Managing Risk: Identifying Black Swans through Knowledge Management

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The one lesson people in the Financial Sector seemed to have learnt from the 'credit crunch' and bank collapses is that we all need to know, and understand better, just what it is we are buying and selling.

It is all very well to say in retrospect: 'Well I never would have bought that financial instrument if I'd known about the insecure debt it concealed'. But while hindsight is a wonderful thing, it's actually foresight that we need. With foresight we can assess the level of risk we will be taking and can judge the potential outcomes of our actions. What this means is that we really have to find out what we don't know about our situation and our possible paths of action and their possible impacts on that situation, in order to judge how to act. But what about the potential influencers that as yet we do not know if they exist, so that we cannot even guess what their impact might be? Yes, just as Donald Rumsfeld so famously said: *There are known knowns. These are things we know that we know. There are known unknowns. That is to say, there are things that we know we don't know. But there are also unknown unknowns. There are things we do not know we don't know.* [Brainyquote, accessed 2009]

There was much laughter as I recall from those listening to him. How can we possibly deal with things we don't know we don't know about? But those of us working in knowledge management nodded sagely and said 'Just so.' As Mary Bates [2007] added *one of the biggest challenges of information professionals is knowing what information is out there and what we are missing – the unknown unknown*. The point is both valid and a distillation of what is a complex matter. If we are going to try and minimise our future risk, whether personally or organisationally, we need to explore the potential influencers on the outcome of any proposed action, and what might be the impact of these influencers on our outcomes.

The insurance industry knows all about this. As Niall Ferguson said in his TV programme [2008] 'We want calculable risk but we're stuck with random uncertainty'. Yet the Scottish Widows company was set up just because the two Scottish ministers concerned <u>could</u> calculate the risk – in this case the numbers of widows and orphans of ministers that there were likely to be in any one year. They were as Niall Ferguson points out, the first insurance actuaries.

Today, in trying to insure against the risk of future occurrences, our complex society means that we are less able to calculate these risks with such great certainty. NASA also understands that there is a problem about reliability and risk management from human error, system risk and multi-objective trade-offs. They do classify their risk into 3 categories as per Rumsfeld 1. Known-known; 2. Known-unknown; and 3. Unknown-unknown. [Maluf et al, 2005.]

And this is where Black Swans come into the picture – early explorers were aware that as they went to new lands they would discover new flora and fauna, but what they didn't know, and didn't dream of occurring, was that there would be new variants on existing fauna. They couldn't conceive of there being Black Swans – after all it was accepted wisdom and knowledge that a swan must be white to be a swan, therefore these black birds were not swans. The concept that Nassim Nicholas Taleb's (2004) puts forward of black swans being a large-impact, hard-to-predict, and rare event beyond the realm of normal expectations is actually the outcome of the hindsight bias, which he says prevents us from adequately learning from the past. [Prologue pVII]

In devising organisational strategy we can play the scenario game – here is where we are on the map of the game plan of our future competitive position, where do we want to be? Who are the other players in our game? What strategies might they employ to try to win in this game? How might they react to our game moves?To attempt to set up such a game strategy to attempt to minimise our exposure to the risk of failure we need to not only know, but also understand, the motivations of our potential players, and how these might affect their game strategy and the moves that they might make.

We really need to devise our strategy in the clear light of our deep understanding of our environment – our landscape of games that we might play. Ah, but what about serendipity and chaos? Michael Porter argues [1988] that there is always chaos to contend with, especially if we operate on a global scale. The unexpected will always happen, we will always discover Black Swans, which will change our ideas of what we know and understand. Or as Pratchett says [1995]

'Chaos is found in greatest abundance wherever order is being sought. It always defeats order, because it is better organised.'

It is very clear that we all live and act within a landscape of complexity, where organisations are continually striving to obtain their peak of fitness for that landscape. The peak that balances the predator with prey is the best fit for us but is one that is easily lost as others [our competitors] transform the landscape as they also search for their peak. Thus we cannot remain still in our competitive landscape but must be continually on the move, judging which is the best direction to move in from our assessment of least risk, or most acceptable level of risk, to obtain the position we desire.

All these stratagems depend on us having sufficient understanding of this competitive and risky landscape or environment in which we operate. Optimum understanding is likely to be too expensive or too time consuming for us to achieve. We will never find all those small local problems which may cascade to larger and sometimes even, catastrophic occurrences [Roberts, 2009] and maybe we will never discover all of the unknowns that we didn't know existed, but those that we do discover, may be sufficient for us to take that next move towards our fitness peak, and to mitigate the risks we may encounter on our journey.

The five main things the delegates will learn by attending the course

1. the value of the existing knowledge in their organisations;
2. identifying and developing a suitable strategy for risk management through knowledge management;
3. the importance of suitable organisational structures in risk and knowledge management;
4. the importance of knowledge sharing and ways to undertake and organise this knowledge sharing;
5. the possible ways to identifying risks and the knowledge management tools that will help in this identification.

Refs:

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Pratchett T., (1995) *Interesting Times* Corgi: UK
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