

◆ Episode 5 Repeat Why QC story Step 4

Analyze the cause

We have to do something about the current situation on why it is taking so much time to grant the subsidies to the exporting companies

In order to achieve the objective of (Receiving and granting the applications within the standard handling period)

Normally, we repeat asking (why?) for 5 times in the kaizen activity to find out the reasons

Ok, then let's do the (Why? Why? Analysis)!

Then let's summarize the reasons why it is taking so much time to grant governmental subsidies

Then let's start immediately

If that is the case, then...

The reason is the reverse of the counter-measure so in order to find out the root cause or even closer to it, it is important to analyze it deeper

5 times is an approximation

When asking (why?) for only 1 or 2 times, there is a possibility to end up with an incomplete solution

Why is it 5 times?

Why? ① Why is it taking so much time to grant the subsidies?

→ Cause ① Taking time on reviewing



Why? ② Why is it taking time reviewing?

→ Cause ② There are too many accompanied documents and the details are inconsistent



Why? ③ Why are there so many accompanied documents?

→ Cause ③ There are too many points to check



Why? ④ Why are there too many points to check?

→ Cause ④ To clear the strict export regulation



Why? ③ Why are the details in the content inconsistent?

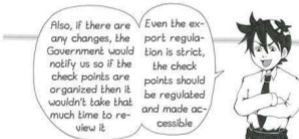
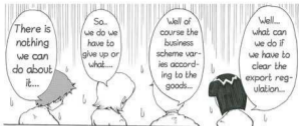
→ Cause ③ Treatment varies according to the industrial field (Such as manufactured goods and agricultural goods)

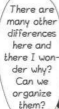


Why? ④ Why are there too many points to check?

→ Cause ④ To clear the strict export regulation







There are many other differences here and there I wonder why? Can we organize them?

Indeed

Why are they different?



For sure, the business scheme is different according to each export field but if you look at the application form, scheme for industrialized goods are planned for one month and three months for agricultural goods

Hm  
m  
m



It's been like this for a long time that the planning period for each export field varies...



And also plan the application form and review on uniting the details of the items for the scheme?

It may be a little bit hard but why not make the check list for the export regulations as the counter-measure



That 's a good idea!!  
Let's do it!!

That sounds great!!



Asking (why? repeatedly) allows us to look at a problem from many different angles so it's a good exercise for our mind

The more we dig into the root of the cause, we can find more reasons and make as many countermeasures for it

This is how we find out the root of the cause by repeatedly asking (why?)



It looks useful in many ways

Aha!  
(Why? Why? Analysis) seems useful and interesting!



We did not use (Why? Why? Analysis) this time but There are times when you keep asking (Why?) and it ends up having someone to blame for a problem



Not only it would end up attacking an individual but also the relationship among each other and the circle activities would be badly affected

If anyone is to be blamed for the reason for kai-zen, then the analysis stops there



rather say  
(The way a person do a certain thing in a certain way is the problem) and pay attention to (HOW a job is handled and processed)



It's not about saying WHO is the cause but

In doing so, we can ask again (Why?) as in (Why do that person work that way?) And lead to a much deeper analysis



Wow!!  
I got it!!

Lights up

◆ To be continued

## Kaizen Appendix Corner

(Why? Why? Analysis) which I have introduced in the story is done in the following steps

This times explanation of QC story is about (Analyze the cause)



### 7 Steps in solving problems (QC story)

	Order	Basic steps	Implementing Issues
P	1	Select Theme	Grasp the problems and decide on theme
	2	Understand the current situation and set a target	Collect information and decide on its characteristic value Set the target and period
	3	Draw up an activity plan	Decide on implementation issues, dates and distribution of roles
	4	Analyze the cause	Analyze the cause and outline the countermeasures
D	5	Review and implement countermeasures	Get ideas on the countermeasures, review the implement method Carry out the countermeasures
C	6	Check the effects	Check the results and compare with the target value Observe the achievements (visible/ invisible)
A	7	Standardize Adopt the management	Standardize and adopt the management Reflect to the next plan

Explained in the previous episode



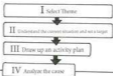
Explanation will be in the coming episodes



I see an unfamiliar tool again...

Run through the steps from (to) as I have already explained in the previous episodes

Let me explain the steps for (Analyze the cause)



- ① Think of the cause
- ② Narrow down the cause
- ③ Check with the data if the chosen causes are really affecting the characteristic value.

- Summarise the relation between the cause (reason) and the characteristic (effect)



Cause and effect diagram

Group the root of the cause \_\_\_\_\_

- Get the data

Day	Temp	Wind	Hum	Wind	Hum	Temp
1	20	10	70	10	70	20
2	22	12	75	12	75	22
3	24	15	80	15	80	24
4	26	18	85	18	85	26
5	28	20	90	20	90	28



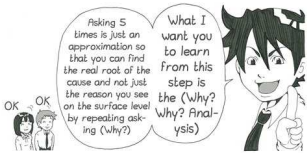
Histogram

- Check the correlation



Scatter diagram

Go to V (Will be explained in the episodes onward)





there is also a way using the (Cause and effect diagram)

(Why? Why? Analysis) can also be drawn into a diagram which I have explained previously (You can find it in Episode 3 Appendix corner) but



Really!!



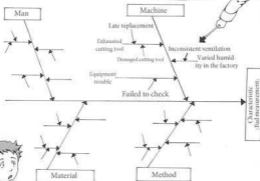
Rustle



Now, let me explain about (Cause and effect diagram)

What is a cause and effect diagram?

Let me first explain in a diagram for you to have an image of (Cause and effect diagram)



Hm m



You are right

As Oryo-chan says, it looks like a skeleton of a fish

That's why it also known as the (Fish bone chart)



It looks like a skeleton of a fish...

To begin with, what is a Cause and effect diagram  
To understand lets first start by learning these words



What is a characteristic? → The result of a work (that has been done)  
For example) Bad paint job or having very little comments from the members at a meeting

What is a cause? → What is the reason of the result of the work  
Using the above mentioned example what could be the cause (reason) of the characteristic of (Bad paint job)?  
If you talk about (MEN), for example, it could be poor knowledge to paint



Ok, so let me show you how to draw it!

Here we have picked up as an example granting subsidies to exporting companies as explained in the main story a

This part could be compared to the head of a fish

First, write the word (Characteristic) on the right hand side  
Characteristic is the result of the work or the result of what took place so it has to be written in a certain style

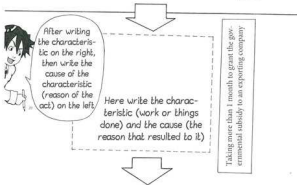


Taking more than 1 month to grant the governmental subsidy to an exporting company

Characteristic

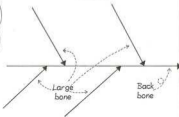
- For example)
- Many measurement mistakes on dimension X
  - Many accidents to be trapped
  - Dimension A varies
  - Not many members comment in the meeting

\* It is best if described specifically in terms of numbers



What is important here is to (classify) the main elements of the major causes in a table as below

I'll start writing the causes  
First write the back bone and then write the major causes that effects the characteristic in the large bone



Taking more than 1 month to grant the governmental subsidy to an exporting company

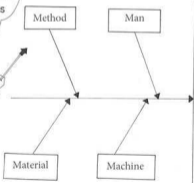
Main elements	Outline the examples on what is understood
Man	Ability, Knowledge Skill
Machine	Facility Space, Positioning Function, Performance, Operability, Compatibility
Material	Product, Manufactured Product, Material, Shape, Quality, Cost, Information
Method	Technique, Processing method, Programs, Condition



Apart from the [4 M], there is the 3M (Measurement, Management and Moral) and Environment and Time which can be included in some cases

This is just an example and the 4M is just the basic so no need to be obsessive about it

The example used here (Taking more than 1 month to grant the subsidy) is the result of a work and it would look like this as having the biggest influence on the (Characteristic)



Taking more than 1 month to grant the governmental subsidy to an exporting company



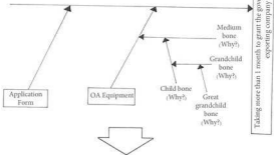




Here are the points to take notice of



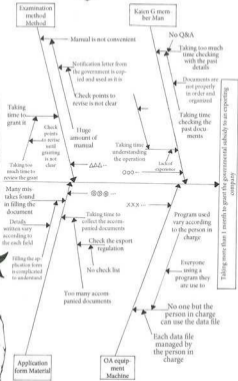
- Cause and effect diagram is purely an assumption
- Through brainstorming, respect and understand each other's opinion
- Do not interrupt on what others are saying
- Ask at least 3 times why at the medium bone
- Narrow down the cause so that you can actually take an action to it
- Having the joint of the bones at 60 degree angle to make it easier to read

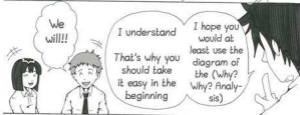
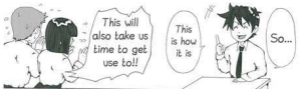




The diagram would look something like this

Once it's done, let us revise it







◆ Continue to Episode 6