Working Backwards to Opportunities

© October 2007, Dr David Hillson PMP FAPM

david@risk-doctor.com

Many people now agree that the risk process should include opportunities, which are defined as "*uncertain events or conditions which, if they occur, have a positive effect on achievement of objectives*." This is reflected in professional standards, guidelines, textbooks, and the processes and practice of many leading organisations. Despite this acceptance of the theory, people still seem to have trouble identifying opportunities. An earlier Risk Doctor Briefing addressed this difficulty in principle, suggesting four routes to finding upside risks. This briefing offers a specific technique that might be useful.

Engineers and project teams have for a long time used a technique known as Fault Tree Analysis (FTA) or Failure Modes & Effects Analysis (FMEA) in order to expose ways in which technical solutions or projects might fail. This approach is very useful in finding negative risks, or threats. Is it possible to use similar thinking to discover opportunities? Is there an analogous process or technique that works for positive risks?

FTA/FMEA starts with a failure mode or fault condition, then works backwards to explore and identify ways in which this might arise. This can be done either informally by asking how and why the outcome could happen, or in a structured way using formal techniques.

The same approach can be used to find opportunities, though perhaps we should call it Benefit Tree Analysis (BTA) or Success Modes & Effects Analysis (SMEA)? The starting point is to identify a range of positive end conditions, such as saving time, reducing cost, improving performance, enhancing reputation etc. Then we can take each of these in turn and work backwards, asking how and why it might arise. What helpful uncertainties might lead us to this good result? Can we do anything to achieve our objective faster, smarter or cheaper?

It is likely that some of these routes leading to the positive outcome can be implemented immediately, in which case we have discovered a definite improvement option. This should be costed, planned, resourced, and done.

Other things may be uncertain: "*If this happened or if we could do that, then it would help because…*" These helpful uncertainties are in fact opportunities. They should be fed into the risk process to be assessed, then appropriate responses can be developed and implemented etc.

The concept of transforming threat-focused risk identification techniques such as FTA/FMEA into opportunity-seeking equivalents can of course be applied elsewhere. We might also adapt similar techniques such as Root-Cause-Analysis or Ishikawa/fishbone diagrams. The key is to treat opportunities just the same as threats: they are both types of risk, except that one has a positive impact and other is negative. To find opportunities we first need to allow ourselves to think positively, be creative, imagine good things. Then we can use structured techniques to identify those uncertain events or conditions which might happen and which, if they did occur, would be helpful.

There are many opportunities out there waiting to be found. Simple modifications to our familiar threat-based techniques will help us find these upside risks and gain the additional benefits they offer.