

RISK MANAGEMENT PATHWAY (Extract on Opportunities)

Risk should be defined as “An uncertain event that, should it occur, would have an effect (positive or negative) on the project or business objectives.

Therefore to be successful, **Risk Management** should be an integral part of project and business management techniques. Risk management relates to the formal process of ‘**Identification**’, ‘**Assessment**’ and subsequent ‘**Management**’ of the ‘**Threats**’ and ‘**Opportunities**’ which face any endeavour.

Assessing risks consistently

Risks should be assessed qualitatively to allow a consistent evaluation and prioritisation of the risks to be undertaken. This ensures that management attention is focussed on those risks that are most significant to the success of the project. To ensure a consistent approach it is essential that a common basis for determining risk probability and impact is defined.

These assessment criteria can be developed for any size or scope of project. In general these criteria reflect a range of boundary values that can be used to consistently assess different perceptions of risk significance. An example of which is shown in Table 1, but actual values must be developed to the actual size and scope of the project.

The example in Table 1 employs 5 bands for Threat and Opportunity, this ensures that significant risks can be easily discriminated from those risks identified.

		Prob.	Timescale Impact	Cost Impact	Performance Impact	
Threat (loss)	VHI	70% - 100%	8 – 24 weeks	50K – 1M (£)	70%- 100%	Reduction in performance
	HI	50% - 70%	4 – 8 weeks	25 – 50 K (£)	50% - 70%	
	MED	30% -50%	2 – 4 weeks	10 – 25 K (£)	30% -50%	
	LO	10% - 30%	1 – 2 weeks	5 – 10 K(£)	10% - 30%	
	VLO	0% - 10%	0 - 1 week	0 – 5 K(£)	0% - 10%	
	Nil	0%	0	0	0%	
Opportunity (saving)	VLO	0% - 10%	0 - 1 week	0 – 5 K(£)	0% - 10%	Increase in Performance
	LO	10% - 30%	1 – 2 weeks	5 – 10 K(£)	10% - 30%	
	MED	30% -50%	2 – 3 weeks	10 – 25 K (£)	30% -50%	
	HI	50% - 70%	3 – 4 weeks	25 – 50 K (£)	50% - 70%	
	VHI	70%- 100%	4 – 10 weeks	50K – 1M (£)	70%- 100%	

Table 1 – Example risk assessment criteria

The assessment criteria used to assess the risk in terms of their probability of occurrence and likely impact then needs to be developed into a weighting system to allow the comparison of the risks. The score generated is in itself a dimensionless number, but it can then be used to identify the relative severity of the risk for the Project. Any weighting number can be used, however, it is recommended that the numbering system used places an emphasis on the impact of a risk rather

that on its frequency. This ensures that those risks with a significant impact rate higher than those minimal impact risks with a greater frequency of occurrence.

0.72	0.36	0.18	0.09	0.05	VHI	Probability	VHI	0.05	0.09	0.18	0.36	0.72	HI >0.2
0.56	0.28	0.14	0.07	0.04	HI		HI	0.04	0.07	0.14	0.28	0.56	
0.40	0.20	0.10	0.05	0.03	MED		MED	0.03	0.05	0.10	0.20	0.40	MED 0.1-0.2
0.24	0.12	0.06	0.03	0.02	LO		LO	0.02	0.03	0.06	0.12	0.24	
0.10	0.08	0.04	0.02	0.01	VLO		VLO	0.01	0.02	0.04	0.08	0.10	LO <0.1
VHI	HI	MED	LO	VLO			VLO	LO	MED	HI	VHI		
Opportunity					Impact		Threat						

Table 2 – Example Probability - Impact weighting scales

It is important to ensure that assessments gained from individuals are as accurate and unbiased as possible. The assessment criteria should be always available at brainstorm or interview for reference. Schedule Impact is assessed as potential movement to key milestones dates. Cost Impact is based upon values of total project cost, and performance impact is based upon relevant technical parameters or objectives.

MANAGEMENT OF RISK

The objective of risk management is to manage those risks associated with the project in advance of their occurrence. Risk Management may require that some risks be avoided completely by changing the project approach, absorbing some risks within financial or schedule float and preparing fallback plans for those critical areas which cannot be resolved in advance. In addition management activities will be required to ensure risk opportunities are realised.

Methods Of Managing Risk (Threats)

There are four basic methods of mitigating Threats:

Risk Avoidance – Eliminate the cause of uncertainty that first introduced the risk.

Risk Reduction – Target key areas or drivers in order to reduce the severity of the impact. It can also be undertaken by applying a contingency budget or slack into the programme. It aims to reduce a risk to an 'acceptable' level.

Risk Transfer – Seek to place liability on a third party should the risk occur.

Risk Acceptance – The process of managing a risk by making a judgement that the risk is at an acceptable level. It may be that the benefits of attempting to reduce the risk further are outweighed by the costs of implementing mitigation actions. The risk is then continually monitored to ensure that any escalation is captured and appropriate strategies are then implemented. It is vital that all accepted risks have a viable fallback plan.

Methods Of Managing Risk (Opportunity)

There are four basic methods of managing Opportunities:

Risk Develop – Clarify the cause of uncertainty that first introduced the risk to ensure the risk is realised.

Risk Enhance – Targets key areas or drivers in order to increase the severity of the impact.

Risk Share – Seek to share the benefit with a third party should the risk occur and use the realised benefits are used to give incentives to partners.

Risk Ignore – The process of managing a risk by making the judgement that the risk is at a level where the return on the risk management investment does not make it cost effective to pursue. The risk is then continually monitored to ensure that if in the future it becomes viable, the appropriate strategies are implemented.