

Raiders of the Root Cause

Lucy and the evacuation exits





Raiders of the Root Cause: Lucy and the evacuation exits

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Translation to English: Helena Perez & Miranda Hochman

Versions available in Chinese, English and Spanish



Helena Pérez Vázquez 2023

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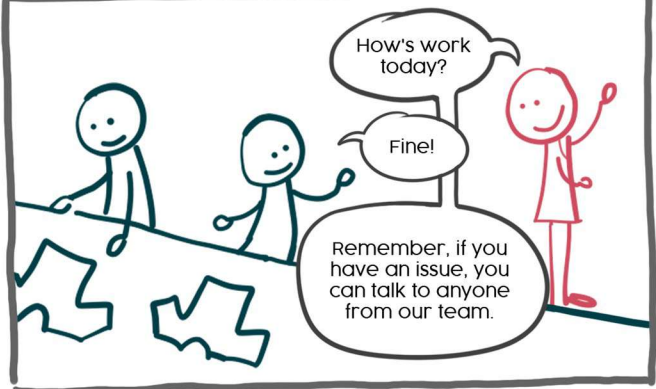
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One ordinary morning in an ordinary factory...



Lucy, the Talent Manager, walks through the production lines...



Suddenly, something catches her attention.



The emergency exit is completely blocked!



Not again! This issue was noted in the last audit and I had already solved it!

I cleared the hallway.

I hung posters so that no boxes were placed there.

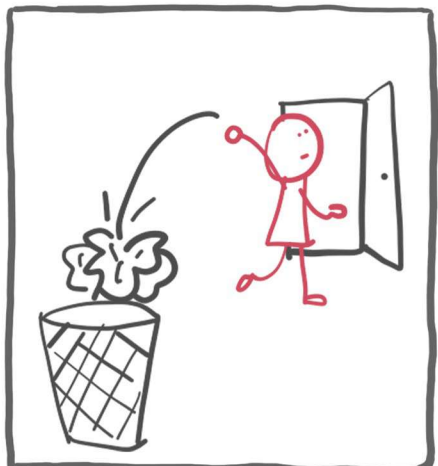
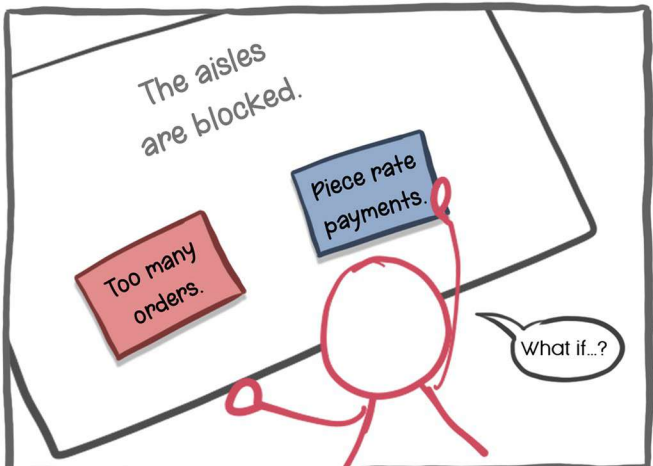
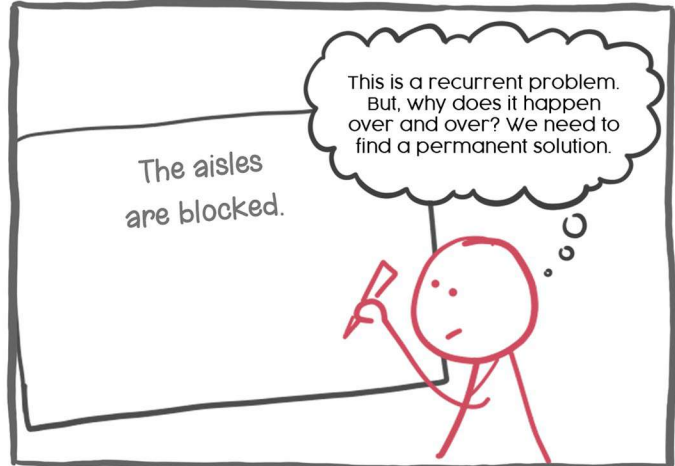
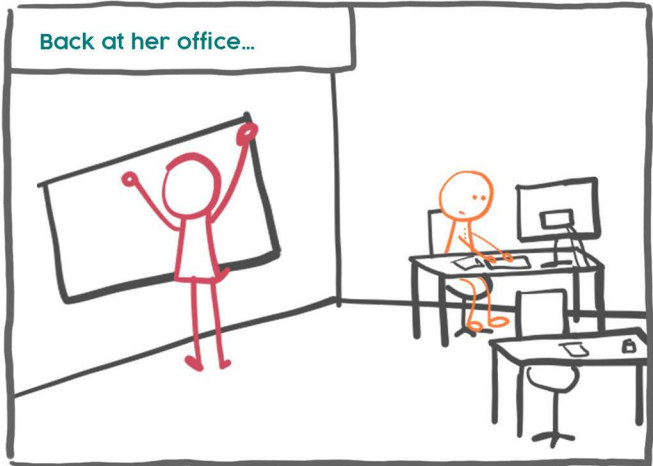
Why is the aisle blocked with boxes again?

The new clients will be visiting the factory soon. What can we do?

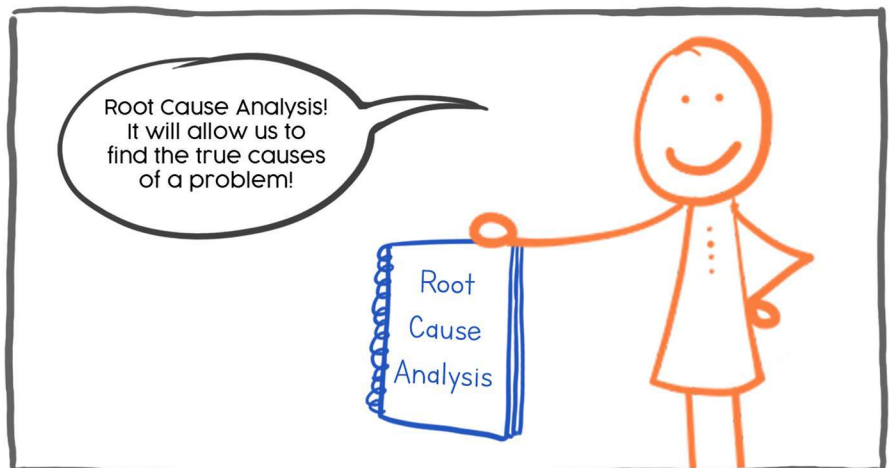
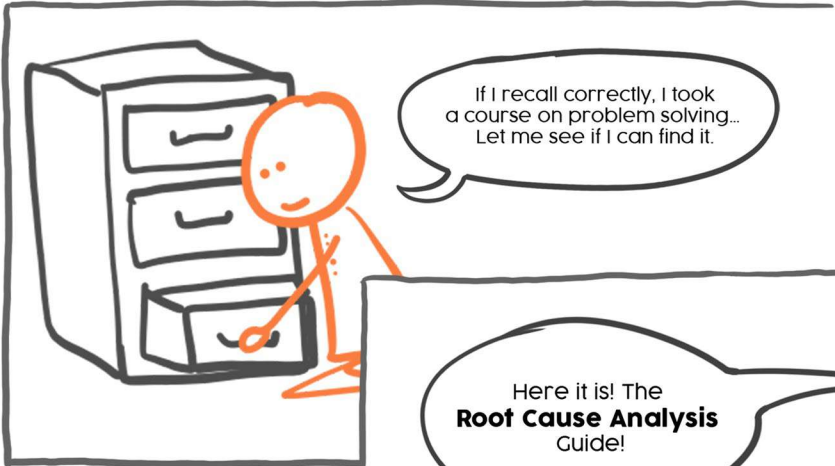
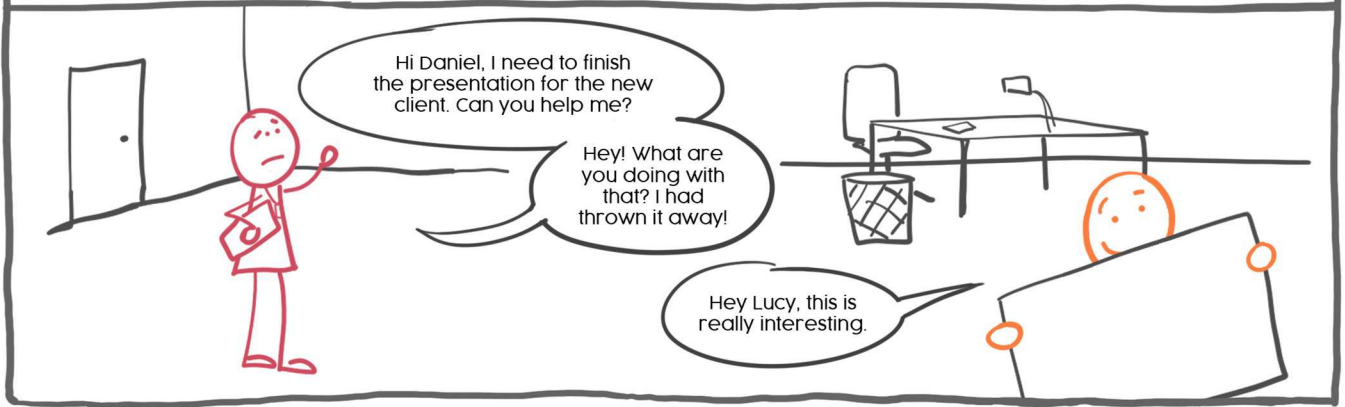
We expanded the warehouse to store the boxes.

Warehouse





The next morning, when Lucy returns to the office, she finds Daniel, her colleague from Talent Management.



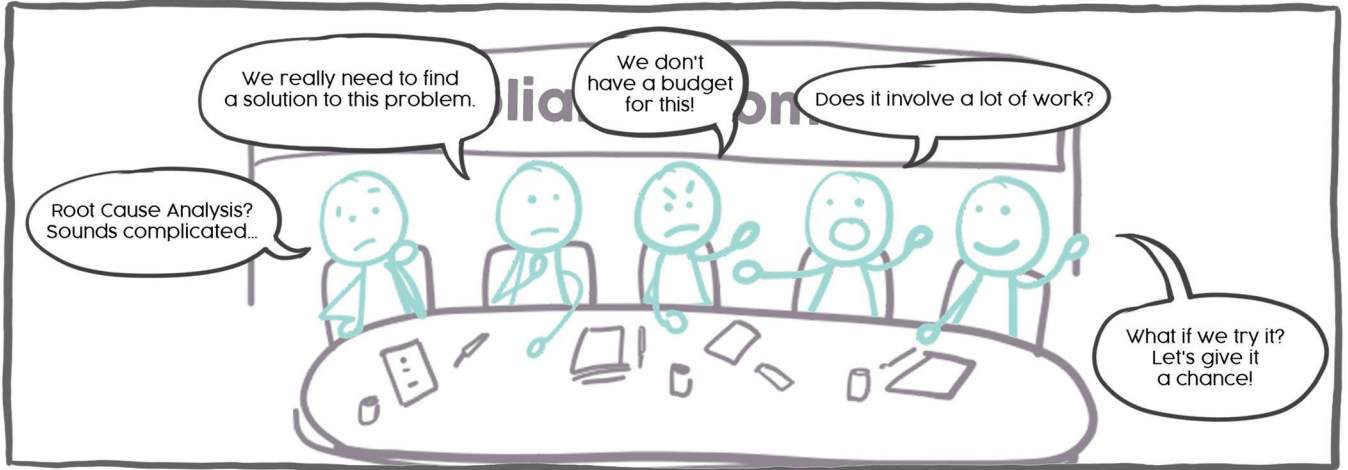
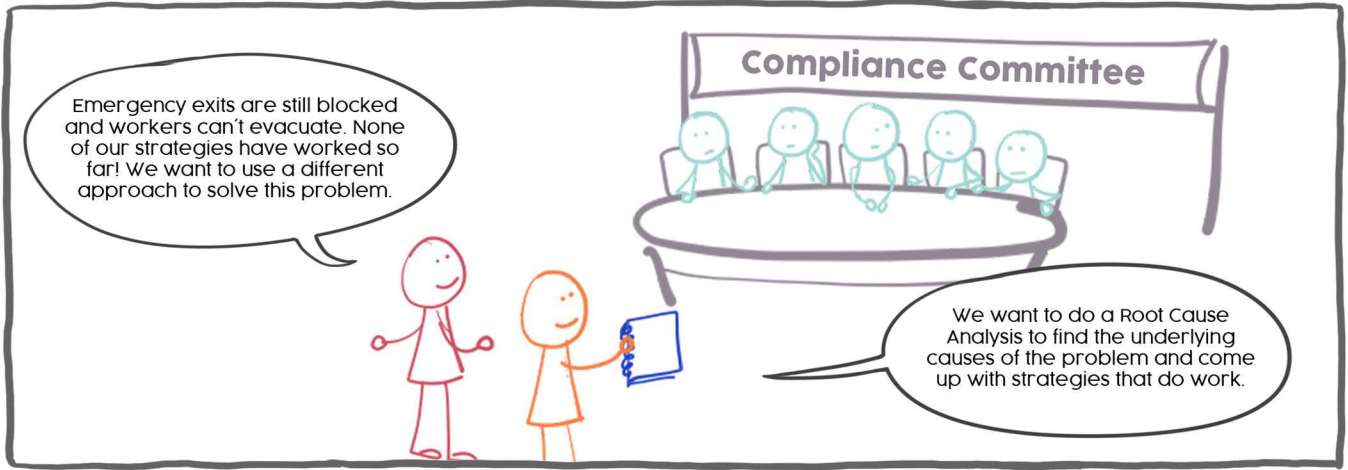
The 10 steps to Root Cause Analysis

1. Build a team.
2. Define the problem.
3. Collect information.
4. Meet and bring the materials.
5. Draw a line and write the problem.
6. Agree on the categories.
7. Identify the causes.
8. Apply the cascade of "whys".
9. Verify.
10. Come up with solutions.

It sounds interesting.
Let's discuss it with the
Compliance Committee.



Perfect!



I. Build a team.

Lucy
Talent Management ♀

★ Responsibility	★ Knowledge
●●●●○	●●●●○
★ Representativeness	★ Passion
●●●●○	●●●●○

Daniel
Talent Management ♂

★ Responsibility	★ Knowledge
●●●●○	●●●●○
★ Representativeness	★ Passion
●●●●○	●●●●○

Rebecca
Union representative ♀

★ Responsibility	★ Knowledge
●●●●○	●●●●○
★ Representativeness	★ Passion
●●●●○	●●●●○

He's not part of the Compliance Committee!

It doesn't matter, we include him because he adds a lot of value and knowledge on the warehouse area!

George
Warehouse supervisor ♂

★ Responsibility	★ Knowledge
●●●●○	●●●●○
★ Representativeness	★ Passion
●●●●○	●●●●○

Eric
Production Manager ♂

★ Responsibility	★ Knowledge
●●●●○	●●●●○
★ Representativeness	★ Passion
●●●●○	●●●●○

Laura
Seamstress ♀

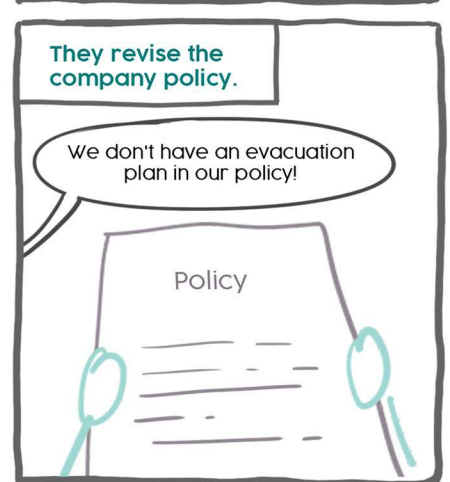
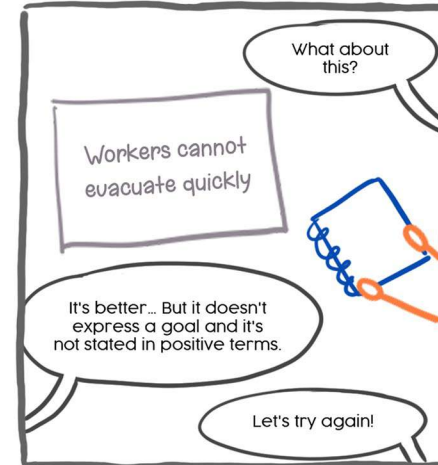
★ Responsibility	★ Knowledge
●●●●○	●●●●○
★ Representativeness	★ Passion
●●●●○	●●●●○



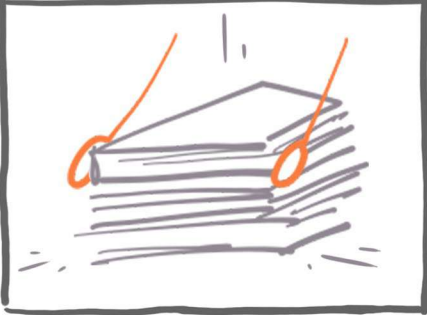
2. Define the problem.

The criteria to define the problem are:

- A. Only one problem.
- B. Measurable goal stated in positive terms.
- C. Doesn't propose a solution.
- D. People have influence over it.
- E. It's a problem for managers.
- F. It addresses a possible root cause.
- G. It focuses on the problem, not on the person responsible for it.



Despite the obstacles, the team manages to collect a great deal of information on the issue.



What now?

We meet again and we bring the necessary materials to draw the Fishbone Diagram!

The Fishbone Diagram is a graphic representation to visualize and organize all the information on the problem and its causes.



4. Meet and bring the materials.

Here are some pencils and pens!

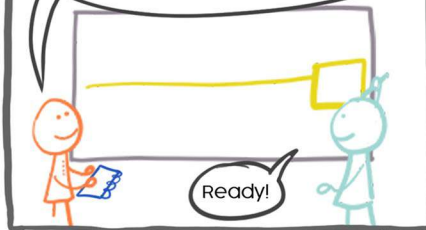
I brought sticky notes in three different colours!



5. Draw a line and write the problem.

To do the Fishbone Diagram, first we need to draw a horizontal line and write the problem on the "head".

Ready!



6. Agree on the categories.

Now we need to agree on the categories which might be contributing to the problem.

We found some information regarding the company's people.

And on the premises.

We revised the policy!



Perfect! We now write each category in a sticky note and place them on the diagram, like the spines of the fish.

These categories help us organize the information.

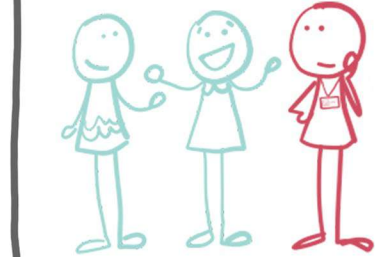


7. Identify the causes.

Under each category, we place the causes according to the information we found.



What causes have we found?



Regarding the premises, we saw that the factory doesn't have enough emergency exits.

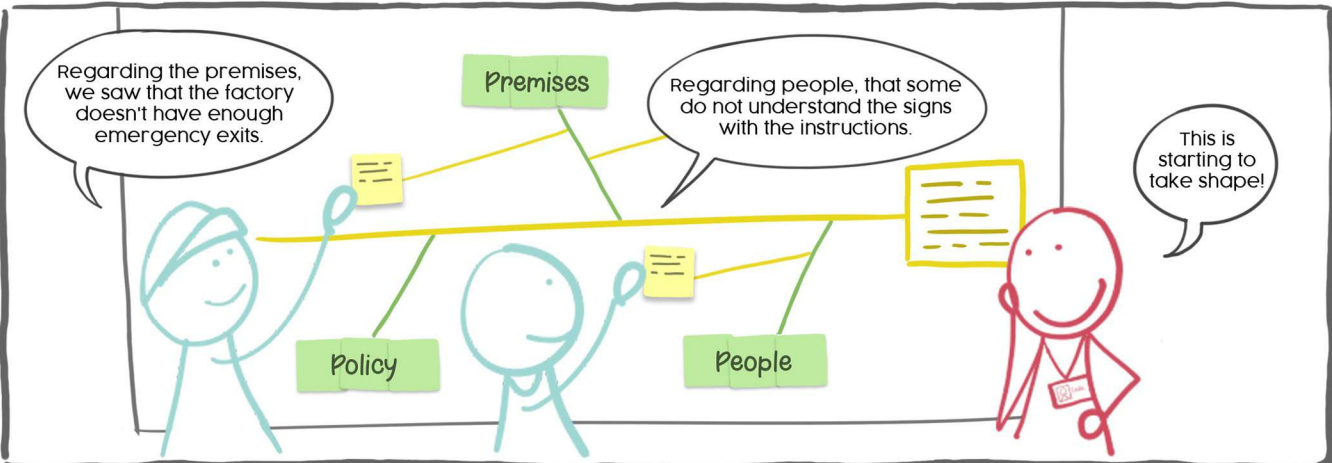
Premises

Regarding people, that some do not understand the signs with the instructions.

Policy

People

This is starting to take shape!



8. Apply the cascade of "whys"

Now we take each cause and apply a cascade of "whys" to each.

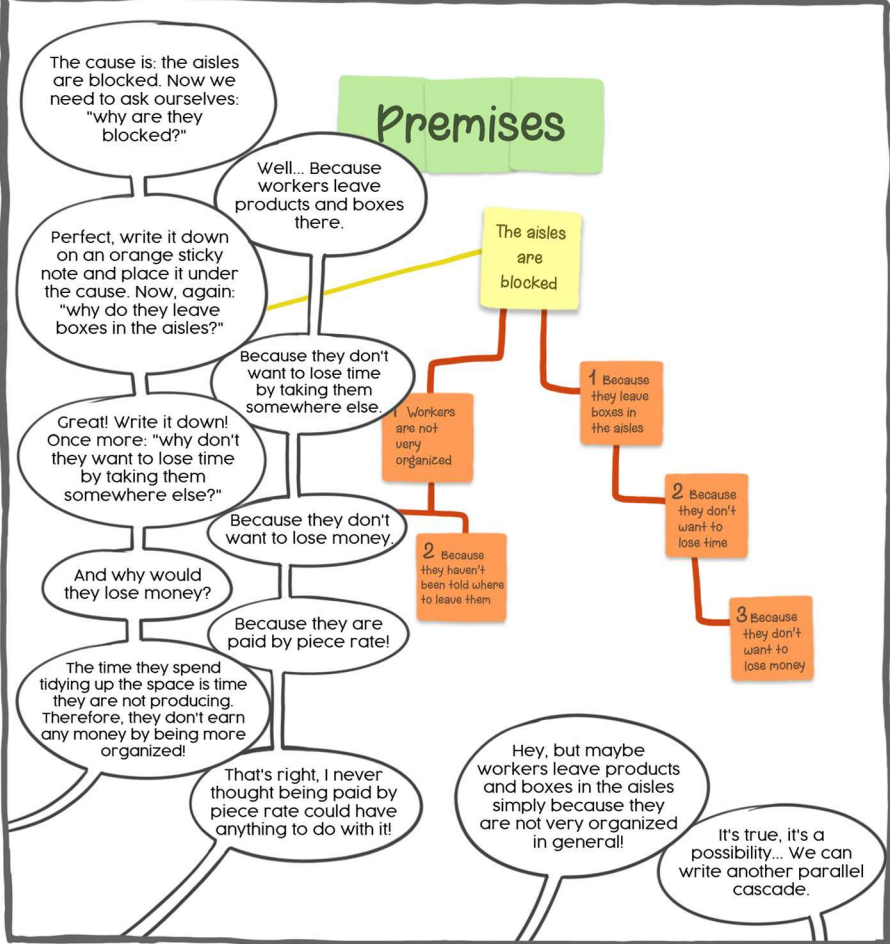
What does that mean?

That for each cause, we will ask ourselves why it happens. And we will do that several times. For example...



But, how many times do we need to ask ourselves why? Isn't it enough already?

With 4 or 5 times, is enough to reach a possible root cause! The cascade allows us to dig deeper in the cause.

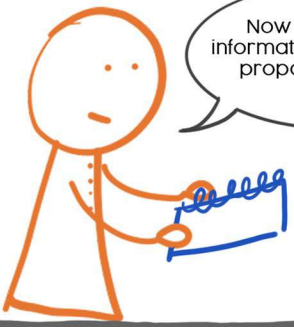


9. Verify

After hours of a lot of thinking and organizing their ideas in the diagram...

Now we need to verify this information: is it true what we are proposing, or are these just assumptions?

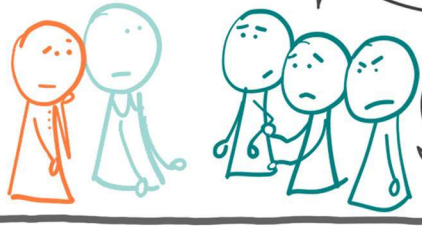
Let's meet tomorrow to correct the diagram, based on what we find out today.



Rebecca and I will verify whether the high productivity demand is an actual reason for why aisles are blocked.

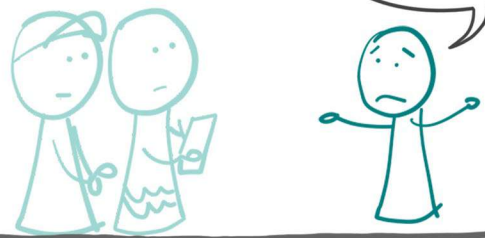
We leave the boxes where we can, to continue with our task as fast as possible! If I have to choose between salary and tidiness, I will definitely choose salary!

Exactly, if I take the boxes to the warehouse, I lose time, which means losing money, because I am paid piece rate.



Laura and George: verify if it's true that there is no evacuation plan because the Safety and Health manager doesn't know how to write one.

I do know how to write it! The problem is, I have too much work because I'm the only responsible for Safety and Health here. I can't take care of everything!



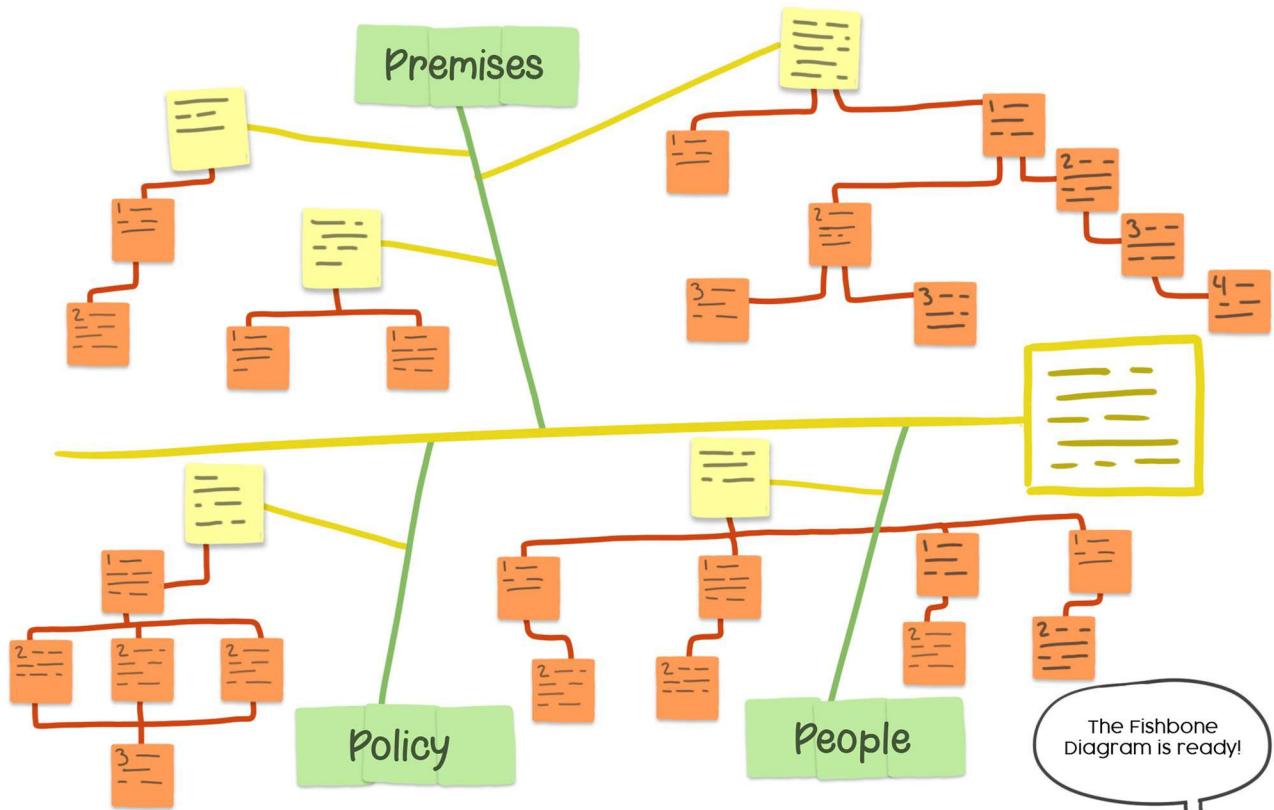
Eric and Lucy, verify if it's true that there are no Emergency Exit signs which are accessible and visible.

There are no signs which say "Emergency Exit". Only some of those green arrows.

Maybe some people don't know what the arrows mean. Some of them are even covered by boxes.



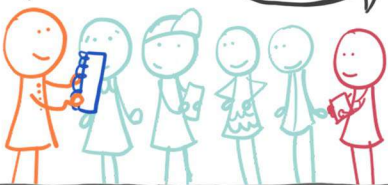
After verifying and correcting the diagram...



10. Come up with solutions.

Now we have to come up with interventions which bring real solutions... by focusing on the root causes!

So far we've been focusing on the problem's symptoms, which meant that the problem persisted.



We can offer a bonus for maintaining the workplace and personal space organized and tidy!

Let's do a campaign in all the languages that are spoken in the factory!

Can we hire someone for the Safety and Health team?

A warehouse employee can be in charge of moving the boxes.

Let's modify the signage system to make it more accessible in the languages spoken by our staff and more visually understandable for those who cannot read.

Intervention Proposal

Goals

Steps

If the budget allows it...

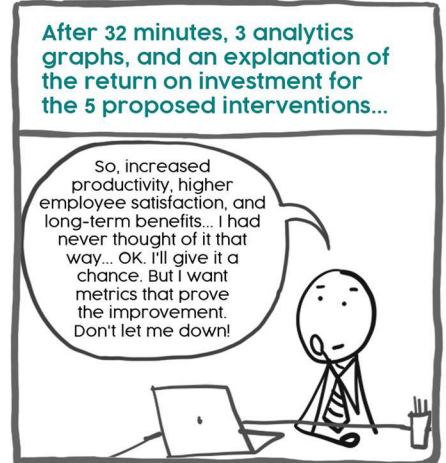
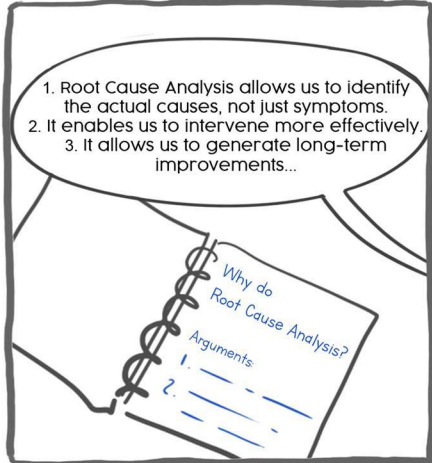
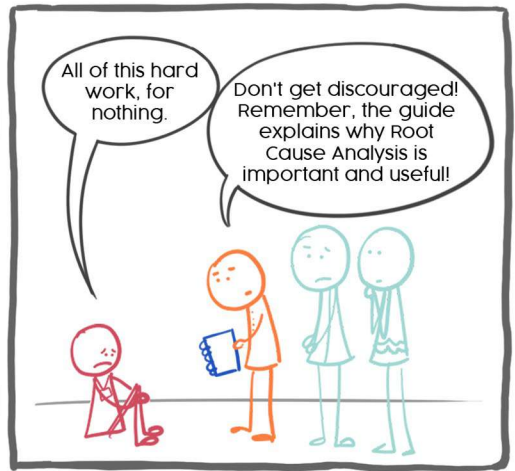
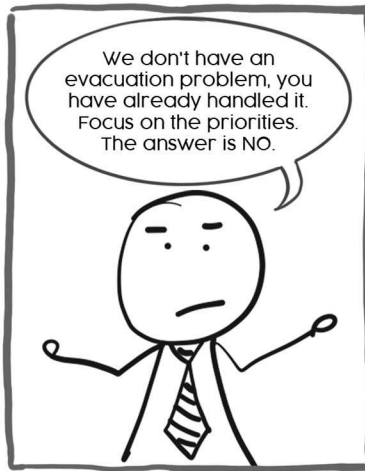


The proposal is ready! We only need to show it to the boss!

You can do it Lucy! I'm sure he'll love it!



BOSS



The implementation begins. The team initiates the changes. It takes time, effort, trials, and errors...

