Asking the right question

First, let's ask the 'wrong question'

Here are some quick tips on how to get the right answer you need, by asking the 'right question'.

Imagine this situation:

- You are a novice car mechanic.
- You have noticed a problem with your car shifting into drive
- You have some skills to trace and troubleshoot the issue and have reasonable suspicion that the problem is with the transmission.
- You do some research and find it might be pressure-related

You then ask the master mechanic at your shop:

- How do I double-check I have the right pressure for my transmission fluid?

The local master mechanic then proceeds to spend 30 minutes training you on this topic. Then you check the pressure it is correct. Now what?

Next, let's ask the 'right question'

There is never an exact way to find precisely the 'right question', but we can start by 'backing out of the weeds'. Or zooming out on the problem.

> Don't focus on a specific detail of the problem. Instead, focus on a high-level view with as much detail as possible

What is our ultimate goal? We want to fix shifting

What do we know so far? Not much... shifting doesn't work.

But wait... we **DO** know more information... if we change our perspective and how we think about this problem

You now tell the master mechanic

- I have a problem shifting in this vehicle
- The issue happens when I'm going from neutral to drive
- The shifter lever does not move

The master mechanic thinks about this for 30 seconds and responds with

- Check the connecting rod from the shifter to the transmission
- You check the rod and it's broken.
- You replace the rod and shifting works perfectly now

In this scenario, while you thought the issue was transmission-fluid related from doing the research ... the answer clearly lies in a different direction entirely. The focus was too much on a 'specific thing' rather than the overall picture.

Moral of the story

When we asked the 'right question' we got the answer almost immediately. Of course not every situation is as cut and dry and as straightforward as this is... but if you ask your mentor, project lead, or other resource the 'wrong question' you're going to still be miles away from solving your problem because it's too detailed... to deep in the rabbit hole to be useful for solving your problem.

While never a bad idea to get extra training... extra training can always be done (and should be done) during 'downtime' when customers aren't waiting for jobs to be completed. The ultimate goal is to fix the problem for the customer. Detailed learning and understanding are great, but it's important to focus on those aspects *after* the problem is solved when you have a relaxing time to absorb and learn.

Examples

Wrong question: How do I make the swap file smaller?

Right Question: I need to clean up disk space, what large files should I delete first?

Analysis: While you might think shrinking the huge swap file is a great way to save disk space... perhaps the real problem is the 500 gigabytes of files in 'Downloads'

Wrong question: How do I make this phone register more often?

Right Question: I'm having a problem with a phone registration dropping out... the user can't make calls after 5 minutes. How can we troubleshoot the network?

Analysis: Registering more often won't fix the problem if it's a broken or misconfigured network. This is why backing out to the 'high level' question is better

Wrong question: How do I turn off the blinking light on the phone?

Right Question: I have a phone, where every time the user gets a voicemail, the light goes on... they would rather get an email for new voicemail messages.

Analysis: The 'Blinking light' could be related to many possible reasons. Lights blink during startup, during configuration reload, for warnings, or for voicemail.

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