

# DANCING IN THE MINEFIELD: MANAGING PROJECT RISKS



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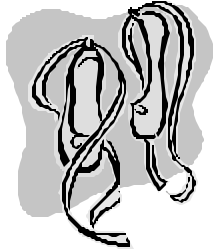
*Supplemental Materials*

# TABLE OF CONTENTS

PRESENTATION SLIDES .....	1
JOB AID 1: RISKS ACCORDING TO MATTA AND ASHKENAS .....	10
JOB AID 2: RISKS ACCORDING TO FOSHAY.....	11
JOB AID 3: RISK MANAGEMENT.....	13
INTERACTIVE EXERCISE 1: RISK MANAGEMENT .....	16
BIOGRAPHIES .....	19
REFERENCES .....	20

# Dancing in the Minefield

## *Managing Project Risks*



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1



## Objectives



- ✓ Identify common project risks.
- Use two schemes to classify risks.
- Use the Risk Management Job Aid
  - ◆ Specify the criticality and probability of the risk.
  - ◆ Specify strategies to mitigate the risk.
  - ◆ Monitor the risk.

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# Big Picture

## *Project Risks in Context*



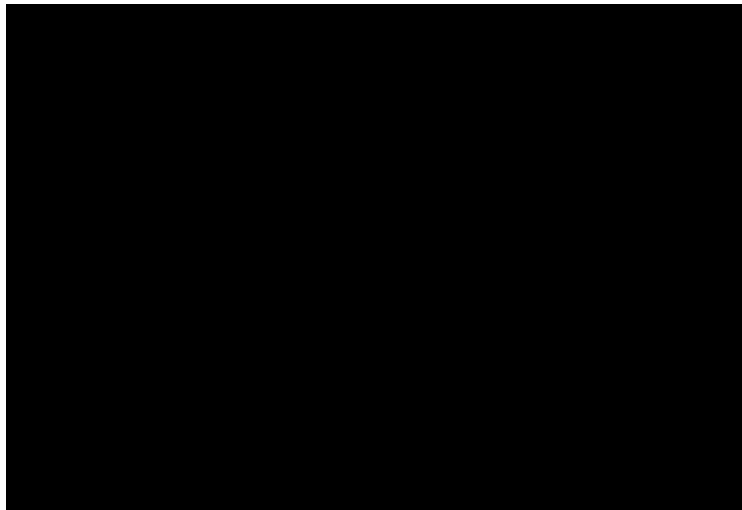
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3



# A Metaphor for Managing Project Risks

## *“The Good, The Bad, The Furry”*



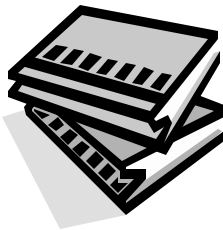
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4



# Project Management Components

## *Alignment and Re-Alignment*



**Alignment Packet**  
(a.k.a. “Cat-Herding Plan”)

- Project plan
  - ◆ Scope of Work
  - ◆ Budget (including cost assumptions)
  - ◆ Schedule
- Critical success factors (CSFs)
  - ◆ Measures and sources
  - ◆ Baseline measurements
- Risks and mitigation strategies
- Roles and responsibilities
- Team structures
- Review and approval process
- Formal project control

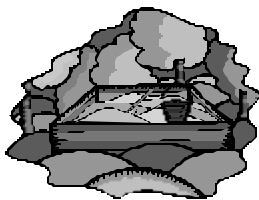
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5



# Common Software Project Risks

## *Jiang & Klein, 2001*



(a.k.a. “playing  
in the  
sandbox.”)

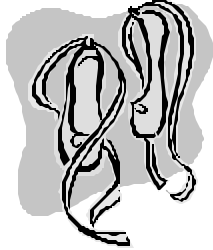
9. Intensity of conflicts
8. Lack of clear role definition
7. Lack of user experience
6. Lack of user support
5. Lack of team expertise
4. Insufficient resources
3. Technology acquisition
2. Application complexity
1. Project size

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6



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  - ◆ Monitor the risk.

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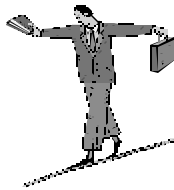
7



## Risk Classification Schemes

*Matta & Ashkenas (2003)*

Job  
Aid 1



- Execution
  - ◆ Inputs
  - ◆ Processes
  - ◆ Outputs
- White spaces
  - ◆ Groups and people who've never played together
- Integration
  - ◆ Multiple components developed independently and then brought together

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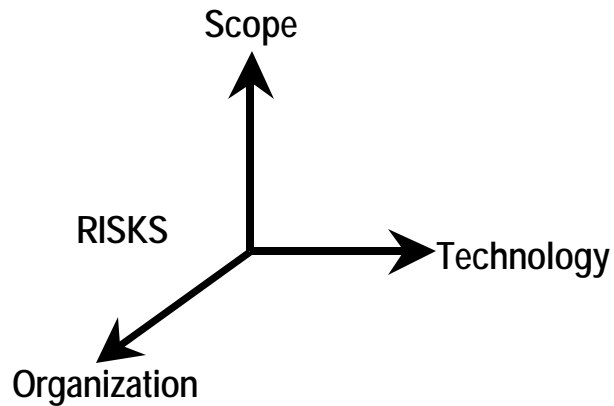
8



# Risk Classification Schemes

*Foshay (1994)*

Job  
Aid 2



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9



## Objectives



- ✓ Identify common project risks.
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10



# Risk Management Job Aid

Job  
Aid 3



- Strategic Business Objective (SBO)
- Critical Success Factor (CSF)
- Risk
- Types of risk
  - ◆ Matta
  - ◆ Foshay
- Probability and impact
- Mitigants
- Owner(s)
- Monitoring strategy

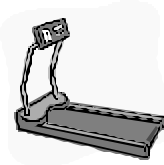
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11



## Interactive Exercise 1

### *Using the Risk Management Job Aid*



- Break into groups.
- Specify an SBO and CSF.
- Write a risk that could jeopardize the SBO and CSF.
- Indicate the Matta and Foshay types of risk.
- Determine the probability and impact of the risk.
- Specify one or more strategies to mitigate the risk.
- Specify an owner for each strategy.
- Specify a monitoring frequency.
- Time = 20 minutes.

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12



## Interactive Exercise 1 Debriefing

### *Using the Risk Management Job Aid*



*Risks will  
change over  
the life of the  
project.*

*Manage them  
proactively.*

- What SBO and CSF did you specify?
- What was the risk that could jeopardize the them?
- What type of Matta and Foshay risks did you specify?
- Given the probability and impact of the risk, how important is it?
- How would you mitigate the risk?
- What types of owners did you specify?
- How often should the owners monitor the risk and success of its mitigation strategies?

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13



## Lessons Learned



1. Just about any project worth doing involves risks to the project's critical success factors and the organization's strategic business objectives.
2. Collaborate with others.
3. Use a framework to think about risks
  - Matta & Ashkenas (2003)
  - Foshay (1994)

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14



## Lessons Learned *(continued)*



4. Use the Risk Management Job Aid or something similar in your own efforts.
5. Monitor the risks once you've identified them.
6. They're not really risks; they're *opportunities*.



## A Parting Comment

*“Attempting to achieve complex goals in fast-moving and unpredictable environments is humbling. Few leaders and few organizations have figured out how to do it consistently. We believe that a starting point for greater success is shedding the blueprint model that has implicitly driven executive behavior in the management of major efforts. Managers expect they will be able to identify, plan for, and influence all the variables and players in advance, but they can't. Nobody is that smart or has that clear a crystal ball.*

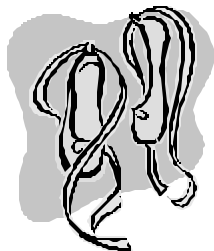
*They can, however, create an ongoing process of learning and discovery, challenging the people close to the action to produce results — and unleashing the organization's collective knowledge and creativity in pursuit of discovery and achievement.”*

**— Matta & Ashkenas (2003)**



## Thank You!

Your questions and comments?



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17



# JOB AID 1: RISKS ACCORDING TO MATTA AND ASHKENAS

## **EXECUTION RISKS**

Involve the inputs, processes, and outputs associated with the major phases and activities comprising the project.

You have an execution risk if you've got:

- People who are handing you stuff that you can't use.
- Folks who don't have processes that let them be successful.
- Outputs that don't meet required standards.

## **WHITE SPACE RISKS**

Reflect the risk associated with required activities and resources that cut across organizational boundaries.

You have a white space risk if:

- You've got a project characterized by people on the team who cut across organizational silos who've never worked together before.
- You need a team of people that cuts across these silos and you don't have them.
- Your end users will employ your performance solutions in ways that cut across organizational silos.

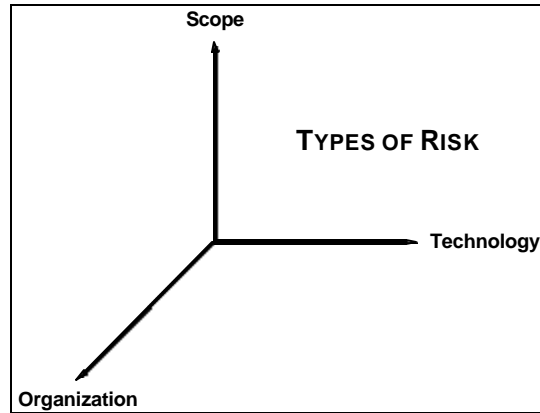
## **INTEGRATION RISKS**

Reflect the risk associated with integrating various deliverables.

You have a white space risk if:

- You've got a number of components created by different folks that need to be brought together—especially towards the end of a project.
- These components have never been brought together in the way that you're using them.
- You haven't been testing the integration of these components as you've been developing them.

# JOB AID 2: RISKS ACCORDING TO FOSHAY



## **ORGANIZATIONAL FACTORS**

- Span of control and level of project sponsor.
- Dedication and relationship of client and supplier project managers.
- Quality of product (from both the customer's and supplier's perspective).
- Number of reviews and timelines for sign-off.
- Previous experience with the customer.
- Amount of end-user involvement in analysis, design, and implementation.
- Amount of available expertise in the subject matter.
- Quality of communications.
- Presence of hidden agendas.
- Expected amount of time spent not related to designing or revising the instructional materials. Some developers estimate that this typically consumes about 80 percent of project time.

## **SCOPE FACTORS**

- Number of expected user contact hours.
- Cognitive performance requirements (conceptual, procedural, problem-solving).
- Complexity of content.
- Number, type, and complexity of components.
- Availability, quality, and accuracy of existing content.
- Complexity and frequency of interactions (performance requirements).
- Specificity of the performance requirements.
- Number and complexity of graphics, animation, and multimedia.

- Ease of use.
- Familiarity of target audience with medium.
- Quality of finished product requirements.
- Length of course.
- Degree of remediation (e.g., quizzes, selective module reviews).

#### **TECHNOLOGY FACTORS**

- Development and implementation platform, authoring and architecture/network environment.
- Distribution.
- Available bandwidth.
- Familiarity with development approach.
- Availability and expertise in specialized development tools, libraries, and templates.
- Experience of development team.
- Degree to which development team has worked together before.
- Rigor of the project management and change management processes.
- Development model the project team employs (traditional ADDIE's linear, "waterfall" approach versus Rapid Application Development (RAD) or other 4<sup>th</sup> generation ISD model).
- Availability of project management data describing a similar development effort.
- Availability of appropriate templates or toolsets.
- Need for specialized peripherals (e.g., touch screens, digitizers, robotics).

# JOB AID 3: RISK MANAGEMENT

## Instructions

- ❶ Specify a Strategic Business Objective (SBO) and Critical Success Factor (CSF) that a project can drive the SBO and CSF you specified.
- ❷ Write a risk that a project can drive the SBO and CSF you specified.
- ❸ Check the box(es) indicating the Matta and Ashkenas type of risk.
- ❹ Check the box(es) indicating the Foshay type of risk.
- ❺ Check the box indicating the probability of each risk.
- ❻ Check the box containing the impact the risk would have on the organization and the project.
- ❼ Specify one or more strategies to mitigate each risk.
- ❽ Specify an owner for each mitigation strategy.
- ❾ Specify the frequency with which the owner(s) will monitor the risk and the success of the mitigation strategies.

<i>SBO</i> ❶	<i>CSF</i> ❶	<i>Risk</i> ❷	<i>Matta &amp; Ashkenas Type</i> ❸	<i>Foshay Type</i> ❹	<i>Probability</i> ❺	<i>Impact</i> ❻	<i>Mitigation Strategies</i> ❼	<i>Owner(s)</i> ❽	<i>Monitoring Frequency</i> ❾
Decrease time to market.  Increase niche market product share.	Provide on-demand support to localized training, information, and tools.	Organization may not be ready to support changes to jobs and roles arising from blended learning and on-demand	<input type="checkbox"/> Execution <input checked="" type="checkbox"/> White spaces <input type="checkbox"/> Integration	<input checked="" type="checkbox"/> Organizational <input type="checkbox"/> Scope <input type="checkbox"/> Technology	<input checked="" type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	<input checked="" type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	a. Design and implement a robust change management program that begins on Day 1 of the effort that includes branding, education, and marketing.  b. Employ appropriate	Development team project manager    Development team project manager	Daily teleconferences    Daily

<i>SBO</i> ①	<i>CSF</i> ①	<i>Risk</i> ②	<i>Matta &amp; Ashkenas Type</i> ③	<i>Foshay Type</i> ④	<i>Probability</i> ⑤	<i>Impact</i> ⑥	<i>Mitigation Strategies</i> ⑦	<i>Owner(s)</i> ⑧	<i>Monitoring Frequency</i> ⑨
		support.					development strategies (such as rapid application development) to ensure buy-in among instructors, managers, supervisors, and end users.  c. Ensure that client-side project team members have adequate release time.	Client team project manager	Weekly
			<input type="checkbox"/> Execution <input type="checkbox"/> White spaces <input type="checkbox"/> Integration	<input type="checkbox"/> Organizational <input type="checkbox"/> Scope <input type="checkbox"/> Technology	<input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	<input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low			
			<input type="checkbox"/> Execution <input type="checkbox"/> White spaces <input type="checkbox"/> Integration	<input type="checkbox"/> Organizational <input type="checkbox"/> Scope <input type="checkbox"/> Technology	<input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	<input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low			

<i>SBO</i> ①	<i>CSF</i> ①	<i>Risk</i> ②	<i>Matta &amp; Ashkenas Type</i> ③	<i>Foshay Type</i> ④	<i>Probability</i> ⑤	<i>Impact</i> ⑥	<i>Mitigation Strategies</i> ⑦	<i>Owner(s)</i> ⑧	<i>Monitoring Frequency</i> ⑨
			<input type="checkbox"/> Execution <input type="checkbox"/> White spaces <input type="checkbox"/> Integration	<input type="checkbox"/> Organizational <input type="checkbox"/> Scope <input type="checkbox"/> Technology	<input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	<input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low			

# INTERACTIVE EXERCISE 1: RISK MANAGEMENT

## Instructions

1. Break into groups of 2-6 people.
2. Specify your own Strategic Business Objective and Critical Success Factor—or choose one below.
3. Write a risk that could jeopardize the Strategic Business Objective and Critical Success Factor.
4. Check the box(es) indicating the Mattas & Ashkenas type of risk.
5. Check the box(es) indicating the Foshay type of risk.
6. Check the box indicating the probability of each risk.
7. Check the box containing the impact the risk would have on the organization and the project.
8. Specify one or more strategies to mitigate each risk.
9. Specify an owner for each mitigation strategy.
10. Specify the frequency with which the owner(s) will monitor the risk and the success of the mitigation strategies.
11. After 15 minutes, we'll regroup and debrief.

<i>SBO</i> ②	<i>CSF</i> ②	<i>Risk</i> ③	<i>Matta &amp; Ashkenas Type</i> ④	<i>Foshay Type</i> ⑤	<i>Probability</i> ⑥	<i>Impact</i> ⑦	<i>Mitigation Strategies</i> ⑧	<i>Owner(s)</i> ⑨	<i>Monitoring Frequency</i> ⑩
“Protect people’s health and safety.”	Minimize the potential impact of a bird flu pandemic.		<input type="checkbox"/> Execution <input type="checkbox"/> Input <input type="checkbox"/> Process <input type="checkbox"/> Output <input type="checkbox"/> White spaces <input type="checkbox"/> Integration	<input type="checkbox"/> Organizational <input type="checkbox"/> Scope <input type="checkbox"/> Technology	<input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	<input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low			
Support people during natural disasters.	Decrease impact of 2006 Hurricane Amos.		<input type="checkbox"/> Execution <input type="checkbox"/> Input <input type="checkbox"/> Process <input type="checkbox"/> Output <input type="checkbox"/> White spaces <input type="checkbox"/> Integration	<input type="checkbox"/> Organizational <input type="checkbox"/> Scope <input type="checkbox"/> Technology	<input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	<input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low			
			<input type="checkbox"/> Execution <input type="checkbox"/> Input <input type="checkbox"/> Process	<input type="checkbox"/> Organizational <input type="checkbox"/> Scope <input type="checkbox"/> Technology	<input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	<input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low			

<i>SBO</i> ②	<i>CSF</i> ②	<i>Risk</i> ③	<i>Matta &amp; Ashkenas Type</i> ④	<i>Foshay Type</i> ⑤	<i>Probability</i> ⑥	<i>Impact</i> ⑦	<i>Mitigation Strategies</i> ⑧	<i>Owner(s)</i> ⑨	<i>Monitoring Frequency</i> ⑩
			<input type="checkbox"/> Output <input type="checkbox"/> White spaces <input type="checkbox"/> Integration						

# BIOGRAPHIES

## **Deborah L. Stone, CPT**

Since 1982, Deborah has been the President and CEO of DLS Group, Inc. Deborah has received over 20 professional awards, including Microsoft's Award of Excellence for the Outstanding Performance Support System. She has also co-received the International Society for Performance Improvement's awards for Outstanding Performance Intervention, Outstanding Instructional Product, and Outstanding Systematic Approach. A frequent author and international presenter, Deborah was a co-author and presenter at ISPI's first two award-winning HPT Institutes in Chicago and San Francisco. She also co-authored the chapter on PSS in the second edition of the Handbook of Human Performance Technology. A certified Human Performance Technologist, she has delivered over 75 presentations and three Masters' Series at various conferences and has co-authored numerous articles that focus on applying the latest, proven research to real-world performance solutions. Deborah is the proud mother of a 14-year-old boy named Sam and a cat named Gizmo.

## **Steven W. Villachica, Ph.D., CPT**

A certified performance technologist, Steve is Chief Learning Officer (CLO) for DLS Group, where he specializes in applying research, theory, and practice to close gaps in organizational performance. A frequent presenter at international conferences and member of ISPI, Steve also co-authored the chapter on PSS appearing in the second edition of the Handbook of Human Performance Technology. A two-time winner of ISPI's Outstanding Systematic Approach award, he completed his doctorate in educational technology at the University of Northern Colorado.

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