

YOUR QUESTIONS ARE PART OF THE ANSWER:

HOW TO ASK QUESTIONS THAT CATALYSE INNOVATION

Sunnie Giles

When you're a hammer, everything looks like a nail. Staying within that frame of reference will actively block radical innovation — so how do you free yourself of trusted old viewpoints?

Max Planck, the Nobel Prize-winning pioneer of quantum physics, said, “When you change the way you look at things, the things you look at change.” This is a nod to the quantum mechanics principle of how the observer changes the observation results simply by being part of the observation (this was proven in the famous double-slit experiment; more info on this [here](#)). What this means for us is that the frame through which we look shapes what we see, so it's important to consciously choose the frame.

The problem is that these frames are subconscious, so we rarely question (or even notice) them. Faster reactions next time we meet the same situation are evolutionarily advantageous. But often we apply frames that are no longer relevant or applicable to the situation at hand. This is a particularly big problem in the volatile, uncertain, complex and ambiguous (VUCA: more on this [here](#)) business world, which changes rapidly because never-before-seen things are coming at you at breakneck speed. You can't solve (or even perceive) new problems using old frames.

A big part of VUCA is about solving new problems. Hence, an important leadership competency is to help yourself and your people throw away old, limiting perspectives and asking questions that open possibilities in all directions, even ones that don't make sense to us. You can encourage this with the questions you ask. The questions you ask shape the direction for people to explore for answers, hence become part of the answer.

To make this principle work for you to catalyse innovation in your team, try the following:

1. It's imperative for you as a leader to withhold judgment and stay curious. After all, as Arthur Conan Doyle said, “Once you eliminate the impossible, whatever remains, no matter how improbable, must be the truth.”

If an idea measures up to the conditions thrown at it, no matter how unfamiliar it might seem to you, it is probable (or at least possible). Then ask, “What are the automatic assumptions that we are taking as a given?”

2. Allow for the possibility that you could be wrong. This is hard for managers trained in the industrial era, who are used to having all the answers and dispensing orders. The level of complexity in the world has surpassed your individual intelligence and technical expertise, no matter how smart you are or deep your knowledge. What one determines to be improbable is a product of one's life experiences, so of course it differs for each individual. As a leader, you must see that your truth might not be the absolute truth. Then ask, “What could make our assumptions wrong?” and “How else can we interpret what we see?”

3. Use the [Bayesian approach](#) to systematically test your hypotheses to increase your confidence in your conclusions. Bayes' theorem provides a framework to think more methodically when new evidence emerges. Using this approach, you are less likely to get worked up by your emotions (causing a false positive) or dismiss a credible signal of threat (resulting in a false negative). Then ask, "How complete is our set of prior beliefs?" and, "Given this new knowledge, how do I need to adjust my prior thinking?"

As palaeontologists Niles Eldredge and Stephen Jay Gould pointed out, "Theory dictates what one sees. . . The expectations of theory colour perception to such a degree that new notions seldom arise from the facts collected under the influence of old pictures of the world."

Radical innovation requires a radical departure from existing solutions. In the brave new world of VUCA, good questions can open others to see completely new uses for that hammer.

[Sunnie Giles](#)

I am the author of "The New Science of Radical Innovation" and founder of Quantum Leadership for Radical Innovation®, a program based on my breakthrough research, which transforms leaders into ones fit to deliver radical innovation. I am a keynote speaker on innovation.