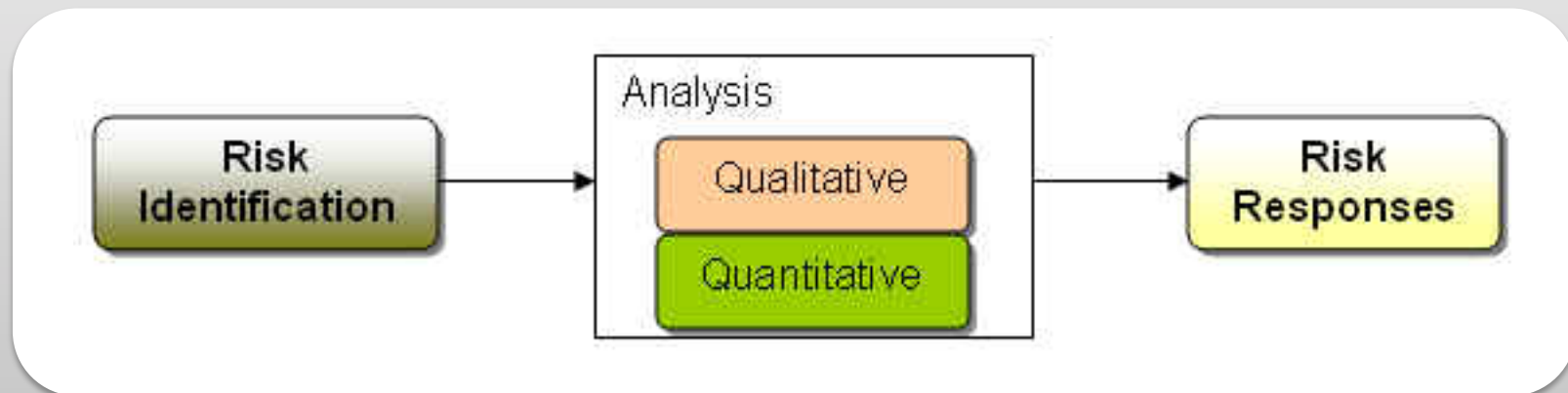


Risk Management

Keeping Pace with Change



PMI-OC Enhancing Business Value with
Project Management

September 13, 2011

Marty Wartenberg (MSEE, MBA, P.E.)

Risk Management

Traditional PMBOK Approach

Risk Management includes the processes concerned with identifying, analyzing and responding to potential risks that may have both positive and negative effects on a project.



The Three Types of Risk

1. Known Risks

2. Unknown Risks

**3. Unknown
Unknown Risks
(Unk, Unk's)**



What is Risk?

- When you are dealing with risk there are always uncertainties
- You can narrow, but not eliminate, the uncertainty, by:
 - Clarifying the probability
 - Understanding the consequences or alternatives
 - Determining what drives the risk
- Risk management helps you understand these factors and consistently sway them in your favor

The Risk Management Process Applied to Changing Business Problems

- The “tried and true” methodologies we have learned for our project and programs can be applied to the larger scale business issues
- Typical MBA type Grads without PM experience are pretty much clueless when it comes to the orderly risk management process



PMI
Project Management Institute
Global STANDARD

PRACTICE
STANDARD FOR
**PROJECT
RISK
MANAGEMENT**

Risk In the Construction Project

- Identify the risks on this project
- Could they be predicted?
- What are some of the preventive measures that could have been taken?
- Were any not preventable but could be mitigated against?



Risk

Common View:

Risk is the possibility of suffering a diminished level of success (loss).

Comprehensive View:

Risk is the uncertainty associated with the outcome of a future event. (Positive or Negative)

Risk Attributes:

- ☑ Uncertainty (probability)
- ☑ Impact (gained / lost value)
- ☑ Time (when) or a Risk Trigger

Risk Management

The process by which a course of action is selected that balances the potential impact of a risk item weighted by its probability of occurrence and the benefits of avoiding or controlling the risk.



Adapted from Higuera & Haines, Software Risk Management, CMU/SEI-98-TR-012, June 2009. 8

A Risk Taxonomy

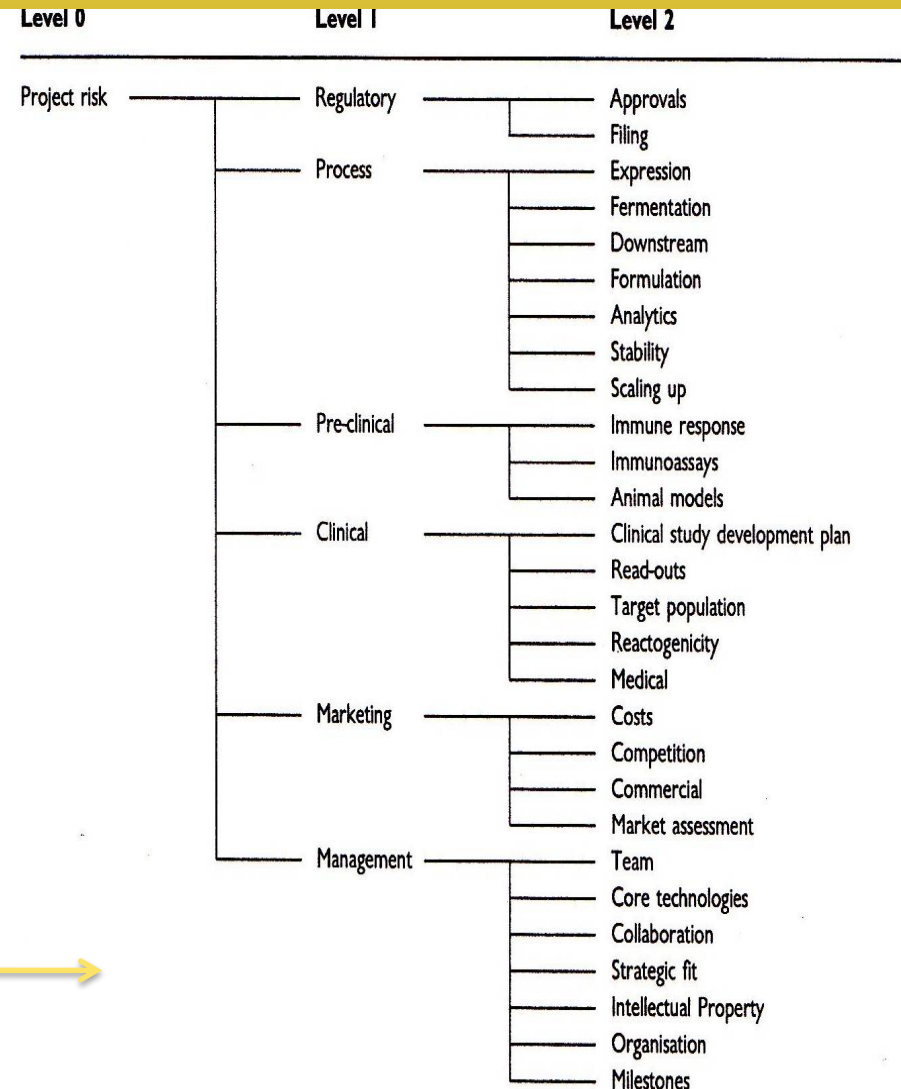
Adapted from Carr, et. al.,
Taxonomy-Based Risk
Identification, CMU/
SEI-93-TR-6, June 2009.



Risk Breakdown Structure

- PMI Standard
- Customize for your Industry
- Customize for your company
- Customize for your functional specialty

Vaccine Development RBS from Merck





Risk Breakdown Structure Example



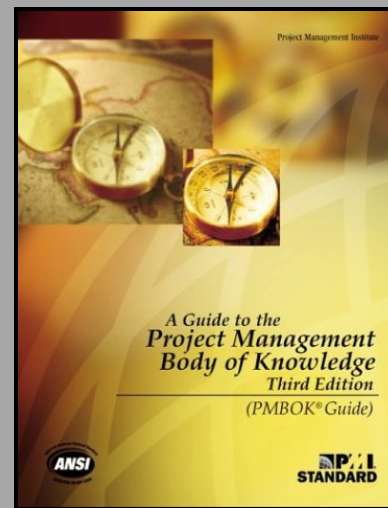
PMBOK® Guide 4th Edition, Figure 11-4

Risk Management and Product Development

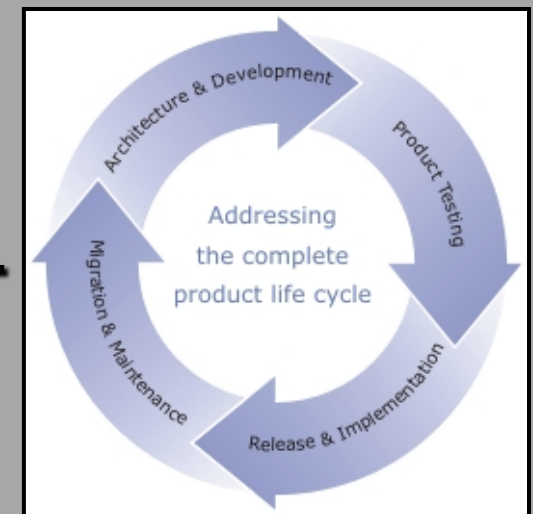
The List of Risks:

1. Risk management is an integral part of project management
2. Product development requires project management
3. Therefore, managing risk should be as natural as managing the schedule (but it isn't)

Key Idea



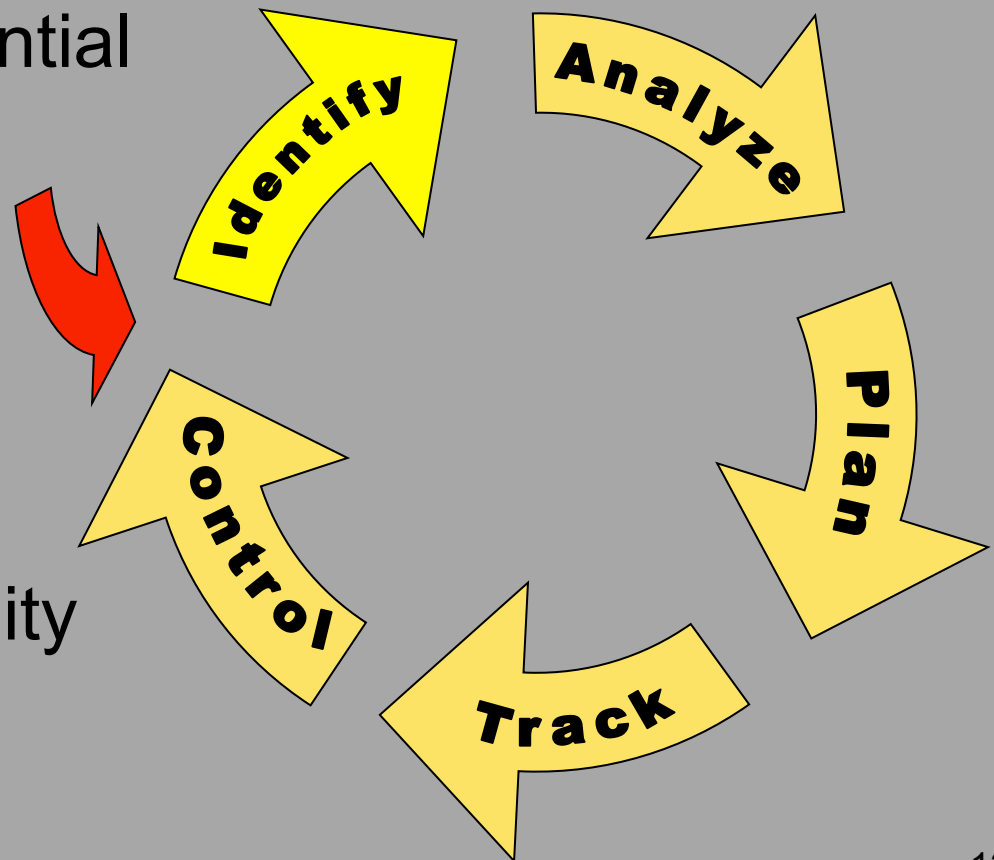
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= Risk Management Methodology

Risk Identification

- A systematic process that produces a list of potential threats to the project.
- Classify according to source
- Rank according to ability to manage



Risk Identification Continued



Risk Identification

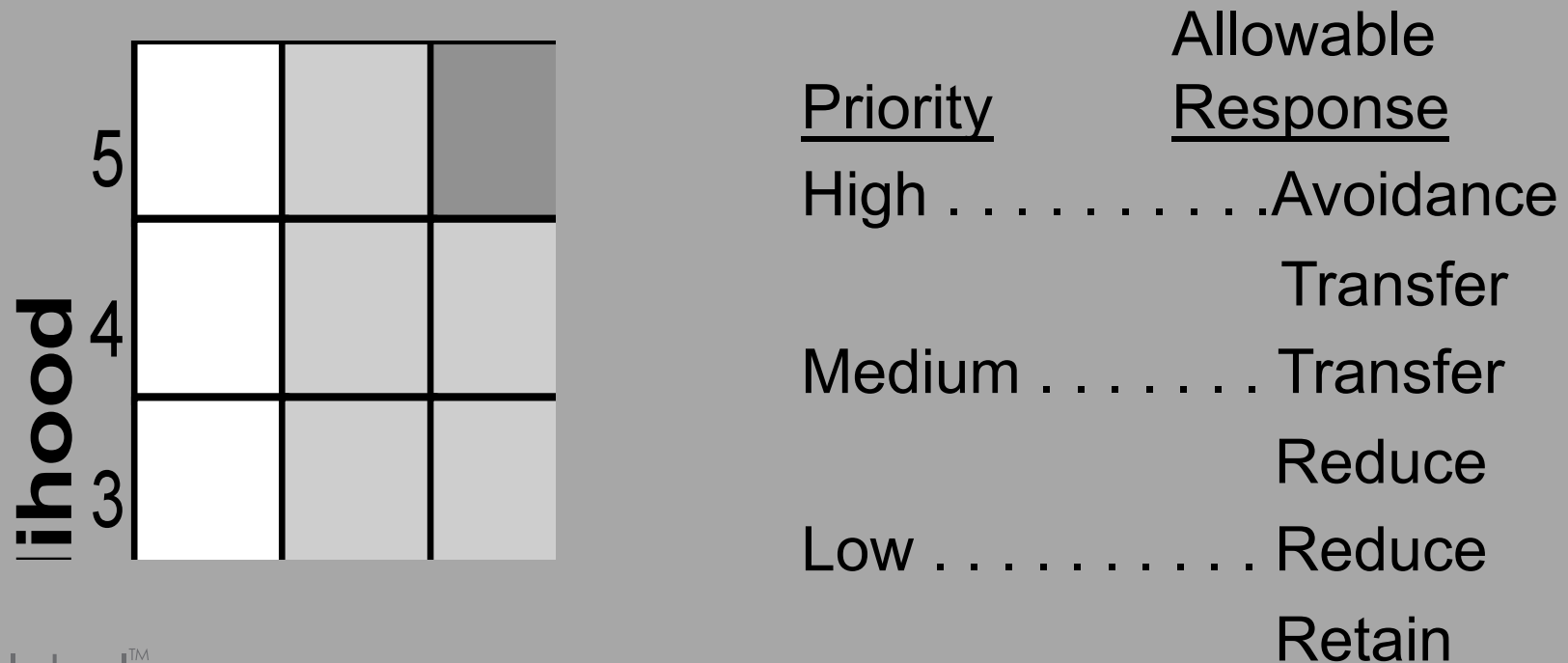
Concerns

Past
Experiences

Checklists

The Risk Matrix With The Company's Tolerance Level

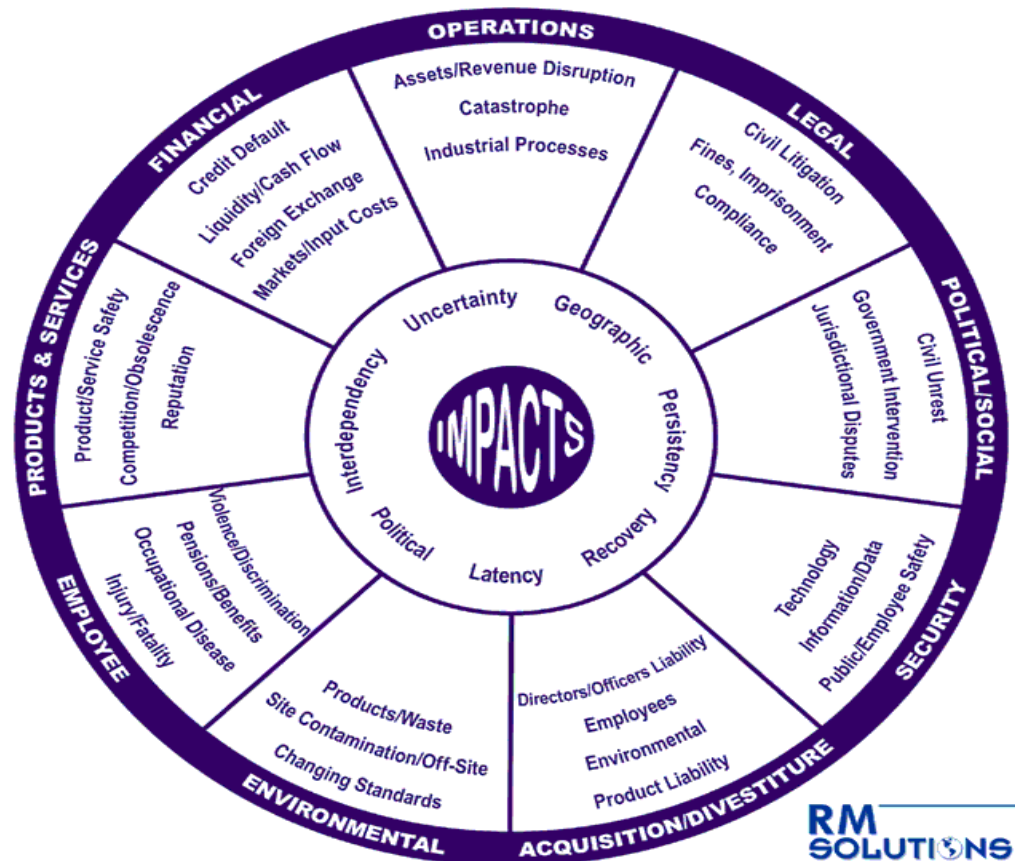
- The company's risk tolerance level can be minimized by restricting risk response options.



Methods of Dealing with Risk

- Avoid
- Mitigate or Reduce
- Accept or Retain
 1. Proactively
 2. Passively
- Transfer
- In Aerospace application of R&D

The Risk Spectrum



Reducing Risk



1. Plan Project Activities
2. Verify Results
 - a) Prototypes
 - b) Pilots
 - c) Models
 - d) Simulations
 - e) Additional Analyses
 - f) Peer Review
3. Use Proven Technology

Reducing Risk

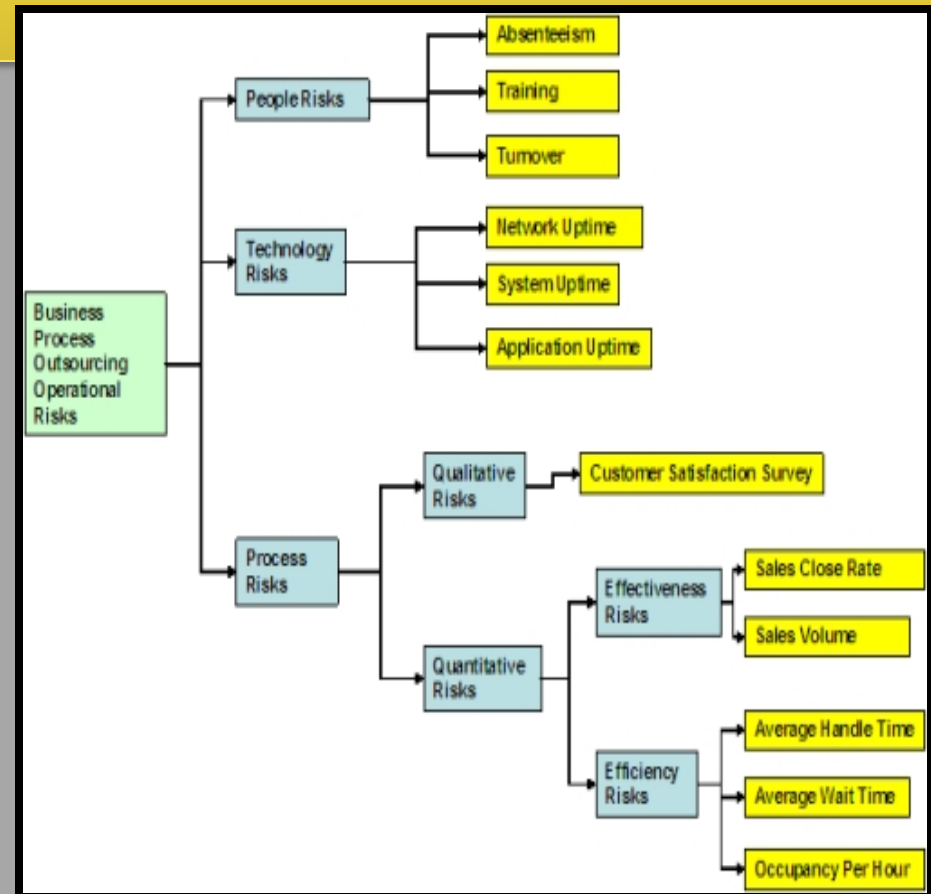
4. Use Standardized Techniques
5. Periodic Reviews
6. Project Manager Direction & Control of Resources



Project Risk Management is used in situations where there is uncertainty and where that uncertainty hinders decision making.

Today's Major Business Risks

- Massive organizational type changes – acquisitions, mergers, etc
- Huge shift in composition of the work force (age, gender, nationality)
- Major new technologies and processes (Lean, Cloud, Global Supply Chain)



Can the PMBOK based approach work in the modern and fast paced environment we find ourselves in?

Risks Inherent in the Global Supply Chain and Leanness

- Dockworkers strikes
- UPS Strikes
- Earth Quakes and Tsunamis
- Business stability
- Political stability
- Others??

HANDBOOK FOR SUPPLY CHAIN RISK MANAGEMENT

*Case Studies, Effective Practices
and Emerging Trends*



Edited by

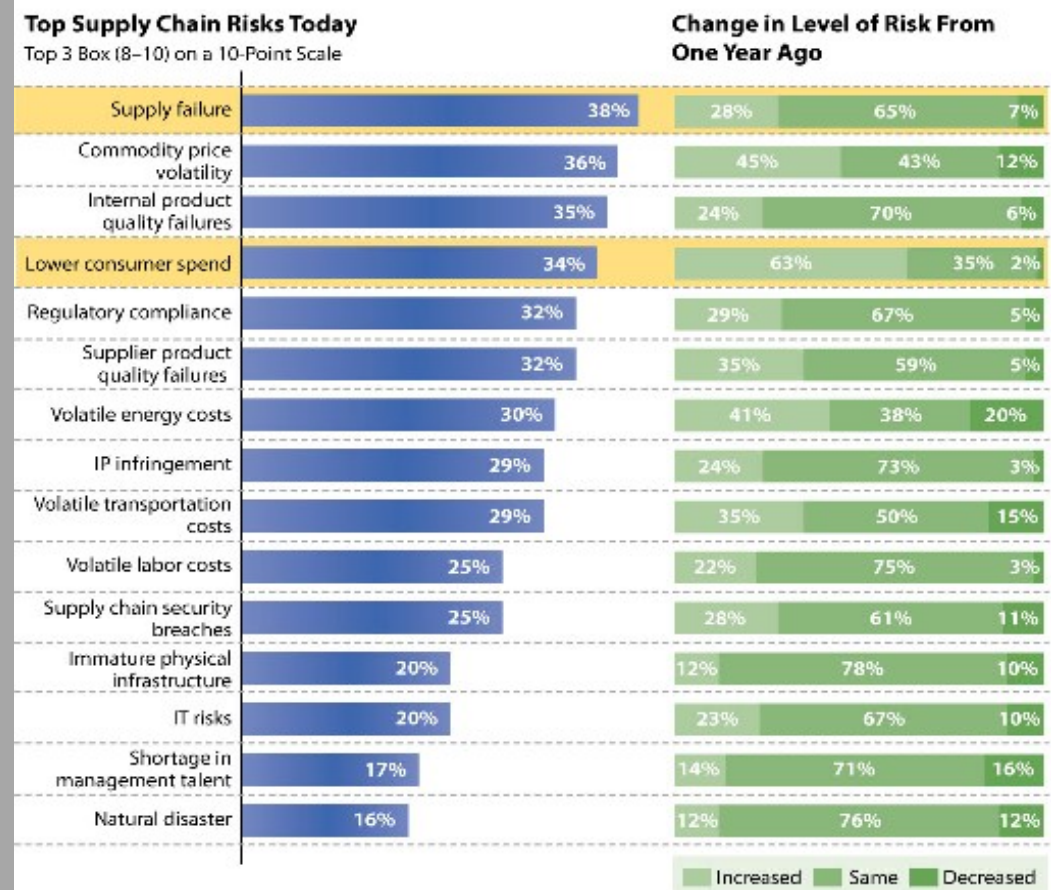
Omera Khan • George Zsidisin

Co-published with International Supply Chain Risk Management Network

Supply Chain Exercise

- Identify risks to the global supply chain and how would you categorize them in a RBS?
- What are some of the potential strategies you may consider?

Top supply chain risks—today and one year ago



n=133

New Technologies Risk

- Dependence on the Internet
- Dependence and move to the “Cloud”
- Security issues with company data



Moving to the Cloud Exercise

- How much should you move to the “cloud”?
- How would you evaluate the risk versus reward equation?
- What are some of strategies you may employ to reduce the impact of bad risks?



Risks Due to Work Force Changes

1. Cultural and National Origins
2. Generational
3. Sexual Orientation
4. Virtual and Distance



Risks Due to Work Force Changes Continued

	Pre-Boomer	Boomer	Gen X	Net-Gen
Satisfaction with Employers	85%	74%	77%	45%
Satisfaction with Jobs	76%	71%	70%	34%
Willing to Go the Extra Mile	81%	81%	77%	40%
Pride in Working for Employer	89%	79%	81%	68%
Fairly Compensated	61%	53%	53%	30%

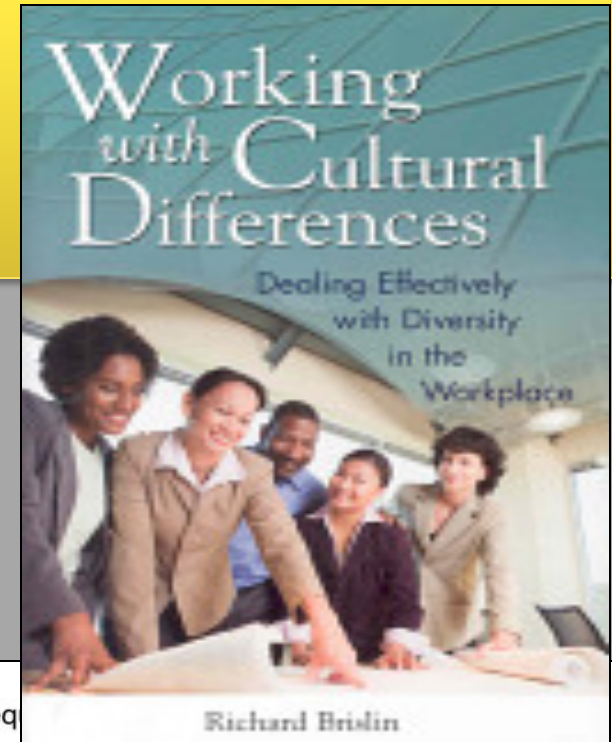
Think of the last time you heard comments like these ...

You're right, but I'm the boss! **Just do your job!** I remember when ...
 The kid wants a promotion after six months on the job!
No I'm not going to do it!

Table 6.2 Generational Satisfaction Levels (Source: Sirota Survey Intelligence as reported in HR Magazine)

Cultural Differences Exercise

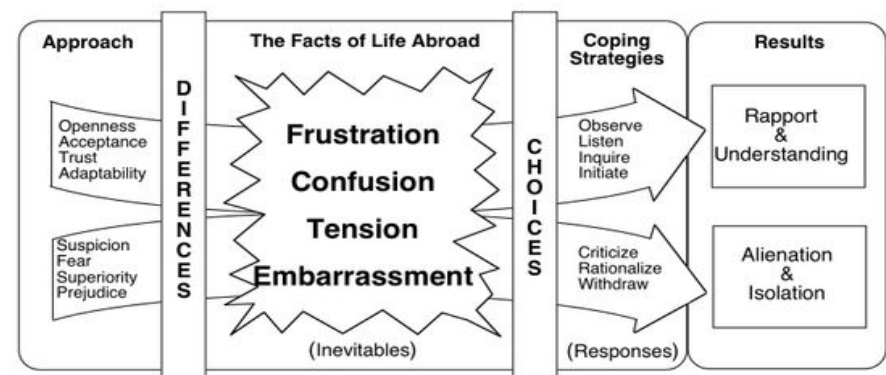
- Project risk impacts of Asian, South Americans and North Americans working on a project?
- How would you begin to identify some of the cultural issues that could lead to project problems?



Living overseas req

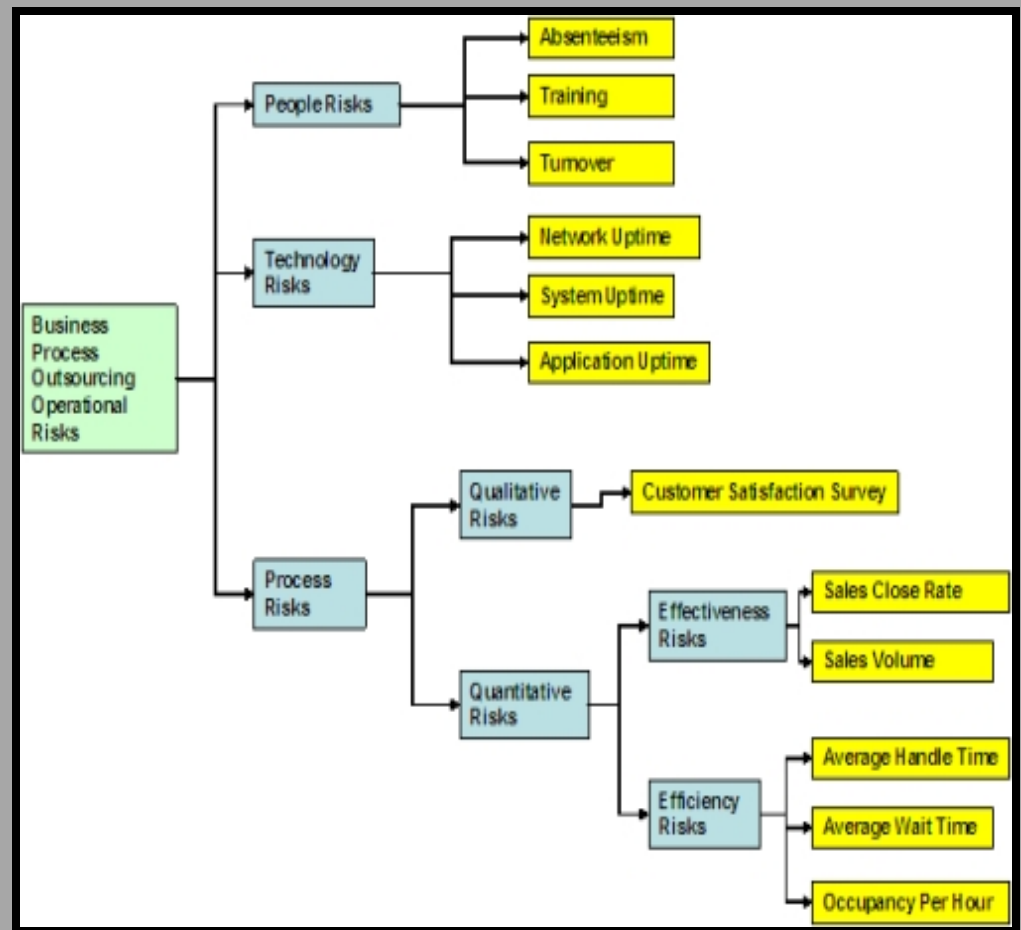
Richard Brislin

Coping with Cultural Differences

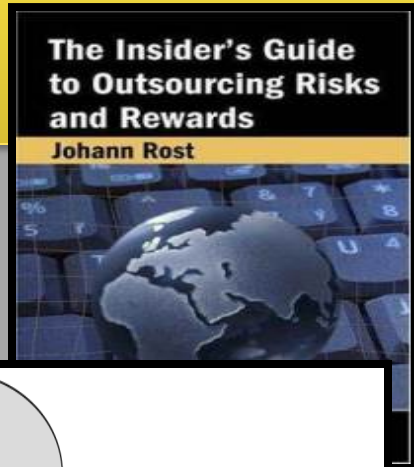


Risks Due to Outsourcing

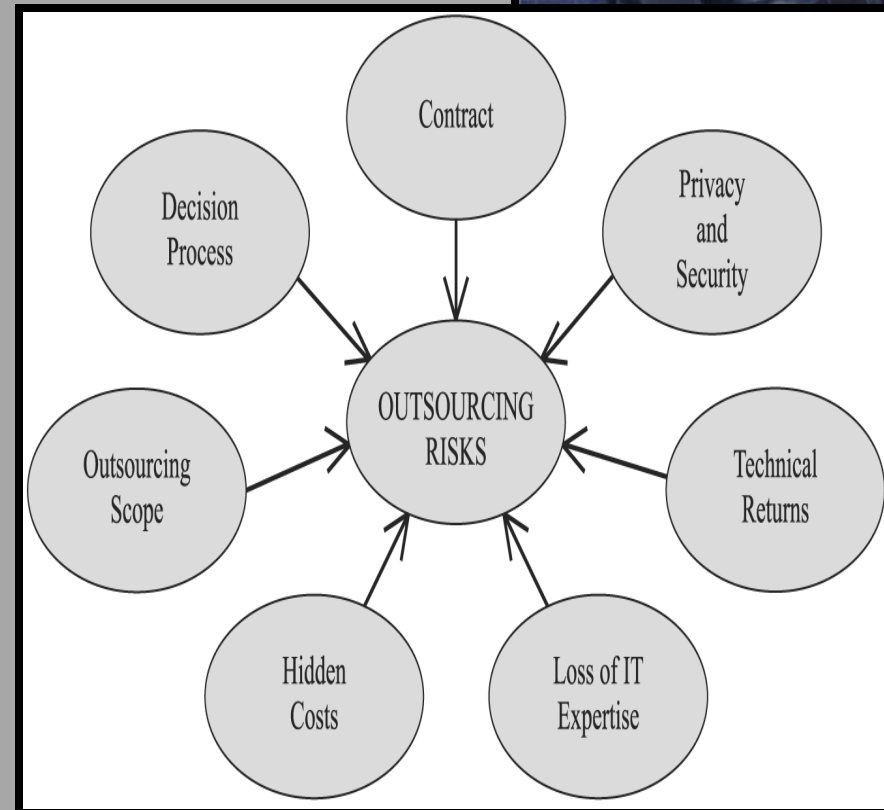
- Loss of capability
- Quality issues
- Loss of control over deliveries
- Problems with meeting schedules
- Piracy and IP problems
- Others???



How Would You Reduce Outsourcing Risks?



- Determine what to outsource?
- Determine how you will outsource?
- Determine who you will outsource to?
- How will you monitor and drive variances



How Much Risk Management?



Hurricane Katrina: Three men use makeshift oars to paddle a damaged boat.

- The more risks you identify, analyze, and monitor, the more it will cost.
- Good risk management requires explicit choices and decisions that are reviewed regularly
- Consider each risk in terms of what it can do for you as well as the harm
- Remember: project management is risk management!

A Personal Unique Experience

- Iditarod Sled Dog Race
- Risks identified included a Volcanic eruption, weather warming up in parts of the trail causing dangerous conditions
- Full up Risk Management Identification, analysis and recommendations
- The numbers didn't speak for themselves
- What do you do next?



The Dirty Secret the PMBOK Ignores

- Identification of too much risk makes you appear wimpy to some managers
- Getting budget for mitigation or other is very difficult
- You need to sell using fear and terror

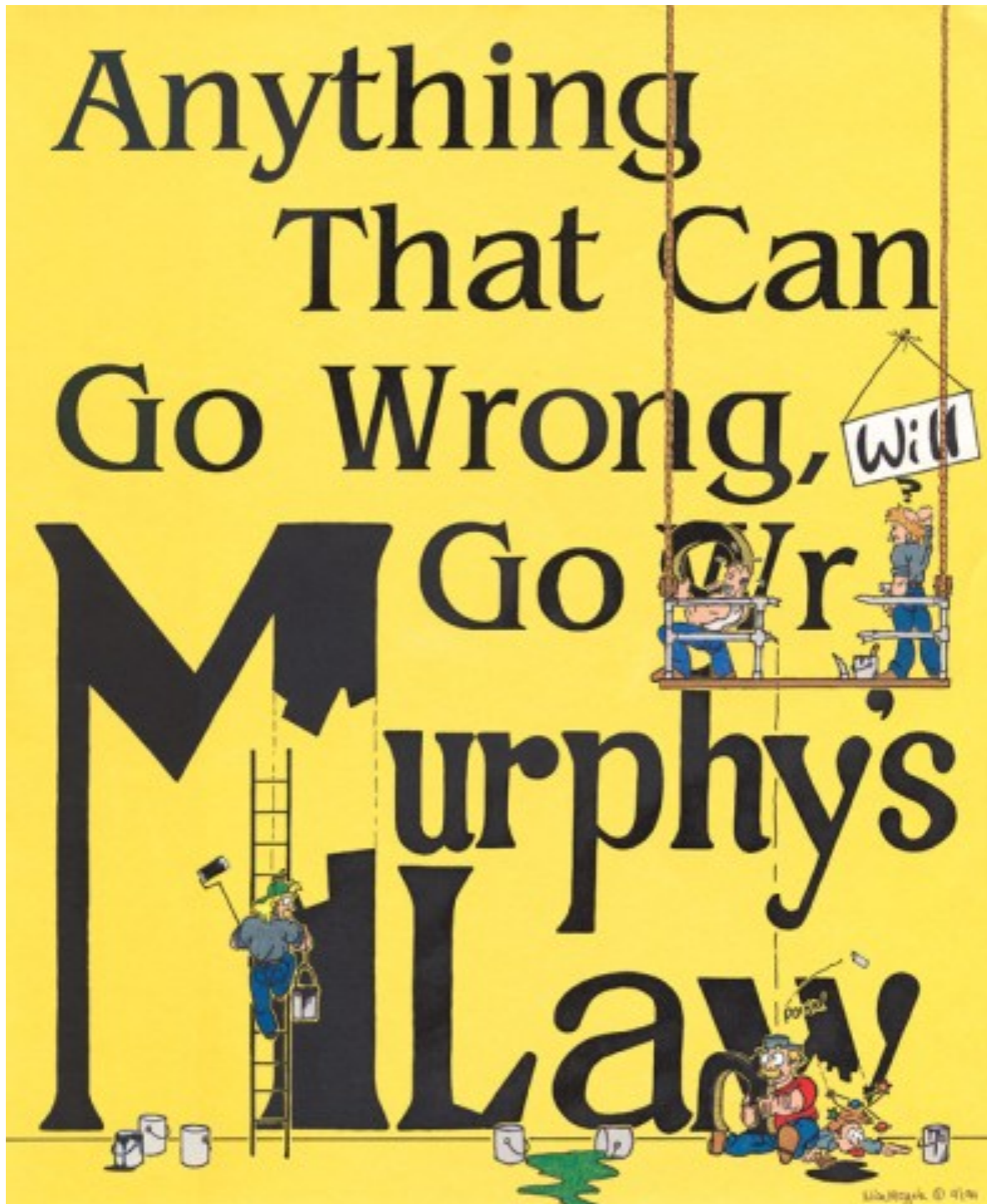


The Antithesis of Risk Management: Firefighting

A type of management behavior, often reinforced

- A corporate firefighter is so involved in fighting the last fire that they let the next one smolder
- Then this person pulls the new problem out of the fire and is regarded as a hero
- The Fire Preventer is rarely rewarded





Any Questions?

Contact Zbglobal for more information on Risk Assessment information and courses.

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