Federico Brinchilin for their inspiration.

You can find an overview of the other parts of this series with tips here.

Authors



Pascal Pollet