



Not Fit for Purpose *- why people can't handle complexity*

In the beginning there were dinosaurs...

A few 100,000 years ago Homo sapiens emerged. Life was lived quite a way down Maslow's hierarchy of needs. We lived in caves, belonged to small tribes, and we hunted our food. So how and when did life get so complex?

- A few 1000 years ago we invented agriculture and trade
- A few 100 years ago along came the printing press, the industrial revolution, 'companies'
- Then just a few 10s of years ago we invented the NHS, the Internet, outsourcing, globalisation, ...
- And now? For many people in organizational life, 'getting things done' involves manipulating a tangled web of customers, suppliers, regulators, competitors, both internal and external.

So the human brain evolved to be well suited to our earlier simpler lives. It should be no surprise that we struggle with the complex world we have constructed relatively recently. Evolution is yet to catch up.

Our minds are not 'fit for purpose'

We have a whole set of evolutionary baggage, leftovers, features which may have supported our survival in the jungles and caves, but are now weaknesses:

- We are prone to a wide range of self-deceptions
- We are not good at rational decision-making
- Our short-term 'working' memory has limited capacity; and our long-term memory is not reliable
- Our short-term 'working' memory has limited capacity

Our ways of co-operating are not 'fit for purpose'

These individual weaknesses are bad enough, but are compounded by a further factor – the need to co-operate. Two brains may be better than one but there is a weak link – language. Most of today's complex problems can't be understood and then resolved by a single person. This introduces a new barrier – the complexity of the network of people we have to negotiate with to solve our problem. Each trying to solve their own problems, of course.

So how do we cope?

- We have conversations, face-to-face and by phone; we meet in groups
- We write things down

The above methods largely form today's definition of work. We support this communication with technology, for example Microsoft Office. Word helps us with concepts, facts and logic, arguments and pictures. Excel helps us with numbers. And PowerPoint gives us a short form to explain the Word and Excel documents to the people who don't have time to read them (such as our bosses and customers).

So we are highly reliant on words and numbers. We place great faith in simple numbers and very complicated spreadsheets. We attempt to capture our thoughts in documents, and assume that other people will have the same understanding that we had when we wrote them.

The good news

Technology can be applied not just to speed up our old ways of working, but to support the capabilities in which we are weak, in particular the ways we interact and communicate in groups to tackle complex issues. It can allow us to tap into the latent 'wisdom of crowds' we already have within our organisations.

Peter Miles, 28 Nov 09