

Developing and Using Risk Contingency Reserve



RefineM PROJECT
MANAGEMENT
CONSULTING

www.RefineM.com

NK Shrivastava, PMP, RMP, ACP
CEO/Consultant – RefineM
nks@RefineM.com

Agenda

1. What is Virtual Lunch & Learn
2. Your Expectations from this Webinar
3. Introduction – Myself
4. Developing and Using Risk Contingency Reserve
 - a. Background/Overview of Risk Management
 - b. What is a Contingency Reserve?
 - c. Using Expected Monetary Value to calculate Contingency Reserve
 - d. Communicating the Contingency Reserve
 - e. Using the Contingency Reserve
5. Upcoming Learning Opportunities from RefineM
6. How to get 1 PDU for this Webinar?
7. Q & A

RefineM

www.RefineM.com

RefineM's Virtual Lunch & Learn

This is a monthly webinar delivered during the lunch hour in the first week (Wednesdays) of every month.

It's designed to help you learn while you eat lunch, providing a relaxed environment to enhance your experience.

The monthly webinars will cover a variety of Project Management/ Agile topics.



www.RefineM.com

Your Expectations

What are your expectations from this webinar?

Why are you here today?



www.RefineM.com

NK Shrivastava, PMP, RMP, ACP

RefineM

Helping organizations turn their project management capability into a *competitive advantage*

My professional journey b/f RefineM



- * CEO/Consultant since Dec 2011
- * Agile Coaching/Adoption
- * Project Management/ Process Improvement Consulting and Training
- * Project Management Toolkits (for PMs, Executives and Agile Practitioners)
- * Board Member – SWMO PMI Chapter

- * 20+ years of Successful Project Leadership
- * Led 100s of projects of all sizes, successfully
- * Recovered many projects, saved millions of \$
- * Implemented numerous process improvements
- * Coached/mentored 100s of PMs, and some executives



www.RefineM.com

Developing and Using Risk Contingency Reserve



- Overview of Risk Management
- What is a Contingency Reserve?
- Using Expected Monetary Value (EMV) to calculate contingency reserve
- Communicating Contingency Reserve
- Using Contingency Reserve



www.RefineM.com

Project Risk Management

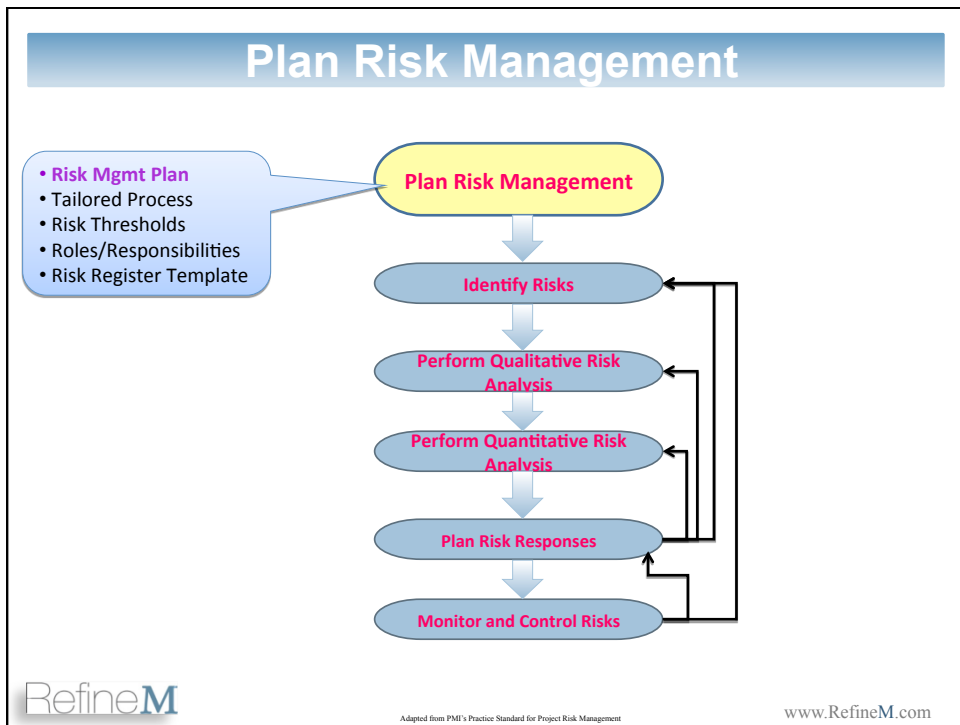
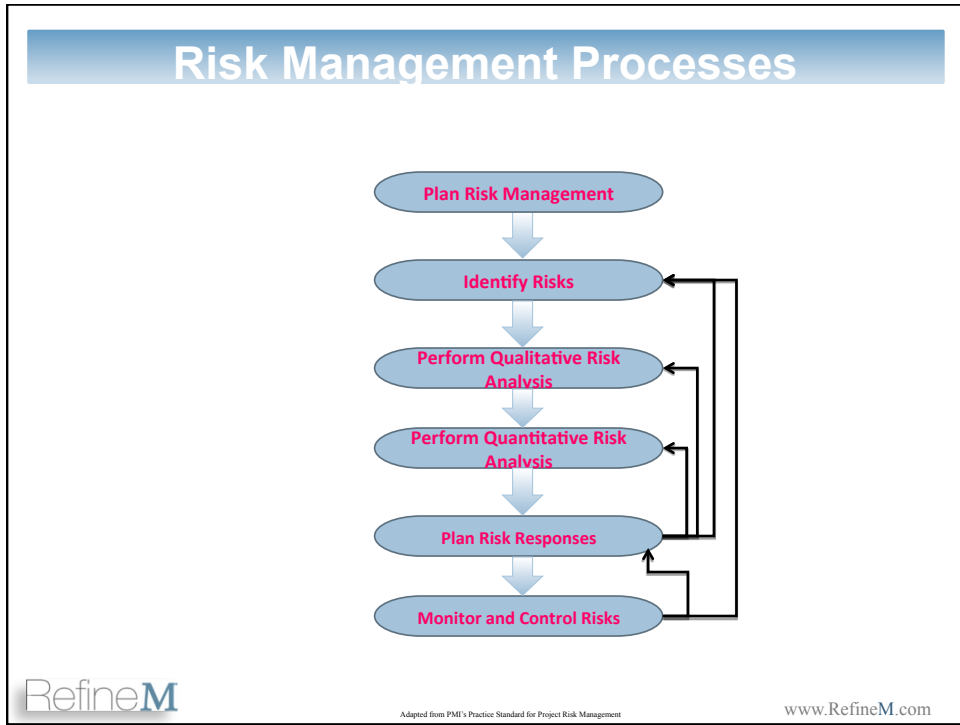
What is a Project Risk?

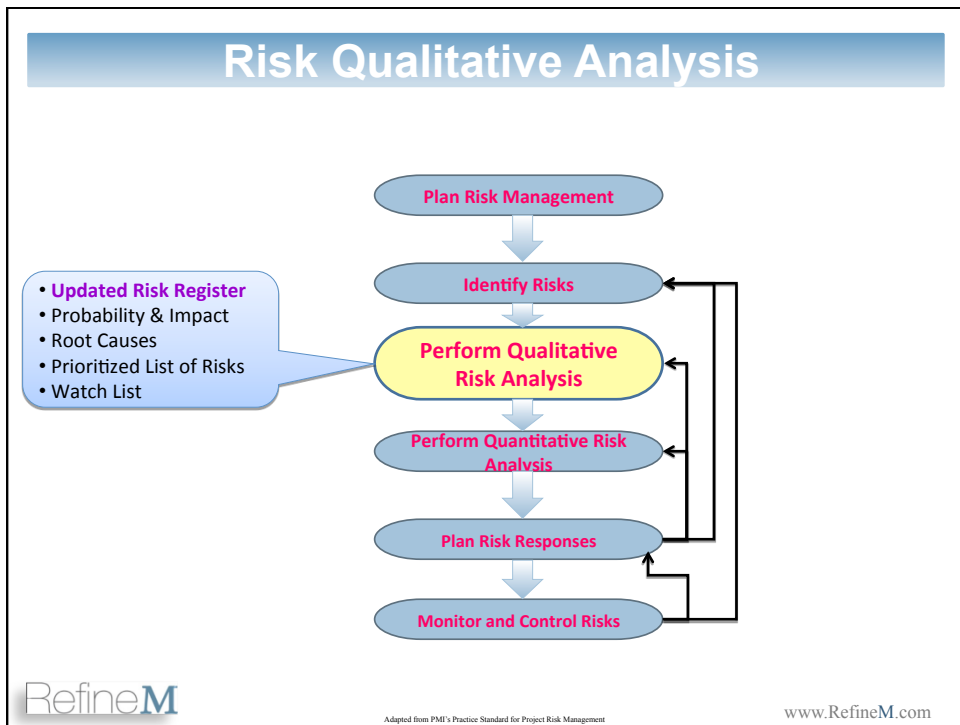
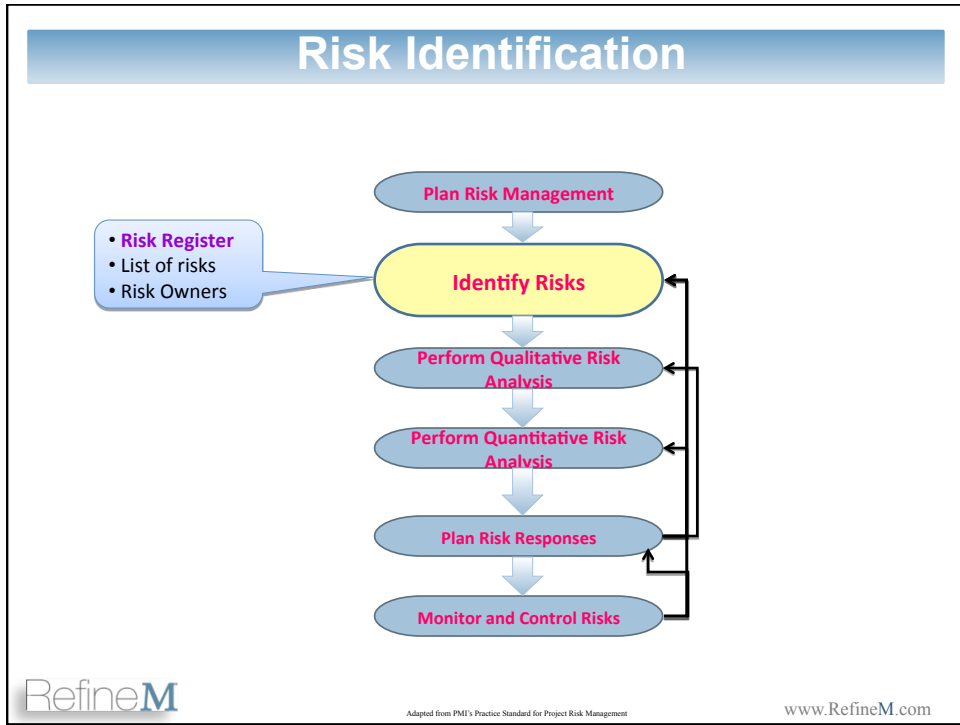
Project risk is an *uncertain event* or condition that, if it occurs, has a positive or a negative effect on a project's objectives.

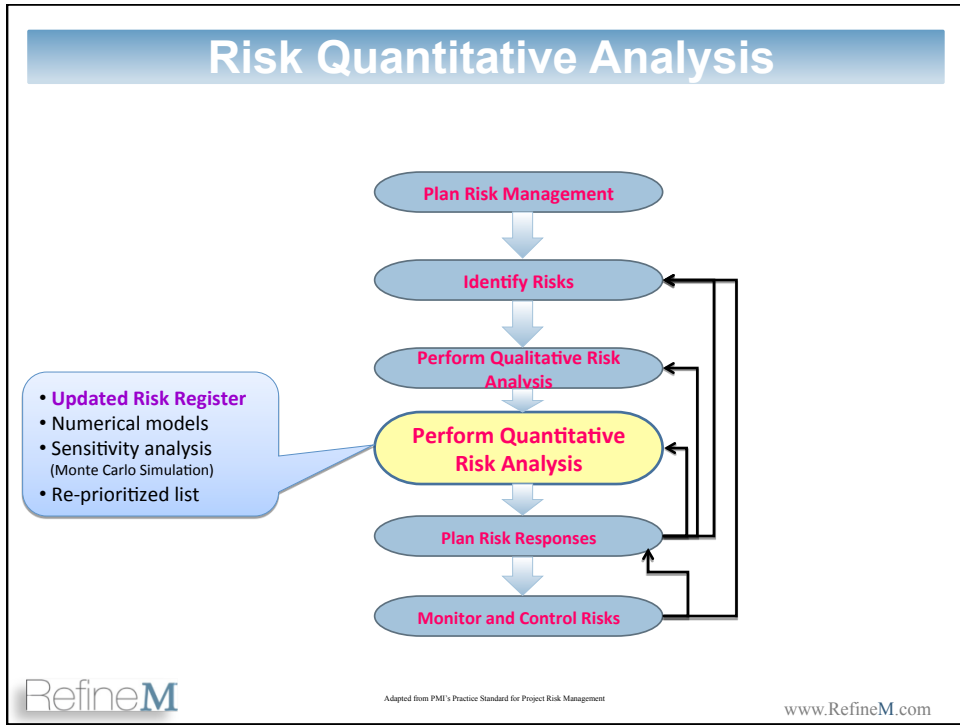
- From PMI's Practice Standard for Project Risk Management - Chapter 2, Page 9

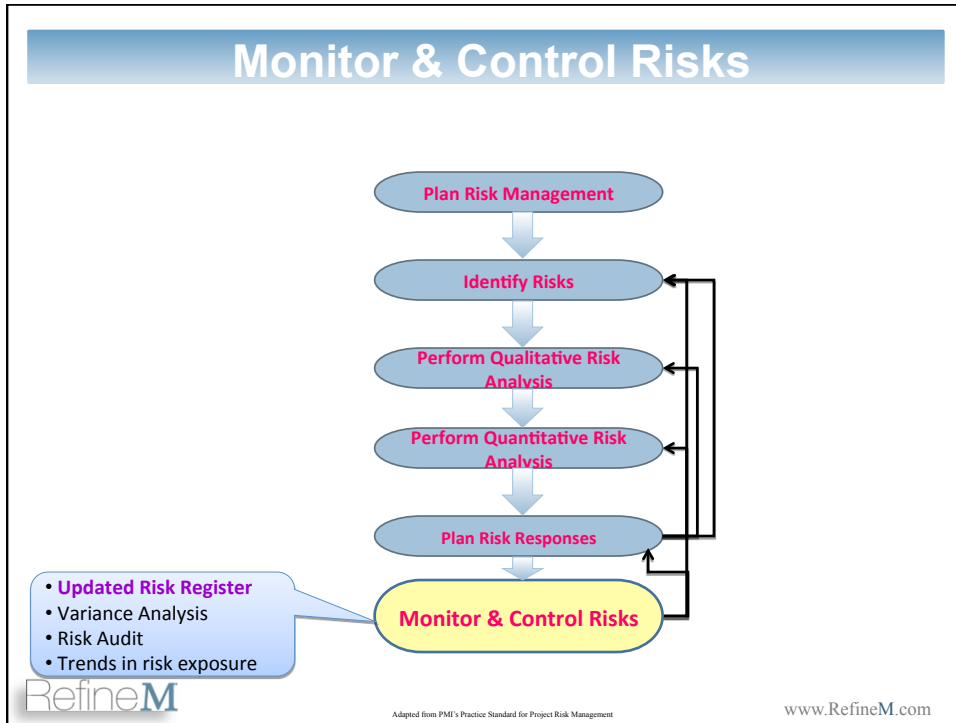
Risk Vs. Issues

Risks	Issues
<ul style="list-style-type: none"> • A event of future • It has not occurred yet but there are chances that it may occur – there is uncertainty • The probability of occurrence can range from 0 to 1 but it is neither 0 or 1 (greater than 0 but less than 1) • The language to describe a risk uses future tense • A response plan is needed in case risk event occurred • Risk Register is used for risks 	<ul style="list-style-type: none"> • An event of past or present • It has already occurred or occurring right now, there is no doubt whether it'll happen or not – no uncertainty • Probability is 1 since it already occurred • The language to describe an issue uses present to past tense • Need a resolution plan with action items to resolve an issue • Issue log is used for issues









What is Contingency Reserve?

- * Time or cost set aside to manage *identified* risks
- * Contingency Reserve covers “known unknowns”
- * Management Reserve covers “unknown unknowns”

Contingency Reserve is a CRITICAL part of Risk Management

RefineM www.RefineM.com

How is Contingency Reserve Useful?

- * Communicating risks
- * Responding to risks
- * Making project outcome more predictable



RefineM

www.RefineM.com

Developing Contingency Reserve

- * What is needed?
 - ✓ Risk Register
 - ✓ Quantitative Analysis Technique (such as Expected Monetary Value or EMV)



RefineM

www.RefineM.com

Expected Monetary Value (EMV)

- * EMV of a Risk = Probability x Impact
 - ✓ Probability of the risk occurring (percentage)
 - ✓ Impact, if the risk occurred (time or cost measure)



RefineM

www.RefineM.com

EMV Example #1

There is a 70 percent chance that computers needed for the project team will not be available on time, causing a delay of 5 days.

What is the EMV for this Risk?

$$\begin{aligned}\text{EMV (probability x impact)} \\ &= 0.7 \times 5 \text{ days} \\ &= \mathbf{3.5 \text{ days}}\end{aligned}$$

RefineM

www.RefineM.com

EMV Example #2

There is a 50 percent chance that a critical piece of equipment will fail during the project and will cost \$10,000 to replace.

What is the EMV of this Risk?

$$\begin{aligned} \text{EMV (probability x impact)} \\ &= 0.5 \times \$10000 \\ &= \mathbf{\$5,000} \end{aligned}$$

RefineM

www.RefineM.com

Develop Contingency Reserve - Example

Id	Risk Description	Event Date	Probability	Impact (days)	Magnitude
1	Performance issues due to redesign of batch (splitting into 4 concurrent jobs) are not handled before the cycle testing	Sep-10	H 70%	M 15	10.5
2	Server performance issues are not handled before the cycle testing begins in September	Sep-10	L 10%	M 10	1
3	Unanticipated table changes occur after the coding has been completed in August	Aug-10	L 10%	L 5	0.5
4	The testing environment chosen could interfere with other high priority projects	Sep-10	L 10%	M 10	1
5	Priority to implement non-rating mod may go up due to NJ coming up right after IOWA.	Aug-10	M 25%	H 40	10
6	Impact Analysis brings up something that we are not thinking of now (on both mainframe and PARIS sides), that may push the	Jun-10	M 25%	M 15	3.75
7	Coding may take longer than expected	Jul-10	H 50%	M 20	10
8	Finding too many differences between SBR and Mainframe rating of a policy may push the dates for cycle testing and the project.	Aug-10	M 30%	M 15	4.5
9	Daily business functions could be interrupted for Production Problems - taking the resources away from this project	Anytime	M 30%	M 10	3
10	Other new product (MA Auto, NJ Auto, Company8, Chrome Expansion) - Taking resources away from this project	Anytime	H 70%	H 45	31.5
11	System upgrades (Rating Engine 4.0, end of VB6...) may be pushed on us right in the middle of this project	Jun-10	L 20%	M 20	4
11	Total Risk Magnitude for the Project				79.75

RefineM

www.RefineM.com

Communicating Contingency Reserve

- * Schedule baseline = Estimated finish date + contingency reserve (time/schedule aspect)
 - ✓ Example: Estimated Finish date is in 10 weeks, with contingency reserve of 4 weeks. What is the schedule baseline?
 - Schedule Baseline is 14 weeks.

“No Later Than” date

RefineM

www.RefineM.com

Communicating Contingency Reserve

- * Cost baseline = Estimated costs + contingency reserve
 - ✓ Example: Project budget is \$1,000,000, contingency reserve is \$250,000. What is the cost baseline?
 - Cost baseline is \$1,250,000.

“Not to Exceed” budget

RefineM

www.RefineM.com

Using Contingency Reserve

- * When risk occurs:
 - ✓ Actual impact is added to cost/schedule
 - ✓ Estimated budget/schedule is updated
 - ✓ Contingency reserve decreases
 - ✓ *Baseline is NOT updated*

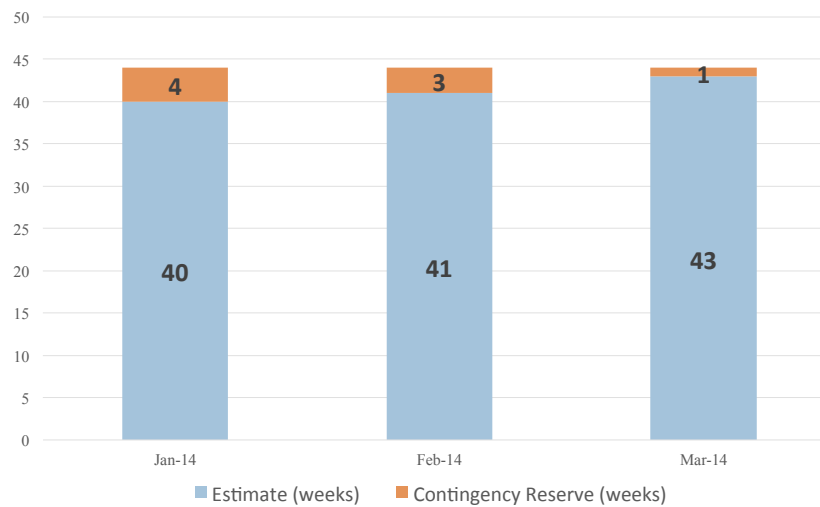
If risk does not occur, contingency not spent

Project finishes before time, under budget

RefineM

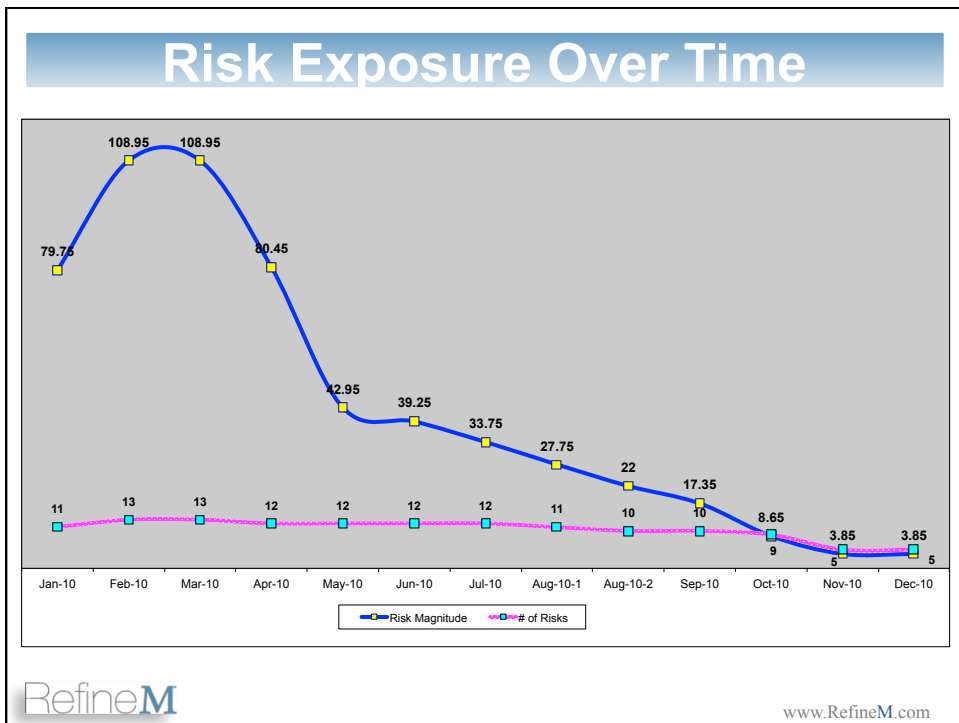
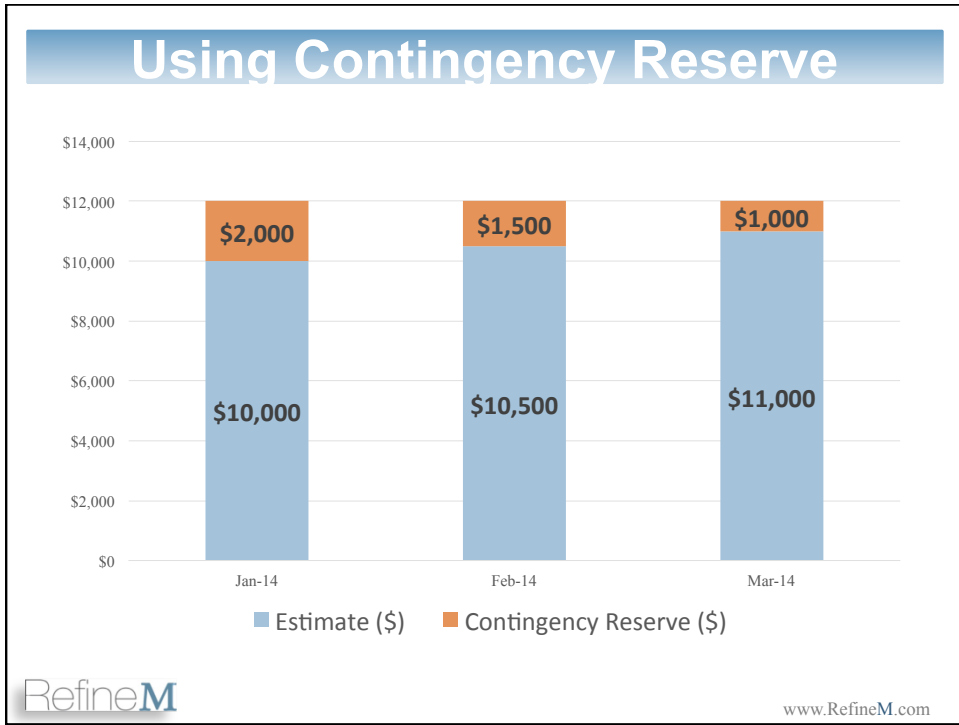
www.RefineM.com

Using Contingency Reserve



RefineM

www.RefineM.com



Risk Impact on the Project

ID	Task Name	Duration	% Complet	Start	Finish
1	SBR for 1st State (IOWA) - with Risks	73.85 wks	37%	Mon 8/3/09	Wed 1/19/11
2	Risk Reserve for Unmitigated Risks	39.25 days	0%	Fri 11/19/10	Wed 1/19/11
3	Project Tasks	66 wks	41%	Mon 8/3/09	Thu 11/18/10
4					
5	SBR in Production - 1st State (IOWA)	66 wks	55%	Mon 8/3/09	Thu 11/18/10
6	Identify the first state - IOWA	0 days	100%	Fri 11/6/09	Fri 11/6/09
7	Mainframe Tasks Group0	11.8 wks	100%	Wed 11/4/09	Mon 2/1/10
13					
14	Mainframe Tasks Group1	19 wks	99%	Mon 1/18/10	Fri 5/28/10
49					
50	Mainframe Tasks Group2	19.2 wks	75%	Mon 2/8/10	Tue 6/22/10
74					
75	Mainframe Tasks Group3	12.6 wks	67%	Wed 3/24/10	Mon 6/21/10
97					
98	Mainframe Tasks Group4	20.8 wks	59%	Fri 1/22/10	Thu 6/17/10
134					
135	Mainframe Tasks Group5	4.6 wks	15%	Mon 5/10/10	Thu 6/10/10
141					
142	PARIS/PC Tasks	39.8 wks	65%	Thu 10/15/09	Thu 7/29/10
167					
168	Rating Related Tasks	43 wks	61%	Mon 8/3/09	Tue 6/8/10
185					
186	HSM for IOWA	0 wks	0%	Fri 8/6/10	Fri 8/6/10
187					
188	Testing	19.2 wks	0%	Wed 6/23/10	Fri 11/5/10
200					
201	Initial Implementation	15 wks	0%	Thu 8/5/10	Thu 11/18/10

RefineM

www.RefineM.com

Limitations of the Model

- * This Model is NOT as useful when:
 - ✓ Only few risks have been identified
 - ✓ All risks have high probability



Either of these could produce erroneous results

RefineM

www.RefineM.com

Summary

- * **Contingency reserve is:**
 - ✓ Critical in risk management
 - ✓ Included in baselines (schedule and cost)
 - ✓ An effective communication tool for risks
 - ✓ A way to make project outcomes more predictable



Start using Contingency Reserve today!
EMV is a simple way to get started

RefineM

www.RefineM.com

More Learning Opportunities From RefineM

- * **Risk Management for Projects – On Jun 18, 2014 – 7 PDUs**
 - ✓ 1-day class delivered in person, from 8:30am-4:30pm CT
 - ✓ Venue – eFactory, 405 N Jefferson Ave, Springfield, MO, USA
- * **PMP Exam Prep Course – Starts Jul 11, 2014 – 36 Hrs/PDUs**
 - ✓ Instructor led virtual course, 8 sessions (4 hours every Friday)
 - ✓ Includes a full length mock test, and tips & tricks to pass the exam
- * **8 Powerful PM Processes – On Aug 13, 2014 – 7 PDUs**
 - ✓ Learn more about simple processes to achieve high-level project results
 - ✓ Venue – eFactory, 405 N Jefferson Ave, Springfield, MO, USA

We also offer customized trainings, On-site & Virtual
Topics include Agile, Project Management, Strategy, Leadership,
Process Improvement, and PMI Certifications.

RefineM

More info at <http://refinem.com/trainings/>

www.RefineM.com

June Lunch and Learn

* *Passing the PMP Exam on Your First Attempt*

- ✓ What does it take to pass on the first try?
- ✓ Study Plan
- ✓ Test Preparation
- ✓ Pitfalls and Best Practices

* *Wednesday, June 4, 12:00-1:00 PM CST*

Register Today - Don't wait for the last Minute

RefineM

www.RefineM.com

How to Claim 1 PDU for this Webinar?

- * PDU Category – B, Continuing Education
- * Program Title – Webinar on “Developing and Using Risk Contingency Reserve”
- * Date Started – Today’s date
- * Date Completed – Today’s date
- * Hours Completed – 1.00
- * Provider
 - ✓ Name – RefineM
 - ✓ Phone # 417-414-9886
 - ✓ Email – nks@refinem.com
- * PDUs Claimed – 1.00

RefineM

www.RefineM.com

Questions?



RefineM PROJECT
MANAGEMENT
CONSULTING

NK Shrivastava, MBA, PMP, RMP, ACP

CEO/Consultant, RefineM

Nixa, MO 65714, USA

nks@refinem.com, www.refinem.com

 <http://www.linkedin.com/in/nkshrivastava>

 [justrightpm](#)

RefineM

www.RefineM.com