



What Are Mental Models?

Mental models are how we understand the world. Not only do they shape what we think and how we understand but they shape the connections and opportunities that we see. Mental models are how we simplify complexity, why we consider some things more relevant than others, and how we reason.

A mental model is simply a representation of how something works. We cannot keep all of the details of the world in our brains, so we use models to simplify the complex into understandable and organizable chunks.

Learning to Think Better

The quality of our thinking is proportional to the models in our head and their usefulness in the situation at hand. The more models you have—the bigger your toolbox—the more likely you are to have the right models to see reality. It turns out that when it comes to improving your ability to make decisions variety matters.

Most of us, however, are specialists. Instead of a latticework of mental models, we have a few from our discipline. Each specialist sees something different. By default, a typical Engineer will think in systems. A psychologist will think in terms of incentives. A biologist will think in terms of evolution. By putting these disciplines together in our head, we can walk around a problem in a three-dimensional way. If we're only looking at the problem one way, we've got a blind spot. And blind spots can kill you.

Here's another way to think about it. When a botanist looks at a forest they may focus on the ecosystem, an environmentalist sees the impact of climate change, a forestry engineer the state of the tree growth, a business person the value of the land. None are wrong, but neither are any of them able to describe the full scope of the forest. Sharing knowledge, or learning the basics of the other disciplines, would lead to a more well-rounded understanding that would allow for better initial decisions about managing the forest.

In a famous speech in the 1990s, Charlie Munger summed up the approach to practical wisdom through understanding mental models by saying: “Well, the first rule is that you can't really know anything if you just remember isolated facts and try and bang 'em back. If the facts don't hang together on a latticework of theory, you don't have them in a usable form. You've got to have models in your head. And you've got to array your experience both vicarious and direct on this latticework of models. You may have noticed students who just try to remember and pound back what is remembered. Well, they fail in school and in life. You've got to hang experience on a latticework of models in your head.”