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The Expert's Dilemma

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Introduction

I would like to propose that the majority of people who have reached a state of expertise in their domain may be at risk for being too smart to innovate. Those with the highest emotional attachment to their beliefs are at the highest risk for being out-thought, out-done and out-innovated.

Innovation happens when commonly accepted frameworks are shifted, tilted or re-aligned to expose greater opportunities, benefits and growth. We call this "Assumption Busting". Those with the most invested in their personal mental models (experts) have the most attachment to old views and are the least likely to be able to innovate.

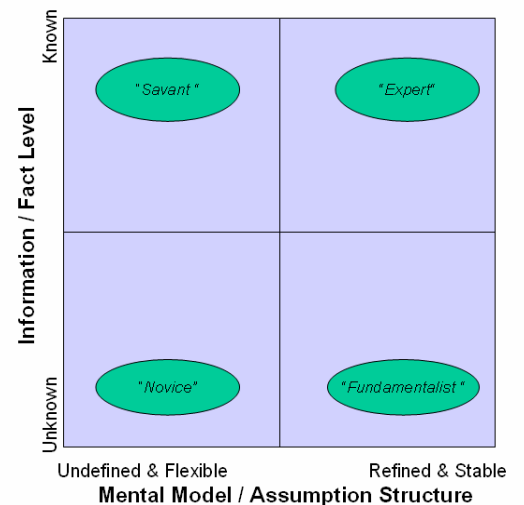
In this brief article, I would like to assert that organizations who suffer from the Expert's Dilemma will be blind to great new insights. And, that great new products, services and business models are often the result of looking at an old insight through the eyes of a new mental model or perspective.

Our Framework

To explain my points, I would like you to entertain an oversimplification of the brain so that we can discuss how we acquire knowledge. In this oversimplified model, I would like you to visualize a 2x2 matrix in which the vertical axis describes how we collect information and the horizontal axis describes how we assimilate the information into a mental model. The ability to apply collected information into a realistic mental model leads to functional "knowledge".

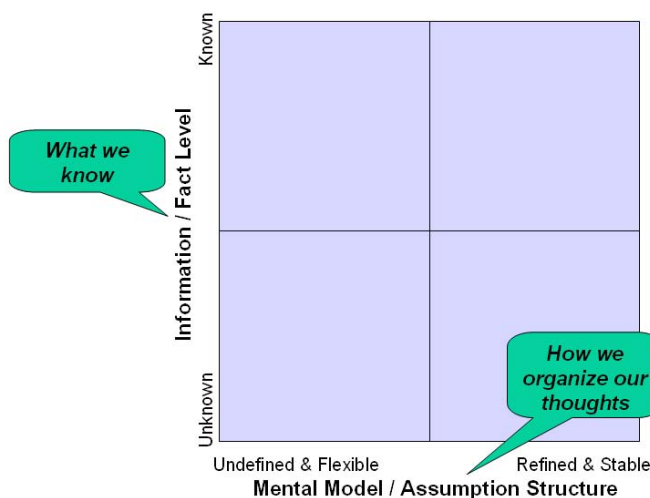
To bring this model to life, let's consider life in these four quadrants. In the lower left quadrant, we find a person without much information and without any mental model. We might call this person a "novice".

Next, imagine someone who has just acquired a great deal of information (perhaps after reading a book or performing a Google



search) and has the talent to remember all of this information. This person can now likely pass any standardized test on the subject and get an "A". But, without any framework or mental model, this person is no more than a feedback device. At the extreme, we might call this person a "savant".

Next, imagine quite the opposite, someone who has been told "how the world is" (perhaps from a religious proselytizer or a political maven). This person now has an opinion on this topic and possibly a great deal of emotional connection to this belief, but really has no underlying information upon which to base this framework. We might call this person a "fundamentalist".

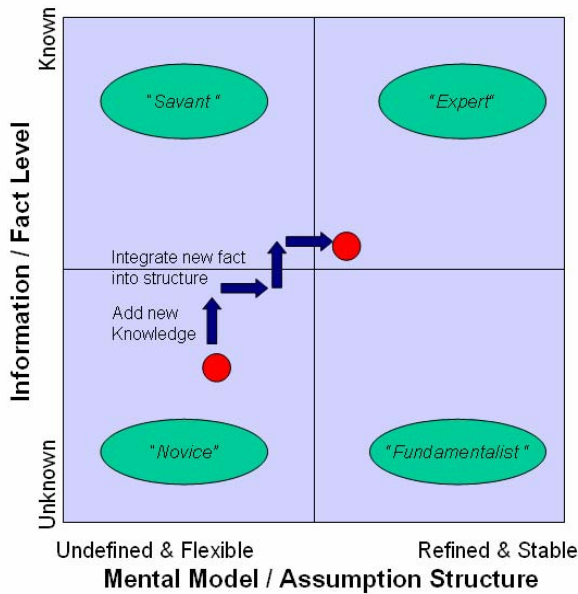


Lastly, imagine your favorite domain of knowledge. Chances are that you were given a number of facts and then were challenged to manipulate those facts in a variety of contexts. You can probably remember the feeling of accomplishment of being able to piece multiple facts together in a manner that made sense and perhaps even a feeling of joy from the resulting clarity. Things made sense. We might call a person who has a large amount of information and a working model in which to organize this information an "expert".

The way to learning

In the field of education, almost all of the debate is focused on taking people (typically our kids in school) from the novice quadrant into the expert quadrant.

Ask those who are passionate about helping kids to become great learners and the general consensus is that a balanced approach to gaining expertise is



necessary. In such a manner (often referred to as a Constructivist approach), students are reminded of their existing mental models, then they are given a certain amount of information and finally they are assisted in putting this new information into a mental model. By engaging a student in this process, their knowledge grows as a result of a stair-step increase in their information level and mental model maturity.

The Limits of Traditional Learning

Unfortunately, this approach has a diminishing return once we achieve some level of "expertise" within any domain. The reason is that this approach is contingent upon new information finding a "place" in an existing mental model.

What we see time and time again is that new and pertinent information rolls off of experts like water off of a duck's back. When the expert gets a new piece of information, he/she

is very reluctant to disturb their mental model with something that does not fit.

The new piece of information is typically ignored, discredited, perceived as a mere duplicate of earlier information, considered unworthy, considered heretical, or never entertained. Because experts have such stable mental models that there is no place to put the new information! The state of the art continues to evolve, yet the expert stays fixed; the result is that the expert devolves to a fundamentalist.

I call this the expert's dilemma.

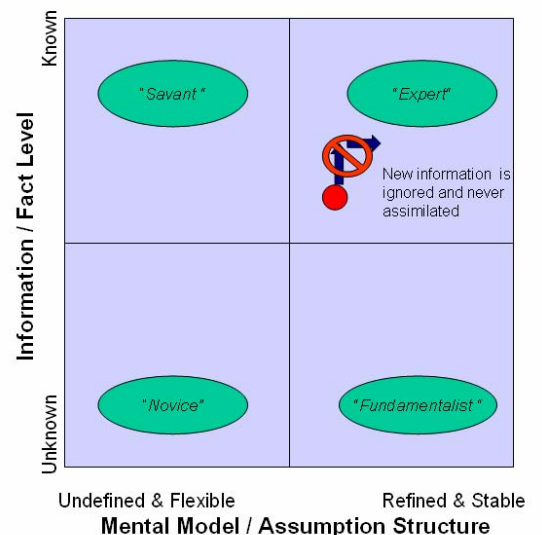
"When the expert gets a new piece of information, he/she is very reluctant to disturb their mental model with something that does not fit."

The Expert's Dilemma

Innovation is often not about discovering something new, but rather the ability to understand when something insignificant has gained a new or different relevance.

In order for an expert to innovate, new information must be welcomed as a challenge to existing information. In the event that this new piece of information is valid, it implies the need to remove an outdated piece of information and replace it with the new.

This ability to displace old information with new information requires an expert to



relinquish a certain amount of pride associated with their existing knowledge. Many experts have invested years of blood sweat and sacrifice to attain their position. The notion that an element of their expertise no longer is valid is akin to divorcing one's children – it's a hard thing to do.

Letting one's model fall apart and joining the "Novice Quadrant" can leave one feeling inadequate naked and adrift – it's also a very hard thing to do.

Assumption Busting

So, how do we take account of our own expertise and overcome the expert's dilemma? We recommend trying a variety of "Assumption Busting" techniques that simultaneously expose people to new insights and new perspectives at the same time. We apply these techniques with small Sensing Teams that are active over a 30 to 90 day window. These parallel streams of education and empathy enable teams to multiply their innovation results.

In order for Assumption Busting techniques to fully flourish, the following sensing team conditions need to be supported:

Openness: Teams must be open to new information, perspectives and thinking. Without openness, we won't be able to see relevance of any new idea or justify any change.

Trust: Team members must be able to relinquish the pride and security of their current mental models and re-emerge on the other side with stronger models. We must trust in others and feel safe enough to take a risk in trying a new approach.

Time: This process is often slow. Teams must be able to dwell ambiguity and discomfort long enough to go through the cycle.

Busting cycle according to a deliberate pace and rhythm.

Regardless, this is a difficult process and the discomfort associated with temporary uncertainty is a high price to pay. This explains why many innovations come from upstart companies who approach a situation without preconceived mental models and without a large burden of prior knowledge. It also explains why these same organizations that find success in displacing an incumbent, frequently become the incumbent themselves and are out-smarted by the next up and coming entrepreneur.

Assumption Busting Activities:

Activities that take us out of our work environment are one of the best and safest ways to bust old assumptions. By seeing the world through others' eyes, visiting a different industry or engaging in a different project – we provide a shortcut to growth. These out-of-office experiences go far in helping to inspire new levels of openness and trust in a set time frame.

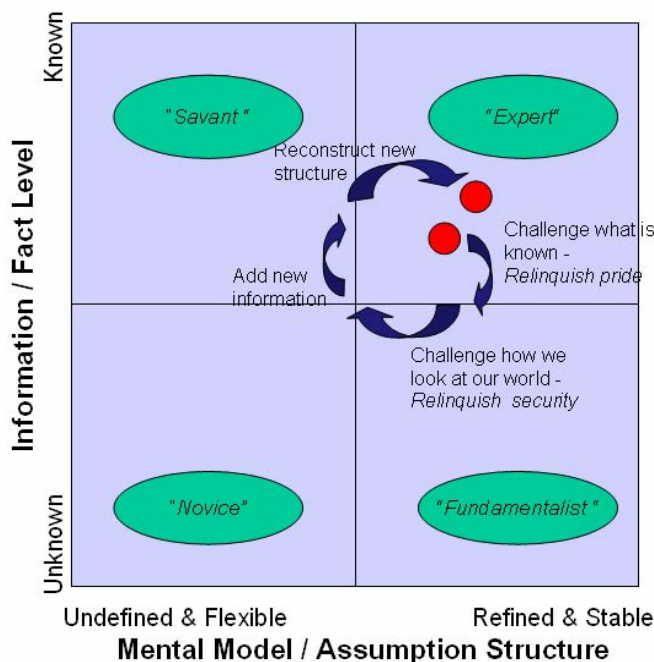
Working with partners who are not experts is another way to enable you and your colleagues to find a shortcut to new levels of thinking. Organizations such as Proctor and Gamble have established their "Connect and Develop" approach as their way to source innovation from outside their walls. Their goal of 50% of growth from outside sources is contingent upon their colleagues' ability to transcend their expertise and entertain new thinking and new mental models.

Summary:

In order to innovate, we must be able to transcend current expertise and attachment to our mental models. To do so, we must approach learning in a different way than that which brought us to this level of expertise. Assumption Busting combines parallel paths of education and empathy to build innovation.

To overcome the expert's dilemma, we must endure the discomfort and insecurity of the destruction of our expertise for sufficient time to enable us to gather new information, reconstruct stronger mental models and emerge on the "other side" of expertise as a wiser student of innovation.

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We find that great thinkers of the world were those who were able to pass through the Assumption