

The paradox of knowledge

How knowledge restricts creativity

One might be right in thinking that the more knowledge we have the better we are likely to be at finding solutions when faced with problems or seeking new ideas for products and services. Innovation at its best is often associated as being the creation of gifted, bright individuals. However, the accumulation of knowledge is paradoxical when it comes to being creative, generating ideas and finding breakthrough solutions.

To appreciate this, we first need to understand a little about traditional thinking and how the brain goes about processing information as we get on with our daily lives.

Imagine a large pile of soil that has been arranged so that it is smooth sided and conical in shape (wide base and pointed at the top). Now imagine slowly pouring a large bucket of water over the point of the mound. Where is the water going? It is likely that the water travels in a downward motion and over time creates gullies down the side of our pile of soil. Let's assume that we stop pouring and allow everything to dry up and then reconvene our pouring.

Where does the water go this time? Almost certainly down the same gullies that were previously created. This is very much like how we process the information that we are continually bombarded with. It is passed along the paths of least resistance, where previous similar information was passed. We refer to these as neural paths and these gradually become more and more embedded. As time goes on we find it increasingly difficult to break out of these neural paths and the ultimate effect being that they limit our ability to think creatively or laterally. We become increasingly dependent upon something stimulating or jolting our thinking if we are attempting to be original or find new approaches etc.

Combine this with our 'education' and accumulation of knowledge over time and this compounds the problem even further. The risk is that the more expert we become the harder we find it to break out of our own pool of knowledge. In engineering, for example, we are taught a set of principles that when applied to certain situations allow us to create things and/or solve problems. The greater our range of knowledge, the more likely we are of success in this. Of course, this is necessary, and I am in no way attempting to belittle the acquisition of knowledge but it does follow that the more expert we become the harder we are likely to find it to break out of our pool of knowledge and be truly creative and innovative.

A recent study on problem solving by Karim Lakhani of Harvard Business School supports this. Lakhani concludes that *"the further the problem from the solvers expertise, the more likely they are to solve it"*.

It is rather like having all of our knowledge in a box (similar to a set of tools) and when faced with a problem or challenge we search the box for a solution that best 'fits'. But what if there is a better solution beyond our own knowledge or there simply isn't a suitable tool in the box? This is where we can seriously struggle. We continue to apply engrained thinking patterns and our existing knowledge to find ideas and solutions when actually what is required is a totally new approach or breakthrough solution.

What is required here is an approach that will enable us to break out of channelled thinking and enable us to be truly creative, thinking in new ways. The good news is that this is a lot easier than most of us would think. There are a vast number of thinking tools and systematic processes that will enable us to generate vast volumes of new ideas on demand, solve the toughest of problems and deliver breakthrough innovation.

William Plomer, the South African and British author was famously quoted as saying: *"It is the function of creative men to perceive relations between thoughts, or things, or forms of expression that may seem utterly different and to be able to combine them into new forms – the power to connect the seemingly unconnected"*.

There is a very powerful tool that encourages just this approach but many struggle to apply it, simply because the brain initially finds it difficult to make connections between things that are apparently unconnected and yet with practice we can all become very effective at this.

Idea generation, creativity, the ability to solve tough and complex problems and innovation isn't, in my opinion, something that should be left to the gifted few. The ability to do these things is most definitely something that can be learnt and over the past fifteen years we have developed and refined a wide range of very effective systematic thinking tools and processes that enable individuals and groups to do just this.

About us

Passionate about thinking efficiency and productivity

We help people do their best thinking. Evolving from a 25 year background in Management Consultancy, we have developed and refined a powerful set of systematic thinking tools and processes and combine these with a unique understanding of individual and group behaviours that when 'managed' enable others to achieve outstanding results.

We work globally and across a wide spectrum of industries supporting endeavours such as innovation, creativity and problem solving (including those of a ridiculously technical nature).

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