

Improving performance: Focus the right target!



Texte disponible en Français

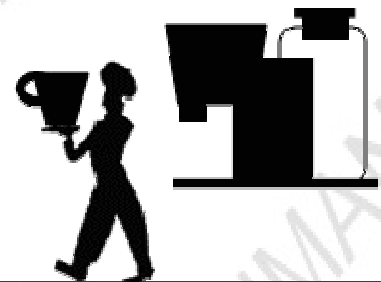


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His teams help the clients with diagnosis, advice, coaching and training about industrial and logistics operations.

This is about a simple process designed to serve client swiftly with a tasty hot espresso coffee. This process uses a coffee machine and a single human resource: the butler.

The coffee machine is located in a nearby kitchenette yet requiring the butler to walk from it to the VIP lounge where guests, mainly connoisseurs, wait for their cup.



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At first glance, the technological cycle time of the coffee machine is 60 seconds.

After the cup was filled, the limited butler speed adds 4,5 minutes for delivery, from kitchenette to the lounge.

Lean aware people will consider the coffee machine cycle time as a value adding operation.

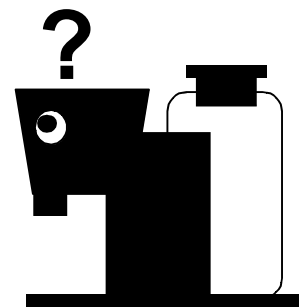
The share of value adding is figured in green in the figure above.

Conversely, the cup transportation time and butler's walking are considered as adding no value. They could even be seen as value destroying operations, as the coffee may cool down. These wastes are shown in red.

A workgroup is challenged to improve this process in order to please the demanding customers, wanting to get faster a good hot espresso coffee.

Deep analysis of coffee machine's technology shows the speed limit at 60 seconds, 18% of total process lead time (60"/5,5'x60)

Can the espresso "fabrication" speed up and global cycle being reduced?



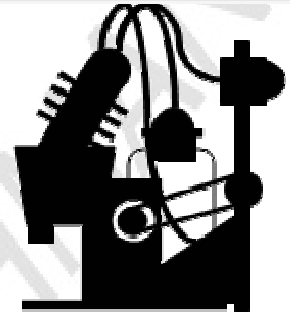
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The workgroup recommends the purchasing of a high-speed Pronto v2 Hyperbar machine with turbo compressor and direct injection, state of the art technology, capable to "brew" an excellent espresso in 7,5 seconds, meaning 8 times faster than actual machine.

with this, for 14.500\$ investment (2 day butler training included) plus a yearly maintenance budget estimated 3.000\$, the process lead time passes from 330" (5,5 minutes) to 277,5" 16% acceleration.



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Gain!

No!

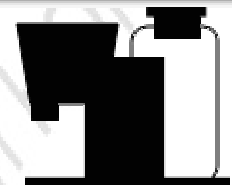
The proposal is rejected because of high costs and low and long Return on Investment. The workgroup is asked to study another solution.

One of the participants proposes to work on waste reduction rather to try improving added value, as the couple cost-performance seems already optimized.

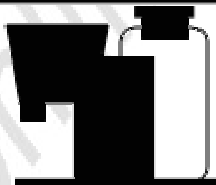
For reducing the time lost in travel and transportation, the group brainstorming output is to setup the butler with roller skates for only 40\$. This solution can reduce travel time by half and get the total cycle time to 3'15" or 40% of improvement!



Tests and trials show the new process is difficult to master. Deliveries and quality are randomly satisfying. Customer got more upset than before. The workgroup is summoned to find a better, robust solution.



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The group proposes to install the coffee machine closer to the consumption location, reducing transportation to the ultimate 7" limit (without spilling coffee over the client) and the whole process time to 67" or 80% reduction of initial cycle time.

Conclusion :

- Beware investing in technology first hand, as other simple, cheap solutions may exist
- The gains are generally higher working on wastes rather than added value operations

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