

Performance Measurement of Risk Management

John Knott

Principal Consultant

John Knott Associates Ltd.

What the Specification said!

Performance Measurement in Risk Management

A classic example of one of the most common project & business risks – seeing what we want to see and not what was asked for!

Start from the beginning!

- Why Manage Risk in the first place?

Typical reasons

- The customer Expects it
- It is a contract requirement
- Corporate governance
- Company procedures
- To reduce fire-fighting
- To meet the key schedule milestones
- To minimise overall costs

Other Reasons

- Maximise utilisation of resources (Especially cash)
- Manage Release of contingency / reserve to profit
- Release Resources to be used on other projects or objectives.
- To Assure our future
- Protect Our Reputation / Credit Rating
- Think of your next job application. What do you want to be associated with?

What is at risk?

- Key Tangible Assets:
 - Property and Facilities
 - Manufacturing plant
 - Material stockpiles
 - Profit

And!

- Key Intangible Assets
 - Business systems
 - Reputation (Yours and the company's)
 - PR & HR
 - Credit Rating (and cost of capital)
 - CSR / Environment
 - Long Term Objectives (Yours and the company's)

So?

- Where do we start looking for measures of performance?

Risk Management Maturity Level?

(M Hopkinson et al)

- Measures:
 - how often, if at all
 - who does and who should
 - ad-hoc or structured,
 - embedded in business practice or tacked on
 - Etc
- Does not actually measure performance

Risk Management Performance?

- What does it mean?
 - Minimising executive time spent?
 - Maximising Coverage?
 - Capturing the Important Risks?
 - Reducing overall Impact?
 - Minimising mitigation costs?

Balance?

- Risk Management Maturity =
- Are you doing the right THINGS?

- Risk Management performance =
- Are you doing things RIGHT?

What can we measure?

- Risks occurred but not identified in advance.
- Risks identified but occurred
- Risks identified but not managed
- Risks identified and successfully managed
- Number of risks in each case vs total score in each case

What we cannot measure!

- Unidentified risks which did not occur!
- (Unknown unknowns which remain unknown and hence immeasurable?)

Even if we do we still might hear:

- How could they have let that happen???
- Could they not see that coming?????
- Are they blind or stupid??
 - If you don't spot risks you will be lucky to manage them.

DNV/AIRMIC Study

- Very few organisations manage all categories of risk in an integrated fashion.
- RM Software used by many organisations but many also use spreadsheets
- Risk policies influence consistency but as a rule have little direct influence on amount of risk accepted.
- There is scope for improving the quality of risk identification, even in some of those organisations that are best at risk management.

- (AIRMIC – Association of Insurance & Risk Managers)

DNV/AIRMIC Study

- Very few organisations manage all categories of risk in an integrated fashion.
- RM Software used by many organisations but many also use spreadsheets
- Risk policies influence consistency but as a rule have little direct influence on amount of risk accepted.
- **There is scope for improving the quality of risk identification, even in some of those organisations that are best at risk management.**

Business Continuity Example

- **BCM HIGHLIGHTS PAINFUL TRUTHS**
 - **BY FOCUSING ON:**
 - **Company's business and operational model**
 - **Key value creating products and services**
 - **Key dependencies –assets and processes**
 - **How the company will respond strategically to loss of threat to any of these**
 - **What are the main threats today and on horizon**
 - **Evidence that response strategies and plans will work in practice.**

L. Bird – Business Continuity Institute – Risk SIG

11-06-09

Business Models

- **BCM HIGHLIGHTS PAINFUL TRUTHS**
 - **BY FOCUSING ON:**
 - **Company's business and operational model**
 - **Key value creating products and services**
 - **Key dependencies –assets and processes**
 - *How the company will respond strategically to loss of threat to any of these*
 - *What are the main threats today and on horizon*
 - *Evidence that response strategies and plans will work in practice.*

L. Bird – Business Continuity Institute – Risk SIG 11-06-09

Need for structure!

- Projects have used requirements breakdown, WBS, contractor breakdown, etc structures for years. Use these as a template for risk workshops.
- Now (at last) becoming recognised that a business model is essential for identifying business continuity risks.
- **Structured Risk Identification helps avoid blind spots.**

PERROX - Requirements, risk and action browser

Requirements breakdown - those in red have associated risks.
Click on requirement to show risk list.
Currently selected requirement is shown bold.

Level 0: Level 1: Level 2: Level 3:

- 21 - Float Function
- 22 - Move Function
- 23 - Fight Function
- 108 - Mountain Climb**
 - 109 - Build Character
 - 110 - Return safely and on time**
 - 113 - Reach the Summit
- 130 - Production Run
 - 197 - Supplier Component Testing
 - 206 - Build standard definition
 - 198 - Outsourced Assemblies
 - 207 - Design Maturity
 - 208 - Build standard definition
 - 209 - Firmware
 - 210 - Test Equipment
 - 211 - Test Procedures
 - 199 - In House Assembly
 - 212 - Procedures
 - 213 - Skilled Assembly Workers
 - 214 - Component Interchangeability
 - 200 - Preliminary Assembly Test
 - 215 - Test Procedures
 - 216 - Manpower
 - 217 - Component Interchangeability
 - 218 - Test Software
 - 219 - Test Equipment
- 201 - Vibration and Thermal Testing
- 202 - Proving and Acceptance Trials
- 203 - Pre Shipment Inspection
- 204 - System Test
- 205 - Shipment & Delivery

Risks associated with selected requirement:

Accident

Actions associated with selected risk:

Practice rescue
First aid training

Find requirement by ID no.:

Find risk by ID no.:

Find action by ID no.:

This software will only let you add risks to a structure item

Still no quantifiable measurement!

- Using a structured approach will assist in identifying relevant risks and....
- not addressing irrelevant ones.
- (Every risk must have a requirement or deliverable on which it will impact)

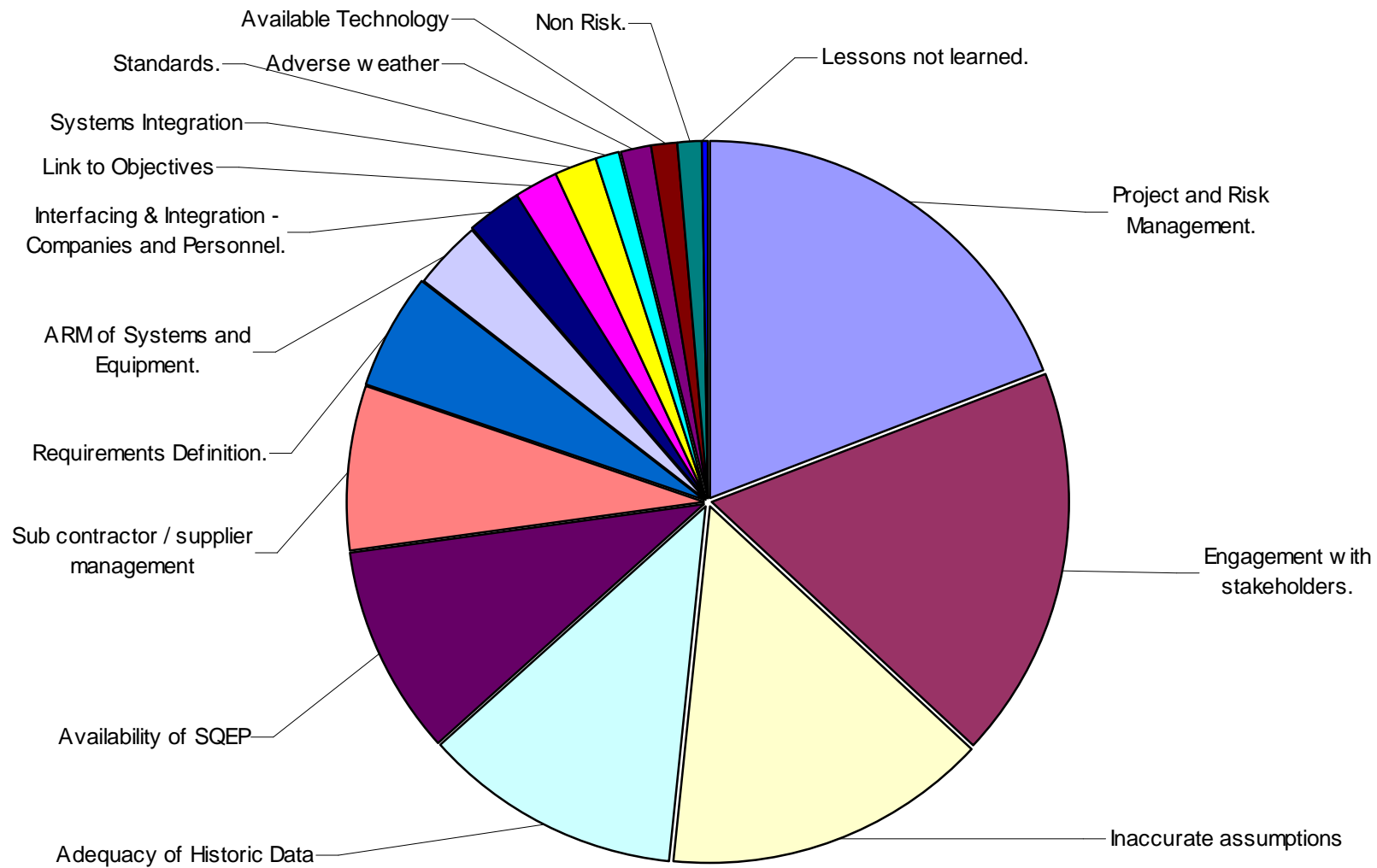
Where else can we look?

NAO/OGC top causes of failure

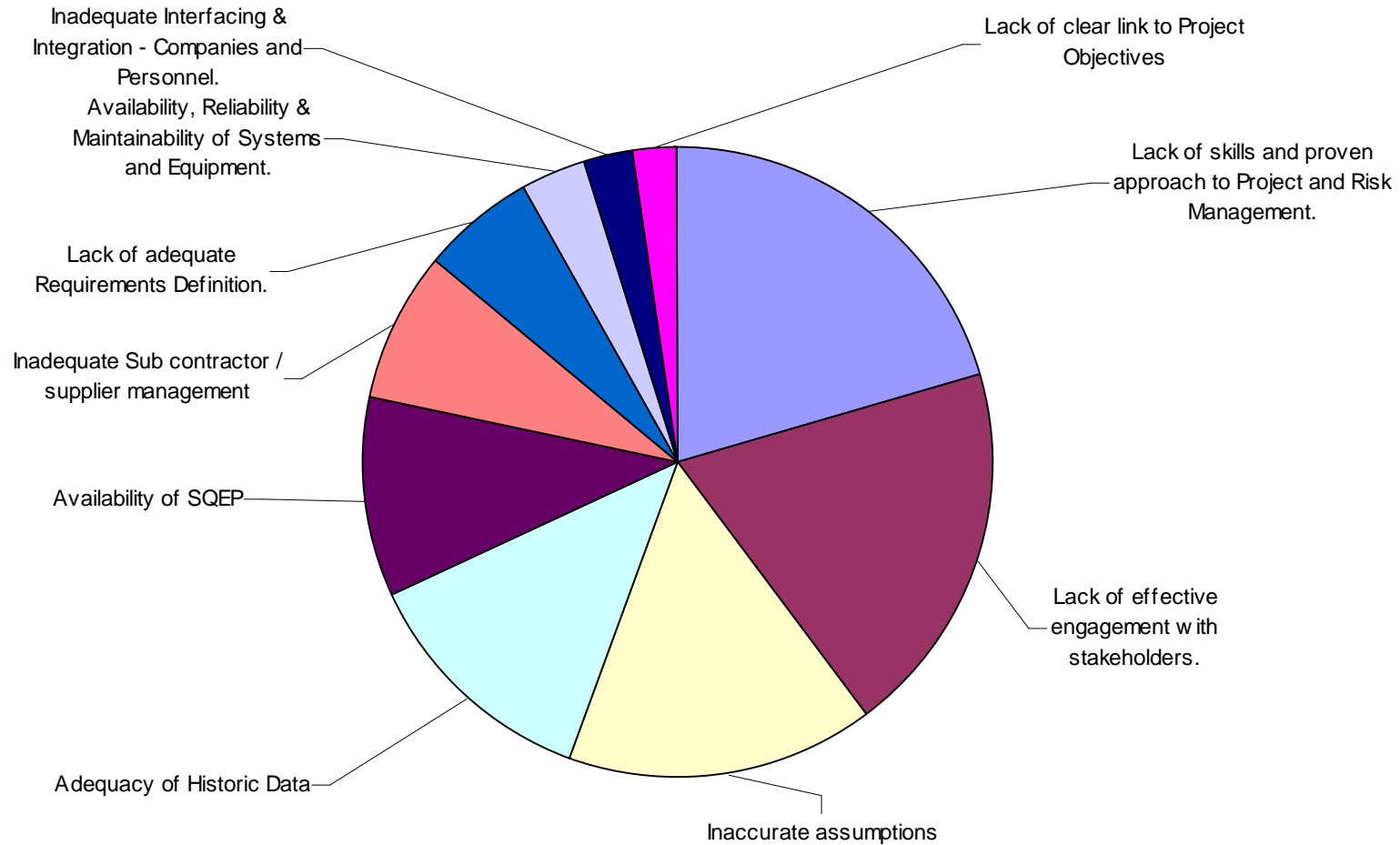
- Lack of Clear Link with strategic priorities
- Lack of clear senior management ownership and leadership.
- Lack of effective engagement with stakeholders.
- Lack of skills and proven approach to Project and Risk Management.
- Lack of understanding of/contact with supply industry at senior levels.
- Evaluation of proposals driven by initial price rather than long term value for money. (especially securing delivery of business benefits).
- Too little attention to breaking down development and implementation into manageable steps.

Actual Case Study!

All 16 Causes of 668 Risks



Top 10 Causes – 617 Risks



Case Study 1

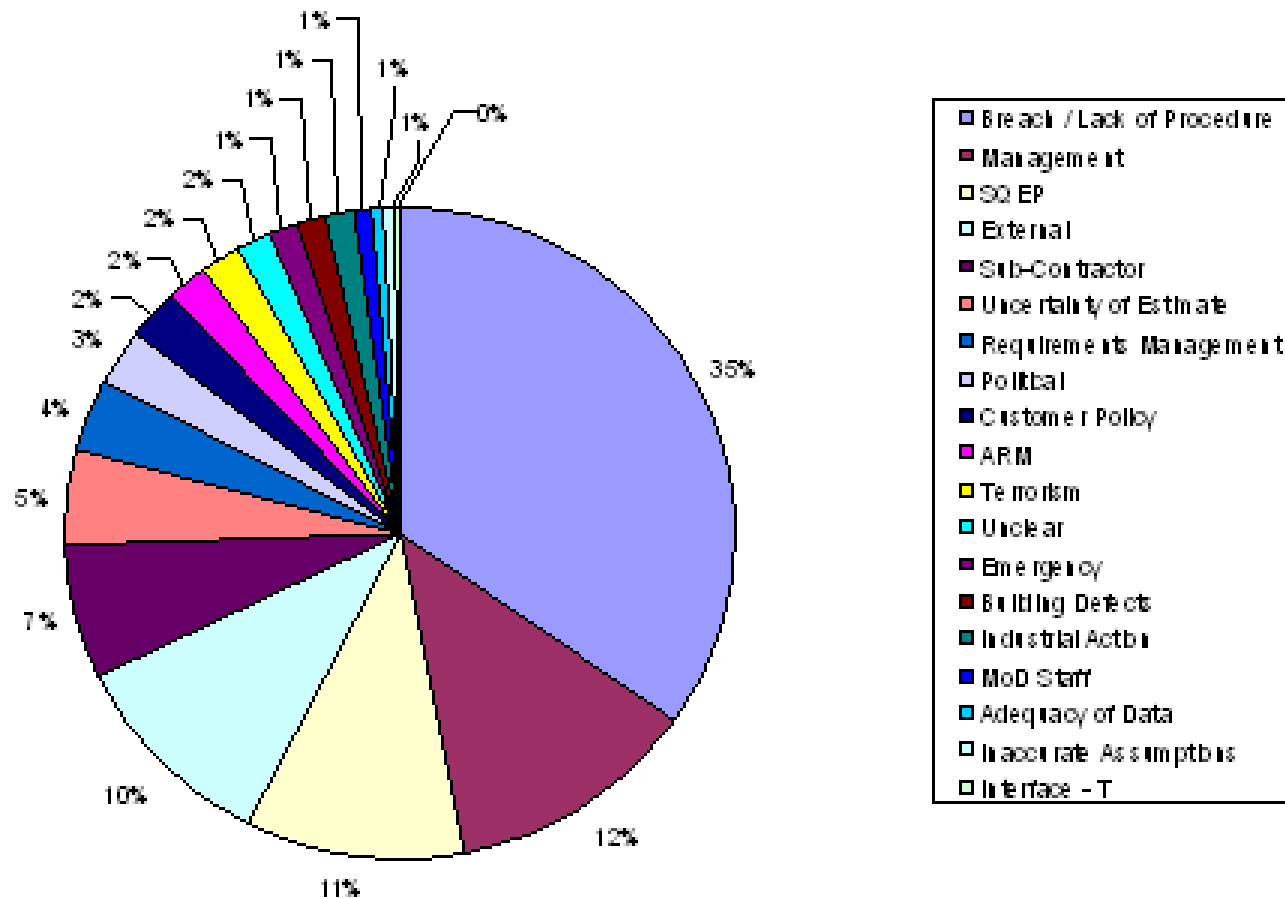
**23 High Level actions to effectively mitigate 600 Risks =
Real Risk Management Efficiency.**

Risk : Action Ratio = 26.8 : 1

**This is an actual number that can add meaning as a measure of Risk
Management Performance.**

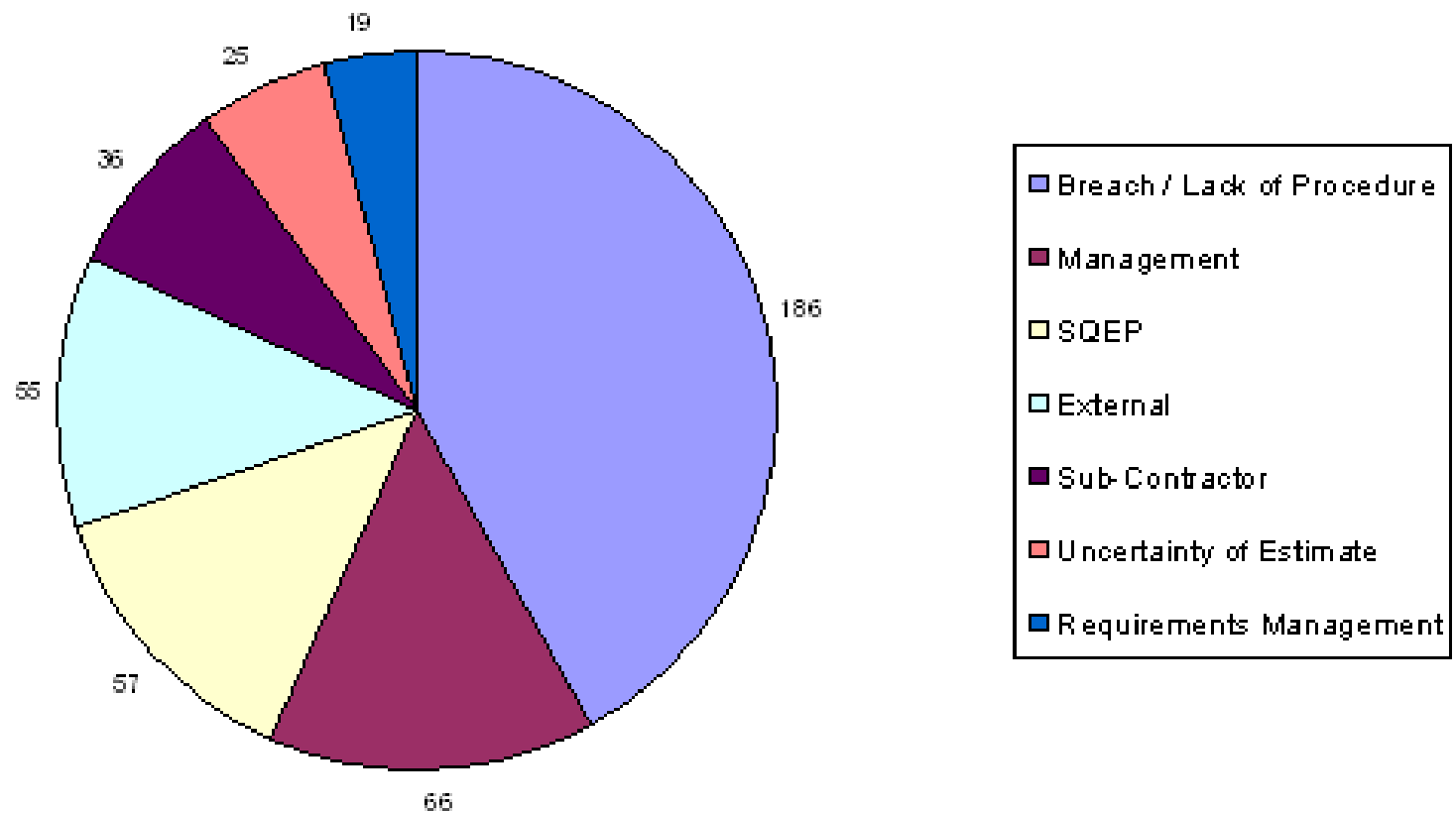
Cause of Risk

Overall Distribution of Risk Causes - 537 Risks from 10 Major Programmes



Key Causes

80% of Risks Originate from 7 Causes



Don't Manage Risk

- Identify Common Causes
- Manage Key Causes
- Maintain paper trail between risk/cause/action.

And Remember!

- Managing key causes of risk will probably manage risks which have not even been identified.

PERROX - Risk browser

Parent requirement for this risk:

 Project?

ID no: Title:

Description:

Action strategy:

Risk type: Risk owner:

Risk strategy: Owning dept:

Cause area:
 Effect area:
 Risk status:

Risk Plan Title:
 Risk Plan Ref:

	<u>Probability of occurrence</u>	<u>Cost exposure</u>	<u>Performance impact</u>	<u>Schedule impact</u>	<u>Reputation impact</u>	<u>Environmental impact</u>	<u>Risk factor</u>
Pre-action:	<input type="text" value="medium"/>	<input type="text" value="negligible"/>	<input type="text" value="high"/>	<input type="text" value="low"/>	<input type="text" value="medium"/>	<input type="text" value="medium"/>	<input type="text" value="6"/>
Post-action:	<input type="text" value="low"/>	<input type="text" value="negligible"/>	<input type="text" value="low"/>	<input type="text" value="low"/>	<input type="text" value="negligible"/>	<input type="text" value="negligible"/>	<input type="text" value="1"/>

Comments on assumptions etc.:

Update summary:

Last updated: Updated by:

This system can guide you to common causes of risk.

Sources

- www.Perrox.net
 - Free software & guidance downloads
- www.Space.businessballs.com
 - Perrox_Risk_Manager - guidance downloads
(Resources)
- Perrox@BTConnect.com

Thank you for listening.

