

Assume nothing, challenge everything!

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No-one knows the future with perfect certainty, which of course is why we need risk management. But sometimes we try to guess what might happen, and use that information as a basis for planning or decision-making. The proper name for such a guess is an 'assumption', and these are an important source of risk, for projects, businesses and life in general.

Making assumptions is a good way of dealing with an uncertain future when there are a number of possible options. It certainly simplifies matters and allows us to get on with things instead of spending a long time analysing all the possibilities. In its most basic form, an assumption is a decision to proceed on the basis that one option will turn out to be correct and the others will not happen.

Projects make a lot of assumptions, especially during the planning phase. For example, we might assume that we fully understand the specification and scope, or that our suppliers will deliver on time, or that our client will sign-off all approvals within two weeks, or that all key members of our project team will remain for the duration of the project. But what happens if we assumed the wrong thing? In most cases a false assumption would lead to a problem for the project, since we usually tend to assume that things will go the way we want.

Of course, not all assumptions matter equally. There are some assumptions which might prove false without having a significant effect on the overall project, but there are others where a different outcome could be serious. So we may be assuming that our design team will produce draft designs within a month, but we have enough float in the schedule to cope if it takes two months – the assumption could be false but it wouldn't matter too much. On the other hand, if we make an assumption that regulatory requirements won't change before our product is released into the market, but in fact they do change, then we could be in real trouble.

Fortunately there is a simple process for testing how risky our assumptions might be, and for including them in the risk process if necessary. It's called Assumptions Analysis. The first step is to list all the assumptions we have made about our project. A simple IF-THEN statement can be written for each assumption, in the form:

**'IF this assumption proved to be false,
THEN the effect on the project would be ...'**

We can then assess both sides of this statement. On the IF side, we ask how likely the assumption is to be unsafe. Considering the THEN side tells us whether it would matter if the assumption was wrong. Another way of describing this is to see the IF statement as reflecting *probability*, whereas the THEN phrase is about *impact*. And probability and impact are the two dimensions of risk. This

simple approach can be used to turn project assumptions into risks. Where an assumption is assessed as likely to be false and it could have a significant effect on one or more project objectives, that assumption should be considered as a candidate risk.

This type of Assumptions Analysis is a powerful way of exposing project-specific risks, since it addresses the particular assumptions made about a given project. There are, however, two dangers with this technique:

1. The first weakness is that this technique can only consider explicit assumptions, which have been consciously made and openly communicated. There are, however, many implicit assumptions which we all make every day, some of which are very risky. Assumptions Analysis can't analyse assumptions that remain hidden.
2. Secondly this approach tends only to identify downside risks, threats that a particular assumption may prove false and result in a problem for the project. Assumptions Analysis is not good at identifying opportunities because most of our underlying assumptions are optimistic.

The first shortcoming can be overcome by a facilitated approach to identifying and recording assumptions, using someone independent and external to the project to challenge established thinking. To be fully effective, Assumptions Analysis needs full disclosure.

For opportunity identification, the technique can be extended to address and challenge constraints. These are restrictions on what the project can or cannot do, how it must or must not proceed, and they are often imposed from outside the project, for example by management, clients or regulators. But some of these constraints may not be as fixed as they first appear – indeed some of them might be assumed constraints. In fact it might be possible for a constraint to be relaxed or perhaps even removed completely. Sometimes changing a constraint might not help much, but in other cases it might create the possibility of working more efficiently.

For example, management may have classified our project as low-priority, resulting in inadequate resourcing. But might we be able to get our project reclassified and so gain access to better resources? Or perhaps you've been told that all detailed design must be completed before any implementation can start? If it was possible to relax this constraint to permit parallel development of low-risk elements, that might be very beneficial to the project schedule and save time. On the other hand, if the project end-date coincides with a major product launch event, there may be no schedule

flexibility at all. How can we know which constraints are set in stone, and which might be worth changing, if possible?

In the same way that assumptions can be tested to expose threats, a similar IF-THEN test can be applied to constraints to identify possible opportunities. This starts by listing the constraints, then writing statements saying:

**'IF this constraint could be relaxed or removed,
THEN the effect on the project would be ...'**

We are looking for constraints that could possibly be changed (the IF side has a positive probability), and where such a change would be beneficial to the project (a positive impact on the THEN side). These constraints then present an opportunity to the project where something might be changed in order to promote the achievement of one or more objectives. We can find them through a simple process of Constraints Analysis that matches Assumptions Analysis, but which tests those imposed restrictions to see if any might usefully be challenged.

Instead of making blind assumptions about the future, or accepting that stated constraints are unchangeable, we should be prepared to challenge assumptions and constraints. Asking simple questions about what might happen in the uncertain future can expose significant threats and opportunities, which can then be addressed through the risk process, leading to increased chances of success.

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About the author

Dr David Hillson, PMP, FAPM, FIRM, is an international risk management consultant, and Director of Risk Doctor & Partners (www.risk-doctor.com). He is a popular conference speaker and award-winning author on risk. He is recognised internationally as a leading thinker and practitioner in the risk field, and has made several innovative contributions to improving risk management.

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