Six Sigma Academy Amsterdam 2020 ©

Exercise topic: SMED

Although Shigeo Shingo made SMED primary for manufacturing, Lean professionals have found out how useful it can be in all other industries. In the video, an example was used from manufacturing. However, Lean is not just a methodology for manufacturing. Lean can be used in every sector. As such, we are going to look at a completely different sector, namely the call center business.

Context

Microsoft has recently launched 2 new pieces of software which we call A and B. Customers with questions about A and B can call the Microsoft call center in Seattle (US) if they have questions about A or B. The primary language spoken at that call center is English, although there are many call center agents who speak another language. Assume that as of yet, a typical call to the call center of a software company goes like this:

CA: Hello

Person	Activity	Time required
Customer	The customer is calling from Montreal (Canada) and is a French speaker. He calls the number of the helpdesk and waits 5 minutes before he is connected to the next available call center agent.	300 sec
Call center agent 1	Greets customer and asks what the problem is.	30 sec
Customer	Customer asks whether it is possible to speak French.	120 sec
Call center agent 1	Puts customer on hold and tries to connect him to a colleague who speaks French.	120 sec
Call center agent 2	Greets customer and asks what the problem is.	30 sec
Customer	Poses his question and explains his problem. The software that he has bought does not seem to function.	60 sec
Call center agent 2	In order to be able to assist the customer, the agent asks for the software serial number. Call center agents always have to ask for the serial number before helping customers. They do this so that they only help customers who have purchased the software legally instead of illegally downloaded it.	30 sec
Customer	Customer explains that he does not have the box near him and has to search for it. After some searching, he finds it and communicates the serial number.	180 sec
Call center agent 2	Explains the solution and with a polite greeting ends the conversation	120 sec
		TOTAL 990 sec

Take this process and apply SMED to streamline it.

Answer

We have to make maximum use of the internal set up time. While the previous product (in this case each product that is produced is a customer who is helped) is being produced, we are preparing the process for the next product (the next customer in line).

We do that during the waiting period of each customer. We already prepare the customer as much as possible for the process. By asking for his preferred language and prompting him to find the serial number, we slash valuable time from our cycle time. Just compare the total time in the table above and the table below which shows the new situation.

Person	Activity	Time required
Customer	The customer is calling from Montreal (Canada) and is a French speaker. He calls the number of the helpdesk and waits 5 minutes before he is connected to the next available call center agent. During the waiting, the customer has to indicate which language he wishes to speak by pressing 1 for English, 2 for French, 3 for Spanish etc. Also during the waiting, an automatic message lets the customer know that he should have the serial number of the software ready at hand.	300 sec
Call center agent 1	Greets customer and asks what the problem is.	30 sec
Customer	Poses his question and explains his problem. The software that he has bought does not seem to function.	60 sec
Call center agent 1	Explains the solution and with a polite greeting ends the conversation	120 sec
		TOTAL 510 sec