

# Managing Risk in Projects: WHAT'S NEW?

Dr David Hillson, The Risk Doctor



## Managing risk in projects: *What's new ?*

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*The Risk Doctor*



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## Where are we now?

### ▶ Project risk management has:

- ▶ Standards
- ▶ Professional bodies
- ▶ Body of knowledge
- ▶ Infrastructure



### ▶ **Becoming a profession?**

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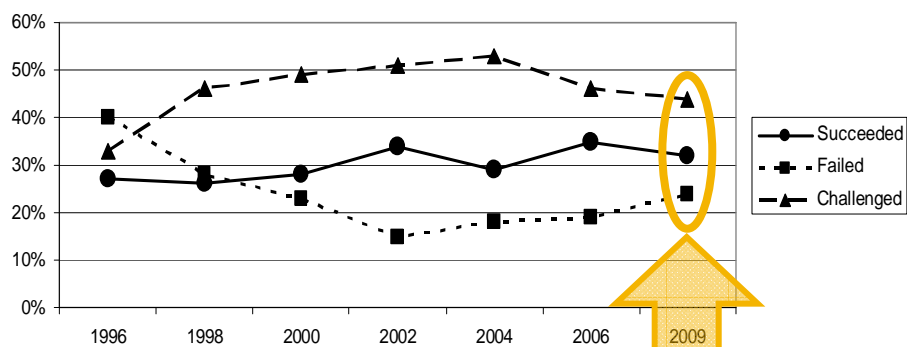
## Today's position

- ▶ Project risk management is
  - ▶ Widely accepted
    - ▶ Consensus on main aspects
  - ▶ Commonly practised
    - ▶ All industries, all project types and sizes, most countries
- ▶ So all sorted then?

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## Standish Group CHAOS data



***We are here***

*24% Failed  
44% Challenged  
32% Succeeded*

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## Project risk management ...

- ▶ ... THE key driver for project success
- ▶ Because :
  - ▶ Life (and projects) are **risky** – must be managed
  - ▶ Emphasis on **objectives**
  - ▶ **Proactive** not reactive
  - ▶ Creates **space to manage**
  - ▶ Ensures **consensus & focus**
- ▶ BUT projects fail REPEATEDLY
- ▶ WHY? Risk management is supposed to help!

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## Three areas to improve

1. Principles
2. Process
3. People



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## 1. PRINCIPLES



*Uncertainty,  
Risk,  
Threat,  
Opportunity*

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## What is risk?

***Risk  $\neq$  Uncertainty***

***True or False?***

***Risk = Uncertainty that matters***  
***(i.e. can affect *objectives*)***

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## Definitions

"The effect of **uncertainty** on **objectives**"



(ISO 31000:2009)

***Risk connects uncertainty with objectives***

"An **uncertain** event or set of circumstances that, should it occur, will have an **effect** on achievement of **objectives**"



(PRAM Guide, BoK5)

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## What kind of effect matters?

- ▶ **Effect** of uncertainty is assessed against **objectives**
  - ▶ Uncertainty could have either **positive** effect or **negative** effect
  - ▶ Uncertainty that **helps** as well as uncertainty that **harms**
- ▶ Both matter
- ▶ Both need managing



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## Definitions

"An **uncertain** event or condition that, if it occurs, has a **positive or negative** effect on an **objective**"

(PMI® PMBoK Ch 11)

***Risk includes both opportunities & threats***

"...uncertainty can affect the achievement of a project's objectives **either positively or negatively**. The term "risk event" is therefore used to cover both **uncertainties that could hinder the project (threats)** and **uncertainties that could help the project (opportunities)**."

[APM PRAM Guide]

"Note 1 – An effect is a deviation from the expected – **positive and/or negative.**" [ISO 31000:2009]

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## Risk and Risks

- ▶ How is risk seen from perspective of project sponsor, programme, organisation, funders, client, external stakeholders... ?
- ▶ Question: **"How risky is this project?"**
  - ▶ Not "What are the risks?"
- ▶ Answer = sum of all individual risks?
  - ▶ **No**, "overall project risk" is a different concept

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## Risk $\neq$ $\Sigma$ [Risks]

- ▶ **apm** PRAM Guide (2004), BoK5 (2006)
  - ▶ Project risk is **the exposure of stakeholders to the consequences of variation in outcome.** The overall risk affecting the whole project, defined by risk events, other sources of uncertainty and associated dependencies, to be managed at a strategic level
- ▶ **PMI** Practice Standard for Project Risk Management (2009)
  - ▶ Overall project risk represents **the effect of uncertainty on the project as a whole.** It is more than the sum of individual risks on a project.

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## Implications

- ▶ Is this in scope for project risk management?
  - ▶ **Yes** – project manager is accountable for “overall project risk”
- ▶ Need language, process, techniques for identification, assessment, response, reporting of overall project risk
  - ▶ Not just programme risk management or ERM
  - ▶ **Part of project risk management**

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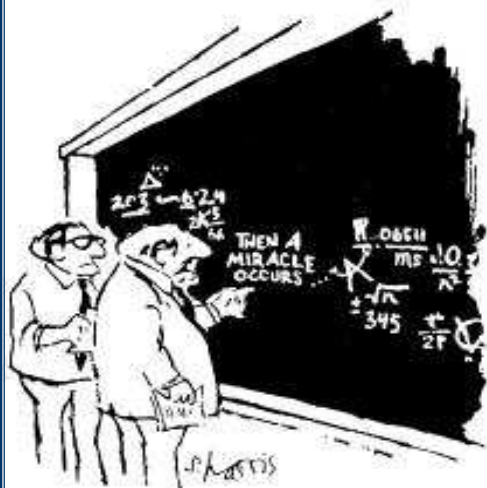
## Principles summary

- ▶ Risk is uncertainty that matters
- ▶ Risk is defined in relation to objectives
- ▶ Risk includes threat and opportunity
- ▶ "Overall project risk" also needs managing
  
- ▶ Challenges:
  - ▶ Do you think about risk in this way?
  - ▶ Does your approach to project risk address this?
  - ▶ If not, why not?
  - ▶ What could/should you do differently?

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## 2. Process



"You need more detail just here..."

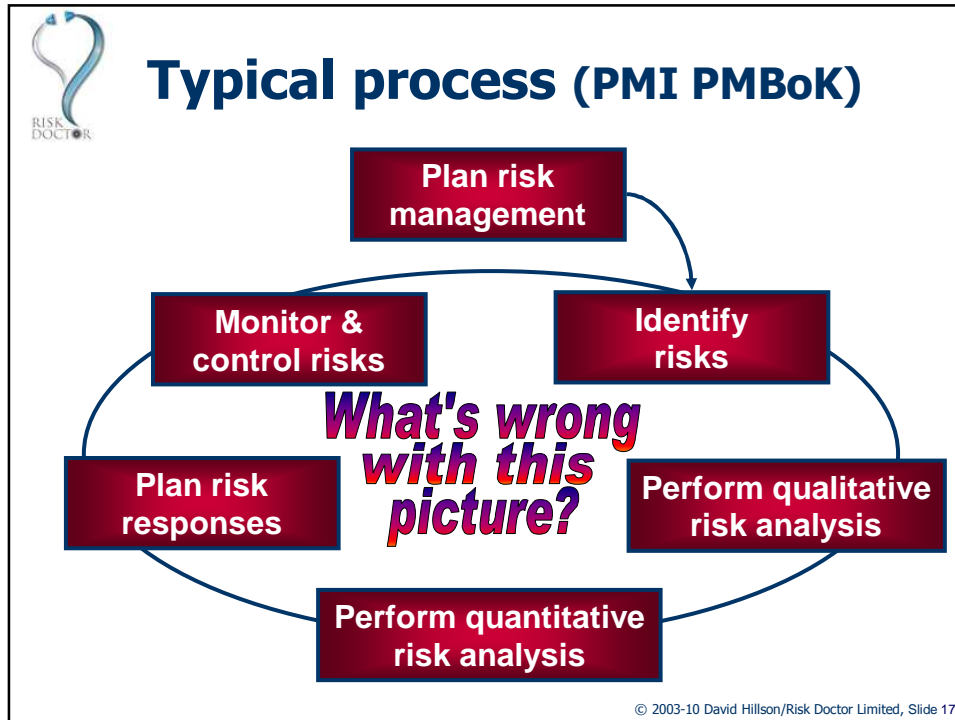
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**Danger point 1**

- ▶ No explicit step in risk process between **Plan risk responses** and **Monitor & control risks**
- ▶ Where do we **implement** agreed responses?
  - ▶ Pass into routine project activity??
  - ▶ Monitored via regular project process??

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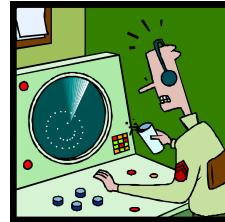
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## Implement responses

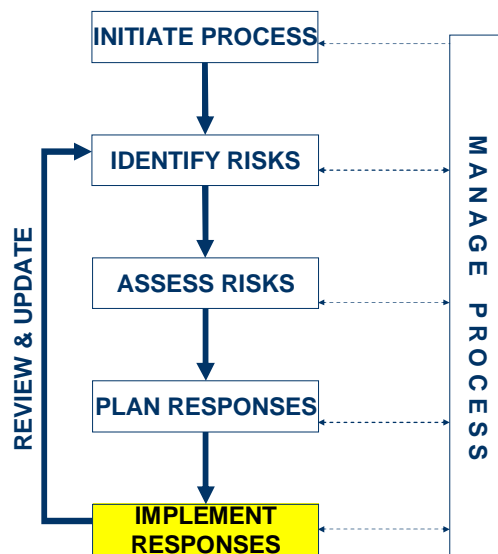
- ▶ Take action as planned, then...
- ▶ Monitor changes in risk exposure
  - ▶ Periodic risk reviews
    - ▶ New risks, closed risks, changes in assessment
- ▶ Determine effectiveness of responses
  - ▶ Additional risk response planning
- ▶ Assess process effectiveness



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## Better process (APM)



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## Danger point 2



- ▶ Risk process iterates without end
- ▶ No final step at project completion
- ▶ Where do we **learn risk-related lessons**?
  - ▶ Part of routine post-project review??
  - ▶ Accessed via knowledge management process??

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## Learning from experience

- ▶ Keep risk records
  - ▶ metrics, trend analysis, "actual v estimate"
- ▶ Review risk as part of post-project review
  - ▶ Or hold specific "Risk Lessons Learned Review"
- ▶ Identify:
  - ▶ generic risks, effective responses, costs & benefits
- ▶ Use results
  - ▶ update checklists etc.
  - ▶ improve project strategy
  - ▶ incorporate proactive responses

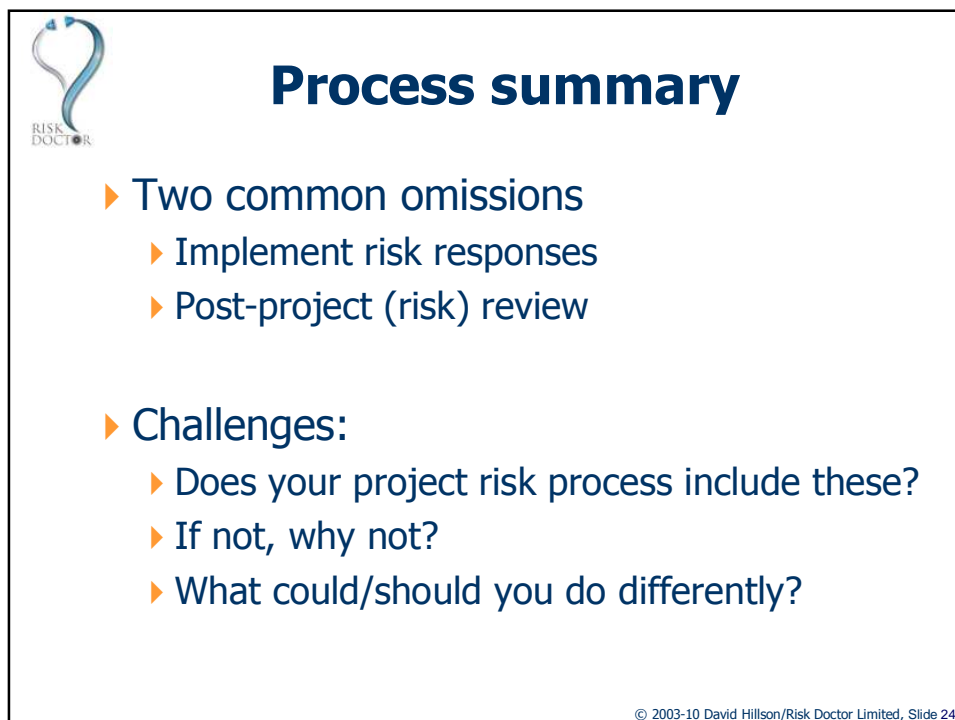
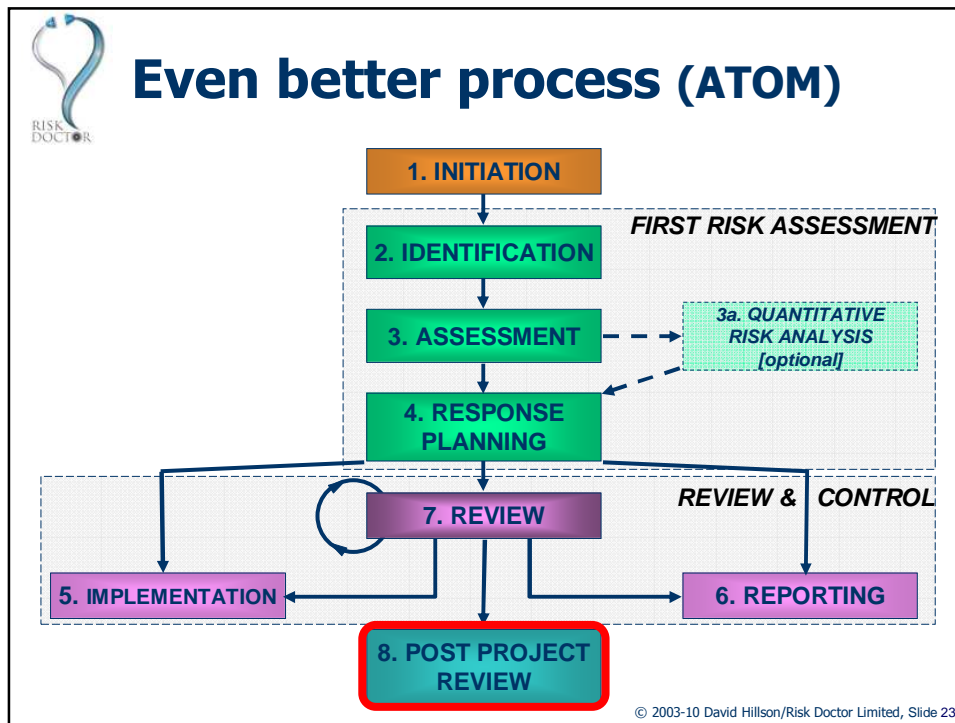


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## 3. People

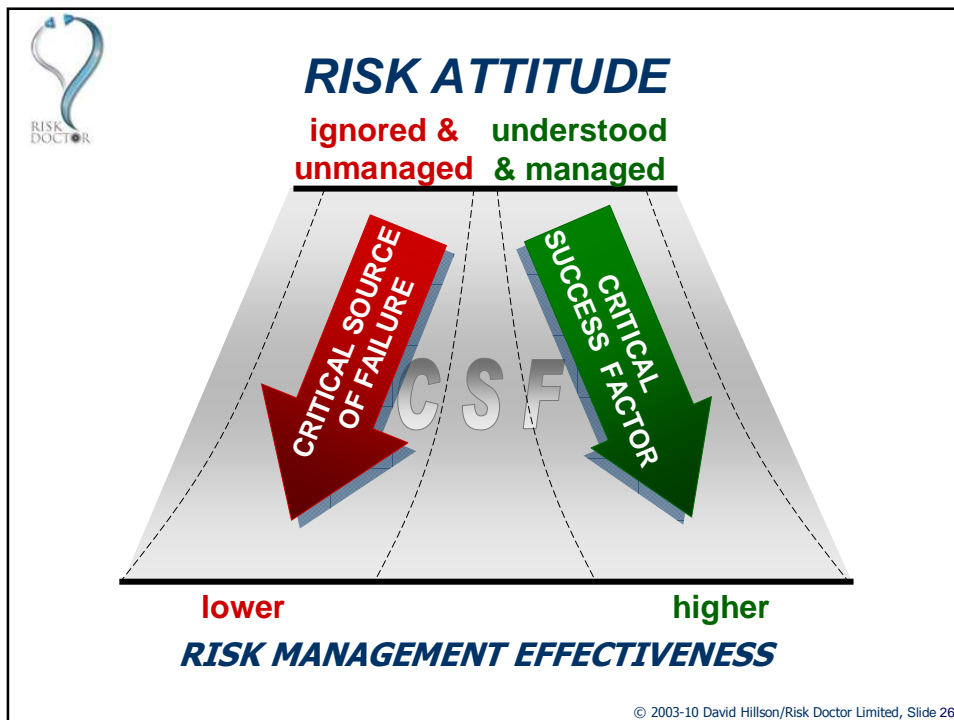


- ▶ Risk is not managed by robots but **people**
- ▶ Human psychology is major influence



**Risk Attitudes** ⇒ **Risk Behaviour** ⇒ **Risk Culture**

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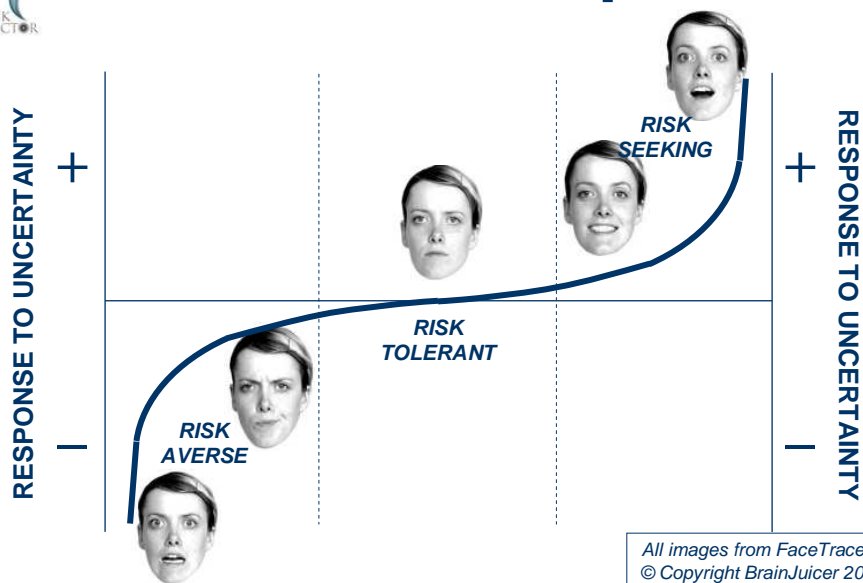
## People & the risk process

- ▶ **The** critical success factor!
- ▶ People are responsible for :
  - ▶ setting risk acceptability thresholds
  - ▶ identifying risks (threats & opportunities)
  - ▶ assessing probability & impacts
  - ▶ proposing appropriate responses
  - ▶ implementing agreed actions
- ▶ All affected by **risk attitude**

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## The risk attitude spectrum



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## Two key questions

**Where are you on the risk attitude spectrum?**

▶ ***"It depends"***

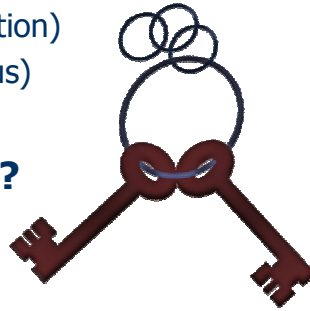
▶ On ...

- ▶ external environment (situation)
- ▶ internal environment (me/us)

**And where should you be?**

▶ ***"It depends"***

▶ On objectives



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## Three key characteristics

▶ Risk attitude is **variable**

▶ Risk attitude is **chosen**

▶ Risk attitude can be **managed**

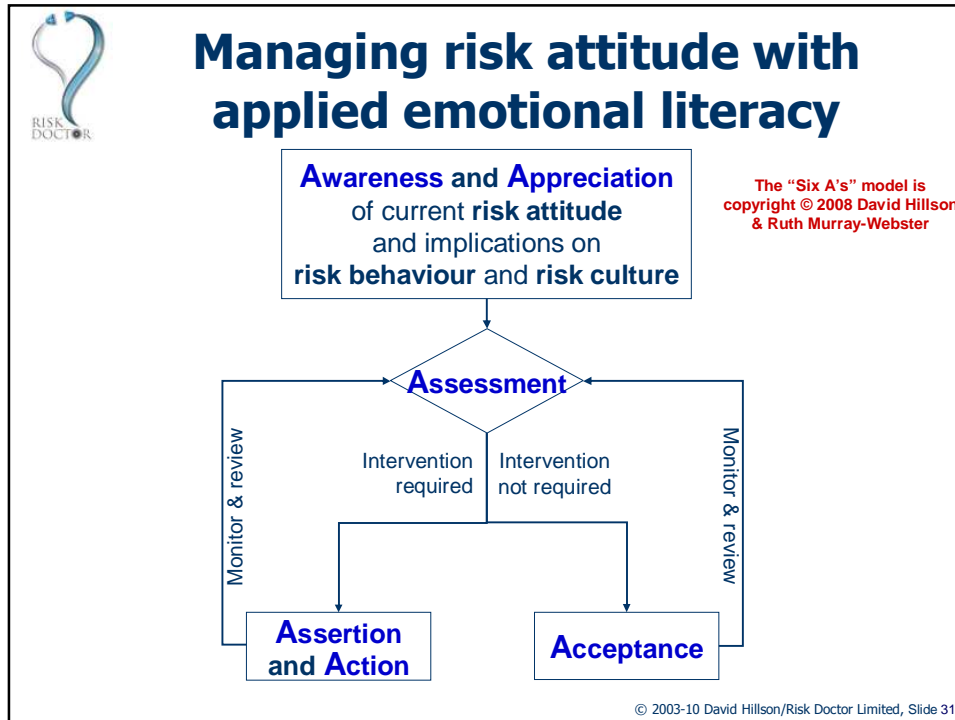


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## People summary

- ▶ Frequently ignored
  - ▶ Risk attitudes affect process effectiveness
  - ▶ Awareness ⇒ understanding ⇒ management
- ▶ Challenges:
  - ▶ Do you manage risk attitudes (self & others)?
  - ▶ If not, why not?
  - ▶ What could/should you do differently?

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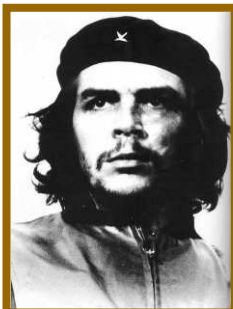
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## And finally...

- ▶ Project risk management matters
- ▶ Several areas for improvement & attention
- ▶ Need pioneers & rebels



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# Thank you

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**RISK DOCTOR & PARTNERS** embodies David's unique ethos, blending *leading-edge thinking* with *practical application*, and providing access to the latest developments in *risk management best practice*. Full details of the business are at [www.risk-doctor.com](http://www.risk-doctor.com). The website also offers many of David's papers for download, and allows you to raise specific problems for rapid diagnosis.

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- **Process review**, comparing your risk management approach against best practice and recommending practical improvements to meet the specific challenges faced by your business
- **Risk review**, assessing the risk exposure of your project, programme or business, identifying and prioritising threats and opportunities, and developing effective responses to optimise performance and achievement of objectives
- **Risk training**, offering a range of learning experiences designed to raise awareness, create understanding and develop skills, targeting senior management, programme/project managers, project teams and risk practitioners

#### DR DAVID HILLSON FRSA FAPM FIRM FCM

David Hillson is **The Risk Doctor**. He is an international risk management consultant, and Director of **RISK DOCTOR & PARTNERS**. Many senior managers have benefited from his insights through personal coaching and mentoring, and he has assisted a wide range of organisations to develop effective in-house risk processes and successfully manage their risk.

David has developed a number of innovations in risk management, which have been widely adopted. He is best known for championing the inclusion of opportunity in the risk process, and has developed a practical approach to understanding and managing risk attitudes (see [www.risk-attitude.com](http://www.risk-attitude.com)).

David is an active member of the global Project Management Institute (**PMI**) and was a founder member of its Risk Management Specific Interest Group (SIG). He received the **PMI Distinguished Contribution Award** for his work in developing risk management over many years.

He is an **Honorary Fellow** of the Association for Project Management (**APM**) and past Chairman of its Risk SIG. David is also a Fellow of the Institute of Risk Management (**IRM**), the Royal Society for the encouragement of Arts, Manufactures & Commerce (**RSA**), & the Chartered Management Institute (**CMI**).

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Risk is everywhere and presents a range of threats and opportunities which need to be managed proactively if we are to minimise problems and maximise benefits. **RISK DOCTOR & PARTNERS** offers a high-value solution for effective risk management – contact us today at [info@risk-doctor.com](mailto:info@risk-doctor.com) to find out how you can benefit, or visit [www.risk-doctor.com](http://www.risk-doctor.com) for full details.





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## MANAGING RISK IN PROJECTS: WHAT'S NEW?

**Dr David Hillson, The Risk Doctor,**

**January 2010**

Humans have been undertaking projects for millennia, with more or less formality, and with greater or lesser degrees of success. We have also recognised the existence of risk for about the same period of time, understanding that things don't always go according to plan for a range of reasons. In relatively recent times these two phenomena have coalesced into the formal discipline called project risk management, offering a structured framework for identifying and managing risk within the context of projects. Given the prevalence and importance of the subject, we might expect that project risk management would be fully mature by now, only needing occasional minor tweaks and modifications to enhance its efficiency and performance. Surely there is nothing new to be said about managing risk in projects?

While it is true that there is wide consensus on project risk management basics, the continued failure of projects to deliver consistent benefits suggests that the problem of risk in projects has not been completely solved. Clearly there must be some mismatch between project risk management theory and practice, or perhaps there are new aspects to be discovered and implemented, otherwise all project risks would be managed effectively and most projects would succeed.

So what could possibly remain to be discovered about this venerable topic? Here are some suggestions for how we might do things differently and better, under four headings:

1. Principles
2. Process
3. People
4. Persistence

### **Problems with principles**

There are two potential shortfalls in the way most project teams understand the concept of risk. It is common for the scope of project risk management processes to be focused on managing possible future events which might pose threats to project cost and schedule. While these are undoubtedly important, they are by no means the full story. The broad proto-definition of risk as "uncertainty that matters" encompasses the idea that some risks might be positive, with potential upside impacts, mattering because they could enhance performance, save time or money, or increase value. And risks to objectives other than cost and schedule are also important and must be managed proactively. This leads to the use of an integrated project risk process to manage both threats and opportunities alongside each other. This is more than a theoretical nicety: it maximises a project's chances of success by intentionally seeking out potential upsides and capturing as many as possible, as well as finding and avoiding downsides.

Another conceptual limitation which is common in the understanding of project risk is to think only about detailed events or conditions within the project when considering risk. This ignores the fact that the project itself poses a risk to the organisation at a

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higher level, perhaps within a programme or portfolio, or perhaps in terms of delivering strategic value. The distinction between “overall project risk” and “individual project risks” is important, leading to a recognition that risk exists at various levels reflecting the context of the project. It is therefore necessary to manage overall project risk (risk of the project) as well as addressing individual risk events and conditions (risks in the project). This higher level connection is often missing in the way project risk management is understood or implemented, limiting the value that the project risk process can deliver. Setting project risk management in the context of an integrated Enterprise Risk Management (ERM) approach can remedy this lack.

### **Problems with process**

The project risk process as implemented by many organisations is often flawed in a couple of important respects. The most significant of these is a failure to turn analysis into action, with Risk Registers and risk reports being produced and filed, but with these having little or no effect on how the project is actually undertaken. The absence of a formal process step to “Implement Risk Responses” reinforces this failing. It is also important to make a clear link between the project plan and risk responses that have been agreed and authorised. Risk responses need to be treated in the same way as all other project tasks, with an agreed owner, a budget and timeline, included in the project plan, reported on and reviewed. If risk responses are seen as “optional extras” they may not receive the degree of attention they deserve.

A second equally vital omission is the lack of a “post-project review” step in most risk processes. This is linked to the wider malaise of failure to identify lessons to be learned at the end of each project, denying the organisation the chance to learn from its experience and improve performance on future projects. There are many risk-related lessons to be learned in each project, and the inclusion of a formal “Post-project Risk Review” will help to capture these, either as part of a more generic project meeting or as a separate event. Such lessons include identifying which threats and opportunities arise frequently on typical projects, finding which risk responses work and which do not, and understanding the level of effort typically required to manage risk effectively.

### **Problems with people**

It is common for project risk management to be viewed as a collection of tools and techniques supporting a structured system or a process, with a range of standard reports and outputs that feed into project meetings and reviews. This perspective often takes no account of the human aspects of managing risk. Risk is managed by people, not by machines, computers, robots, processes or techniques. As a result we need to recognise the influence of human psychology on the risk process, particularly in the way risk attitudes affect judgement and behaviour. There are many sources of bias, both outward and hidden, affecting individuals and groups, and these need to be understood and managed proactively where possible.

The use of approaches based on emotional literacy to address the human behavioural aspects of managing risk in projects is in its infancy. However some good progress has been made in this area, laying out the main principles and boundaries of the topic and developing practical methods for understanding and managing risk attitude. Without taking this into account, the project risk management process as typically implemented is fatally flawed, relying on judgements made by people who are subject to a wide range of unseen influences, and whose perceptions may be unreliable with unforeseeable consequences.

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## Problems with persistence

Even where a project team has a correct concept of risk that includes opportunity and addresses the wider context, and if they ensure that risk responses are implemented effectively and risk-related lessons are learned at the end of their project, and if they take steps to address risk attitudes proactively – it is still possible for the risk process to fail! This is because the risk challenge is dynamic, constantly changing and developing throughout the project. As a result, project risk management must be an iterative process, requiring ongoing commitment and action from the project team. Without such persistence, project risk exposure will get out of control, the project risk process will become ineffective and the project will have increasing difficulty in reaching its goals.

Insights from the new approach of “risk energetics” suggest that there are key points in the risk process where the energy dedicated by the project team to managing risk can decay or be dampened. A range of internal and external Critical Success Factors (CSFs) can be deployed to raise and maintain energy levels within the risk process, seeking to promote positive energy and counter energy losses. Internal CSFs within the control of the project include good risk process design, expert facilitation, and the availability of the required risk resources. Equally important are external CSFs beyond the project, such as the availability of appropriate infrastructure, a supportive risk-aware organisational culture, and visible senior management support.

## Final words

So perhaps there is still something new to be said about managing risk in projects. Despite our long history in attempting to foresee the future of our projects and address risk proactively, we might do better by extending our concept of risk, addressing weak spots in the risk process, dealing with risk attitudes of both individuals and groups, and taking steps to maintain energy levels for risk management throughout the project. These simple and practical steps offer achievable ways to enhance the effectiveness of project risk management, and might even help us to change the course of future history.

[Note: All of these issues are addressed in the book *“Managing Risk in Projects”* by David Hillson, published in August 2009 by Gower (ISBN 978-0-566-08867-4) as part of the *Fundamentals in Project Management* series.]

## About the author

Known globally as *The Risk Doctor*, **Dr David Hillson** is Director of RISK DOCTOR & PARTNERS ([www.risk-doctor.com](http://www.risk-doctor.com)). David is recognised internationally as a leading thinker and expert practitioner in risk management, and he consults, writes and speaks widely on the topic.

David is active in the Project Management Institute (PMI®) and received the PMI Distinguished Contribution Award for his work in developing risk management over many years. He is also an Honorary Fellow of the UK Association for Project Management (APM), and an active Fellow of the Institute of Risk Management (IRM). David was elected a Fellow of the Royal Society for the encouragement of Arts, Manufactures & Commerce (RSA) to contribute to its Risk Commission. He is also a Chartered Manager and Fellow with the Chartered Management Institute (CMI).