



# Project Planning: Getting it Right Up Front

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Management

**K | T | H**

**PROGRAM AND PROJECT MANAGEMENT**

# Preamble: Who, What, Why?

- So who is this Ken Hanley guy?
- What does he know?
- Why should I care? Because...

# Three Key Takeaways from today...

- Effective project planning is far more important than effective ‘project execution’
- An effective plan is a dynamic (i.e. change responsive) project framework that ‘lives and breathes’ throughout a project, from beginning to end – “plan to manage, and manage to the damn plan”
- ‘Activity’ based plans aren’t worth the paper they’re printed on...

# Just When You Think You've got it Nailed...



**Don't let this happen to  
you...**



# Agenda

- **Overview of best practices thinking:**
- *Alignment:*
  - Three Key Questions
  - Priority Triangle
  - Stakeholder Breakdown Structure
- *Scheduling and budgeting:*
  - 3-D Scheduling and Range estimates (PLOs)
- *Risk and Uncertainty Management:*
  - Mitigation
  - Target Setting and Scheduling for Reality
- *Tracking and Reporting:*
  - Checkpoints & Off Ramps
  - Carley Graph & Project GPS

# Expectations for Today's Session: You Will

- Understand and be able to speak comfortably about leading edge Project Planning and Management concepts
- Have developed common project management concepts and lexicon
- Be able to effectively participate in a project team

# Why Project Management?

- “All work is project work”
  - Tom Peters, Fast Company, May 1999
- How important is effective project planning and management in your organization?





# Best Thinking

- Single point estimates are inappropriate in today's business environment!
- Eat your crow when its young and tender
- Columbo would have been the world's best project manager
- Start with the end in mind – work backwards from the end



# Best Thinking

- Everything about the way we manage a project connects explicitly (direct line of sight)
- This is not black box project management
- Agendas are OK, as long as they're explicit and openly communicated



# Best Thinking

- You can find circumstances where it makes sense to cancel any project
- Nothing comes for free on a project
- You can have it good. You can have it fast. You can have it cheap. Pick any two. Red Adair
- You must know the criteria for success in the end before you begin

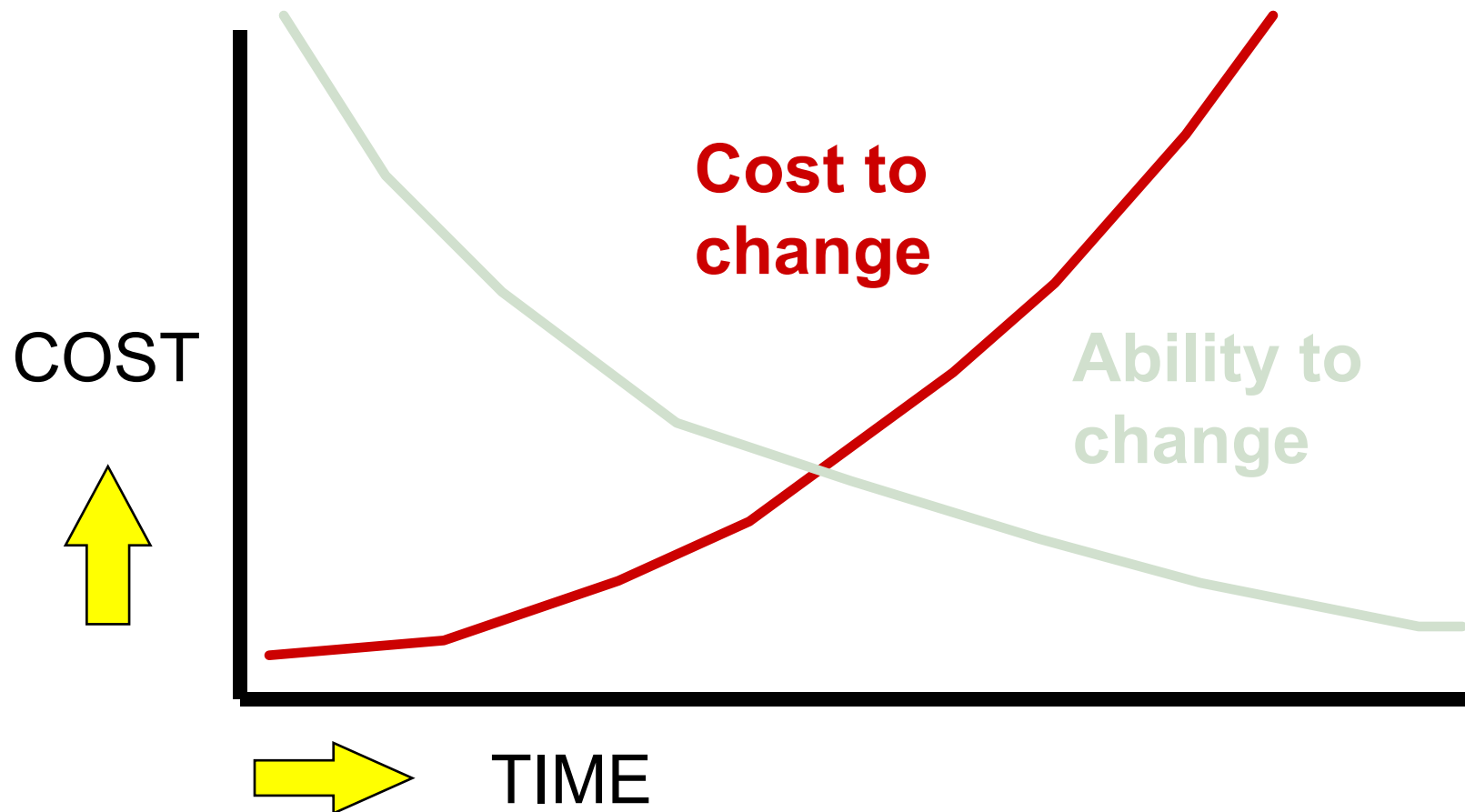


# Best Thinking

- If you don't know where you are, where you've been, and where you're going, you're out of control
- Every project incorporates formal interim check points
- Never start without a baseline for duration, cost, and performance
- Planning is cheap - reacting is expensive

# The Cost/Influence Curve:

How Much Does it Cost/How Easy is it to Make a Change?



# **Project Stakeholder's Bill of Rights:**

## **Answers to these questions**

1. Is this the right project?
2. Has this project been thought through thoroughly?
3. How much of a challenge or novelty is this project?

# Project Stakeholder's Bill of Rights:

## Answers to these questions

4. Are all project stakeholder perspectives and requirements well understood?
5. What are the biggest risks?
6. What are the early signs of success and failure?
7. What will we do if things go wrong?

# **Adding Value Immediately – if I have a heart attack 5 minutes from now...**

- Estimate classes, and how to show risk and uncertainty explicitly

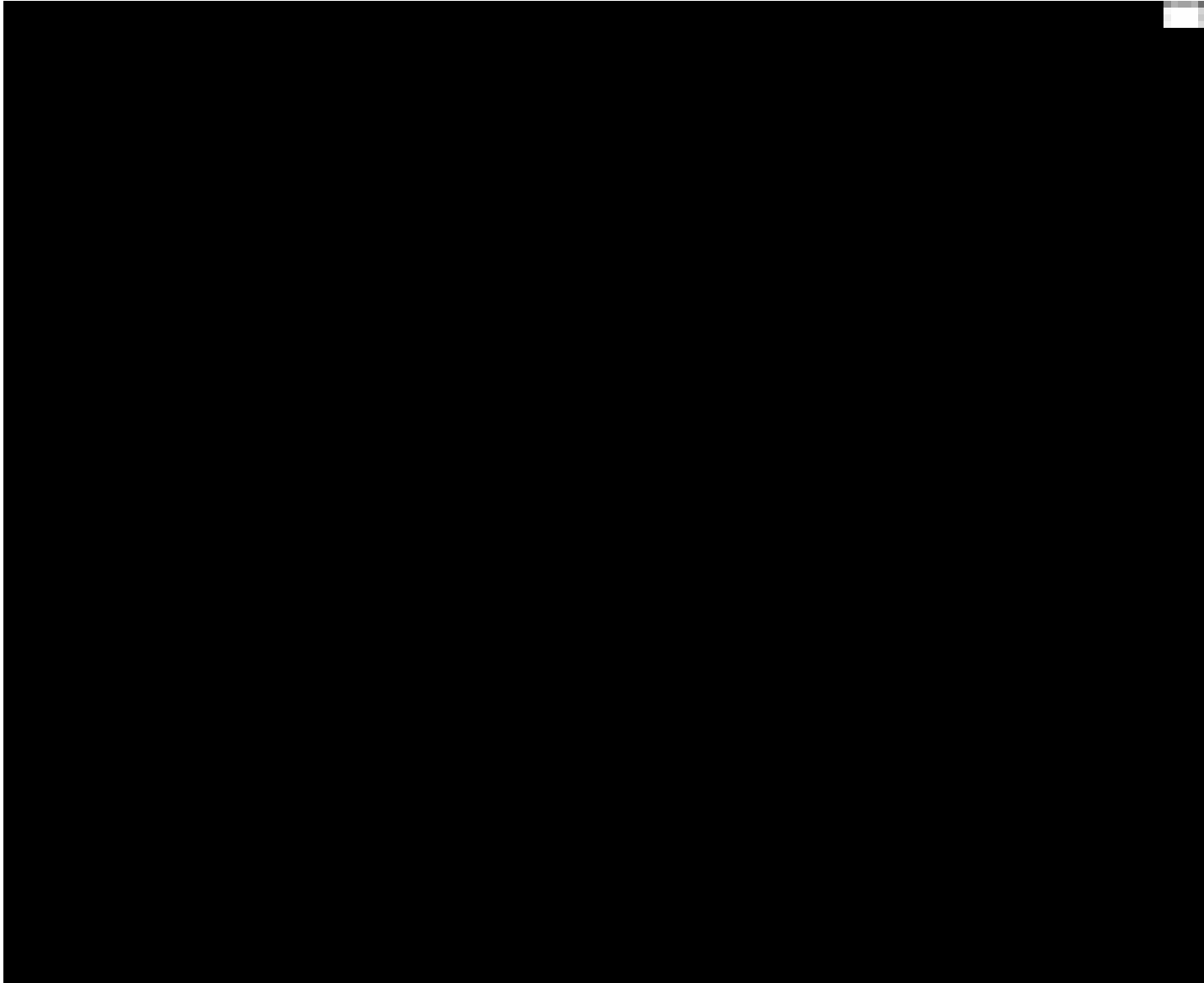




# Issue #1 is Alignment!

- Intent: Get alignment of project stakeholders on key result requirements, measures of success, major milestones, and project drivers

# Misaligned expectations...



# Alignment - What Do We Do?

- Establish an end point and project success criteria: Answer the Three Key Questions
- Understand how to drive this project: the Priority Triangle
- Understand stakeholder perspectives: Create a Stakeholder Breakdown Structure

# The Three Key Questions

- 1) How will we know when the project is done?
- 2) What are the objective measures of project success? These become the project Key Performance Indicators (KPIs).
- 3) Who gets to vote on questions 1 and 2 (who is the project sponsor)?

# Lining up Done and Won...

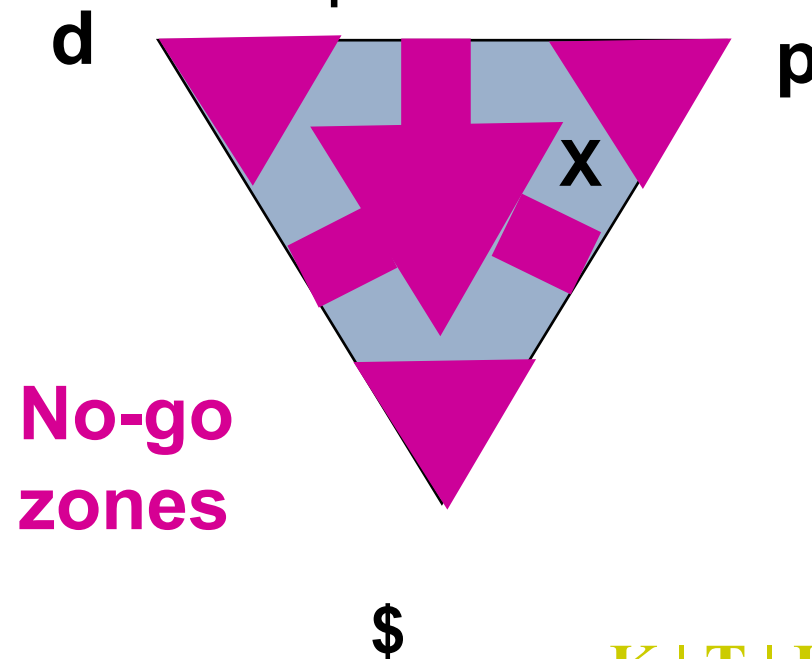
- Making sure that all your WONS occur at or before your final DONE...
- Human deliverables, human milestones...



# Exercise: The Three Key Questions

# Project Priority Triangle

- How does the sponsor want the project team to behave?
- Where is the X?
- Do we make decisions that optimize:
  - duration
  - cost or
  - performance?



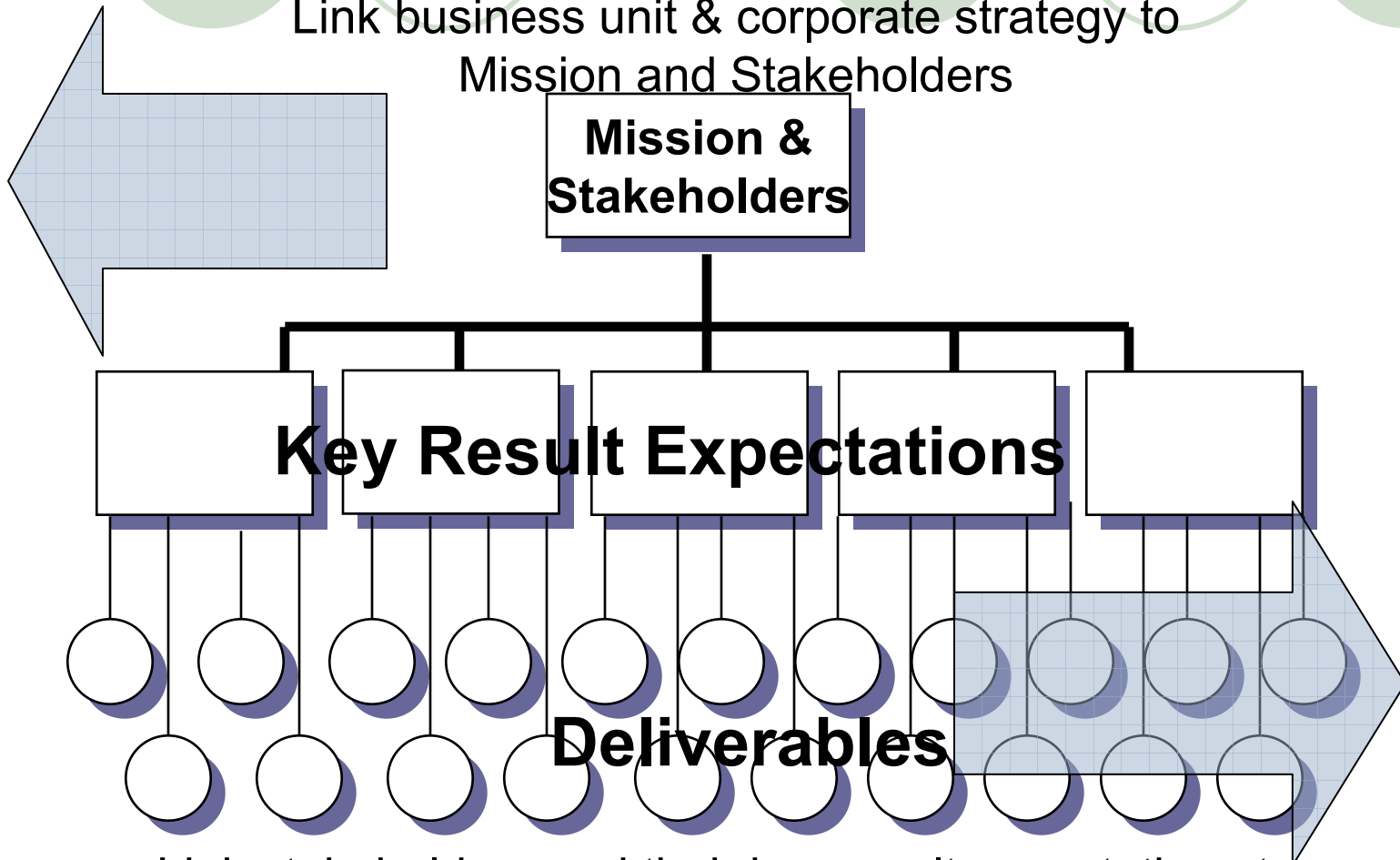
# Stakeholder Breakdown Structure

- What is the mission of this project?
- How does this align with corporate and business unit objectives?
- Who are the project *stakeholders* who have an interest in this mission?
- What are the *key result expectations* of each of the project *stakeholders*?
- What do we have to *deliver* to meet these *key result expectations*?



# Stakeholder Breakdown Structure

Link business unit & corporate strategy to Mission and Stakeholders



Link stakeholders and their key result expectations to scheduled deliverables on the 3D Schedule

# Write the Project Mission

- Keep it simple
- Use an “elevator statement”
- Avoid generalized terms & buzzwords
- 15 minutes is enough
- No consensus? We’re not ready to start the project!



# Identify the Project Stakeholders

- Stakeholder: anyone who can impact, or who can be impacted by the project
- Use the rule of seven and group the stakeholders accordingly
- Most important stakeholder groups to the left...
- Number the stakeholder groups

# What Do Stakeholders Want From the Project?

- Key Results (KRs) - simple sentences or point form
- Check Project Stakeholder Groupings - are the key results common to all/most in the stakeholder group?
- Should you check the answers with the stakeholders?
- There will be conflicts: fix them now and manage expectations accordingly!

# What Do We Have to Deliver to Meet the Key Results ?

- These are our project deliverables!
- Number deliverables according to the first stakeholder group they are most important to
- Deliverables can (and often do) repeat across stakeholders

# Check For and Fix Key Result Conflicts

- Are there conflicts in stakeholder key result expectations?
- Can the team resolve these conflicts by themselves?
- Do we need help from outside the project team (e.g. management)?
- Are there any key results we cannot or will not address, given the priorities and/or limitations of the project?

# What is Undefined or Excluded?

- We're starting to manage expectations...
- Cloudy items
- Specific exclusions



# Parking Lot

- Clear up the undefined
- Capture items before you're ready to handle them



# Deliverables Breakdown Structure

**Project Name:** ERP Sample Project  
**Division:** IT  
**Budget Reference:** ITERP01  
**Project Manager:** Terry Ontime

**Print Date:** May 01, 2000  
 3:59 PM  
**Revision:** 1.0

**Mission:** To implement a new ERP system including the implementation of Finance and HR modules in a decentralized processing environment.

## Stakeholders

1	2	3	4	5	6	7
Steering Committee	Project Team	Central Depts	Implementation Partner	Vendor	Departments	
Executive Sponsor			Independent contractors			

## Key Result Areas

Clear scope & project plan	Meet or exceed expectations	Participation in project	Clear scope & project plan	Meet or exceed expectations	Communication
Meet or exceed expectations	Visable project sponsor	Training on new system and processes	Access to PCP resources	Referenceable implementation	Training on new processes
Communication	Clear scope & project plan	Job re-evaluations	Meet or exceed expectations		
	Scope change mgmt	Communication	Referenceable implementation		
	Access to PCP business resources	Validate final product	Scope change mgmt		

## Deliverables Breakdown Structure

1.01 Project approved	2.01 ERP generic training	3.01 Business review	4.01 Statement of work/contract	5.01 Application Issues identified	6.01 User Group meetings held
1.02 Project updates	2.02 Fit/Gap analysis drafted	3.02 Fit/gap review completed	(2.02)	5.02 Application Issues resolved	(3.06)
1.03 Post implementation review	2.03 Detailed design drafted	3.03 Design walk thru	(2.03)	5.03 Progress meetings	(3.07)
1.04 Implementation partner chosen	2.04 Detailed design signed off	3.04 UAT/Parallel Plan created	(2.04)		(3.08)
1.05 Vendor contracts signed	2.05 System configured	3.05 UAT/Parallel plan executed	(2.05)		6.02 Newsletters created
1.06 Project scope & plan finalized	2.06 System test plan created	3.06 Communication plan created	(2.06)		6.03 Training on new processes/systeme
1.07 Lessons learned captured	2.07 System test plan executed	3.07 Training plan created	4.02 Scope changes signed off		6.04 Change Readiness
	2.08 Change log update	3.08 Training materials created	4.03 Post impl support completed		
	2.09 Project Kickoff	3.09 Training for Testers	4.04 Sponsor update meetings		

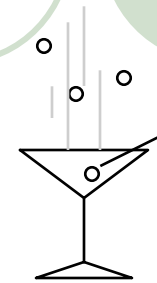
# 3-D (Drop Dead Date) Scheduling

- Project end point ('done' from Three Key Questions)
- Map deliverables from SBS and add others
- Milestones
- Identify Activities between milestones
- Determine PLO Duration for each activity
  - or tasks below the activities for big projects
- Identify risks for each activity
- Run a Monte Carlo Schedule Simulation

# 3-D Schedule Milestones

- Work backwards - start from the end and 'unbuild' the project from 'done'
- Diamonds represent milestones
- What has to be delivered prior to the next activity commencing?
- Identify milestones and the 'activity' to get to them
- Number the milestone from  $M_0$  (now) to  $M_x$  (the defined end of the project)

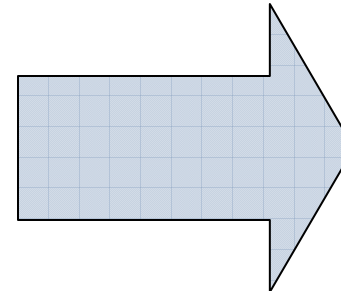
# 3-D Scheduling



**'Done' per the  
Three Key  
Questions**

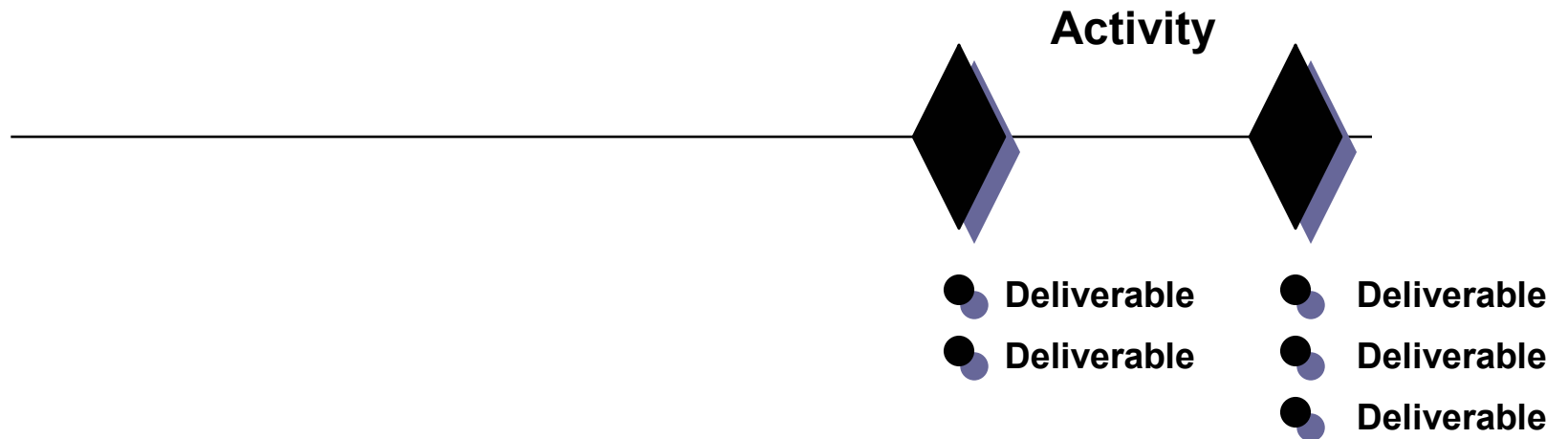
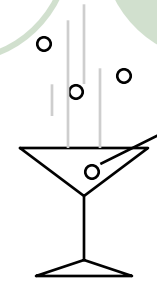


**Deliverables off  
the bottom of the  
SBS**

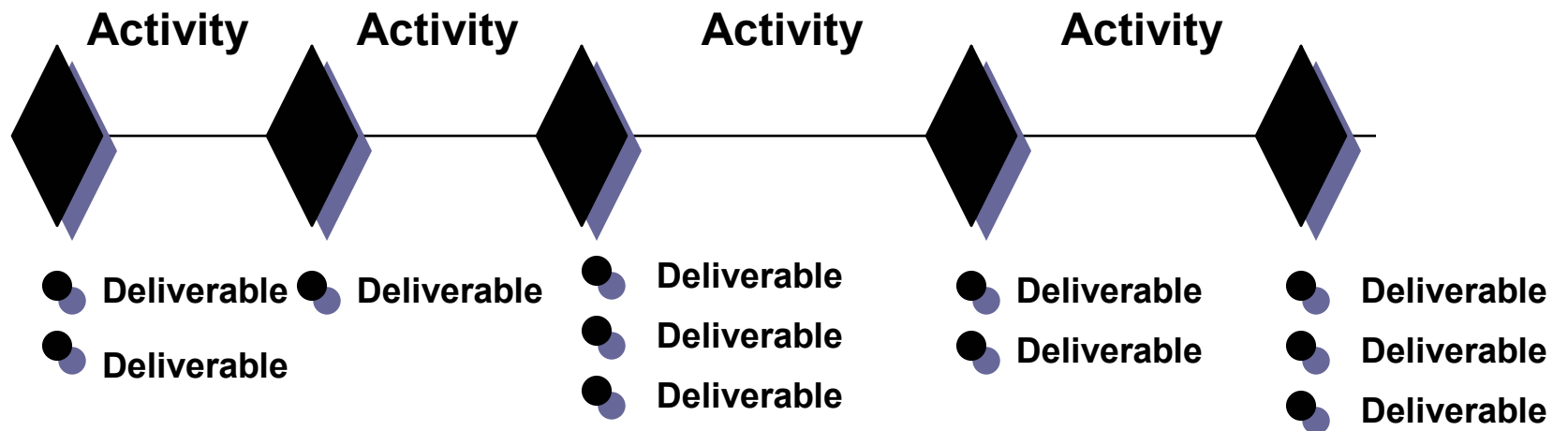
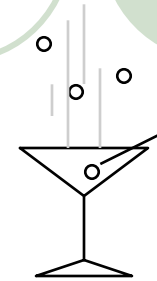


- Deliverable
- Deliverable
- Deliverable

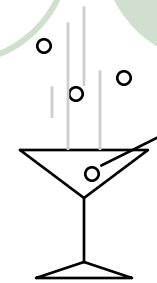
# 3-D Scheduling



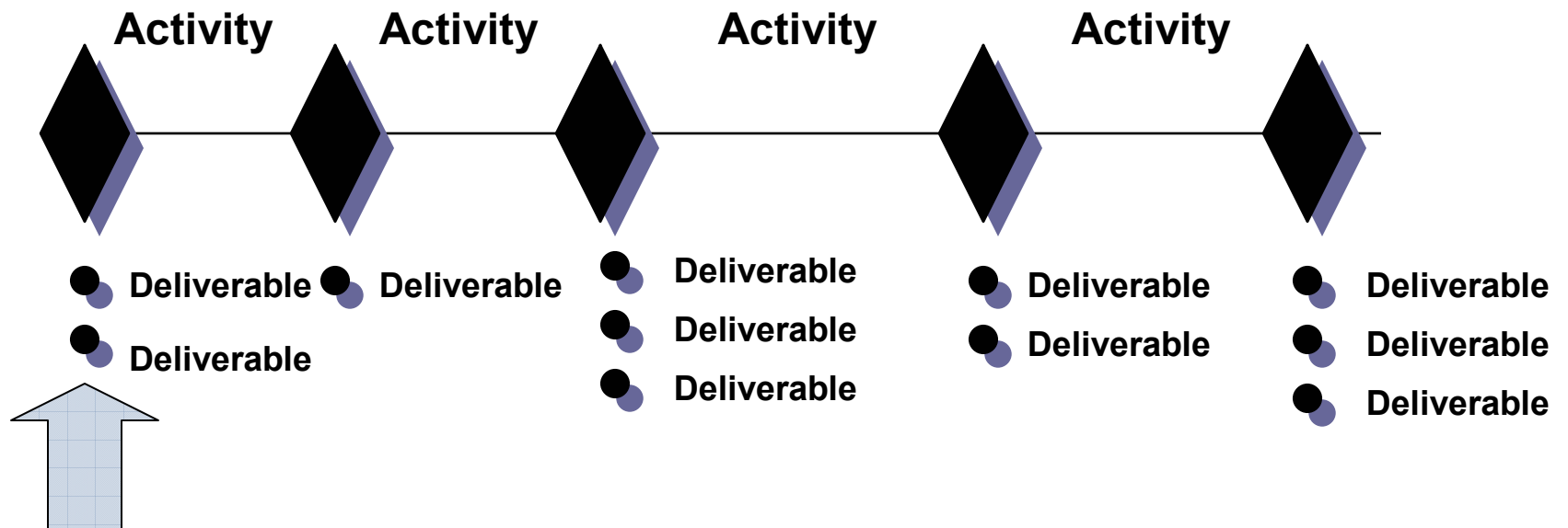
# 3-D Scheduling



# 3-D Scheduling



When you get here, you find  
you should have started  
6 months ago!



Where we are right now

# 3-D Schedule Mechanics

- The 3D is linear by nature – projects often aren't
- It's okay to have several paths - projects inside projects - but try to get to one path only
- We can represent overlapping activities – activity becomes “How much to finish?”
- Keep the details out - work at a higher level



# Check for Deliverables Consistency 3D to SBS


- Do 3-D planning deliverables match those in the SBS?
- What about the other way around?
- Based on what our 3D says, do we want to go back and manage expectations for stakeholders on the SBS - especially for those who won't get what they want e.g. a chance to try out new technologies
- The Project Charter is a dynamic document!

# ERP Project

## Project 3D Schedule

<b>Project Name:</b>	ERP Sample Project
<b>Division:</b>	IT
<b>Budget Reference:</b>	ITERP01
<b>Project Manager:</b>	Terry Ointime

<b>Print Date:</b>	May 02, 2000 8:59 AM
<b>Revision:</b>	1.0

Time (Weeks/Days)	Definition/Team training/Environment set up		Fit/Gap Analysis:		
Perfect:	5		2		
Likely:	7		3		
Outrageous:	10		5		
Target:	7+1		3		

M0			M1			C2		
Deliverables	Mitigated Risks	Non Mitigated Risks	Deliverables	Mitigated Risks	Non Mitigated Risks	Deliverables	Mitigated Risks	Non Mitigated Risks
1.01 Project approved	R1 - C - Vendor courses are not available		2.01 Project team trained by vendor	R3 - C - Business resource not available	Limited internal knowledge of current "big picture" processes	3.02 Business review of current processes completed		
1.04 Implementation Partner (IP) chosen & contracts signed	R2 - C - Shipment delays for hardware/software		2.10 Hardware & software installed and environments created	R5 - C - Willingness for change		2.02 Fit/Gap analysis drafted		
1.05 Vendor contracts signed			1.06 Project scope & plan finalized			3.02 Fit/Gap analysis review completed and signed off		
4.01 Independent contractors selected and contracted			2.09 Project Kick off conducted			5.01 Application issues researched and identified		
			6.04 Change readiness assessed			4.04 Sponsor review meeting held		
						3.06 Communication plan completed		

# Project Simulation before Risk Mitigation

- List project milestones on a spreadsheet
- Between each milestone, enter the PLOs for duration and/or cost
- Run the Monte Carlo simulation...

# 3-D Plan Durations and/or Costs

- Add PLO durations and/or costs for each Activity
- Perfect - how long is duration/how many \$ under perfect conditions?
- Likely - how long a duration/how many \$ under normal circumstances?
- Outrageous - how long a duration/how many \$ if problems arise?
- How 'O' do you go?

# Notes on PLO Estimates

- PLOs represent the range of duration/cost outcomes for this activity
- Things can get a little better (P) and a whole lot worse (O)
- Look for O's that are at least double the L first time through
- Deliberate risk mitigation will (should) narrow ranges

# Monte Carlo Simulation

- Uses PLO estimates, not single point ones
- Uses PLO estimates as the basis for many simulations
- Looks at results of these simulations as a basis for evaluating the probability of completion at a specific single point by a certain date or for a certain cost



**This is where estimate  
classes come into play...**

A diagram consisting of five circles arranged in a pentagonal pattern. The top circle is empty. The middle-right circle is filled with a light green color and contains the text 'ERP Project'. The bottom-left and bottom-middle circles are also filled with the same light green color. The bottom-right circle is empty.

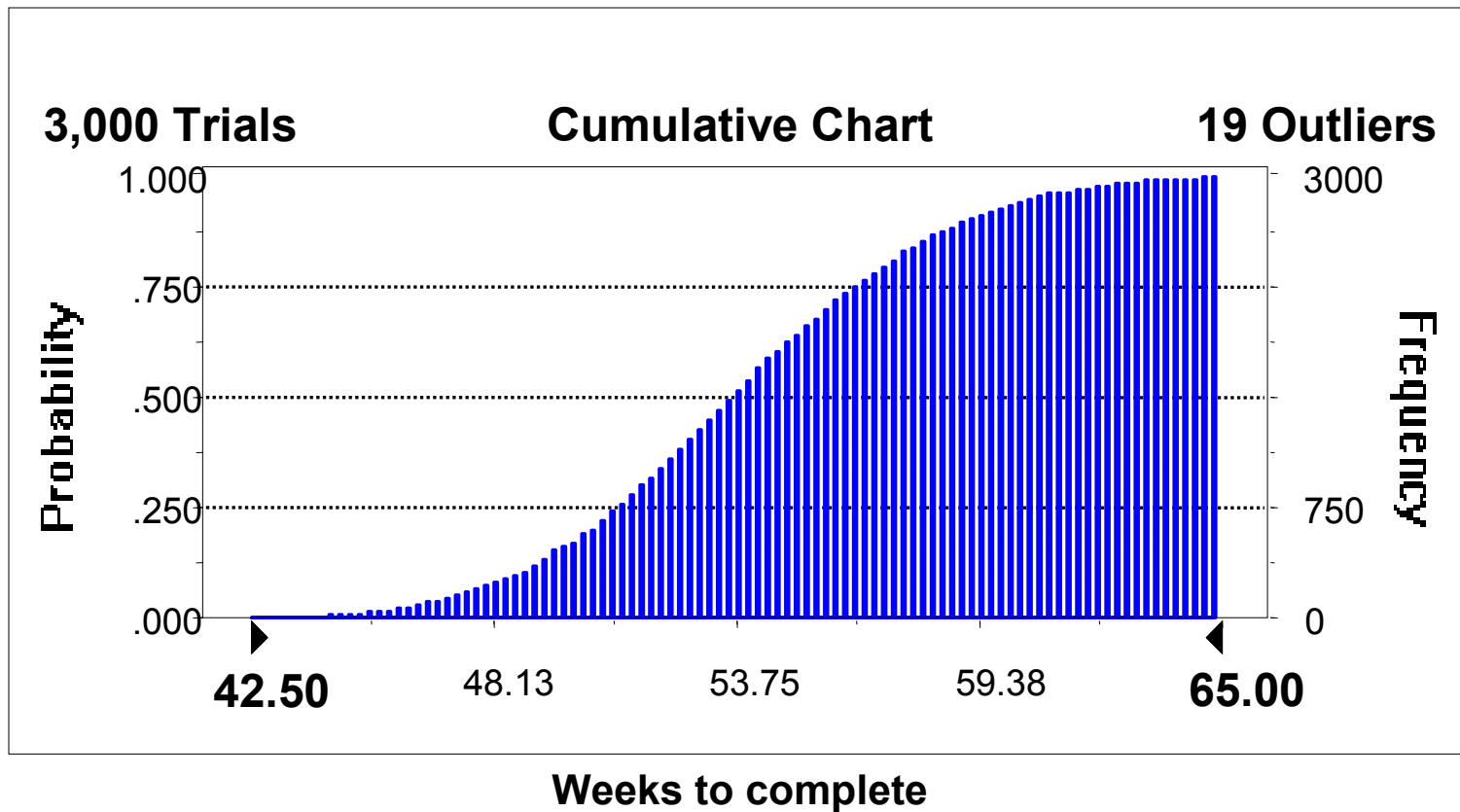
**ERP Project**

The Raw (before Mitigation)  
Numbers



# Monte Carlo Simulation

## ERP Project without Risk Mitigation

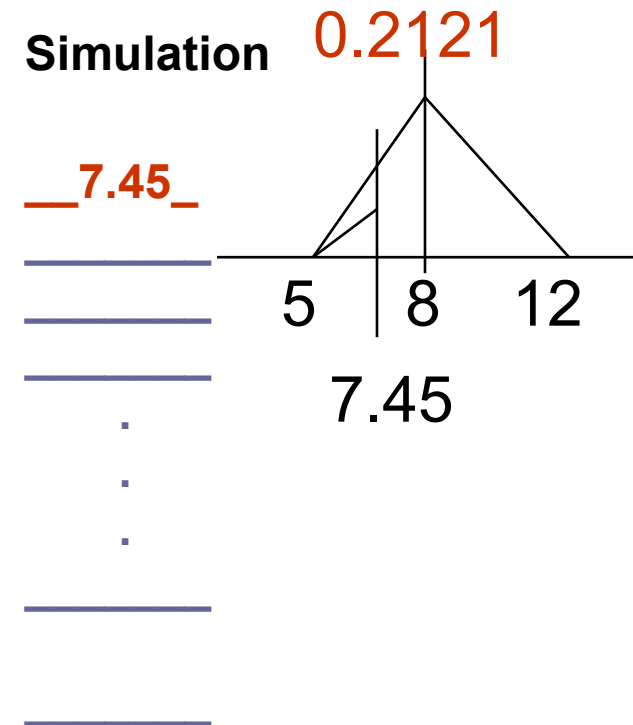


# How Monte Carlo Works

Activity	Estimate Range			Simulation
	P	L	O	
Plan Plan	5	8	12	_____
Fit/Gap	2	4	8	_____
Design	3	6	10	_____
Configure	5	10	16	_____
Etc...	.	.	.	.
.	.	.	.	.
.	.	.	.	.
Post Implement	4	4	8	_____
<b>TOTAL</b>	<b>30</b>	<b>48</b>	<b>84</b>	_____

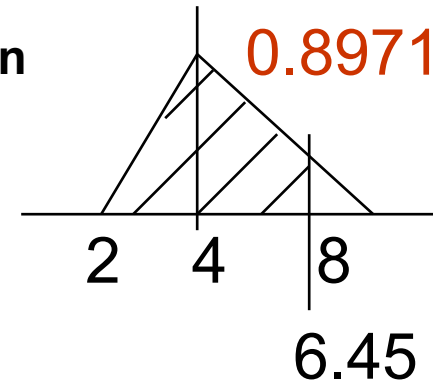
# How Monte Carlo Works

Item	Estimate Range			Simulation
	P	L	O	
Plan Plan	5	8	12	0.2121
Fit/Gap	2	4	8	7.45
Design	3	6	10	
Configure	5	10	16	
Etc...	.	.	.	
.	.	.	.	
.	.	.	.	
Post Implement	4	4	8	
TOTAL	30	48	84	



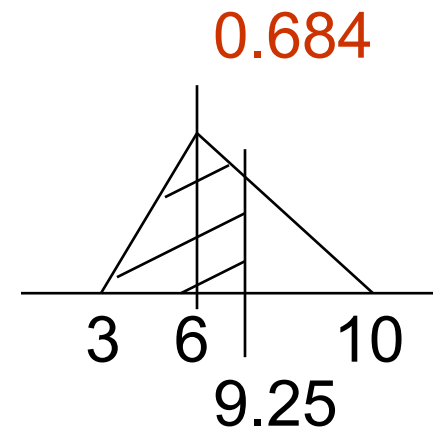
# How Monte Carlo Works

Item	Estimate Range			Simulation
	P	L	O	
Plan Plan	5	8	12	<u>7.45</u>
Fit/Gap	2	4	8	<u>6.45</u>
Design	3	6	10	_____
Configure	5	10	16	_____
Etc...	.	.	.	.
.	.	.	.	.
.	.	.	.	.
Post Implement	4	4	8	_____
TOTAL	30	48	84	_____



# How Monte Carlo Works

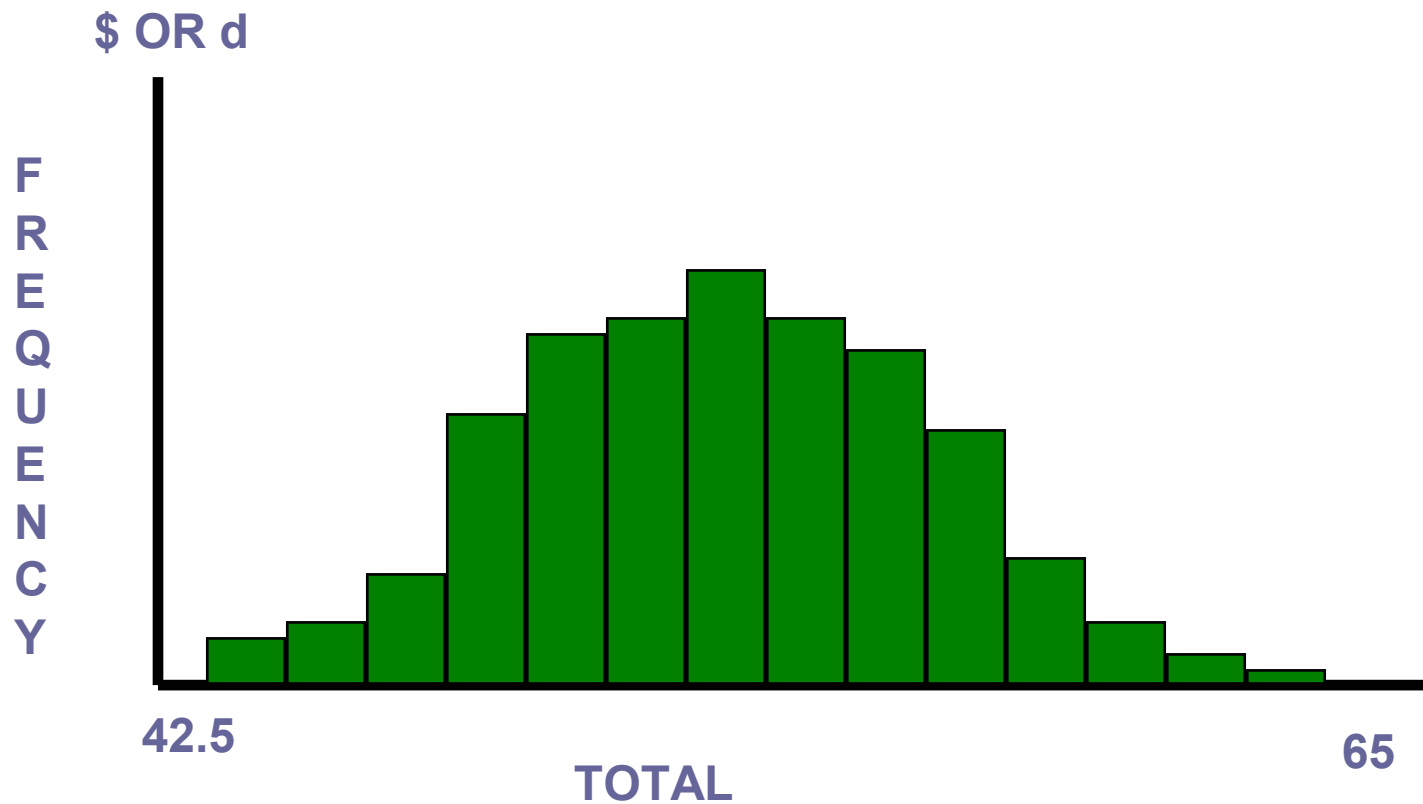
Item	Estimate Range			Simulation
	P	L	O	
Plan Plan	5	8	12	7.45
Fit/Gap	2	4	8	6.45
<b>Design</b>	<b>3</b>	<b>6</b>	<b>10</b>	<b>9.25</b>
Configure	5	10	16	
Etc...	.	.	.	.
.	.	.	.	.
.	.	.	.	.
Post Implement	4	4	8	
<b>TOTAL</b>	<b>30</b>	<b>48</b>	<b>84</b>	



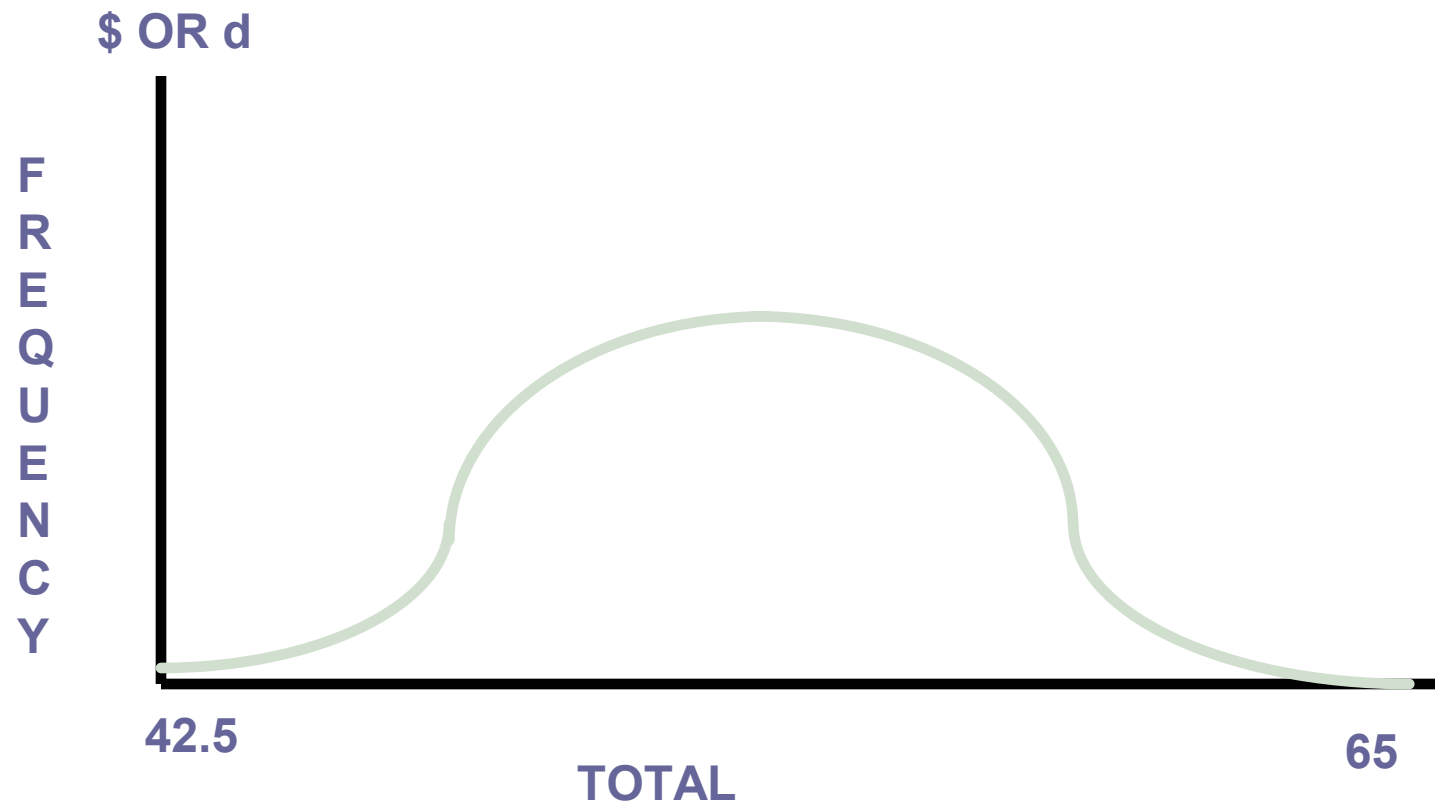
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Item	Estimate Range			Simulation
	P	L	O	
Plan Plan	5	8	12	7.45
Fit/Gap	2	4	8	6.45
Design	3	6	10	9.25
Configure	5	10	16	7.92
Etc...	.	.	.	.
.	.	.	.	.
.	.	.	.	.
Post Implement	4	4	8	6.55
TOTAL	30	48	84	56.26

# Plotting the Results

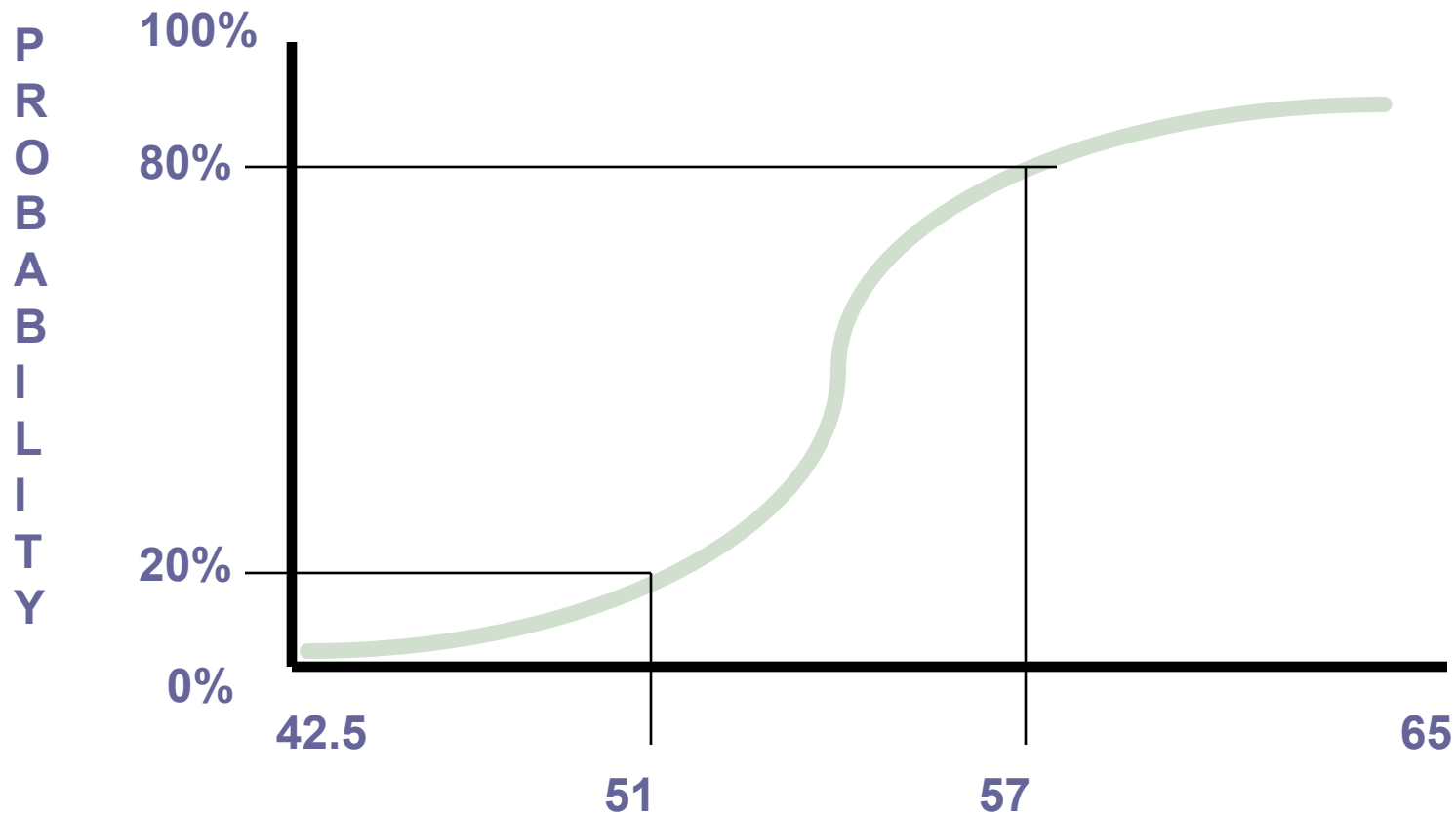


# Plotting the Results





# Plotting the Results



# We Don't Have to Use a Triangular Distribution....

- 'Big Os' skew the schedule and budget to the high end
- You're not going to like the first simulation...
- We can use a normal distribution IF
  - There is a substantial experience database
  - There is considerable certainty in the activity

**Keep in mind...it's never just  
the numbers**



# Risks That Drive Us To Outrageous

- What could happen to make the ‘O’s a reality?  
These are our risks
  - e.g. shortage of resources, delay in decision making, burrowing owls
- Note what 3-D activity they are associated with – we want to know when each risk is ‘alive’
- It’s okay to have the same risk associated with more than one activity (e.g. resource shortages)

# Project Risk Management

- Categorize risks as controllable (can mitigate) or uncontrollable (*may* not be able to mitigate)
- Think hard: most risks can be mitigated
- How would you mitigate i.e. what is your mitigation strategy?
- Back to the Project Triangle: How does mitigation strategy affect the original PLOs? Project cost? Performance?

# Project Risk Management

- Some mitigation strategies affect more than one activity
- Risk can not be eliminated, only transferred
- ‘Weather’ is not a risk – ‘Bad weather delays’ are
- The positive impact of mitigation may not exceed its cost!
- If you can’t mitigate the *critical risk* (the ‘*driver risk*’), for an activity, you may not want to mitigate any for that activity

# Opportunities that Take Us To Perfect

- The flip side of risk
- What could happen to make the 'P's a reality? These are our opportunities
  - e.g. more resources, eliminating steps, sole risk

# Risk Tolerance Evaluation

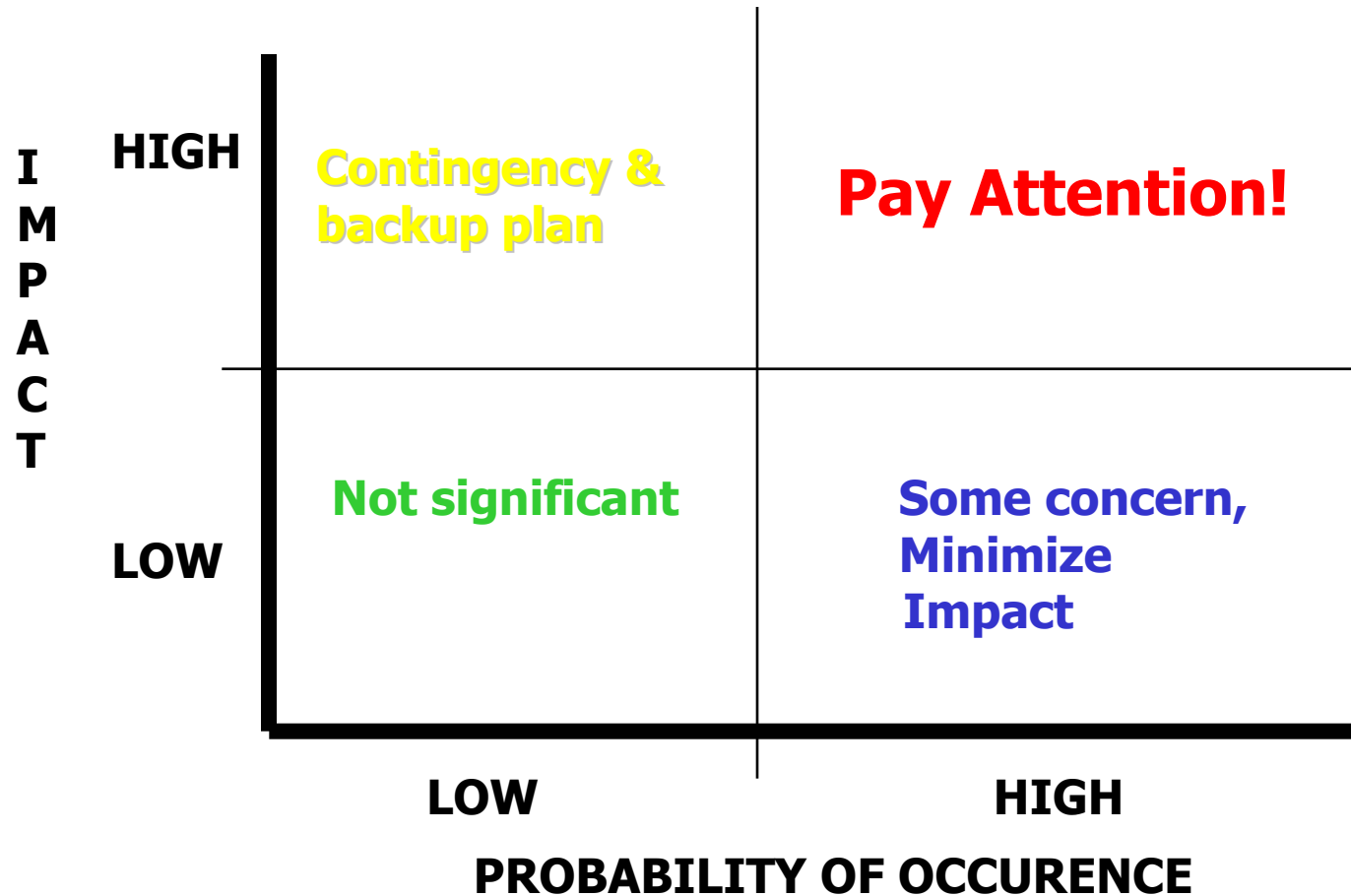
- What does the sponsor/project team define as high & low project impact?
  - Performance (KPIs)?
  - Dollars?
  - Duration?
- What does the sponsor/project team define as high and low probability of occurrence?
  - Percentages?



# Mapping the project risks

- Risk tolerance evaluation helps us decide on which risks we'll focus on
- Map each project risk to the appropriate area on an impact/ probability grid

# Which Risks to Focus On?





# Risk Mitigation

- Self-defence: for those risks that you aren't going to mitigate, let the 'Who' people know
- Remember: Risk mitigation doesn't come free: where are the deliverables that your risk mitigation strategies imply?
- Unmitigated or unmitigatable risk is *residual* risk
- Single point estimates mean that *all* risk has been mitigated

# ERP Project

## Mitigated Risk Database

**Project Name:** ERP Sample Project  
**Division:** IT  
**Budget Reference:** ITERP01  
**Project Manager:** Terry Ontime

**Print Date:** May 01, 2000  
 4:01 PM  
**Revision:** 1.0

Mitigation Number	Risk Type	Milestone	Risk	Action1	Action2	Action3	Schedule Impact	Cost Impact
R1	CHL	M0	Vendor courses are not available	Book courses early			4 weeks	None
R2	CHL	M0	Shipment delays for hardware/software	Place orders early			4-6 weeks	None
R3	CHH	M1	Business resources not available	Hire backfill resources			2 weeks	\$5,000
R5	CHL	M1	Willingness for corporate change	Pre-project workshops	Well defined communication plan			\$5,000
R7	CHH	C2	Business resources not available	Hire backfill resources			2 weeks	\$5,000
R8	CHH	M3	Poor quality legacy data for conversion	Clean data early - M1-2	Hire add'l resource to scrub data		4 weeks	\$10,000
R9	CHL	M3	System environment issues	Test environment early - M1-2	Invoke vendor assistance		2 weeks	
R10	CHL	M3	Conversion issues re: COA changes	Freeze COA changes & track manually	Hire add'l resource to track changes		4 weeks	\$1,000
R11	CHH	M4	Unexpected system issues	Review vendor issue logs early M1-2			2 weeks	
R12	CHL	M4	System volume issues	Stress test early at M1-2			2 weeks	
R13	CHH	C5	Resource knowledge to conduct testing	Conduct pre-testing training			2 weeks	
R14	CLL	C6	Getting training materials ready by	Hire contract resources to prepare			4 weeks	\$10,000
R15	CLH	C6	Depts resist/don't understand	User internal resources to deliver			2 weeks	
R16	CHL	C6	Not enough capacity for training	Begin training early to accommodate more			4 weeks	
R17	CHL	M7	Unstable production environment	Include mock-production move	Invoke vendor assistance		2 weeks	
R18	CHH	C8	Community resists new processes	Incorp processes into training materials	Develop change mgmt plan		4 weeks	\$10,000
R19	CHL	C8	Unstable production environment	Perform rigorous system testing			4 weeks	
R20	CHH	C8	Integration issues	Hire an integration lead			4 weeks	\$20,000



# ERP Project

## *Non-Mitigated Risk Database*

**Project Name:** ERP Sample Project  
**Division:** IT  
**Budget Reference:** ITERP01  
**Project Manager:** Terry Ontime

**Print Date:** May 01, 2000  
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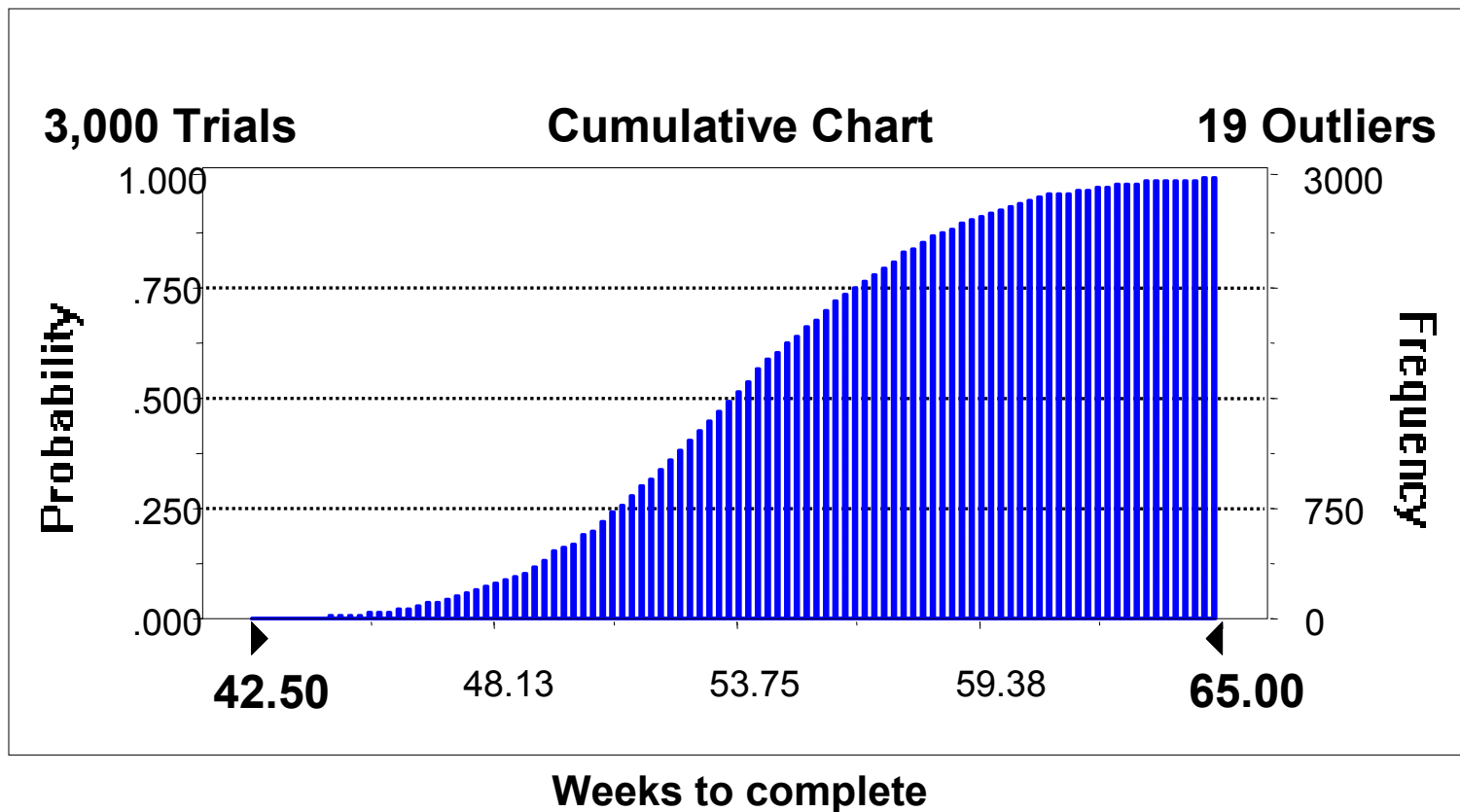
<b>Milestone Reference</b>	<b>Risk</b>	<b>Type</b>
M1	Limited internal knowledge of current "big picture" processes	UHL
C2	Unresolved GAPS after fit/gap analysis; inability to find work arounds	CLL

# Project Simulation after Risk Mitigation

- List project milestones on a spreadsheet again
- Between each milestone, enter the new PLOs for duration and/or cost
- Rerun the Monte Carlo simulation...

# Monte Carlo Simulation

## ERP Project without Risk Mitigation





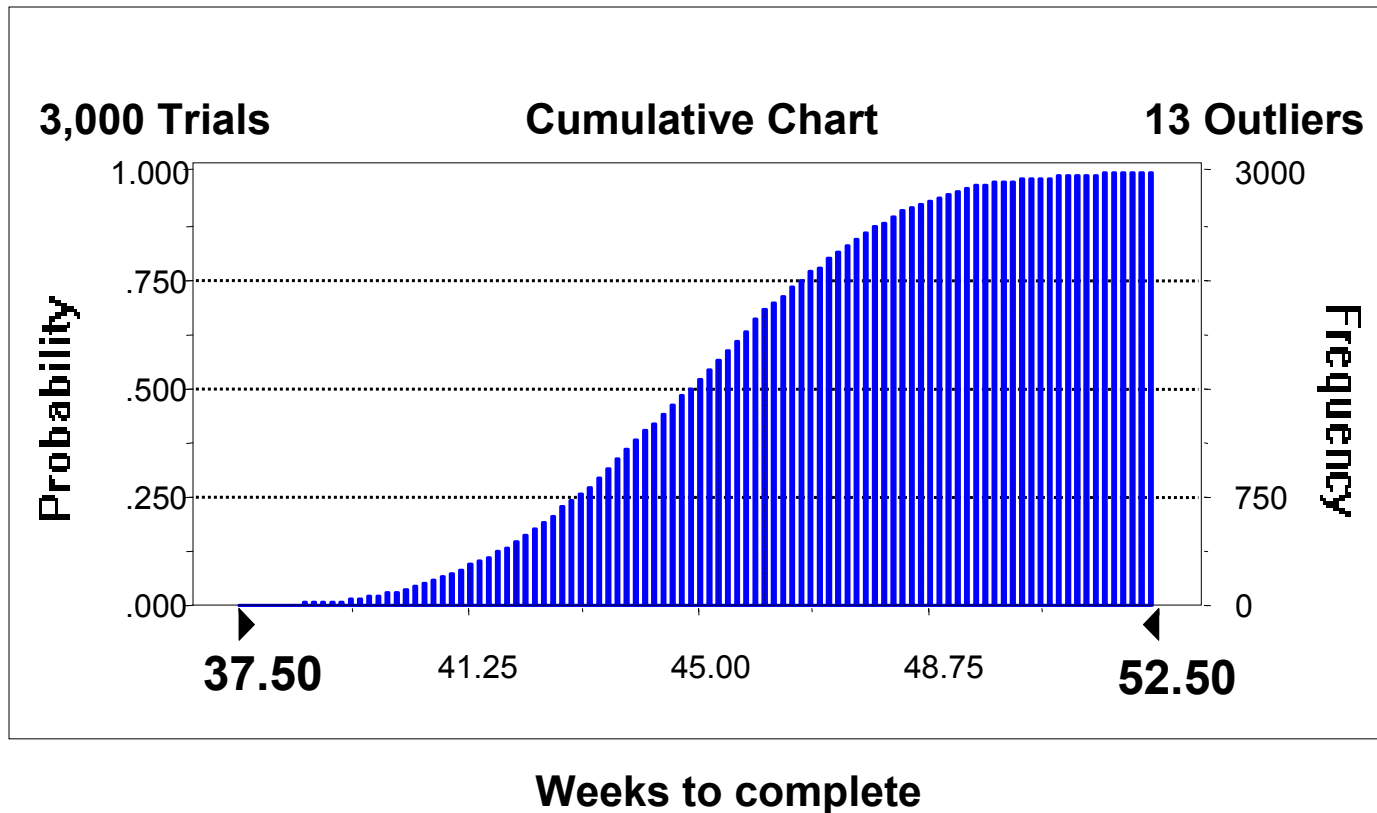
**ERP Project**

**The Mitigated Numbers**



# Monte Carlo Simulation

## ERP Project After Risk Mitigation



# After Mitigation, Select the Targets

- Negotiate duration and cost target with Management
- Question: What level of schedule risk is acceptable to the team and management?
- Would you walk away? The best PMs sometimes do
- Aside: Which PMs do you cull out of the herd?

# Apply Target Durations to a Calendar

- Target duration minus likely duration equals *unallocated* duration (this is not contingency)
- Apply unallocated duration over the 3 D Schedule

# How Do We Apply Unallocated Duration?

- Simple math - proportionately
- Allocate where the risks are highest
- Front end load for a culture of success
- Work around your golf schedule



# Schedule for reality

- How does the project lay out on a calendar?
- What are the forecast dates for each milestone?
- How does the ‘real’ schedule line up with ‘real life’?
- By imposing the target schedule on a calendar, you may extend the schedule by a few weeks

# Set Project Check Points & Off Ramps

- Where do we need to check in with management?
- What should we expect to see at each check point?
- Look for *objective* indicators of project health at each check point



# Check Point Tips

- Does the sponsor think the Check Points are set early enough?
- Are there check points ahead of significant capital investments?



# Check Points

- At major project check points, if the answer to the *checkpoint question* is yes, proceed per the baseline plan
- If the answer is no, think in terms of the PM triangle to assess impact



# The Check Point Register

- Target date
- Baseline expectation - how will we know we're on track (measurable!)
- If 'better' than expected
  - Duration impact
  - Cost impact
  - Performance impact (KPIs)

# Check Point Register

- If 'worse' than expected
  - Duration impact
  - Cost impact
  - Performance impact (KPIs)

# Checkpoint Register – Oil & Gas

**CHECKPOINT:** C3  
**TARGET DATE:** March 19 '99  
**BASELINE EXPECTATION:** Drilling results yield 2 cased wells in the Basal Colorado within 5% of target reserves and 3 cased wells in Glauc. Lithic within 5% of target reserves out of 7 wells drilled

**IF NO:**

→ **More than 5 out of 7 wells cased (more reserves than in baseline plan)**

**CAPITAL IMPACT:** Increase project capital required by \$300,000 per well over 5 wells to account for additional completions and facilities required

**DURATION IMPACT:** Extend project end date by 2 weeks for each well over 5

**SCOPE IMPACT:** Increase project deliverables:

- Annualized rate increases by 15e6m<sup>3</sup>
- Exit rate increases by 45e3m<sup>3</sup> per well over 5
- Reserve adds increase by 45e6m<sup>3</sup> per well over 5
- F&D costs per BOE decreases by \$.32

→ **Less than 5 out of 7 wells cased (few reserves than in baseline plan)**

**CAPITAL IMPACT:** Decrease project capital required by \$300,000 per well

**DURATION IMPACT:** Reduce project end date by 2 weeks per well not completed

**SCOPE IMPACT:** Decrease project deliverables:

- Annualized rate decreases by 15e6m<sup>3</sup>
- Exit rate decreases by 45e3m<sup>3</sup> per well under 5
- Reserve adds decrease by 45e6m<sup>3</sup> per well under 5
- F&D costs per BOE increase by \$.16 for project

# Severe Check Points: Project Off Ramps

- What would cause us to stop the project?
- I never walk into a room...
- Practice pre-death pathology
- There's no shame in stopping if
  1. You've said you might in advance, and
  2. You've given the sponsor opportunity to reallocate resources early enough

# ERP Project

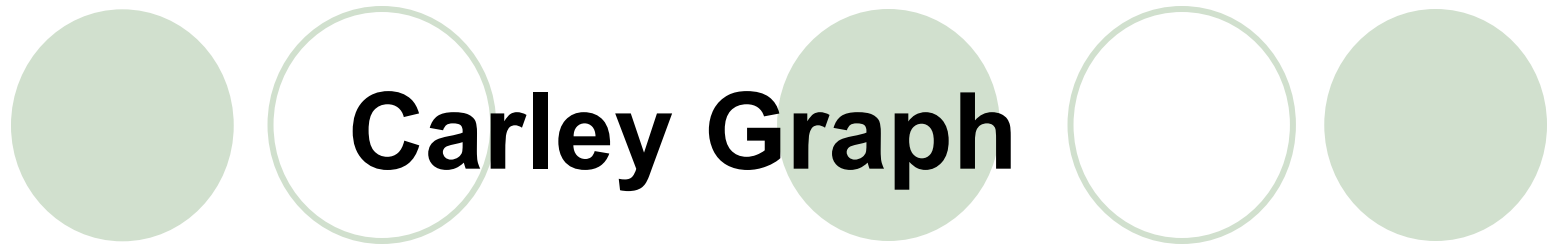
## Check points and Offramps:

### Checkpoint Database

**Project Name:** ERP Sample Project  
**Division:** IT  
**Budget Reference:** ITERP01  
**Project Manager:** Terry Ontime

**Print Date:** May 02, 2000  
 9:51 AM  
**Revision:** 1.0

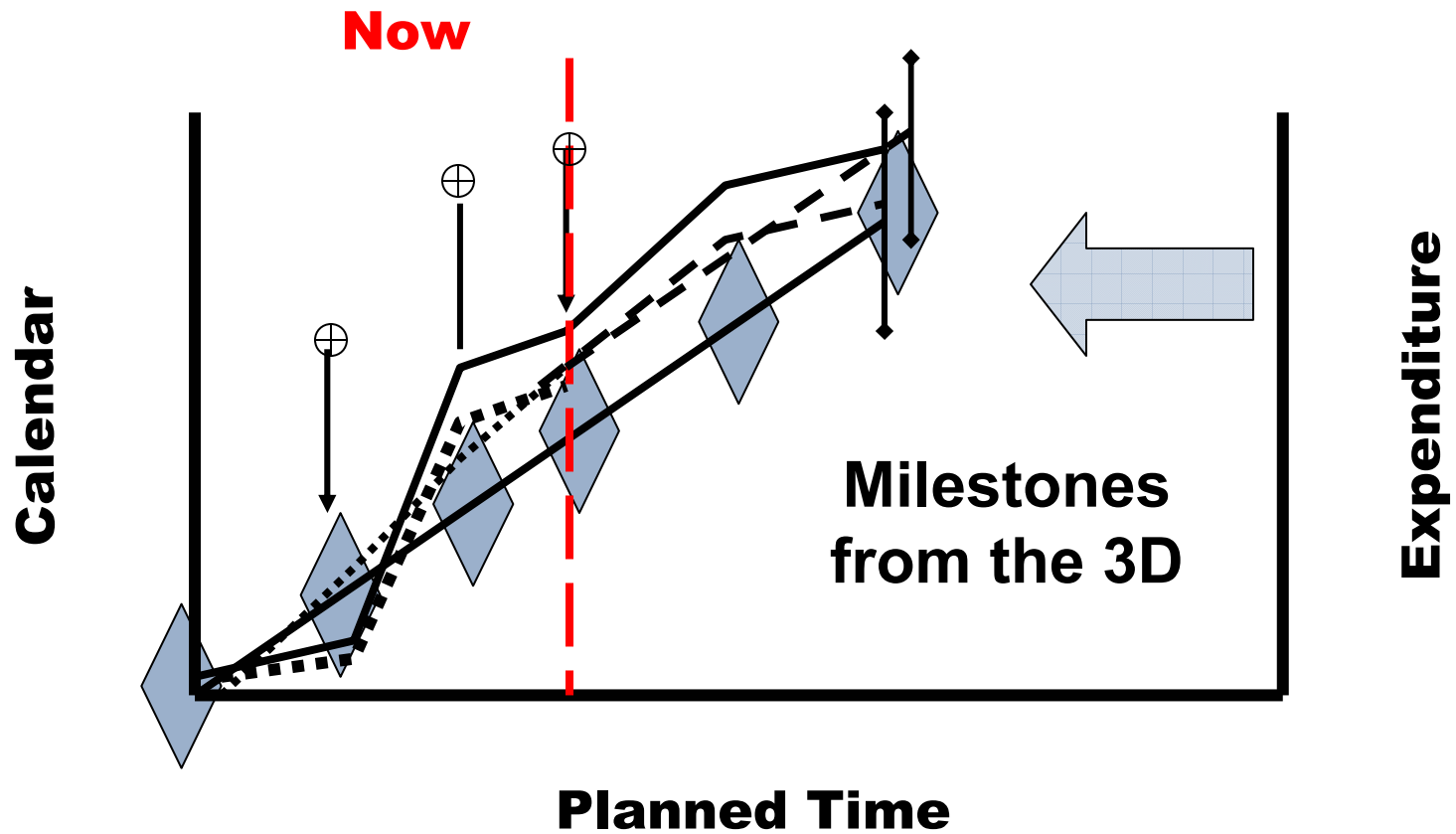
Checkpoint	Baseline Expectation	Outcome A	Capital Impact A	Duration Impact A	Scope Impact A	Outcome B
C2 - offramp	A minimum 80% of business processes fit application	Between 60-79% fit	Assess capital impact of customizations to accommodate a better fit	Assess impact to go-live date for customizations; could add 1 week per main customization	Additional effort may be required to accommodate customizations	Less than 60% fit
C5 - checkpoint	System testing complete with 80% success rate	Between 60-79% fit	Additional costs may be required to fund a go-live extension	Consider extending project to accommodate continued system testing to resolve issues	No change in scope	Less than 60% success rate
C6 - checkpoint	UAT testing complete with 80% success rate	Between 60-79% fit	Additional costs may be required to fund a go-live extension	Consider extending project to accommodate continued system testing to resolve issues	No change in scope	Less than 60% success rate
C8 - checkpoint	Production environment is stable; conversion 90% successful	Conversion between 70-90% successful	Additional funds may be required to pay overtime premiums to conversion team	No impact	No impact	Less than 70% success rate



# Carley Graph

- Provides report of planned (baseline) vs. actual for capital costs and duration on a milestone by milestone basis
- Indicates anticipated future project costs and schedule, based on actuals to date

# Carley Graph





# The Project GPS

- Baseline schedule & forecast schedule
- Baseline budget & forecast budget
- Baseline KPIs (performance) & forecast KPIs
- How does what you're seeing fit with our PM triangle?



# Executing Effectively: Rolling RACI+

- Responsibility, Action, Coordination, Information, plus . . .
- RACI+s roll-up to 3D planning
- RACI+ charts ‘roll’ through a project - a detailed 6-8 week view on current activity
- Keep the focus on the deliverables

# Plan Work, Communication & Responsibility

## RACI+ Rolling 4 week project schedule: (Project Name)

For the period: July 15 to August 15

Project Manager: Name

Project Team: Names

Milestones: **M1-M2: Requirements**

Key:

R = Responsible for deliverable

A = Action (does the work)

C = Coordination - consulted on the work, has input

I = Information - informed about the work, reviews output

S = Sanction - who has to sign on to accept the completed work i.e. agree on format and quality standards

**\*Planned and Actual hours are only for action items for this activity**

**1=Planned Work Hours for each assigned Action**

**2=Actual Work Hours for each assigned Action**

### RESOURCES

ACTION	Planned Start	Planned Due	Started	Completed	Name	1		2		Name	1		2		Name	1		2		Total Planned Hours	Total Actual Hours	Delta Hrs	Planned Cost	Actual Cost	Delta Cost
						1	2	1	2		1	2	1	2		1	2								
<b>Major Deliverable</b>	19-Jul	05-Aug	17-Jul																						
First activity	19-Jul	21-Jul	19-Jul	23-Jul	R			A	10	7	I			C						10	7	3	\$4	\$2	\$2
Second activity	21-Jul	23-Jul						R			A	15	20							15	20	(5)	\$5	\$3	\$2
Third activity	26-Jul	28-Jul			A	10	10				R			A	10	15				20	25	(5)	\$6	\$4	\$2
Fourth activity					C			R			A	10	9	A	5	9				15	18	(3)	\$7	\$5	\$2
Fifth activity					I			A	15	15	C			R						15	15	0	\$7	\$6	\$1
<b>Total Effort</b>						<b>10</b>	<b>10</b>		<b>25</b>	<b>22</b>		<b>25</b>	<b>29</b>		<b>15</b>	<b>24</b>			<b>75</b>	<b>85</b>	<b>(10)</b>	<b>\$29</b>	<b>\$20</b>	<b>\$9</b>	
<b>Major Deliverable</b>	19-Jul	05-Aug	17-Jul																						
First activity	19-Jul	21-Jul			R			A	10	7	C			I						10	7	3	\$4	\$2	\$2
Second activity	21-Jul	23-Jul			A	15	20	S			I			R						15	20	(5)	\$5	\$3	\$2
Third activity	26-Jul	28-Jul			S			C			A	20	25	I						20	25	(5)	\$6	\$4	\$2
Fourth activity					I						R			A	10	10				10	10	0	\$7	\$5	\$2
Fifth activity								S			A	20	20	R						20	20	0	\$7	\$6	\$1
<b>Total Effort</b>						<b>15</b>	<b>20</b>		<b>10</b>	<b>7</b>		<b>40</b>	<b>45</b>		<b>10</b>	<b>10</b>			<b>75</b>	<b>82</b>	<b>(7)</b>	<b>\$29</b>	<b>\$20</b>	<b>\$9</b>	
<b>Major Deliverable</b>	19-Jul	05-Aug	17-Jul																						
First activity	19-Jul	21-Jul			A	5	3	R			C			S						5	3	2	\$4	\$2	\$2
Second activity	21-Jul	23-Jul			A	5	10	C			A	10	10	R						15	20	(5)	\$5	\$3	\$2
Third activity	26-Jul	28-Jul			S			I			C			A	20	25				20	25	(5)	\$6	\$4	\$2
Fourth activity					A	15	18	S			I			R						15	18	(3)	\$7	\$5	\$2
Fifth activity					R			I			S			A	20	25				20	25	(5)	\$7	\$6	\$1
<b>Total Effort</b>						<b>25</b>	<b>31</b>					<b>10</b>	<b>10</b>		<b>40</b>	<b>50</b>			<b>75</b>	<b>91</b>	<b>(16)</b>	<b>\$29</b>	<b>\$20</b>	<b>\$9</b>	

Deltas: Negative is bad, Positive is good



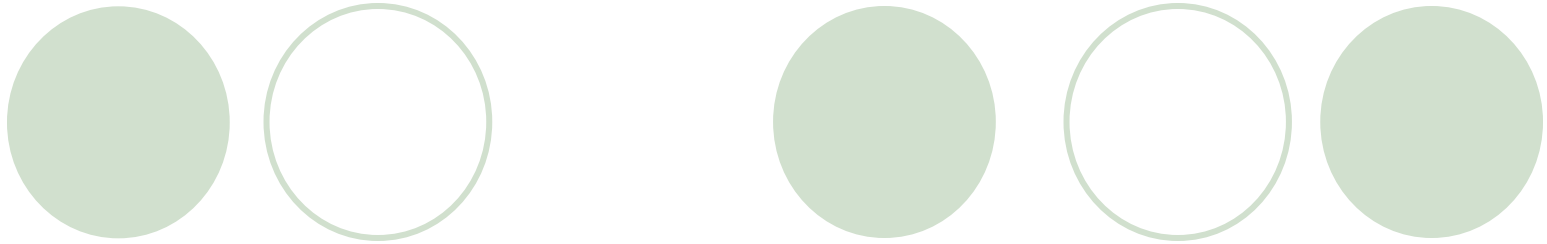
# RACI+ Charts

- Set up for 4 - 8 weeks ahead, 2 weeks behind
- Multi-project support resources may only manage by the RACI+ “Just tell me what you need me to do & when”
- Make them the focus of project meetings



- Questions?

- Comments?



**Thank you**