

## Problem Solving

### Solving difficult and ambiguous problems

For a free guide to Creative Problem Solving and Problem Solving tips just fill your details in to the left and we will send you it by return. In a study carried out by the David Wilkinson the author of *The Ambiguity Advantage* between 2001 and 2007, 161 leaders from 42 organisations were interviewed about their success in solving ambiguous problems. They were asked to describe the problem and how successful they were in solving the problem. 155 of these leaders (96.2%) reported success in both diagnosing the problems and solving them. A number of these leaders reported that any failures were due to failures with other people or circumstances outside of their control. 96% of leaders considered their problem solving was successful

When their peers, managers, team members and direct reports were asked firstly if they recognised the problem, and then what their thoughts were about the success of the solution, these respondents (where there was agreement on the problem and its nature (that it was actually ambiguous)) reported a failure rate exceeding 80%. Included in this figure where a series of situations where the others considered that the solution implemented by the leader resulted in consequences that were so severe that they were worse or as worse as the original situation. 81% of leaders' problem solving was actually considered by others to be a failure

It should be remembered at this point that these results are constrained to ambiguous problems as defined above and not the whole range of problems leaders encounter on a daily basis.

The question has to be asked why there appears to be such a high failure rate for solving ambiguous problems. The answer lies in the way most of us handle ambiguity. The natural tendency for about 98% of the population[1] in some way to ignore, deny or rearrange our view of reality to cancel out the ambiguity especially if it is a near reality ambiguity like the following example:

Expert Problem Solving Workshops - learn how the masters of ambiguity solve difficult and ambiguous problems I think that you should be able to read this without too much trouble. It is very strange that when you turn around the center letters of words you can still read them easily. Ambiguity gets cancelled out by the brain when it is close to a reality we understand. This can be a problem as well as a useful phenomenon. What happens is that our brain makes, what is known as "brdignig inferences"; It looks for patterns and then tries to make sense of what it finds based on what we already know. However it can go wrong! Especially in totally new situations. The brain will try to impose a pattern which is either simply outdated or just plain wrong.

We create the patterns that make sense to us, which means that we can read the above passage with little problem because the brain imposes order in a top down process. In effect imposing a recognisable pattern on things that if we were to see reality for what it is would make little or no sense, otherwise, and would certainly tie up the brain with, processing and energy consuming effort.

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Our usual "default" thinking processes create the recognisable out of vague, ambiguous and largely disorganised world around us. This enables us to process data rapidly and make rapid decisions by knocking the corners and rough edges off what would otherwise be confusing diversity of apparently unconnected data. Under normal circumstances default thinking serves us well, enabling us to navigate a complex world of variation quickly and with reasonable efficiency. However when we need to solve ambiguous and complex problems this otherwise useful ability to be able to simplify, filter and generalise causes failure on an epic scale as we smooth over variance that could easily signify that a whole new set of operators are at work, that we are in new territory and we are required to employ different thinking. There are many famous instances where conditions have changed (new world) and key decision makers have continued applying the thinking and strategies of the old world scenario, totally filtering out the data that signifies change with often catastrophic results. Such examples would include the decisions that led to the commencement of bombing that heralded the start of the Vietnam war, the Challenger disaster, the events following the land fall of Hurricane Katrina, the genocide in Rwanda, the collapses of Bearings bank, Enron, Polaroid and many more. Instances where such disasters were averted by the injection of a new type of thinking, designing new rules and new outlooks include IBM, Apple and the transition of power from the apartheid regime to democracy in South Africa. Clearly not all leaders are bad at recognising new world situations and dealing with ambiguity. As one would expect there is a reasonably normal distribution of people ranging from those that are excellent in new and changing situations right through to those that hate any form of change, deny the new and crave certainty. Similarly there are those that are totally risk averse, those that can see the reality in risk and the "risk fools" who regularly miscalculate risks and frequently end up losing their shirt or worse their lives due to poor appreciation of the risk. The fact that some people are good with ambiguity, risk and solving ambiguous problems leads inevitably to questions about what are the characteristics of such talents and what lessons can we learn from the masters of ambiguity to extend our own talents? Such knowledge helps

dramatically to increase the success rates with uncertainty and risk especially where leadership, problem solving and emotional resilience is concerned. more

[1] Wilkinson, D.J. (2006) The Ambiguity Advantage: what great leaders are great at. London Palgrave Macmillan.