

DANCING IN THE MINEFIELD: MANAGING PROJECT RISKS



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Presented at the 2006 ISPI International Conference
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Sunday, April 9, 2006, 11 a.m.
Session S122

Supplemental Materials

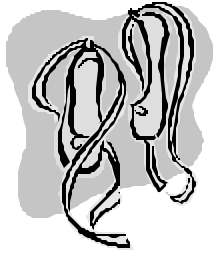
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Dancing in the Minefield

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Managing Project Risks



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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



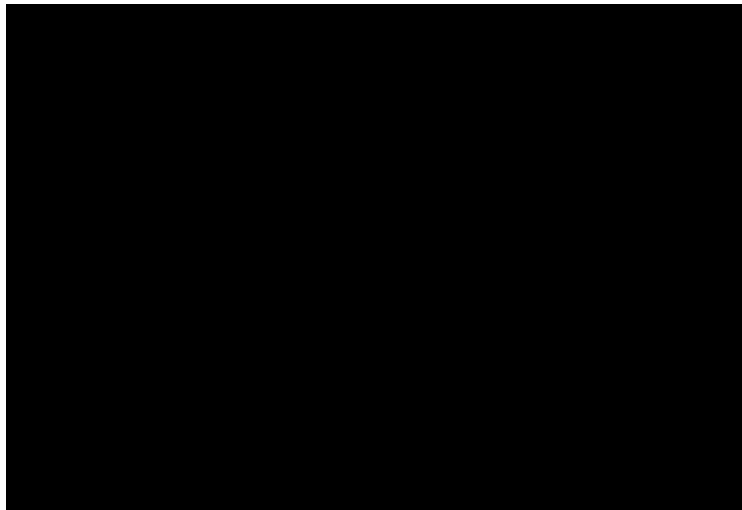
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A Metaphor for Managing Project Risks

"The Good, The Bad, The Furry"



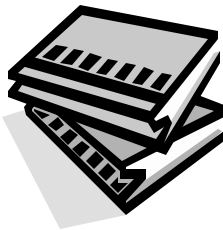
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Project Management Components

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

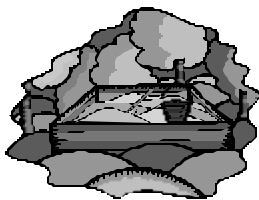
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Common Software Project Risks

Jiang & Klein, 2001



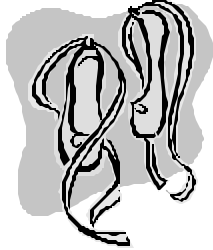
9. Intensity of conflicts
8. Lack of clear role definition
7. Lack of user experience
6. Lack of user support
5. Lack of team expertise
4. Insufficient resources
3. Technology acquisition
2. Application complexity
1. Project size

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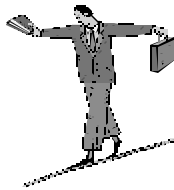
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Risk Classification Schemes

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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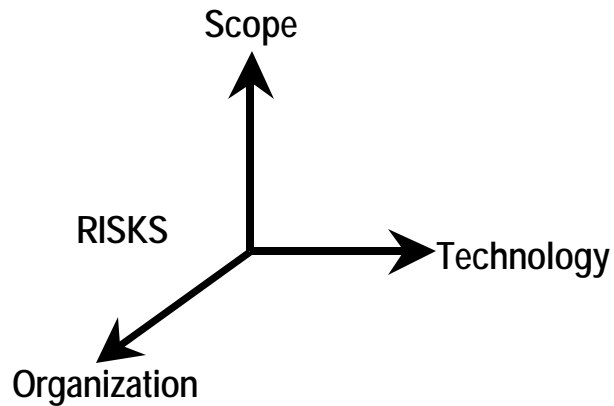
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Risk Classification Schemes

Foshay (1994)

Job
Aid 2



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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.
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Risk Management Job Aid

Job
Aid 3



- Strategic Business Objective
- Critical Success Factor
- Type of risk
- Probability and impact
- Mitigants
- Monitoring strategy
- Owner(s)

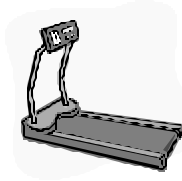
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Interactive Exercise 1

Using the Risk Management Job Aid



- Break into groups.
- Choose a Strategic Business Objective and Critical Success Factor—or specify your own.
- Specify a risk that could jeopardize the Strategic Business Objective and Critical Success Factor.
- Check the box(es) indicating the types of risk, probability, and impact.
- Specify one or more strategies to mitigate each risk.
- Specify an owner for each mitigation strategy and the frequency which the owner(s) will monitor it.
- Time = 20 minutes.

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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 you use or specify?
- What was the risk you specified that could jeopardize your SBO or CSF?
- What types of risk 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 did you monitor the risk and success of its mitigation strategies?

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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
 - Mattas & Ashkenas (2003)
 - Foshay (1994)

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Lessons Learned *(continued)*



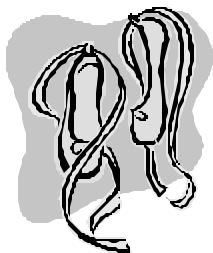
4. Use the Risk Management Job Aid or something similar in your own efforts.
5. Monitor the risks once you've identified them.

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Thank You!



Your questions and comments?

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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.

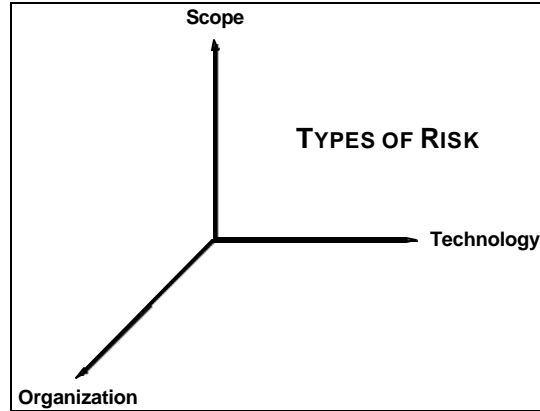
INTEGRATION RISKS

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 4th 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 (WORKED EXAMPLE)

Instructions

- ❶ Specify a Strategic Business Objective (SBO) and Critical Success Factor (CSF) for a project you are working on.
- ❷ Write a risk that could jeopardize 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 & 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 support.	<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 strategies (such as rapid application development) to ensure buy-in among instructors, managers, supervisors, and end users.	Development team project manager Development team project manager	Daily teleconferences Daily Weekly

<i>SBO</i> ①	<i>CSF</i> ①	<i>Risk</i> ②	<i>Matta & 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
							c. Ensure that client-side project team members have adequate release time.	Client team project manager	

INTERACTIVE EXERCISE 1: RISK MANAGEMENT

Instructions

1. Break into groups of 2-6 people.
- ② Choose a Strategic Business Objective and Critical Success Factor below—or specify your own.
- 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 & 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
Maintain annual revenue growth of 7 percent.	Provide on-demand support to localized training, information, and tools.		<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			

<i>SBO</i> ②	<i>CSF</i> ②	<i>Risk</i> ③	<i>Matta & 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
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"/> 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			

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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