

How Much Risk Is Too Much Risk?



NYC SPIN

**Tim Lister
The Atlantic Systems Guild, Inc.
January 13th, 2004**

WHAT'S IT ALL ABOUT, ALFIE?

“The purpose of risk management is to make decisions, not to sit around and admire the risks.”

– Rockwell Collins Risk Management Guide

**“BUT WE CAN’T POSSIBLY MAKE
THESE DECISIONS . . .”**

“The winning general is the one who can best act on imperfect information and half formed theories.”

– Napoleon Bonaparte

4. RISK MANAGEMENT: WORLD'S SHORTEST TUTORIAL

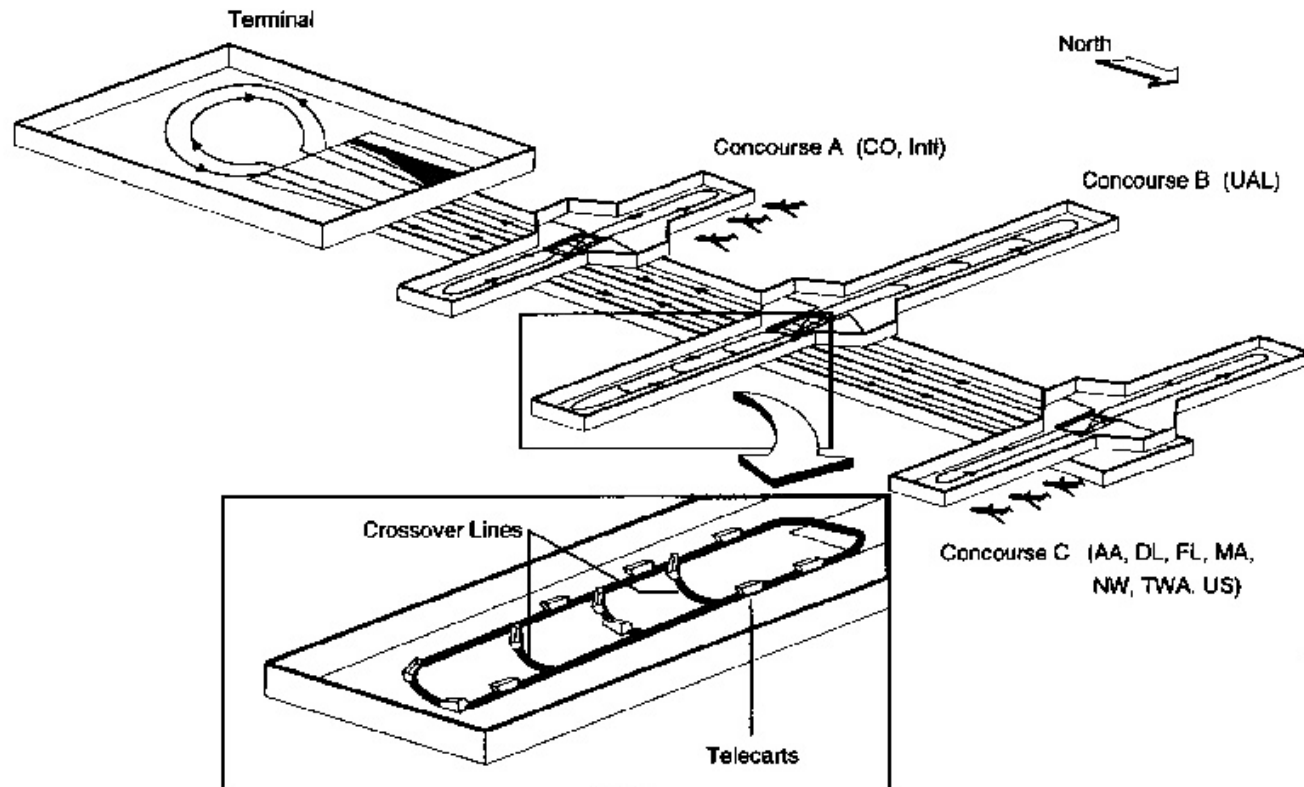
- Avoiding the obvious
- Explicitly declared uncertainty
- Tools of risk management
- Risk and value
- A test: Did we really do risk management?

RISK MANAGEMENT ATROCITIES

- You're blind-sided by a risk that's happened a thousand times before.
- You have no infrastructure in place to deal with a risk when it materializes.
- You don't have a useful (early) transition indicator.

DENVER INTERNATIONAL AIRPORT

The automated baggage handling system:



Terminal

North

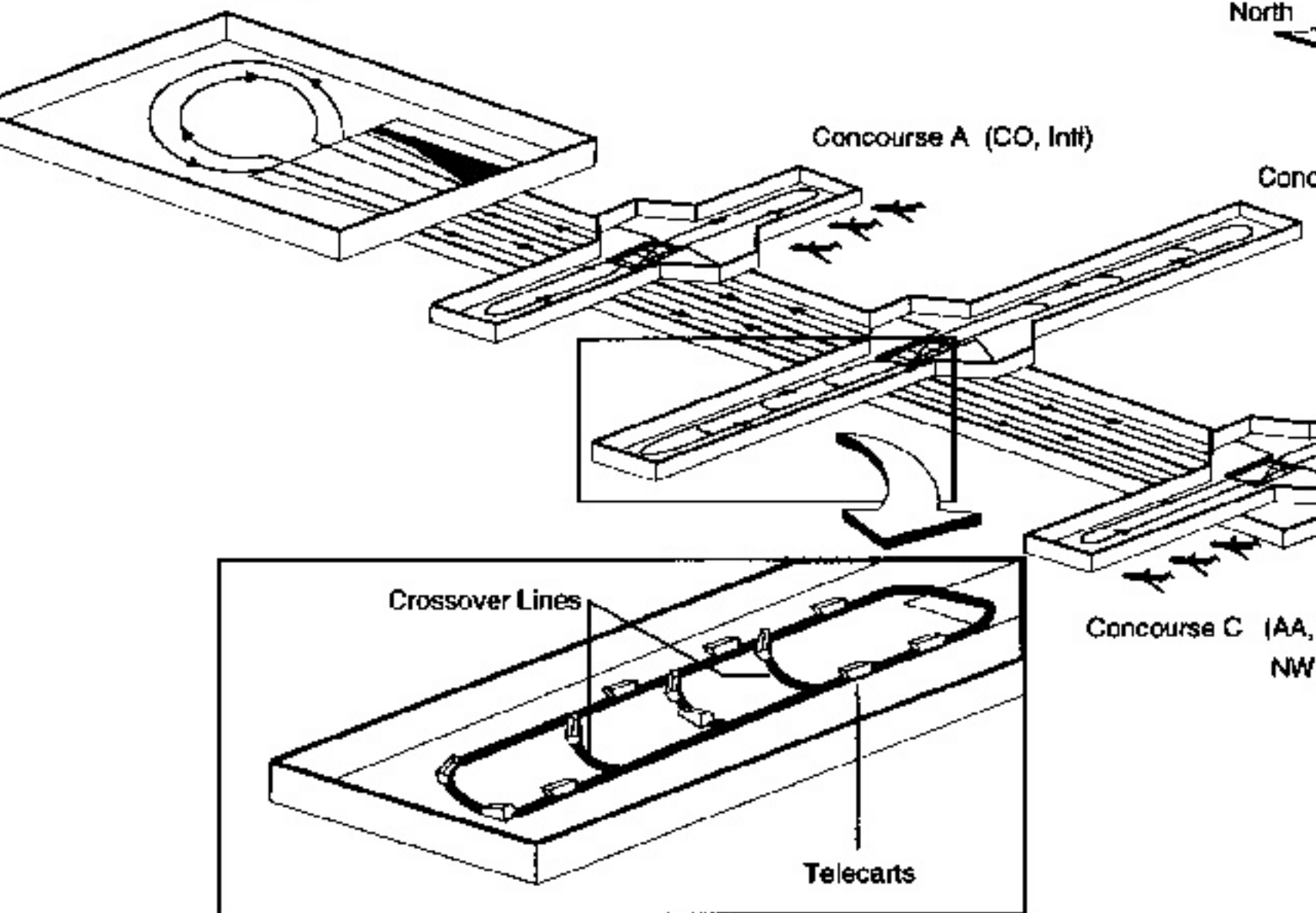
Concourse A (CO, Intl)

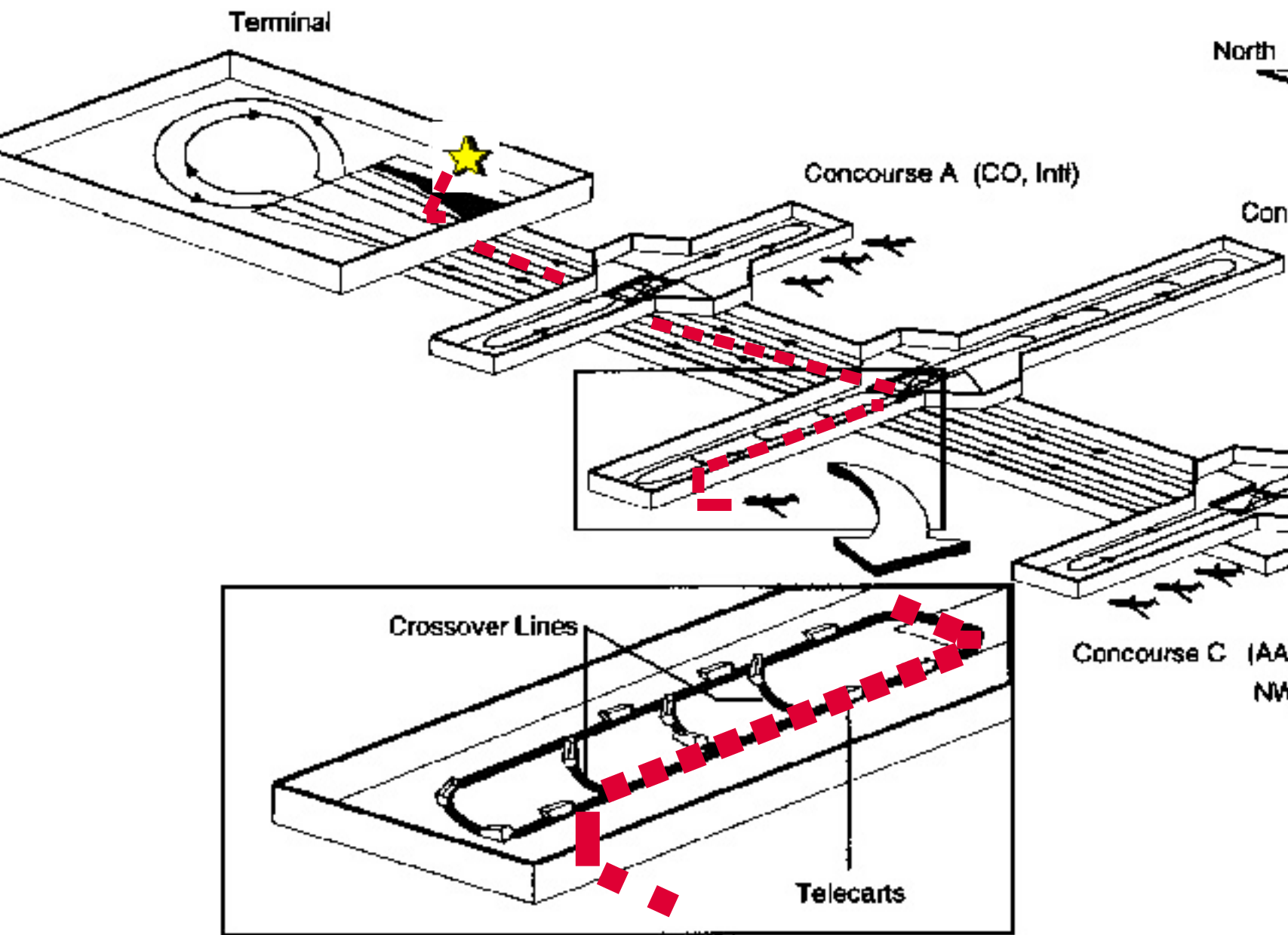
Conc

Crossover Lines

Concourse C (AA,
NW)

Telecarts

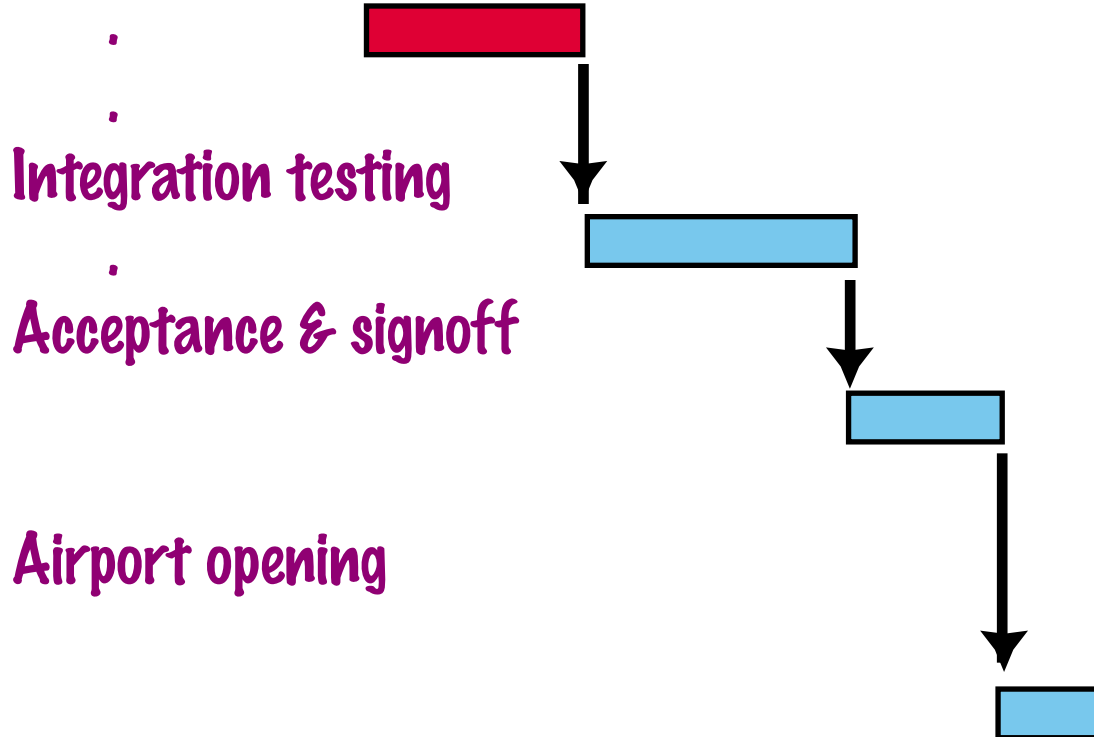




D.I.A. PROJECT: CRITICAL PATH

1993 1994 1995

Baggage Handling Software



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Integration testing

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Acceptance & signoff

Airport opening



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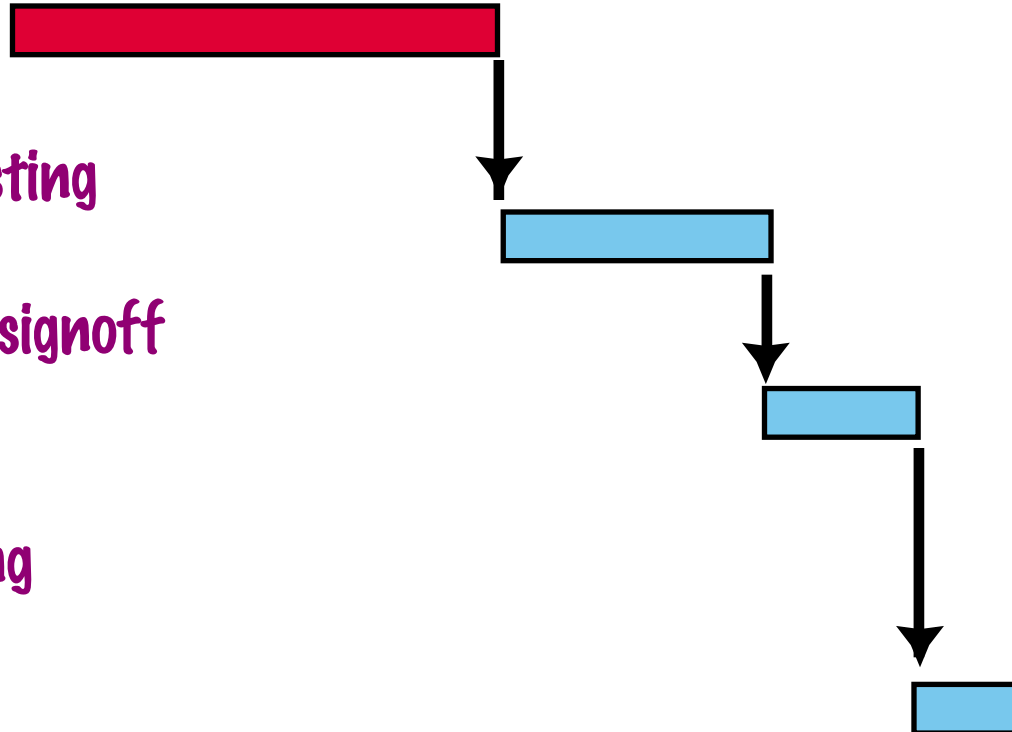
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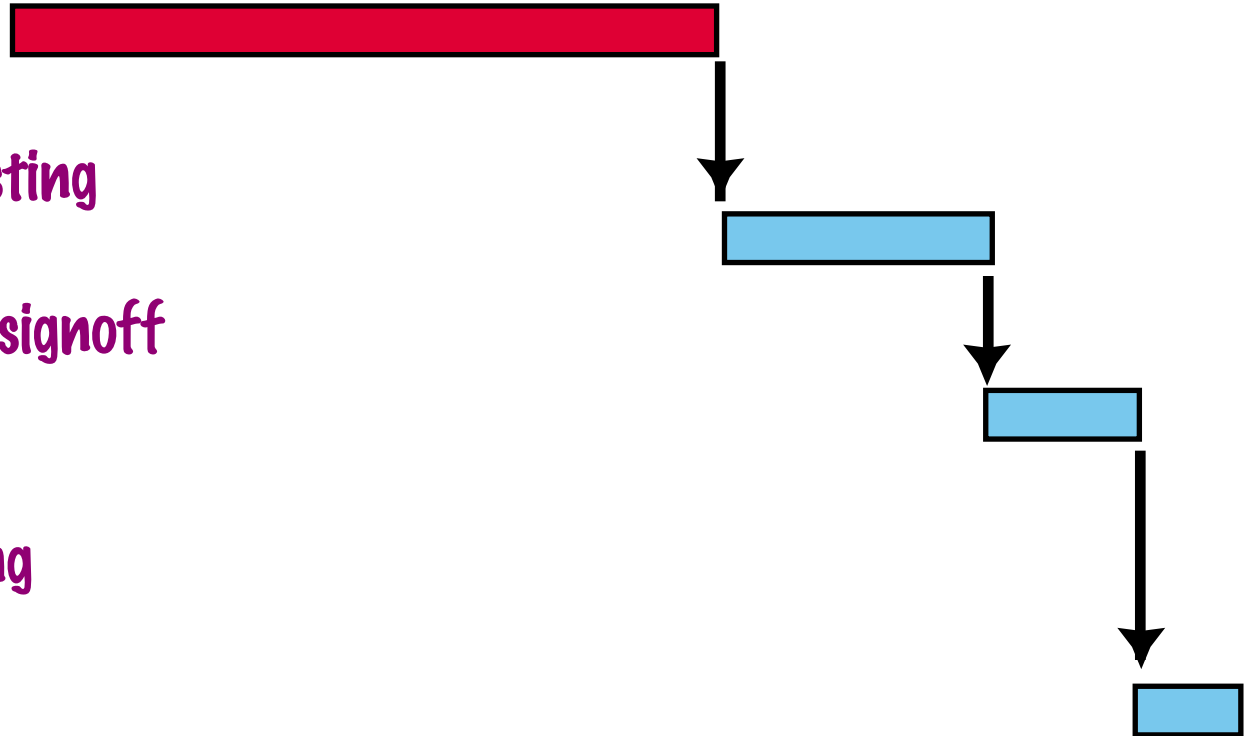
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from the best-selling authors of PEOPLEWARE

Waltzing *with* Bears

MANAGING RISK ON SOFTWARE PROJECTS

"The seminal work on managing software project risk... Explosive insights, practical advice. Finally we have a guide to risk management that we can implement and use."

—ROB AUSTIN, PROFESSOR
HARVARD BUSINESS SCHOOL



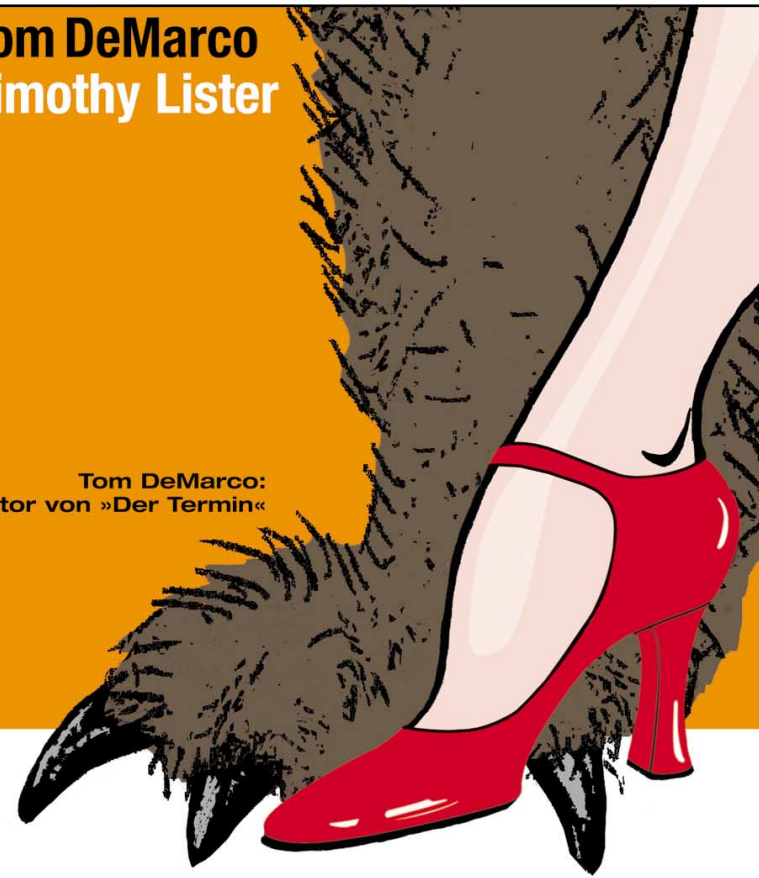
TOM DEMARCO & TIMOTHY LISTER

**NOW AVAILABLE
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**Tom DeMarco
Timothy Lister**

Tom DeMarco:
Autor von »Der Termin«



Bärentango

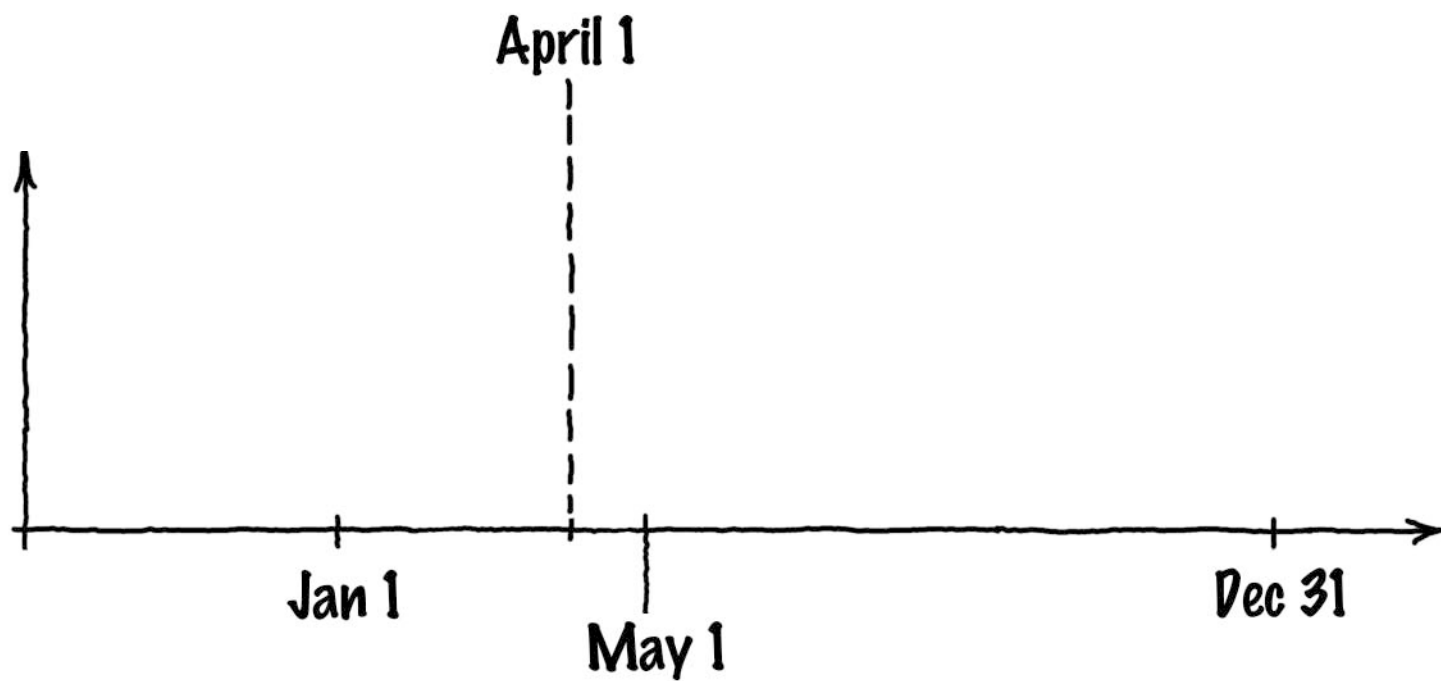
**Mit Risikomanagement
Projekte zum Erfolg führen**

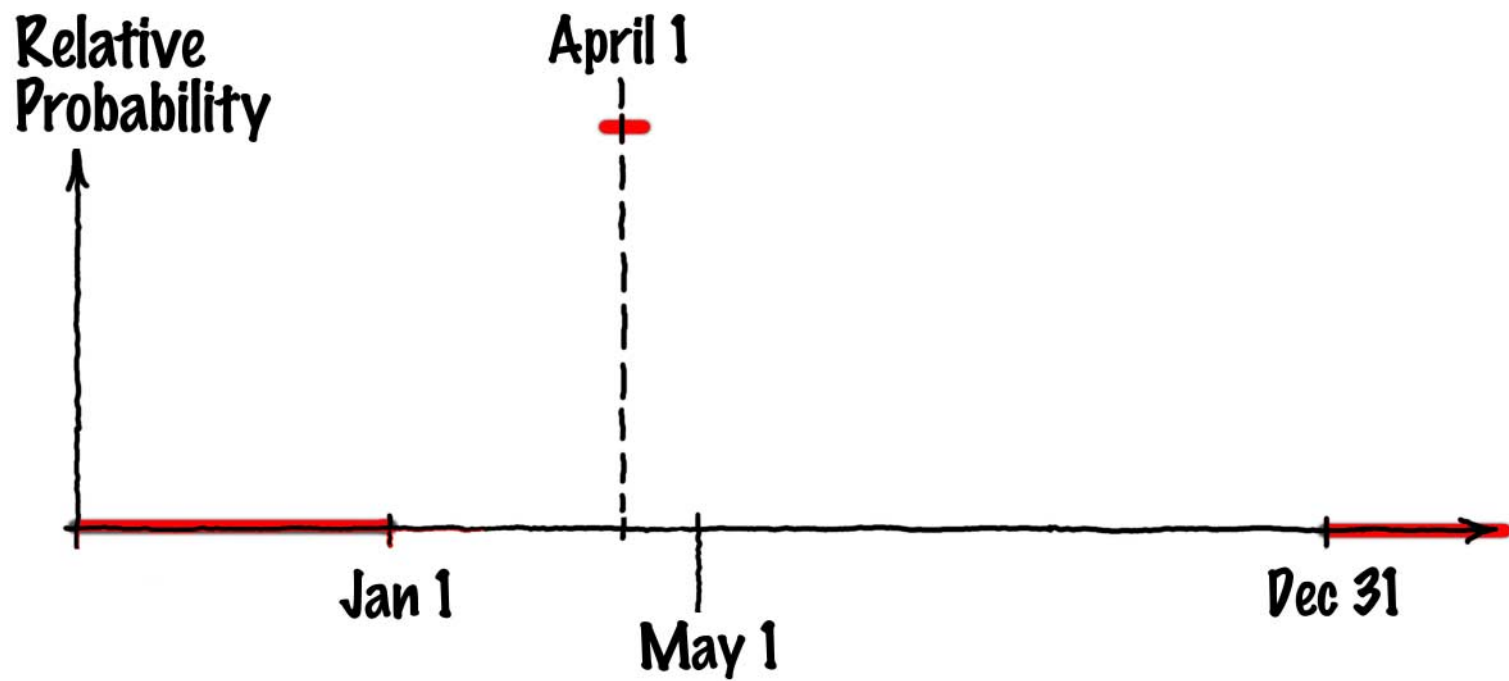
HANSER

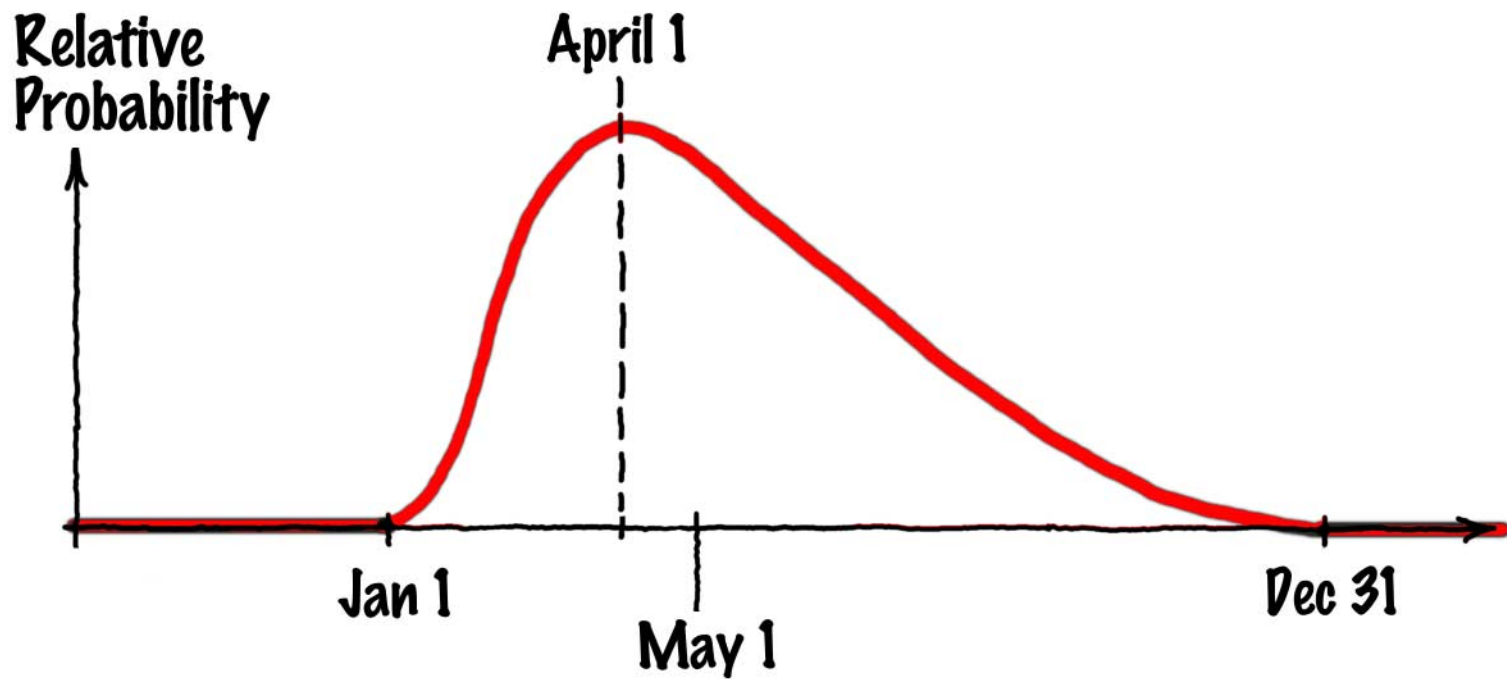




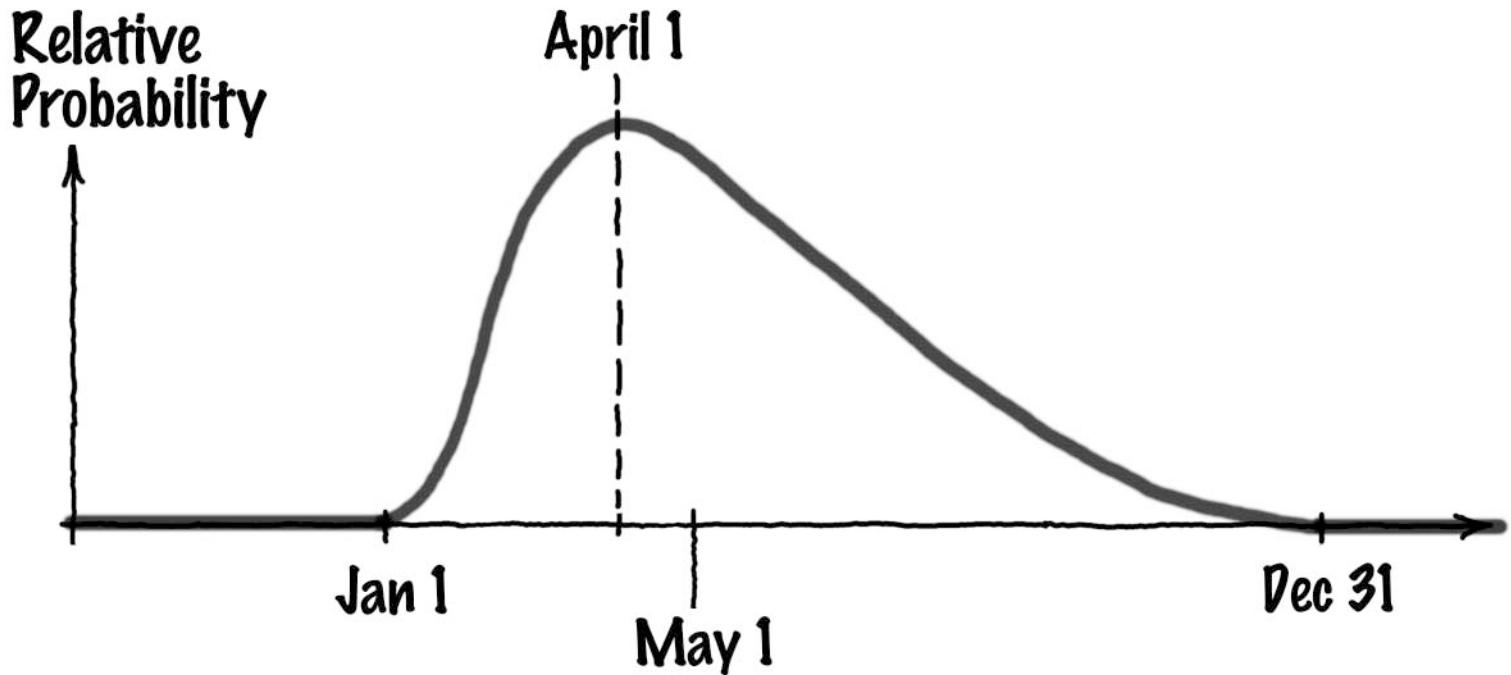
1. You have zero chance of delivering before January of next year.
2. My best guess is you'll be done around April 1st . . .
3. but to be at least 50% sure, you'd better advertise a date of May 1 or later.
4. To be 100% safe, you'd have to allow for delivery as late as end of next year.





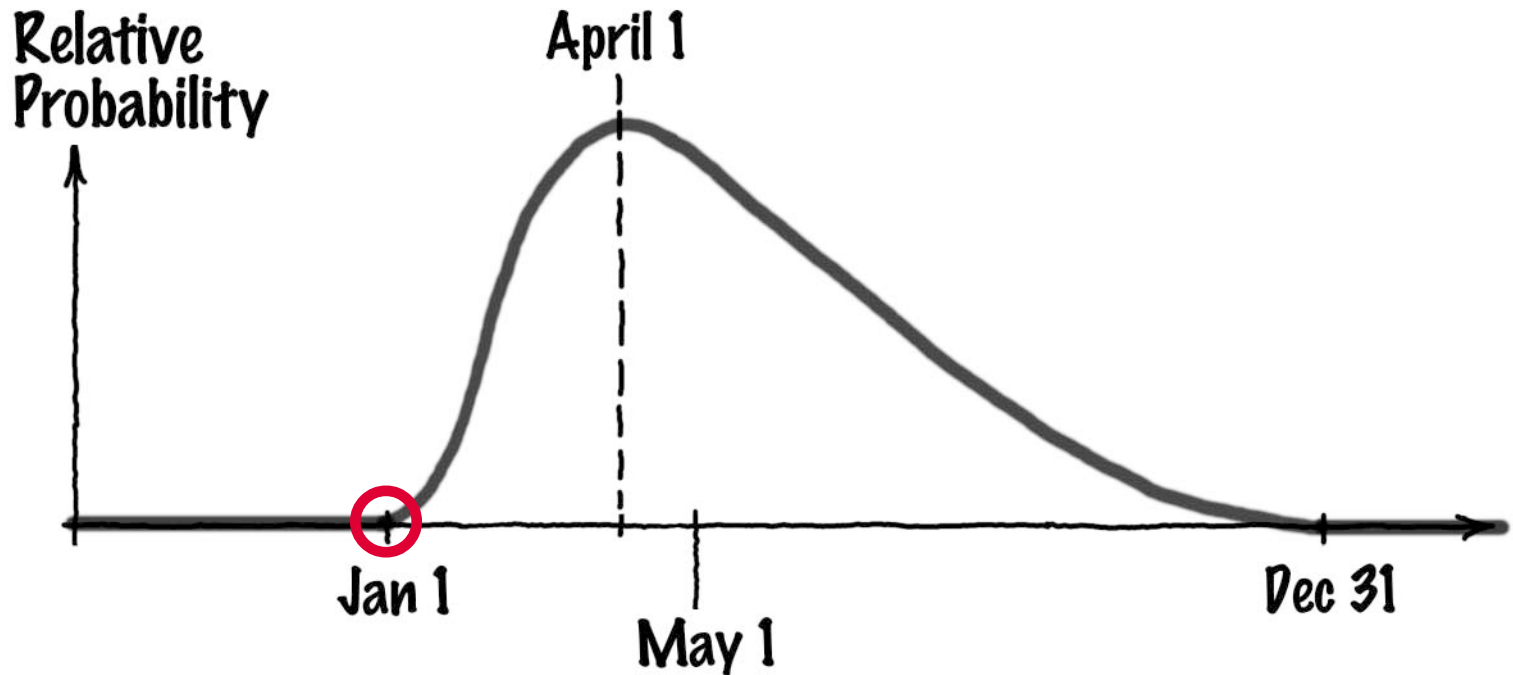


RISK DIAGRAM:



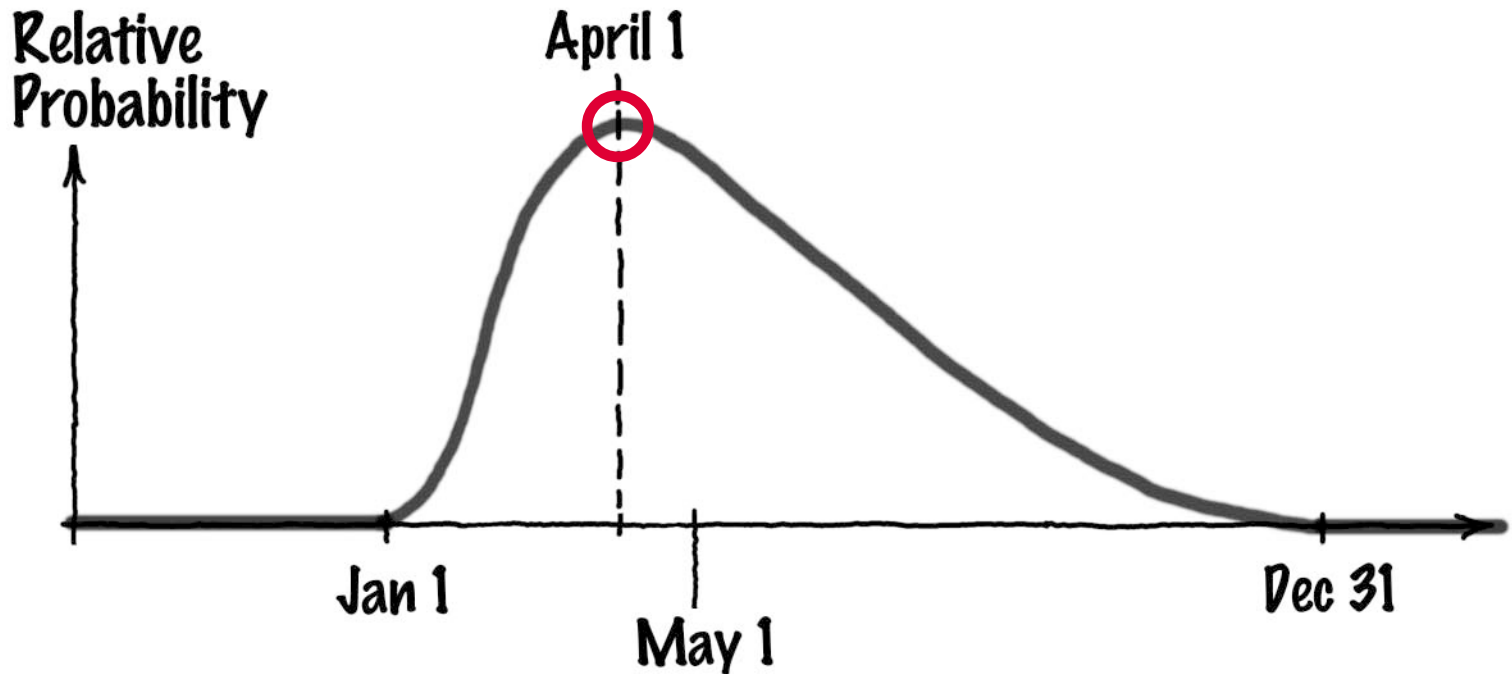
A risk diagram shows explicitly how uncertain we are about delivery date (or anything else).

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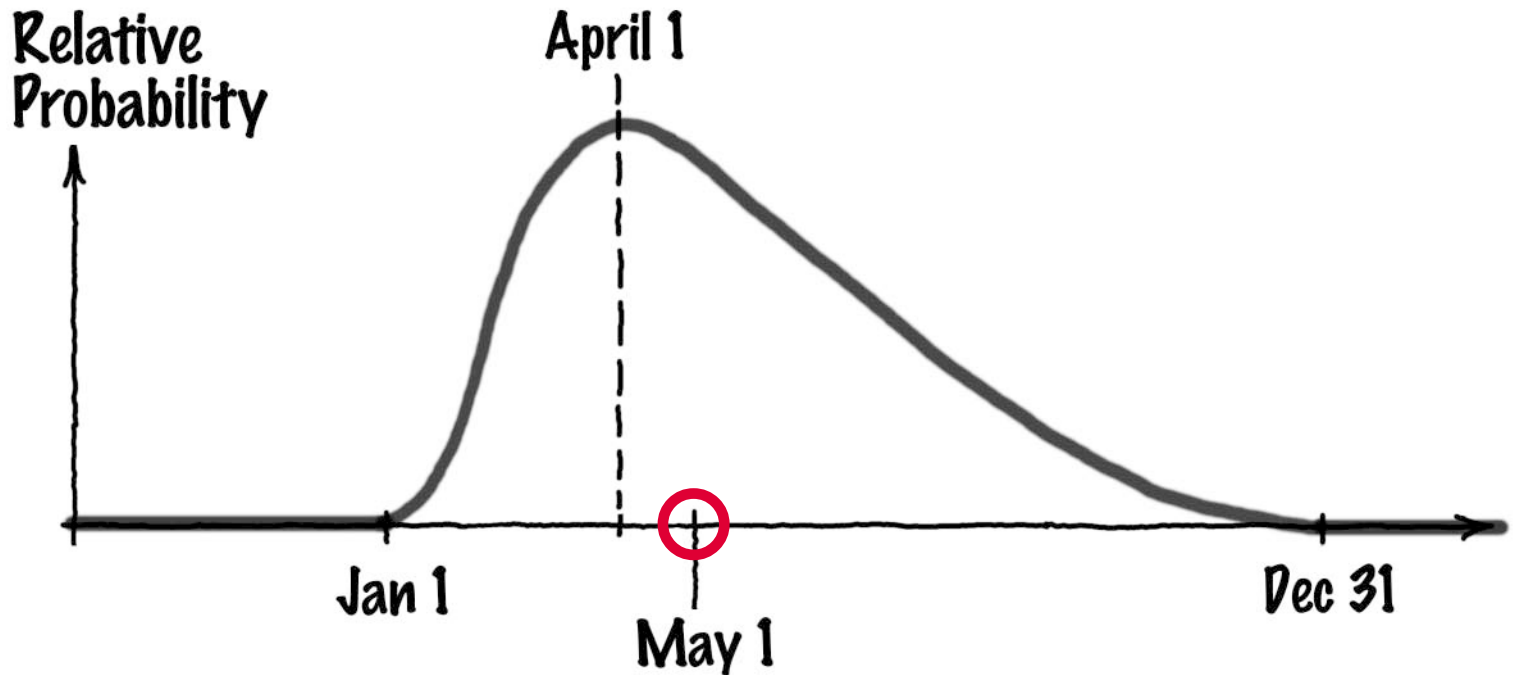
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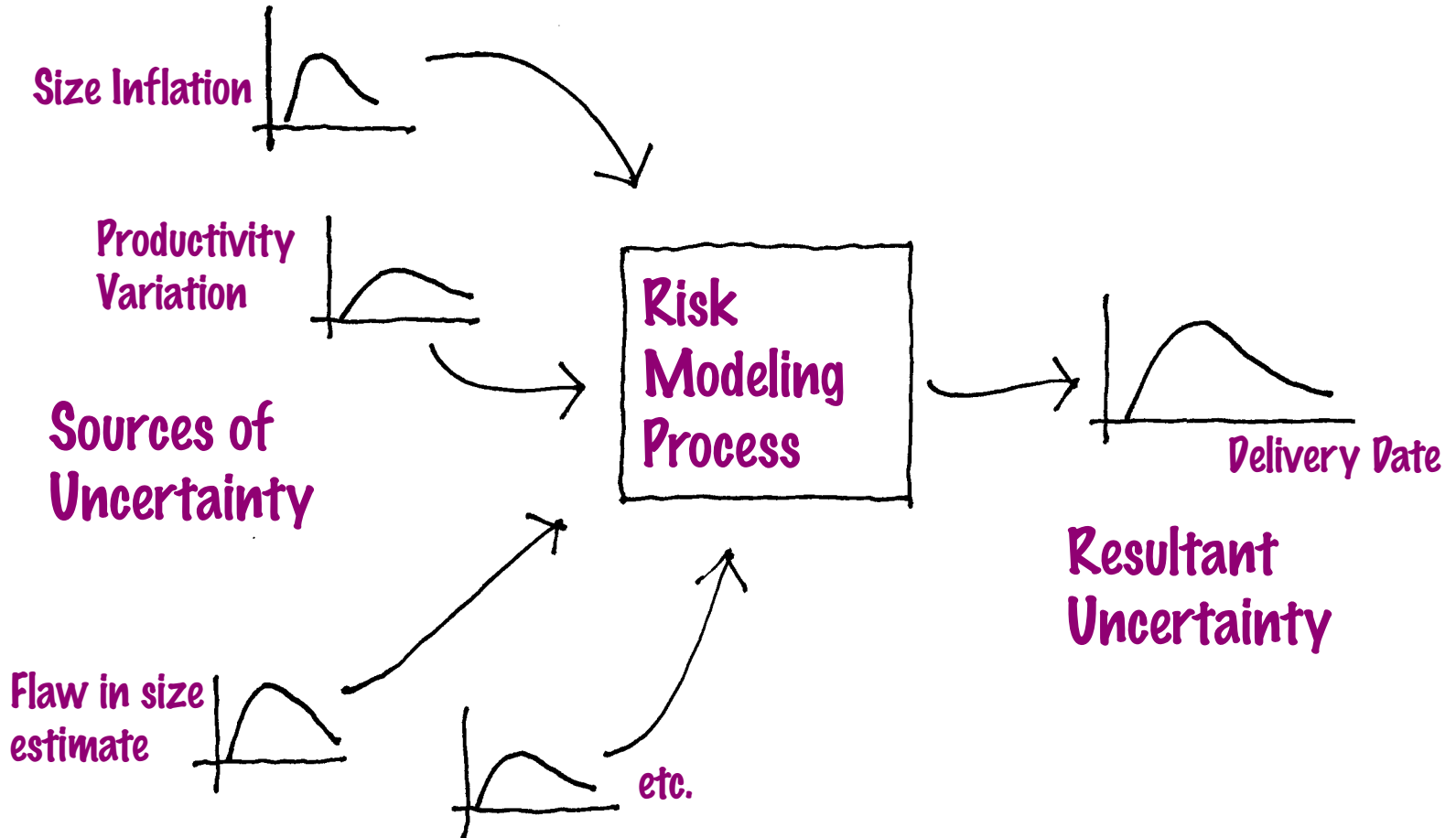
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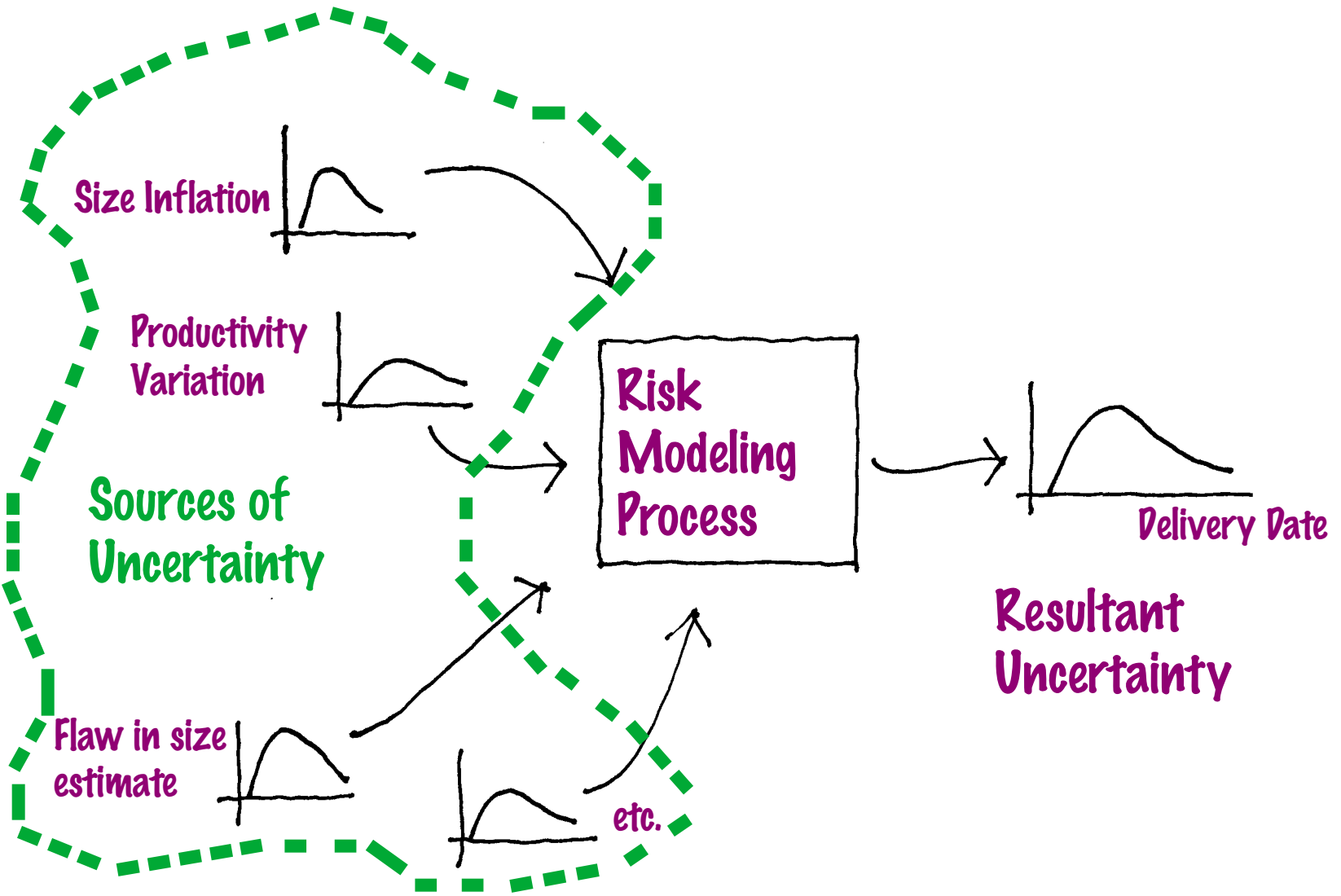


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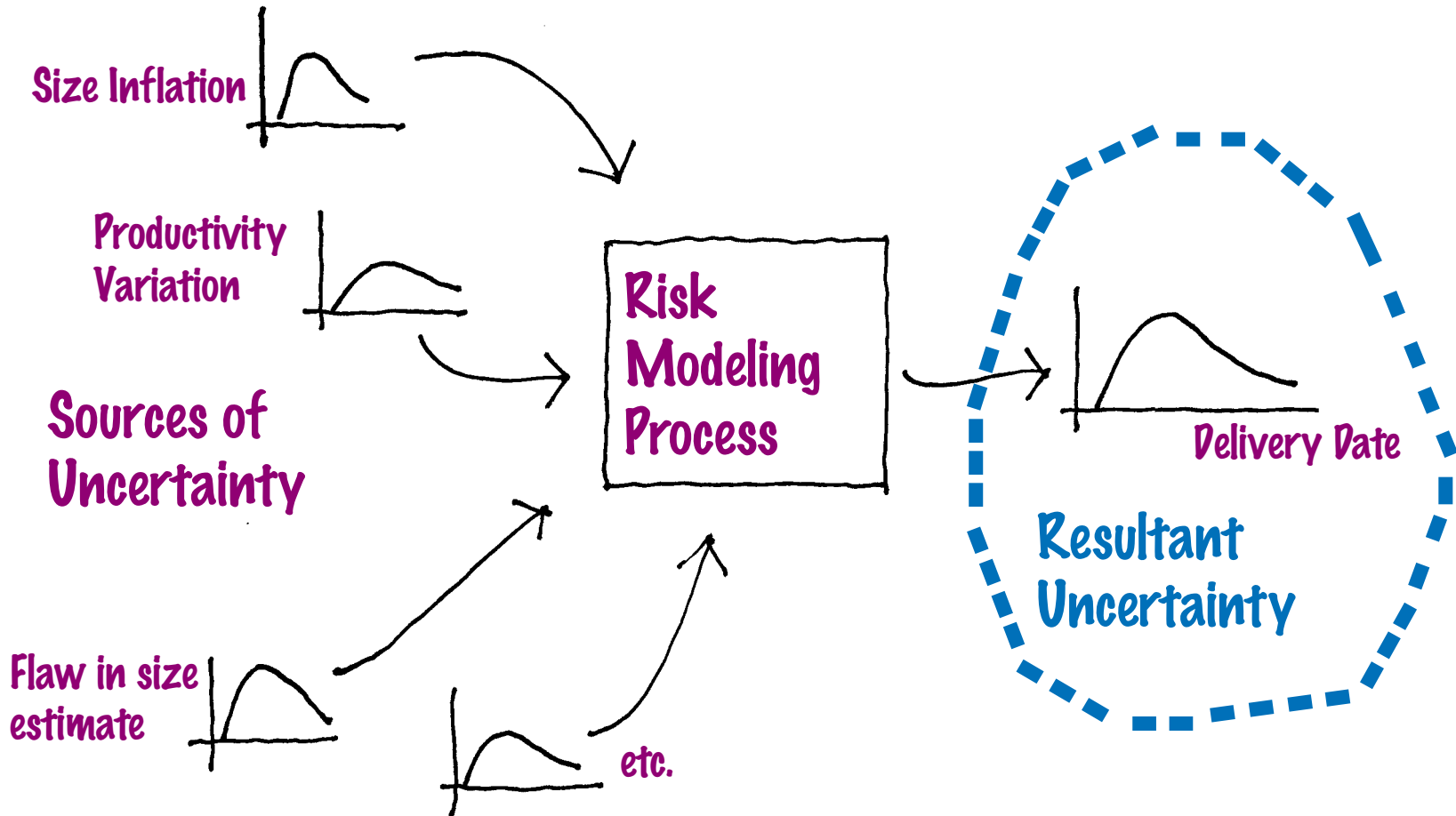
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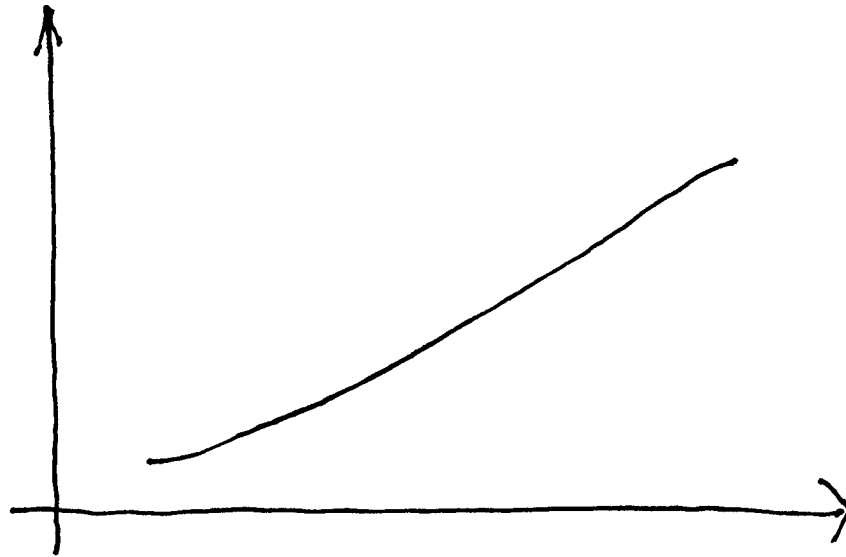


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SENSIBLE PROJECT MANAGEMENT:

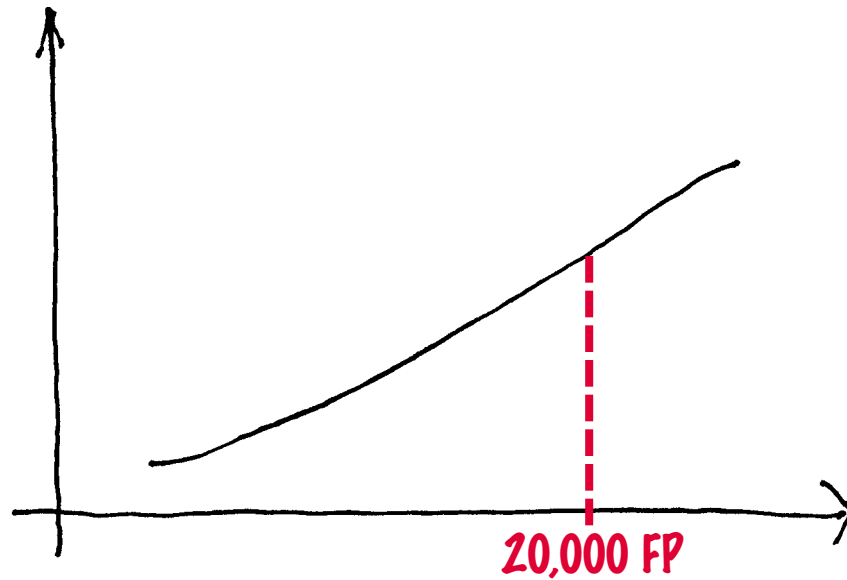
Effort



Size in (for example) Function Points

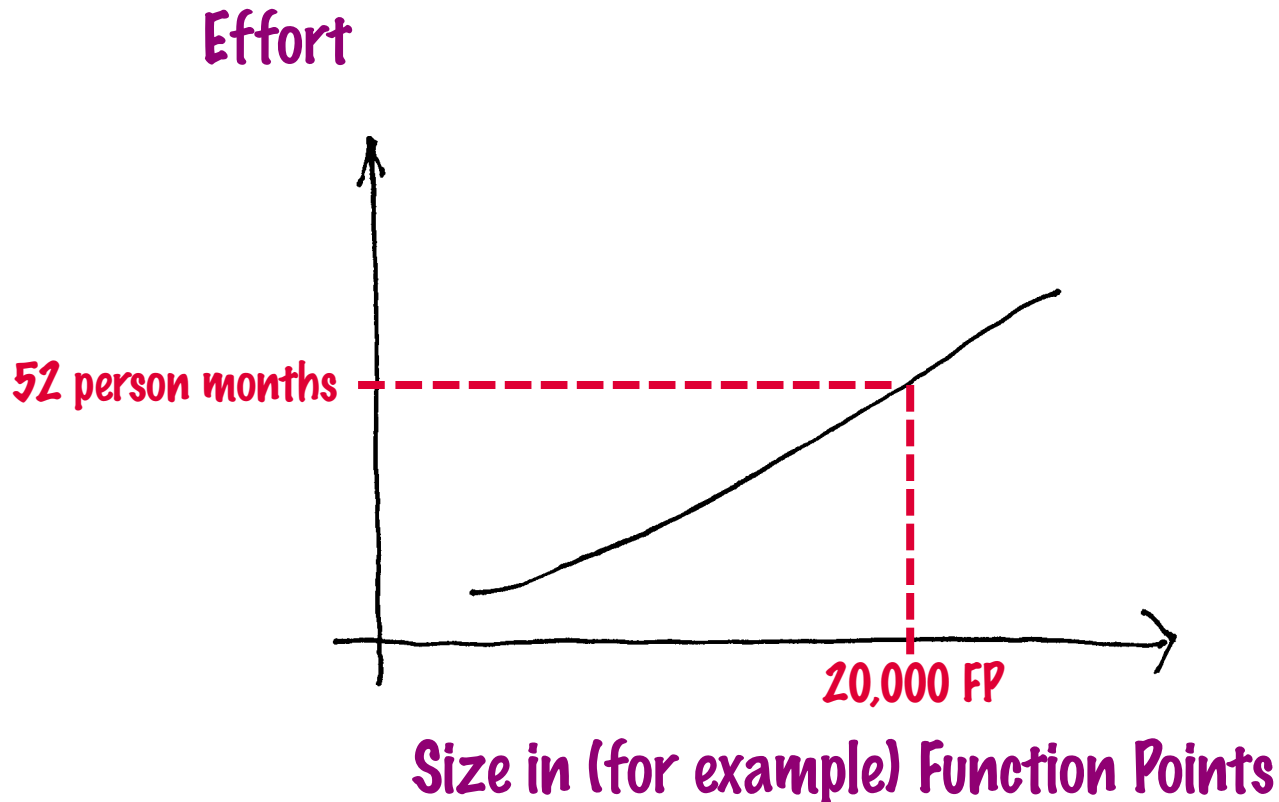
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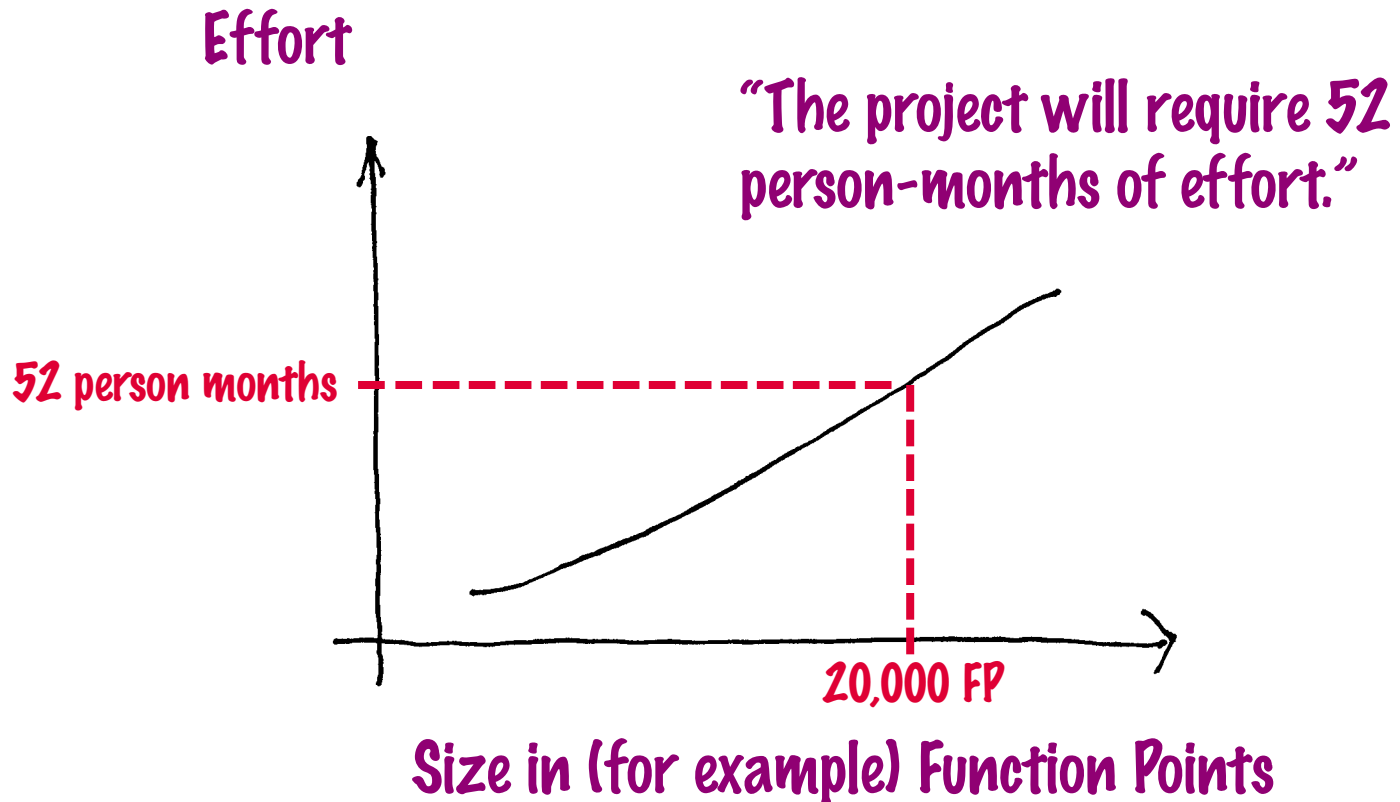


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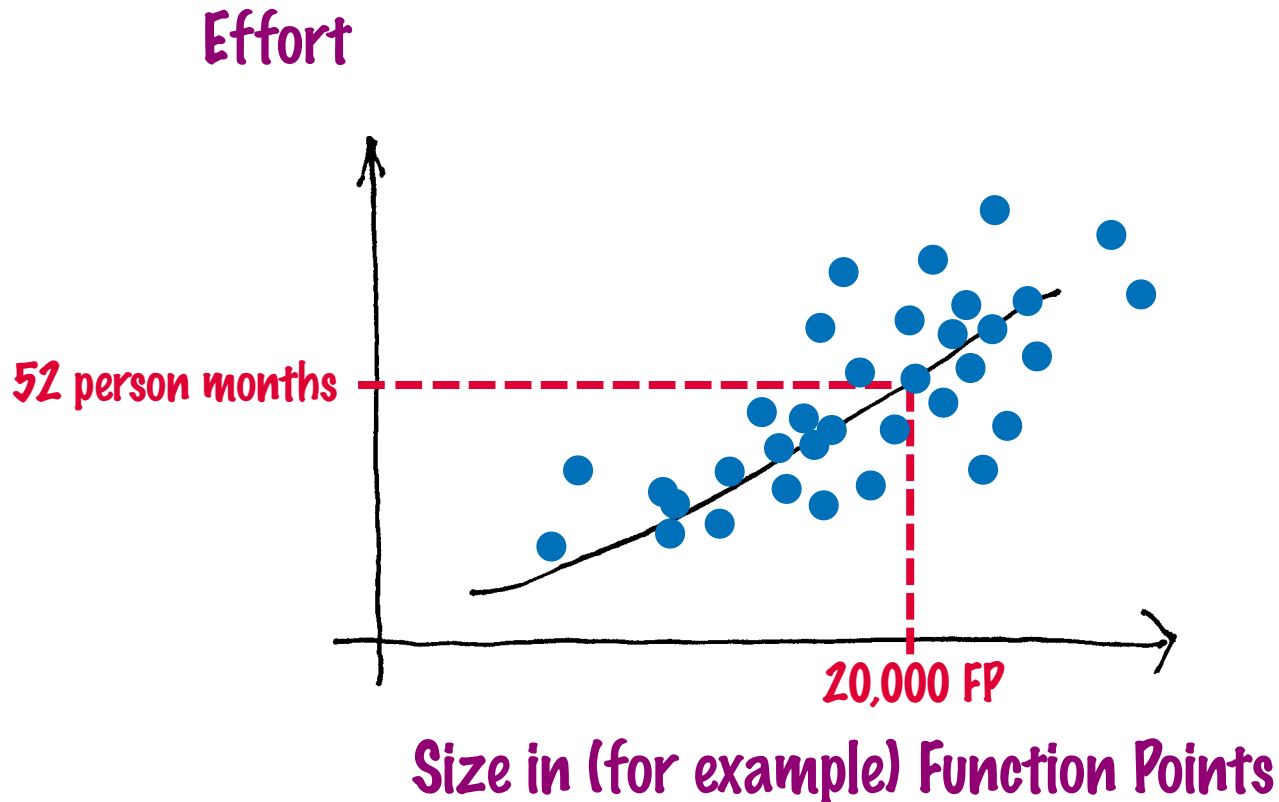
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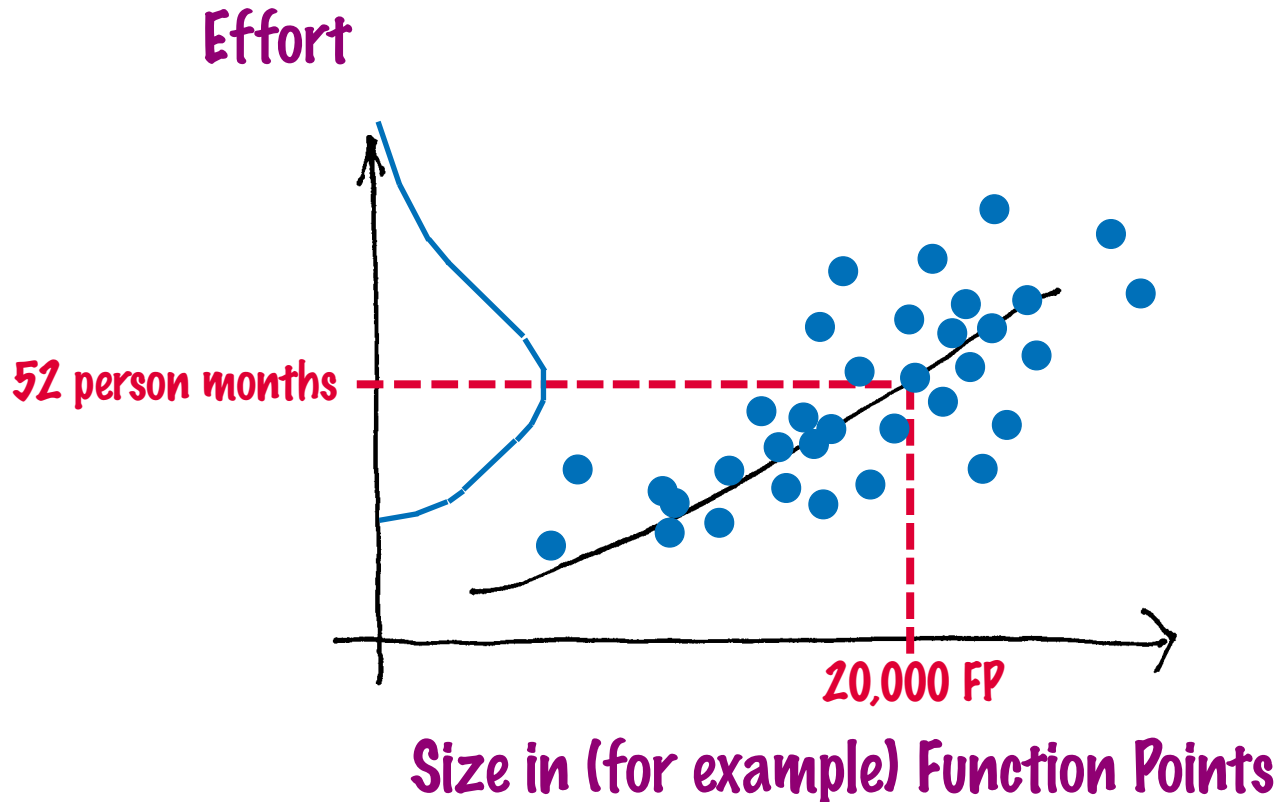
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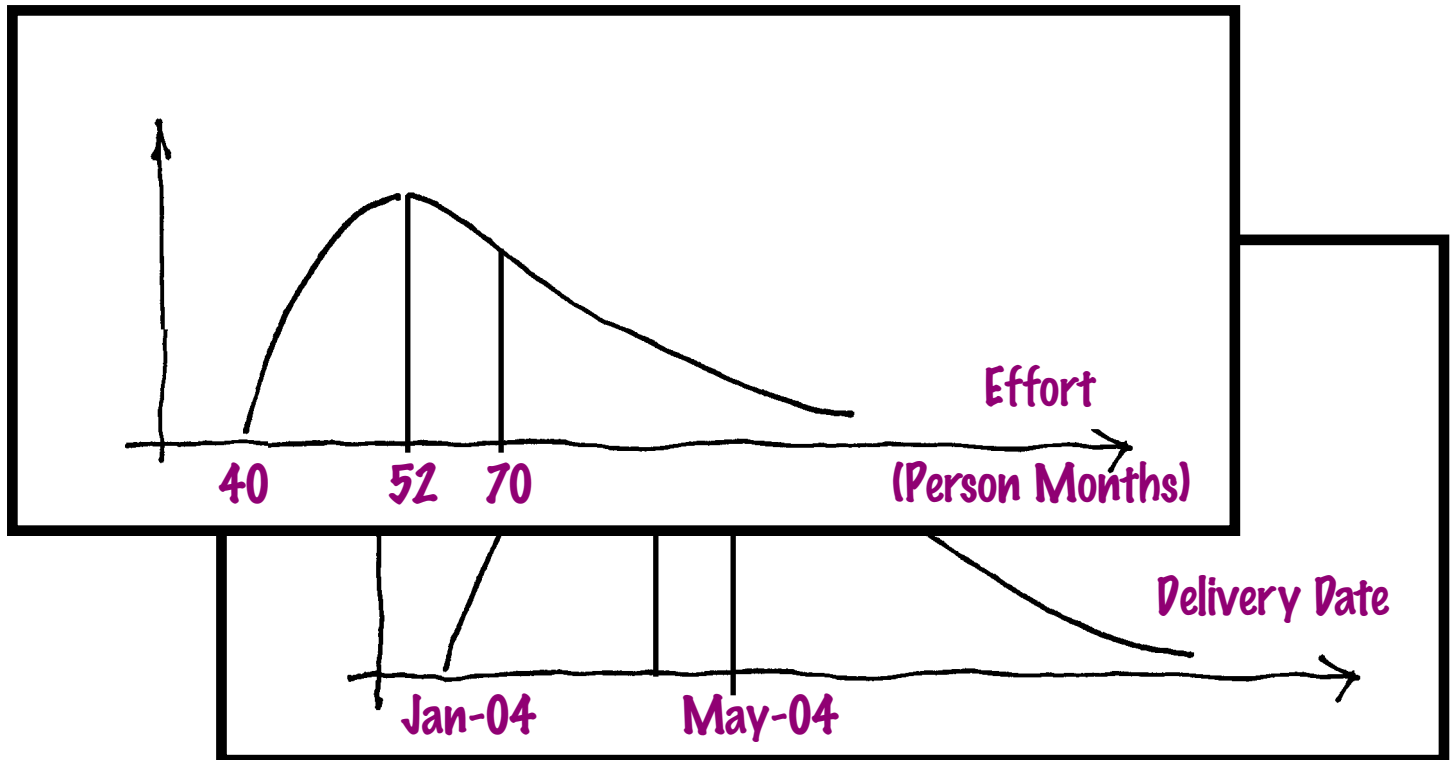
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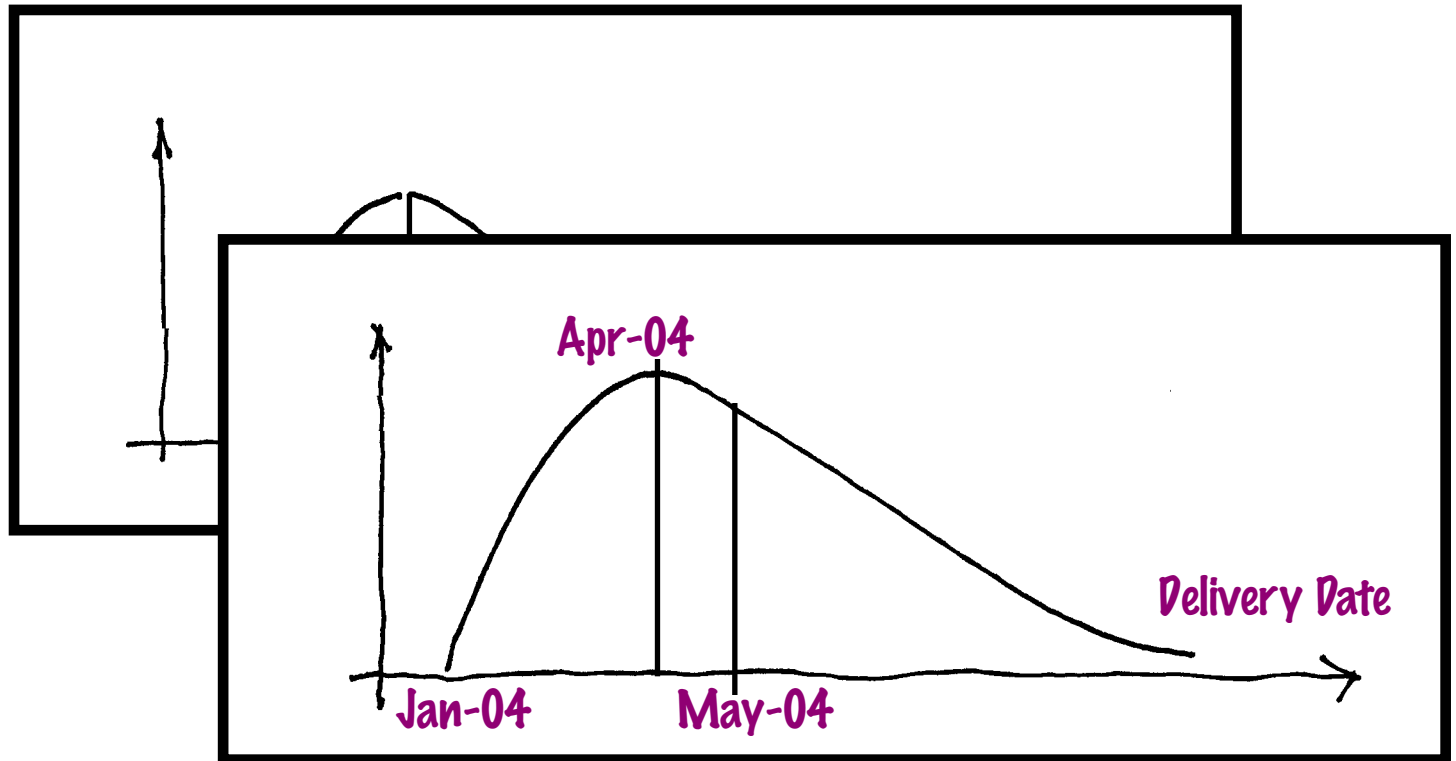
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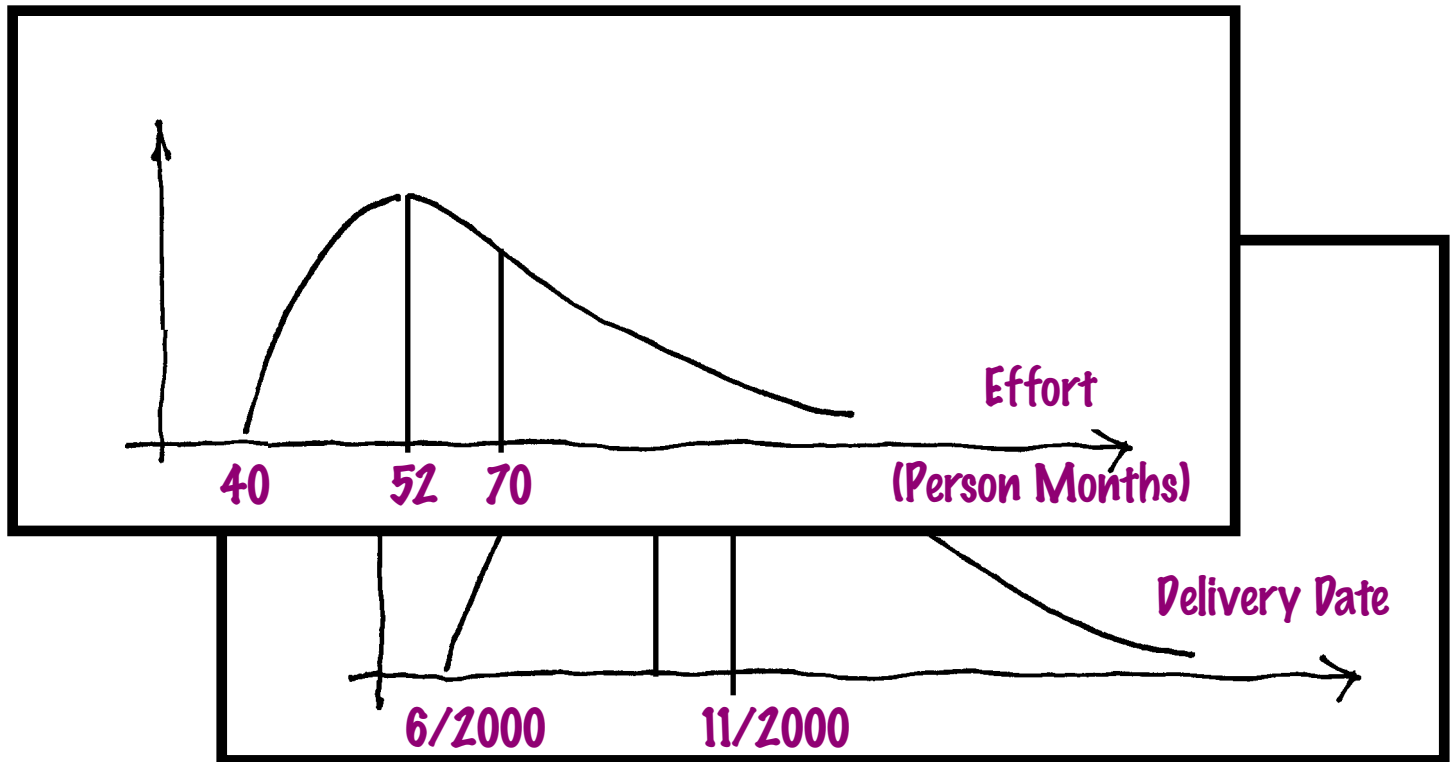


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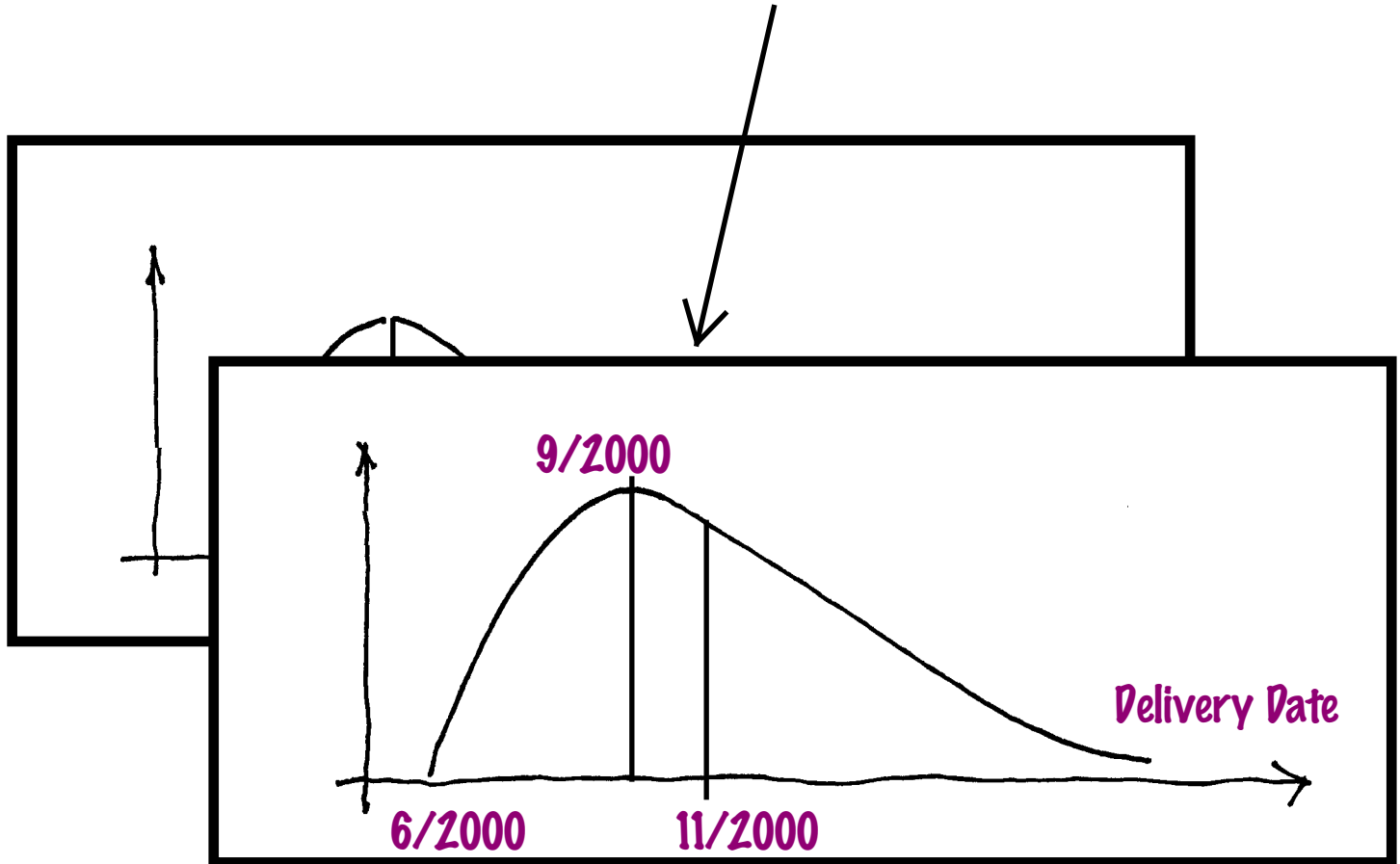
SENSIBLE RISK MANAGEMENT:

“The project will take this much effort.”



SENSIBLE RISK MANAGEMENT:

"The project will take this much time."

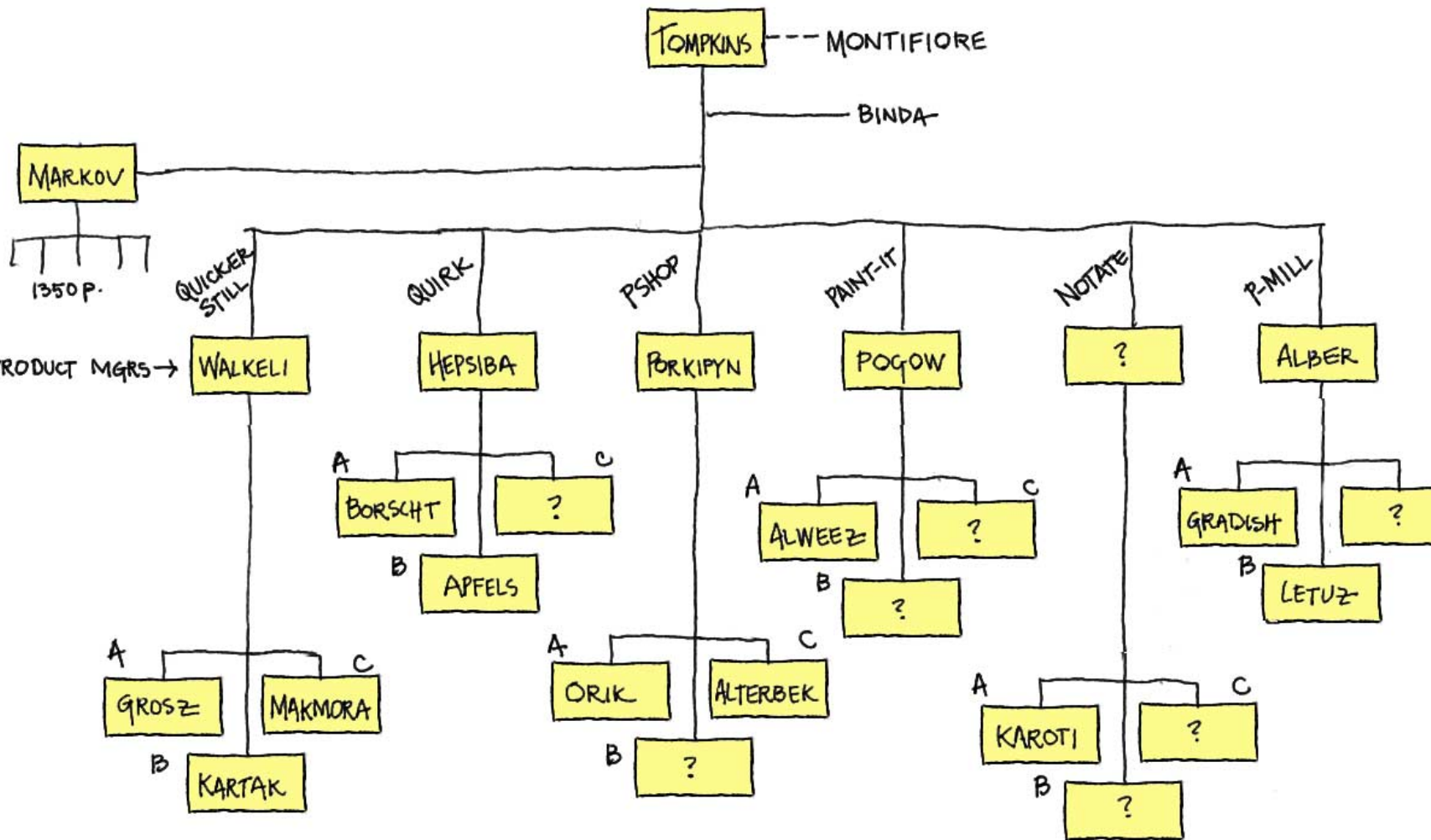


How much risk is too much risk?

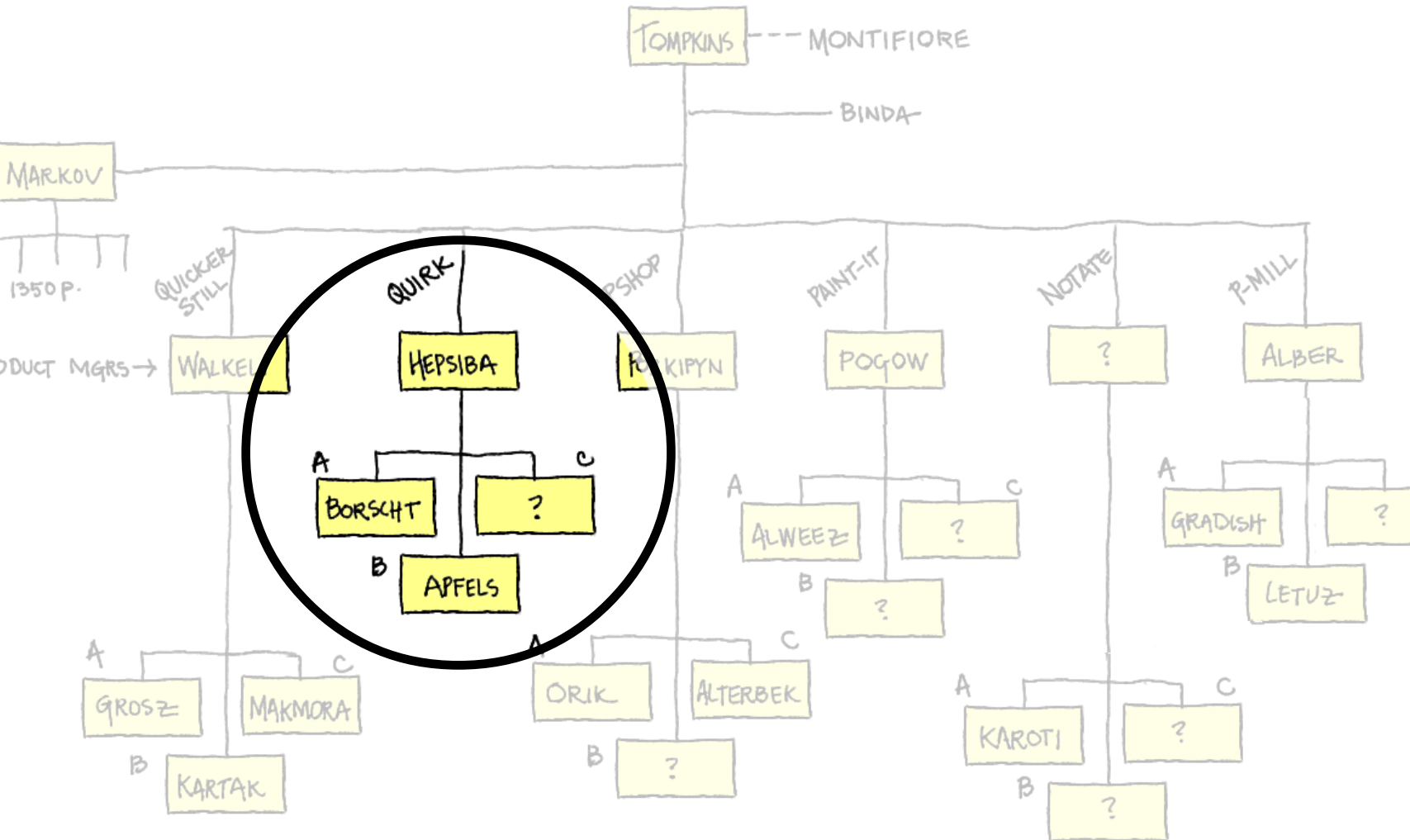
INSIGHTS:

- surprise about where the major risks lie
- surprise about the value of low risk projects
- surprise about risk quantification
- surprise about precision
- surprise about aggressively scheduled projects

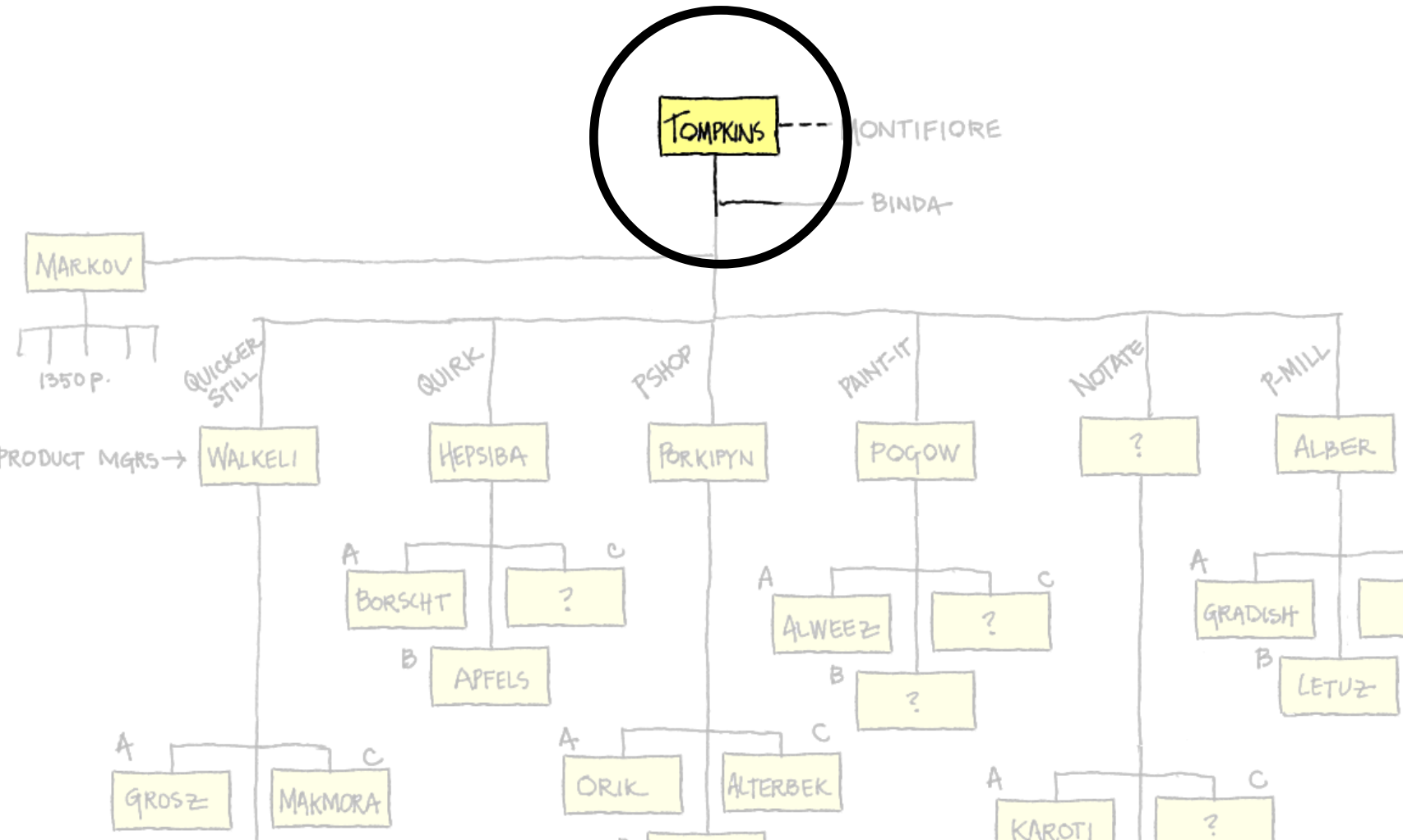
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THE FIRST SURPRISE:

The biggest risk an organization faces is lost opportunity, the failure to choose the right projects.

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So . . .

- ◆ Value is every bit as important as cost (the plusses matter as much as the minuses).
- ◆ Your process for deciding which projects to do is more important than your process for how to do them.

THE KEY PROJECT NEGOTIATION:



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The real reason we need to do risk management is not so much to survive our risks, but to enable risk-taking.

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Conversely:

- ◆ A failure to manage risks ensures that no one will take any but the most minor risks.

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The real reason we need to do risk management is not so much to survive our risks, but to enable risk-taking.

Conversely:

- ◆ A failure to manage risks ensures that no one will take any but the most minor risks.
- ◆ Without credible risk management, it is impossible to pursue meaningful value.

THE THIRD SURPRISE:

The only reason to quantify cost (schedule and budget) is to have something to compare to your quantification of benefit.

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A failure to quantify benefit assures that:

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A failure to quantify benefit assures that:

- ◆ there is perfect one-way accountability; the project team is accountable but the client is completely unaccountable.
- ◆ there is no way to assure that the high value projects get done (prioritization is a charade).

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So if all the user is willing to say about benefit is:

"We gotta have it!"

then it's perfectly reasonable to quantify budget and schedule only to this extent:

"It's gonna cost a lot,"
and
"It will be done when it's done."



I'm sorry, Tom, but I simply
cannot tolerate delivery any later
than December 31, 2003.





I'm sorry, Tom, but I simply cannot tolerate delivery any later than December 31, 2003.

If I limit them to this year they can't possibly spend more than I'm willing to pay.

THE FIFTH SURPRISE:

An aggressive delivery date is often driven by a cost containment motive, not an urgent date motive.

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An inescapable corollary:

Starting a project late is a worse sin than finishing it late.

INSIGHTS:

- surprise about where the major risks lie
- surprise about the value of low risk projects
- surprise about risk quantification
- surprise about precision
- surprise about aggressively scheduled projects

I think we're doing risk management.
Um . . . we are, aren't we?

THE “ARE WE REALLY DOING RISK MANAGEMENT” TEST

(in six parts):

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2. Is each risk quantified as to probability and cost and schedule impact?
3. Is there at least one early transition indicator associated with each risk?

THE “ARE WE REALLY DOING RISK MANAGEMENT” TEST (CONTINUED)

4. Does the census include the core risks indicated by past industry experience?

THE “ARE WE REALLY DOING RISK MANAGEMENT” TEST (CONTINUED)

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- 5. Are risk diagrams used widely to specify both the causal risks as well as the net result (schedule and cost) risks?

THE “ARE WE REALLY DOING RISK MANAGEMENT” TEST (CONTINUED)

- 4. Does the census include the core risks indicated by past industry experience?
- 5. Are risk diagrams used widely to specify both the causal risks as well as the net result (schedule and cost) risks?
- 6. Is the scheduled delivery date significantly different from the best-case scenario?

