



Benefiting from cognitive diversity

1. Identify where you have complex challenges or a need for innovative thinking. Where have your 'tried and true' approaches begun to fail?
2. Make sure you have strong levels of cognitive diversity in those exact areas. If necessary, recruit for diversity. Remember, a diverse team will outperform talented individuals when the issue is a tricky one.
3. Check that every member of your diverse teams shares the same sense of purpose and the same goals. Use the UGM Impact Map to help you do this. Review this tool in the Newsletter archive on our website.
4. Build protocols and practices that promote inclusion and help to manage the normal and predictable frustrations, conflicts and misunderstandings that come with difference. A foundation skill here is listening.
5. Train team members to listen for and probe the unstated assumptions lying beneath a colleague's words and, in turn, to make their own assumptions transparent to others. This step will help people to see the relevance of a different perspective and allow their own mental models to be challenged.

DIVERSITY: THE DIFFICULTIES AND THE DIVIDEND

An imperative to change but a tendency to fail

One snowy morning in February, 1933, Ed Carlson, an American farmer from Wisconsin, came into Karl Link's laboratory at the state's Agriculture Research Centre, carrying a milk-can full of blood that refused to coagulate. Outside he had some clover hay and a dead heifer freezing in the back of his truck. He wanted to know why his calves kept dying.

Link discovered that coumerin, a factor present in clover, thins mammals' blood and had caused the calves to haemorrhage. But Link didn't just figure out why the calves died, he recognised his discovery might help tackle another agricultural problem. If coumerin thinned mammals' blood, then - in the right dose - it might be the most effective rat poison ever discovered! So it proved to be. "From the beginning," he said later, "I had an intuitive feeling that this might be a pretty bad thing for rats, but a good thing for farmers!"

The effect of group think

Sounds like a job well done but the story doesn't end there. Incredibly - from the vantage point of today - it was to be another *forty years* before someone else joined the scientific dots in a new way: if a lot of this coumerin thins a rat's blood and kills it, maybe just a little of the same drug could thin human blood enough to treat cardiovascular diseases. Today, this drug (marketed as warfarin) is second only to penicillin in the number of lives it saves around the world every year.

Let's take a moment to reflect on this. It seems the fact that the initial discovery was made in an agricultural field meant that doctors took no notice of it. It didn't fit their mental model of 'medical research'. So it took some rank outsiders with a fresh perspective forty years later to spot the enormous potential of coumerin to save lives. This incredible medical breakthrough was a direct result of what is now termed 'cognitive diversity'.

What is 'cognitive diversity' and how can business use it?

The term refers to a diverse team's ability to think differently about a problem and so achieve a breakthrough beyond the reach of talented individuals working alone. It's about the differences inside people's heads that produce what are essentially different *cognitive toolkits* or methods of thinking. It is these that enable a diverse team, organisation or society to perform better than groups comprised of people who all think the same way.

There are essentially three sources of cognitive diversity: differences in training, experience and social identity. For example, different professions tend to transmit different ideas about what is logical and what are the best ways to think clearly.

Through our experience, we also build different ways of making sense of what happens to us. But perhaps the most significant shaper of thinking is our cultural background. For instance, through this we acquire a language system that functions as a perceptual filter shaping reality for us. Now cultural neuroscience reveals how this affects the structure of the brain itself.

Other identity markers, such as gender, can also influence thinking style. The result is that a team made up of diverse individuals has a rich array of cognitive tools for problem-solving and decision-making.

Why this research finding matters so much today

The nature of work in today's knowledge economy prioritises the need for diverse teams to tackle difficult issues. There is compelling evidence that diversity matters to difficulty. Nobel prize-winners provide a striking example. From 1901 to 1995, overwhelmingly it was the solitary scientist working alone that won. But from 1995 onwards, on average, 2.8 scientists from adjacent fields have shared every prize. It seems a diverse team outperforms a talented individual when there's a tough nut to crack.

But what's the down side?

UGM filmed research into problem-solving teams shows that unfortunately frustration, conflict and misunderstanding can be rife the more different people are. Human beings tend to gravitate towards sameness and away from difference, so diversity takes us out of our comfort zone. The truth is unsurprising. Diverse teams frequently fail to deliver on their promise. From the very good to the really bad, diversity produces tremendous *variance* in performance.

Inclusion is the key

The magic key is the extent to which we are able to create an inclusive culture across the organisation and in each team. The first step is making sure there is a shared sense of purpose and common goals. Thinking differently is good but wanting fundamentally different things is not!

At UGM, we have found that 'building an inclusive culture' needs to be practical, behavioural and outcome-oriented. We can't leave things at the abstract level of values or principles and then hope for the best. There are some quite specific protocols and practices that will help you leverage the dividend inherent (but often unrealised) in diversity.

The steps outlined in the box will get you started. We're planning further newsletters on this topic where we'll share more of the best research from around the world to support your D&I initiatives. □