

Bottlenecks

What is a bottleneck?

A bottleneck is a constraint in the flow of a process which limits the capacity for a successful outcome to occur. Bottleneck identification starts after the current system or process is mapped and the desired outcome or goal has been clearly defined. Identifying bottlenecks are critical to:

- Recognizing opportunities for improving the efficiency and flow of a process
- Pinpointing waste and promoting focus on solutions
- Reducing lead times and improving capacity
- Alignment



When should I use it?

- When you suspect and/or recognize there are impediments to successfully completing a process or task
- When you suspect there may be excessive or unnecessary steps delaying completing a process or task
- When you are unclear about what is negatively impacting the flow of a process or task
- When process participants report frustration with delays/waiting, accumulation of work, backlogs.
- When there is a pattern of internal or external customers complaining about unacceptable turnaround times

How do I facilitate identifying it?

1. Define and Discuss

It's important to start by defining what a bottleneck is. **Critical Constraint= Weakest Link= Bottleneck.** If facilitating, start by polling the group or promoting conversation with the group or individual on how they believe the strength of a chain is defined? (Answer: by the weakest link) How do they believe a bottleneck is defined? Discuss examples of internal and external bottlenecks (i.e. External: insufficient demand; Internal: Policies, procedures, practice, skill level, equipment, technology, geography, supplies etc...)

2. Once a clear definition has been shared there are 2 options.

- Review or have a case study to work through individually or as a group like (Maybe include innovative leaders Miro example or one in the bottleneck slides from drop box in tips section? Also wanted to pull over the picture of the chain held together by the paper clip but couldn't grab it.)
- Have participant start with the first step in the process of interest and map the process workflow end to end. If a map already exists review it for completeness.

3. Next, identify the bottleneck

Facilitate conversation on where the client believes the weakest link or critical bottleneck is occurring. Where is the congestion happening and impacting the flow of work?

- **Important:** just because something is broken does not mean it is the bottleneck.
- **Here it is helpful to ask,** “what is the typical knee-jerk reaction most manager’s/leaders have to identifying a bottleneck?” “What is the common reaction?” **Answer:** to add resources. Facilitate discussion here as to “why is this knee-jerk reaction is not a good idea.” Discuss that while this increases throughput, it also increases expenses and does not necessarily fix the problem at hand. We need to ask, how are we using our existing resources first. “Are we making the most of what we have?”

4. Get the most of the bottleneck

Facilitate discussion on how the organization can make better use of existing resources. Are people working to the top of their license? Do they have the necessary training/skills/resources to be successful? Can any of these tasks be reassigned? How do we stop siphoning bottleneck resources to non-bottleneck tasks? Is there anything upstream of the bottleneck that can be fixed?”

5. Align other work to the pace of the bottleneck

Here you want to encourage the participant/client to look both up and downstream of the bottleneck. Some steps of the process are moving faster than the others. Temporarily, have those steps slow down to match the pace of the bottleneck. This is not to say to stop working but work to create the amount the bottleneck can handle then stop. The customer can not get more than the bottleneck can handle, so there is no impact at this point on end performance. All of the freed up resources that come from this slow down can be redistributed to help “self-fund” improvement here. They can be used to help analyze the bottleneck to see how it can be done faster, better, cheaper. Ideally, they will be from outside of the step being worked on which will make it easier for them to challenge the process.

6. Eliminate, elevate, or expand the bottleneck (Rinse & Repeat)

Using those extra freed up resources, look at policies, procedures, and common habit practices that were previously hampering people at the bottleneck.

- Common tools here for analysis might be using “ 5 whys,” “Fishbone.” Here you want to explore issues in policy, procedure, and practice and try to get to the root of the problem with tools like 5 whys. You might update manuals and SOPs, organize spaces, develop workers through improved training etc.
- Impediments often come from an internal decision that interpreted an external rule that made life unnecessarily more difficult. If you still need additional resources after the above process/approach, then you can pull those resources from lower priority projects and services. Once you have done ALL of this across ALL services and projects according to priority, if the customer is still unhappy with throughput and unwilling to sacrifice lower priority items for higher ones, then you can advocate for more resources to be added.

Tips

- Remote- Miro or other virtual whiteboards can be useful for facilitating group discussion and engagement from participants. Also, leverage ice breakers, private polling and “thumbs up” “thumbs down” voting to keep engagement up. Ask clients to remain on video if possible . We have all misinterpreted and email or a text because of lack of tone and not being able to “see or hear” how the message is being communicated.. Share with clients the importance of body language in communicating effectively.
- In Person- Utilize whiteboards, post-it/stickies, icebreakers, break-out groups to encourage participation and create engagement
- When using examples, choose examples that relates or are relevant to the client’s world. Using relevant example and showing you understand their industry help to build rapport and aid the client in remembering what has been taught.