

When is a Risk not a Risk? *by Dr David Hillson*

One of the most common failings in the risk management process is for the risk identification step to identify things which are not risks. Clearly if this early stage of the risk process fails, subsequent steps will be doomed and risk management cannot be effective. It is therefore essential to ensure that risk identification identifies risks. This paper addresses two key requirements for effective risk identification. The first is a clear understanding of what is meant by the term "risk". The second is to be able to distinguish risks from non-risks, particularly from their causes and effects.

Clearly defining risk

Many people when they try to identify risks get confused between risk and uncertainty. Risk is not the same as uncertainty, so how are the two related? The key is to realise that risk can only be defined in relation to objectives. The simplest definition of risk is "uncertainty that matters", and it matters because it can affect one or more objectives. Risk cannot exist in a vacuum, and we need to define what is "at risk", i.e. what objectives would be affected if the risk occurred. A more complete definition of risk would therefore be "an uncertainty that if it occurs could affect one or more objectives". This recognises the fact that there are other uncertainties that are irrelevant in terms of objectives, and these should be excluded from the risk process. For example if we are conducting an IT project in India, the uncertainty about whether it might be raining tomorrow in London is irrelevant – who cares? But if our project involves redeveloping the Queen's gardens at Buckingham Palace, the possibility of rain in London is not just an uncertainty – it matters. In one case the rain is merely an irrelevant uncertainty, but in the other it is a risk.

Linking risk with objectives makes it clear that every facet of life is risky. Everything we do aims to achieve objectives of some sort, including personal objectives (for example to be happy and

healthy), project objectives (including delivering on time and within budget), and corporate business objectives (such as to increase profit and market share). Wherever objectives are defined, there will be risks to their successful achievement. This is illustrated for projects in Figure 1.

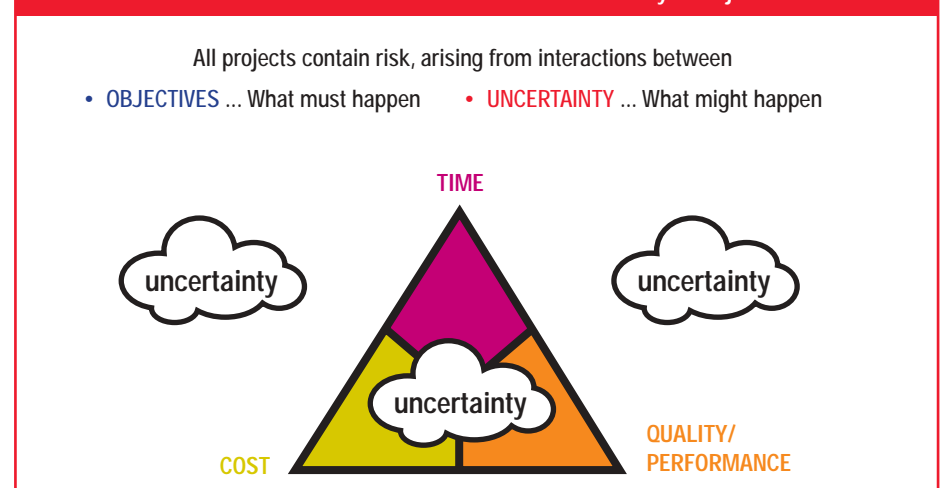
The link also helps us to identify risks at different levels, based on the hierarchy of objectives that exists in an organisation. For example strategic risks are uncertainties that could affect strategic objectives, technical risks might affect technical objectives, reputation risks would affect reputation, and so on.

Distinguishing risks from non-risks

Another common challenge in risk identification is to avoid confusion between causes of risk, genuine risks, and the effects of risks. The PMI® PMBoK® Guide says that "A risk may have one or more causes and, if it occurs, one or more impacts". In the most simple case, one cause leads to a single risk which in turn could have just one effect (see Figure 2), though of course reality is considerably more complex. How do these three differ?

- Causes are definite events or sets of circumstances which exist in the project or

FIGURE 1: Risk arises from the effect of uncertainty on objectives



One other question arises from the concept of risk as "uncertainty that could affect objectives" : what sort of effect might occur? In addition to those uncertainties which if they occur would make it more difficult to achieve objectives (also known as threats), there are also uncertain events which if they occur would help us achieve our objectives (i.e. opportunities). When identifying risks, we need to look for uncertainties with upside as well as those with downside.

Effective risk management requires identification of real risks, which are "uncertainties which if they occur will have a positive or negative effect on one or more objectives". Linking risks with objectives will ensure that the risk identification process focuses on those uncertainties that matter, rather than being distracted and diverted by irrelevant uncertainties.

its environment, and which give rise to uncertainty. Examples include the requirement to implement a project in a developing country, the need to use an unproven new technology, the lack of skilled personnel, or the fact that the organisation has never done a similar project before. Causes themselves are not uncertain since they are facts or requirements, so they should not be managed through the risk management process.

- Risks are uncertainties which, if they occur, would affect achievement of the objectives either negatively (threats) or positively (opportunities). Examples include the possibility that planned productivity targets might not be met, interest or exchange rates might fluctuate, the chance that client expectations may be misunderstood, or

whether a contractor might deliver earlier than planned. These uncertainties should be managed proactively through the risk management process.

- Effects are unplanned variations from objectives, either positive or negative, which would arise as a result of risks occurring. Examples include being early for a milestone, exceeding the authorised budget, or failing to meet contractually agreed performance targets. Effects are contingent events, unplanned potential future variations which will not occur unless risks happen. As effects do not yet exist, and indeed they may never exist, they cannot be managed through the risk management process.

Including causes or effects in the list of identified risks obscures genuine risks, which may not receive the appropriate degree of attention they deserve. So how can we clearly separate risks from their causes and effects? One way is to use risk metalanguage (a formal description with required elements) to provide a three-part structured "risk statement", as follows : "As a

criteria (contingent possibility = effect on objective)."

- "We have to outsource production (cause); we may be able to learn new practices from our selected partner (risk), leading to increased productivity and profitability (effect)."

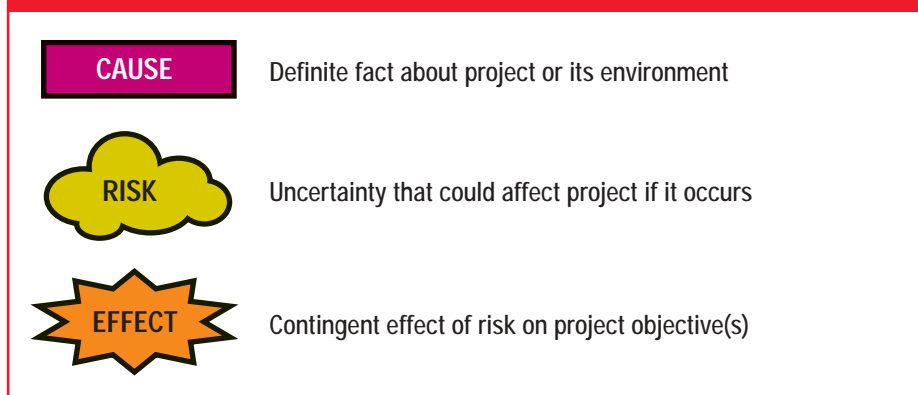
The use of risk metalanguage should ensure that risk identification actually identifies risks, distinct from causes or effects. Without this discipline, risk identification can produce a mixed list containing risks and non-risks, leading to confusion and distraction later in the risk process.

Conclusion

Risks must be identified if they are to be successfully managed. But risk is not the same as uncertainty, and risks must be separated from their causes and their effects. We must be clear about what we are trying to identify.

Effective risk identification is an essential prerequisite for a successful risk process, and this requires both a clear understanding of what "risk"

FIGURE 2: Cause, Risk and Effect



result of <definite cause>, <uncertain event> may occur, which would lead to <effect on objective(s)>."

Examples include the following :

- "As a result of using novel hardware (a definite requirement), unexpected system integration errors may occur (an uncertain risk), which would lead to overspend on the project (an effect on the budget objective)."
- "Because our organisation has never done a project like this before (fact = cause), we might misunderstand the customer's requirement (uncertainty = risk), and our solution would not meet the performance

means as well as what it does not mean. This paper has addressed both these elements, by clarifying the fundamental link between risk and objectives (a risk is "any uncertainty which if it occurs would have a positive or negative effect on one or more objectives"), and by describing how risk metalanguage can distinguish between cause, risk and effect ("Because of a cause, a risk might occur, which would lead to an effect"). Applying these simple approaches will ensure that risk identification identifies risks, allowing the rest of the risk process to proceed on a sound basis. Only then can we be sure that the risk management process is addressing those uncertainties that can affect our projects and businesses.

References and further reading

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About the author



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