



PARTNERSHIP



ACCURACY

internal audit • erm • project risk mgmt • bcr • health & safety • rms • claims admin • esg • tprm • compliance • policy mgmt

RISK UNDER
ONE ROOF
Confidential

Why Projects Fail

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WHY PROJECTS FAIL

WHY?

WHY PROJECTS FAIL

A project is a temporary endeavor undertaken to create a unique product, service or result.

A project is **temporary** in that it has a defined beginning and end in time, and therefore, defined scope and resources.

And a project is **unique** in that it is not a routine operation, but a specific set of operations designed to accomplish a singular goal.

WHY PROJECTS **FAIL**

PROJECT FAILURE IS BASED ON ONE OR MORE OF THE FOLLOWING CRITERIA:

It *didn't work* as expected

It *cost more* than expected

It *took longer* to complete than expected

It resulted in personal or environmental *harm*

AVIATION

Case Studies



HEATHROW INTERNATIONAL AIRPORT, TERMINAL 5

Evening Standard

Terminal disgrace: Poor training and computer failings to blame for T5 chaos as flights fiasco to last into the weekend

13 April 2012

British Airways admitted that the Terminal 5 chaos is set to last into the weekend as the airline put its hands up to a string of blunders.

The carrier is facing a wave of anger from holiday and business passengers who claim the shambolic launch of the £4.3billion facility is 'a national humiliation'.

Some said they were 'ashamed to be British' after fights broke out among passengers as BA announced it was cutting a fifth of its flights.



MISPLACED BAGGAGE & CANCELLED FLIGHTS

Evening Standard

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DENVER INTERNATIONAL AIRPORT

The New York Times

Denver Airport Saw the Future. It Didn't Work.

By Kirk Johnson

Aug. 27, 2005

DENVER, Aug. 26 - Ten years ago, the new Denver International Airport marched boldly into the future with a computerized baggage-handling system that immediately became famous for its ability to mangle or misplace a good portion of everything that wandered into its path.

"It wasn't the technology per se, it was a misplaced faith in it," said Richard de Neufville, a professor of civil and environmental engineering and engineering systems at the Massachusetts Institute of Technology. Professor de Neufville said the builders had imagined that their creation would work well even at the busiest boundaries of its capacity. That left no room for the errors and inefficiencies that are inevitable in a complex enterprise.

"The main culprit was hubris," he said.



THE COMPLEX BAGGAGE HANDLING SYSTEM AT DIA

The New York Times

Denver Airport Saw the Future. It Didn't Work.

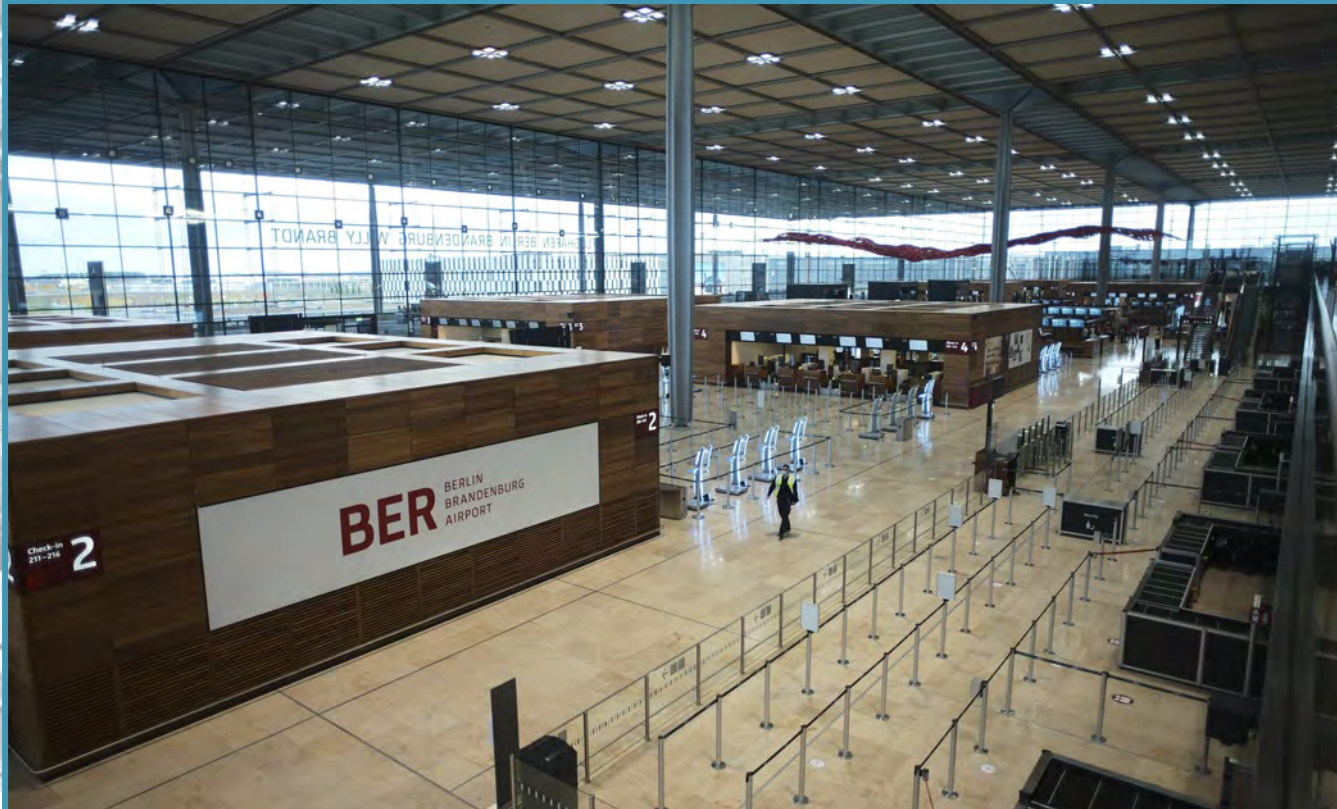
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THE BELEAGUED BERLIN BRANDENBURG AIRPORT



Berlin's new airport finally opens: A story of failure and embarrassment

Date: 31.10.2020

Author: William Noah Glucroft

Conception to operation has taken 30 years, with seven missed opening dates. Rather than being a symbol of a revitalized German capital, the new airport has been one of the most glaring public scandals in recent memory.

The Berlin-Brandenburg Airport (BER) was slated to open on June 3, 2012. It wasn't the first time the project missed its deadline, but it was the most memorable.

So great was the anticipation, public broadcaster rbb planned to go live for 24 hours covering it. So great was the disaster thereafter, the German satire site, The Postillon, proposed a new grammatical form for discussing the airport's conditional opening — an event repeatedly kicked down the tarmac never to actually happen.



FINALLY OPENING AFTER MONUMENTAL DELAYS



Berlin's new airport finally opens: A story of failure and embarrassment

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Failures across all types of projects

CASE STUDY

THE 2010 US CENSUS

United States Census 2010

This is your official U.S. Census form. It is quick, easy, and your answers are protected by law. Please complete your form in the language most comfortable for you and return it today.

Start here

Use a blue or black pen.

Start here

The Census must count every person living in the United States on April 1, 2010.

Before you answer Question 1, count the number of people living in this house.

U.S. Census Bureau

Este es su cuestionario oficial del Censo de los Estados Unidos. Conteste y sus respuestas están protegidas por ley. Por favor, complete el cuestionario en el idioma que le sea más cómodo y devuélvalo hoy.

Comience aquí

Use un bolígrafo de tinta azul o negra.

El Censo tiene que contar a cada persona que vive en los Estados Unidos el 1 de abril de 2010.

Antes de contestar la Pregunta 1, cuente el número de personas que viven en esta casa, apartamento o casa de familia.

5. Please provide information for each person living here who owns or rents this home. If the owner or renter lives somewhere else, this will be Person 1.

What is Person 1's name? *Print name*

Last Name

CASE STUDY

THE 2010 US CENSUS

KEY POINTS:

- US Census Bureau aimed to automate with specialized handheld devices
- Project activities fell behind
- Delayed and abbreviated testing revealed significant flaws too late
- Result: reverting to traditional paper-based approach and significant cost overruns of over **\$1.7 Billion**



SURVEYS ON
IT PROJECTS

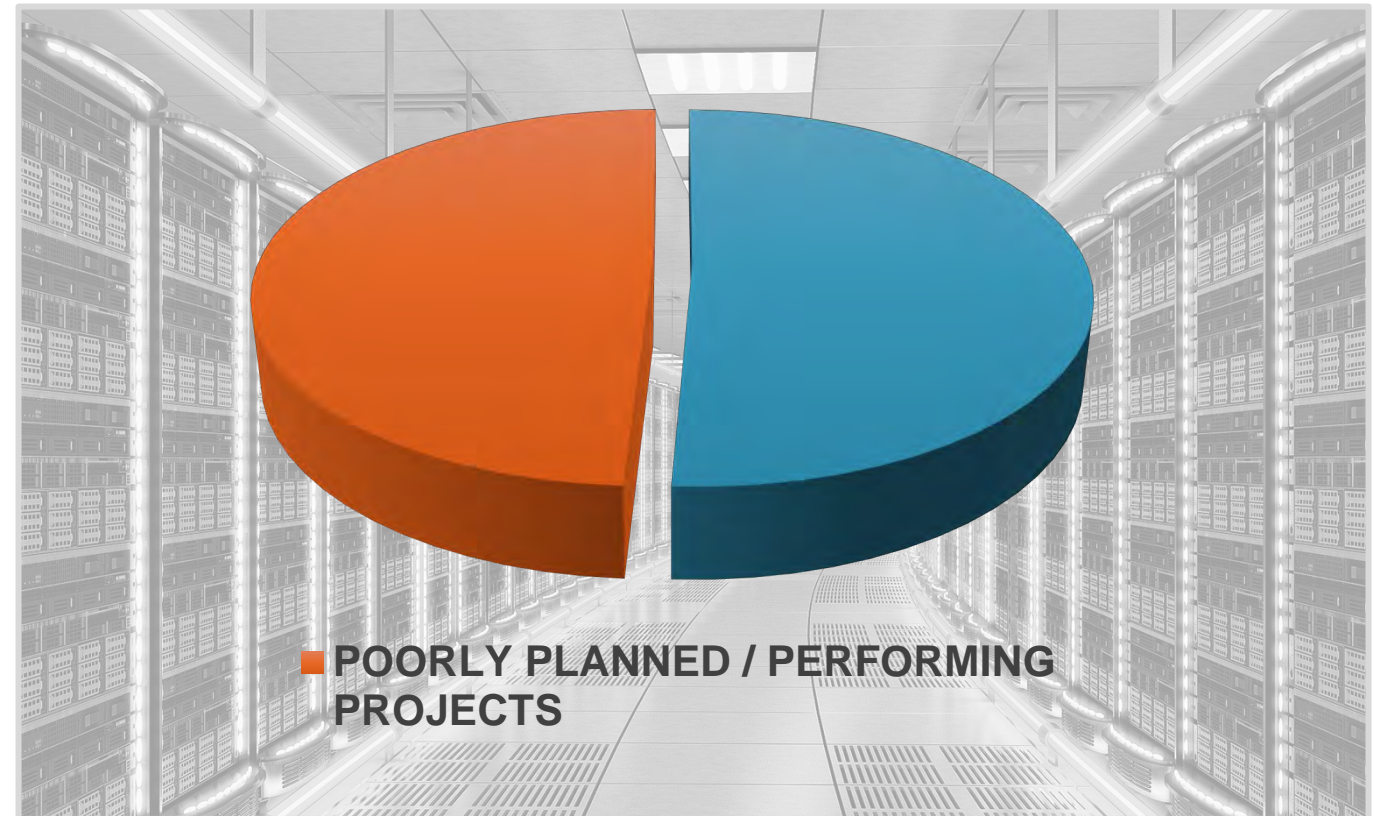


SURVEYS ON

IT PROJECTS

U.S. Government Accountability
Office

413 of 840 federally funded IT
projects were poorly planned, poorly
performing or both

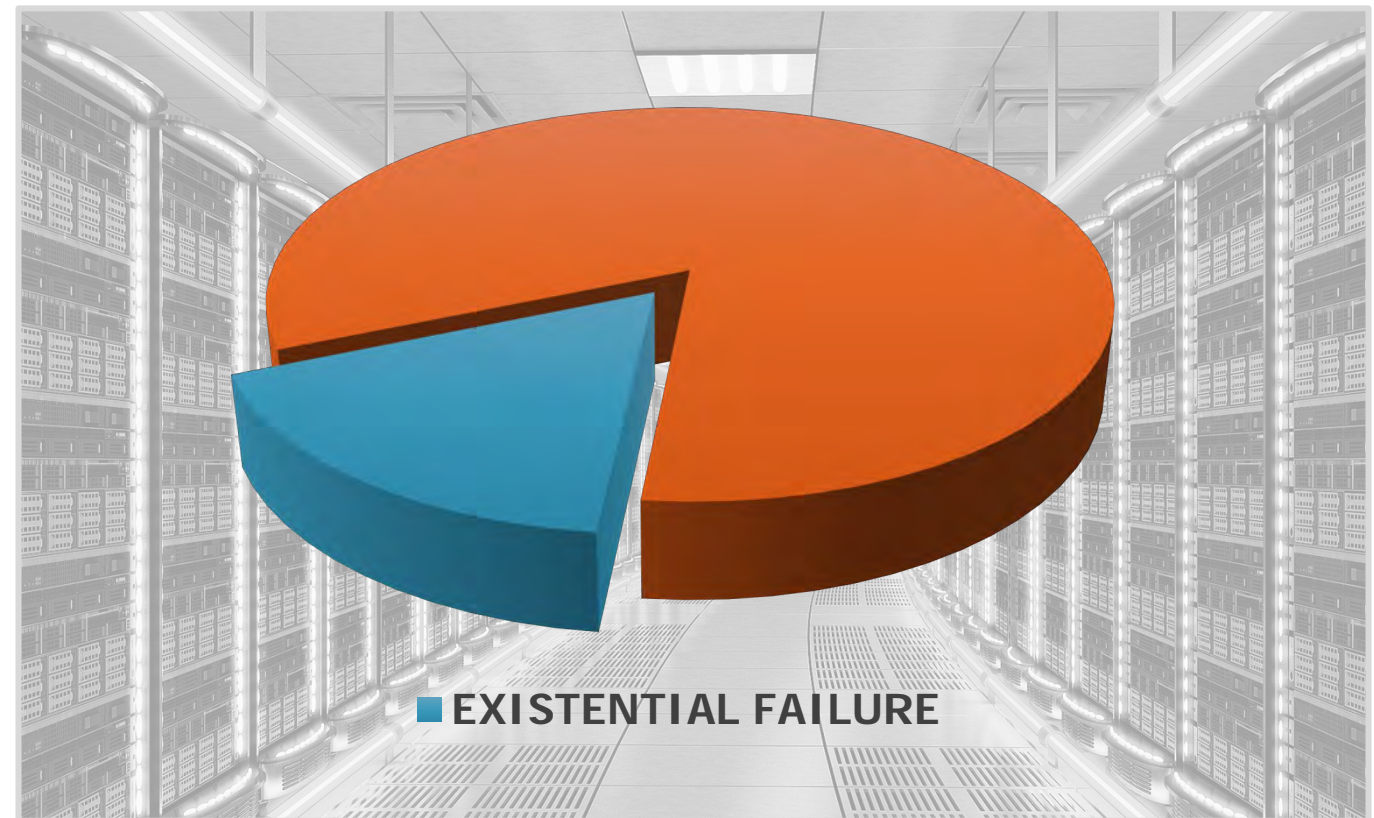


SURVEYS ON

IT PROJECTS

McKinsey & Company and the
University of Oxford

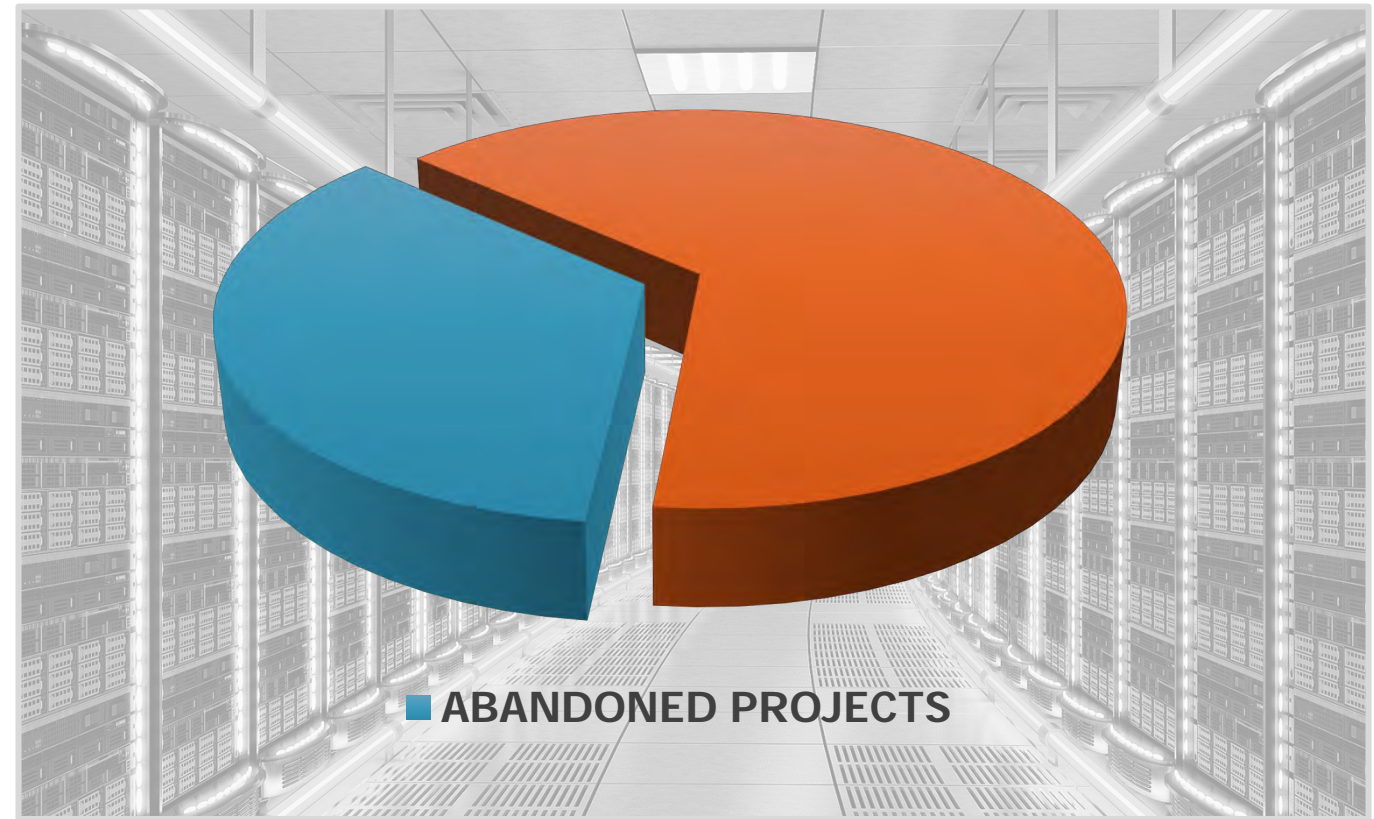
- 5000+ projects with budgets > \$15M
- Average of 45% overbudget (\$6.7M)
- Nearly 1 in 5 projects failed so badly that they threatened the continued existence of the company



SURVEYS ON IT PROJECTS

Logica and the Economist
Intelligence Unit

- 380 **Senior Executives** surveyed
- 35% of senior executives had **abandoned** a major project in the last 3 years
- Business Process Change projects, **37%** failed to deliver results



CASE STUDY

FLINT WATER CRISIS



CASE STUDY**FLINT WATER CRISIS****KEY POINTS:**

- The city of Flint, Michigan sought to cut costs by changing the city's water source
- The Dept. of Environmental Quality ignored early warnings of high levels of lead in the water
- Residents of Flint are still dealing with the lead levels over three times the Federal Action limit



Preventing Project Failure

If You Manage Well Your.....

Not True!

Project Cost

Schedule

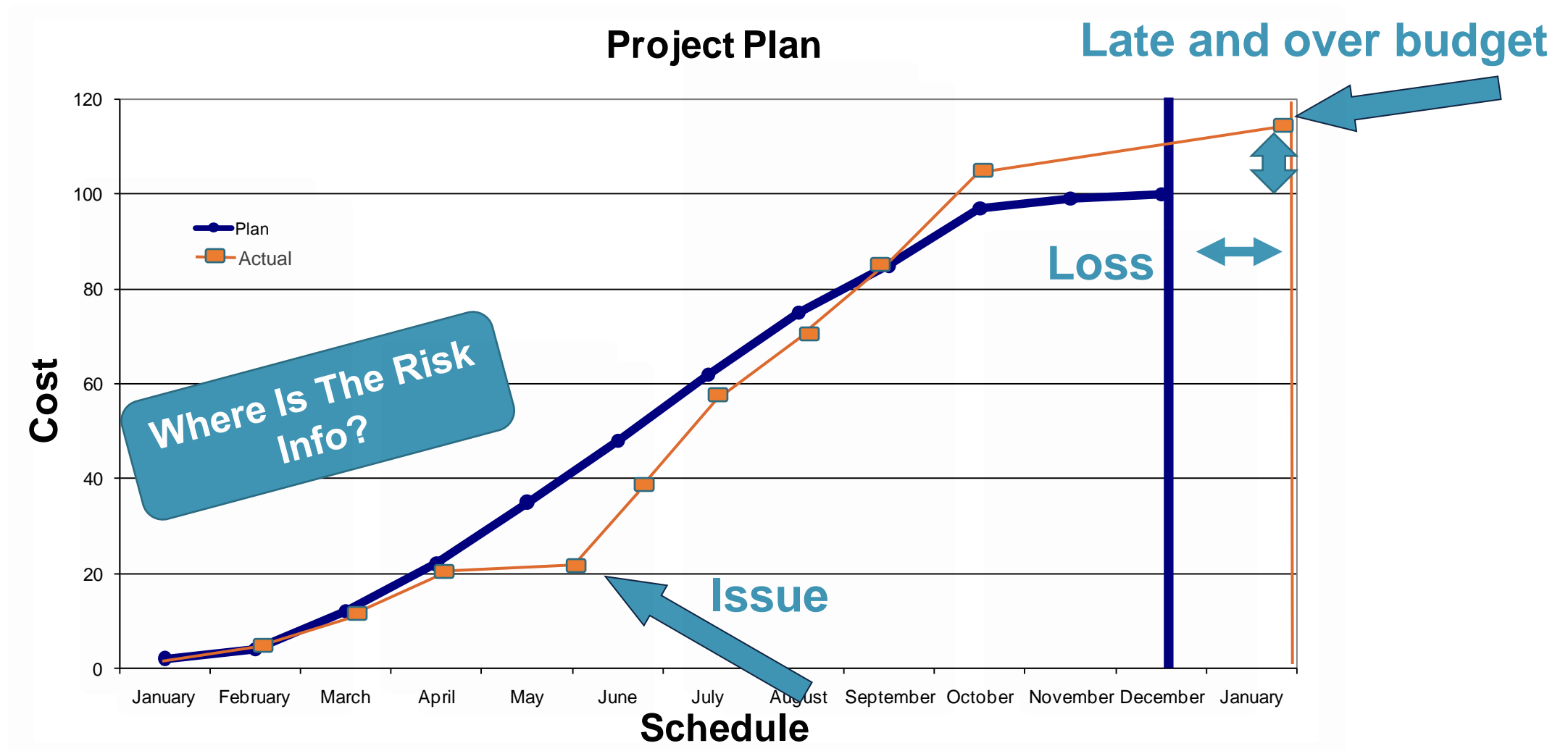
Project Success

The Typical Project Plan



Source: Project Management Institute

And What Is Often Repeated



Source: Project Management Institute

Its Proven. Measuring 2 Dimensions Is Not Enough



Studies Suggest:

- “30% of capital projects are delivered on-time”
- “Only 15% are on budget”
- “More than 60% of owners surveyed that expect both size and complexity of their projects to continue increasing”

ACCORDING TO:

accenture
High performance. Delivered.

The Impact Of Not Managing Risk

■ J.A. Jones



- 2.2 Billion in Revenue
- # 14 on ENR Top 400
- 113 Years In Business
- “Jones was forced into a cascading economic condition. Several bad projects lead to lower bonding which lead to less work and caused a mass exodus.” – Former Top Executive, JA Jones

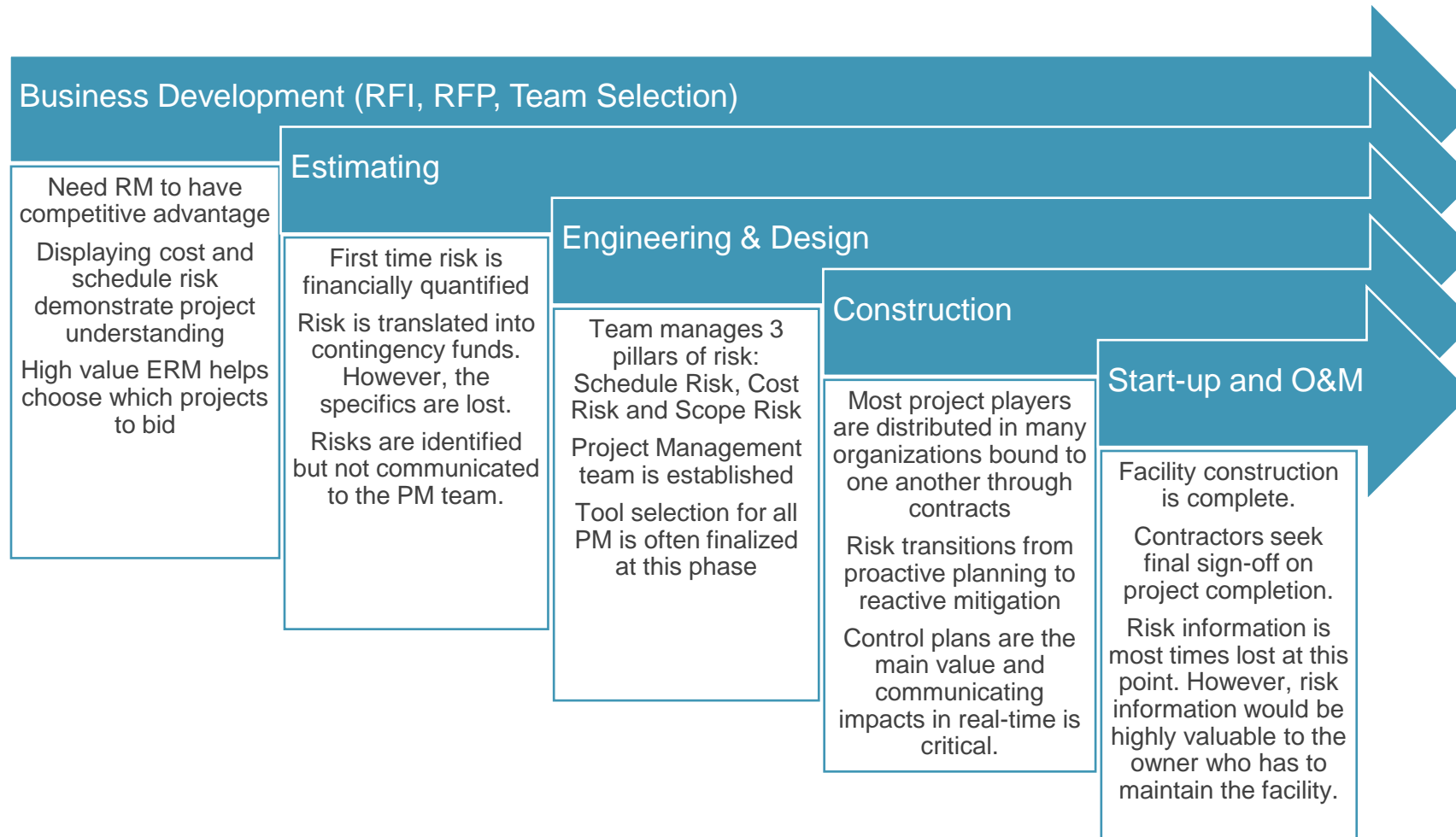
The Impact Of Not Managing Risk

■ Dillingham Construction

- \$ 350 million
- # 103 on ENR Top 400
- 45 Years In Business
- “It only takes a few bad projects to wreak havoc. We had to finance these projects and we got to a debt level that was untenable to us.” - Donald E. Sundgren, CEO, Dillingham Construction



Risk Impacts the Entire Project Management Lifecycle



The Takeaway

- Risks are readily visible from the earliest stage
- There are firewalls between groups when communicating risks
 - Owner to Designer
 - Designer to Estimator
 - Bid & Tender Phase
 - Contractor to Subcontractor
 - Contractor to Owner
- Regardless of whether you have contractually transferred the risk to someone else, the Owner/Client ultimately has to live with the impact.
 - This often determines project success or failure
 - Reputational risk hangs in the balance
 - Future (negotiated) work is in jeopardy

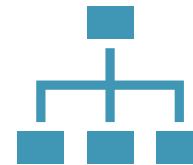
Other Myths To Consider...



Identifying a risk is a sign of failure.



Spreadsheets are the answer.



Exception-based project management deals with risks as they arise.

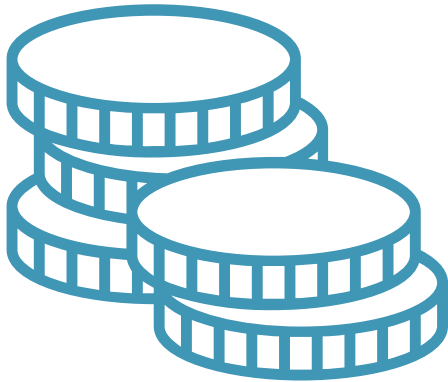


It's the Risk Manager's job to handle them

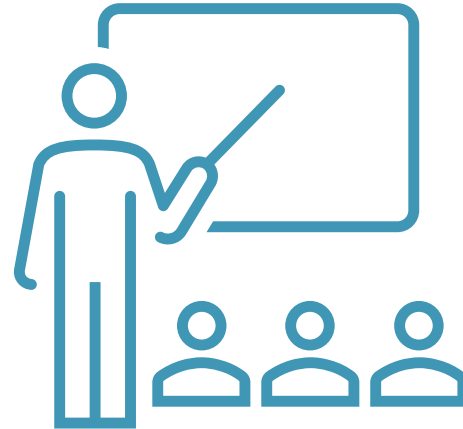
Review



Drivers of Project Failure



Underestimation



Lessons & Concerns



Motivations

1 — UNDERESTIMATION

Underestimation of *complexity, project duration and budget, and requirement changes.*

REVIEW OF
PRINCIPLES

Underestimation – The Solution

- Document Assumptions
- Engage risk management from project kick off
- Ensure visibility to all stakeholders
- Embrace change, but manage it appropriately

Dashboard 1

Author: James Patman

Welcome back, Jennifer

Tue 3 September 2022
Week 44

Current Residual Exposure (EMV)

Folder: Projects

\$20,100,414
High count threshold: \$20,000,000

Target Residual Exposure (EMV)

Folder: Projects

\$4,304,720
Low count threshold: \$2,000,000

Expected cost of mitigation

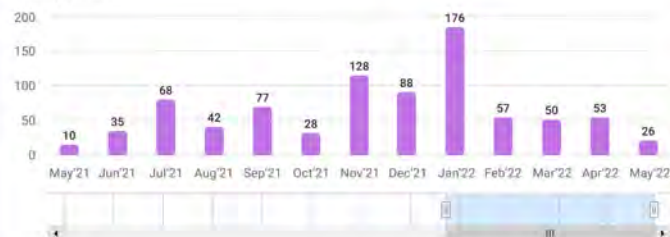
Folder: Projects

\$3,592,520
Medium count threshold: \$2,000,000

Open activities by implementation time

Folder: Projects

Quantity or amount



Last updated risks

Folder: ACH130, ACH135

PERIOD: 3 MONTHS

26 MAR 2022

- 5328 - Control systems detected emission ...
- 6818 - Missing contractual documents or i...
- 7419 - Worker being injured by earth movin...

12 MAR 2022

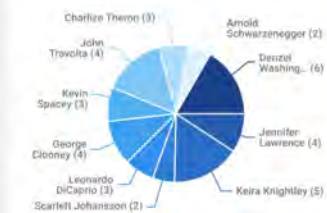
- 7533 - Loss of more than 10% of staff at ca...

ACH130 ACH135

Risk by owner

Folder: Defence projects

Total



Widget title

Folder:

Corporate risks

Folder: Construction projects

22 total

Widget title

Folder:

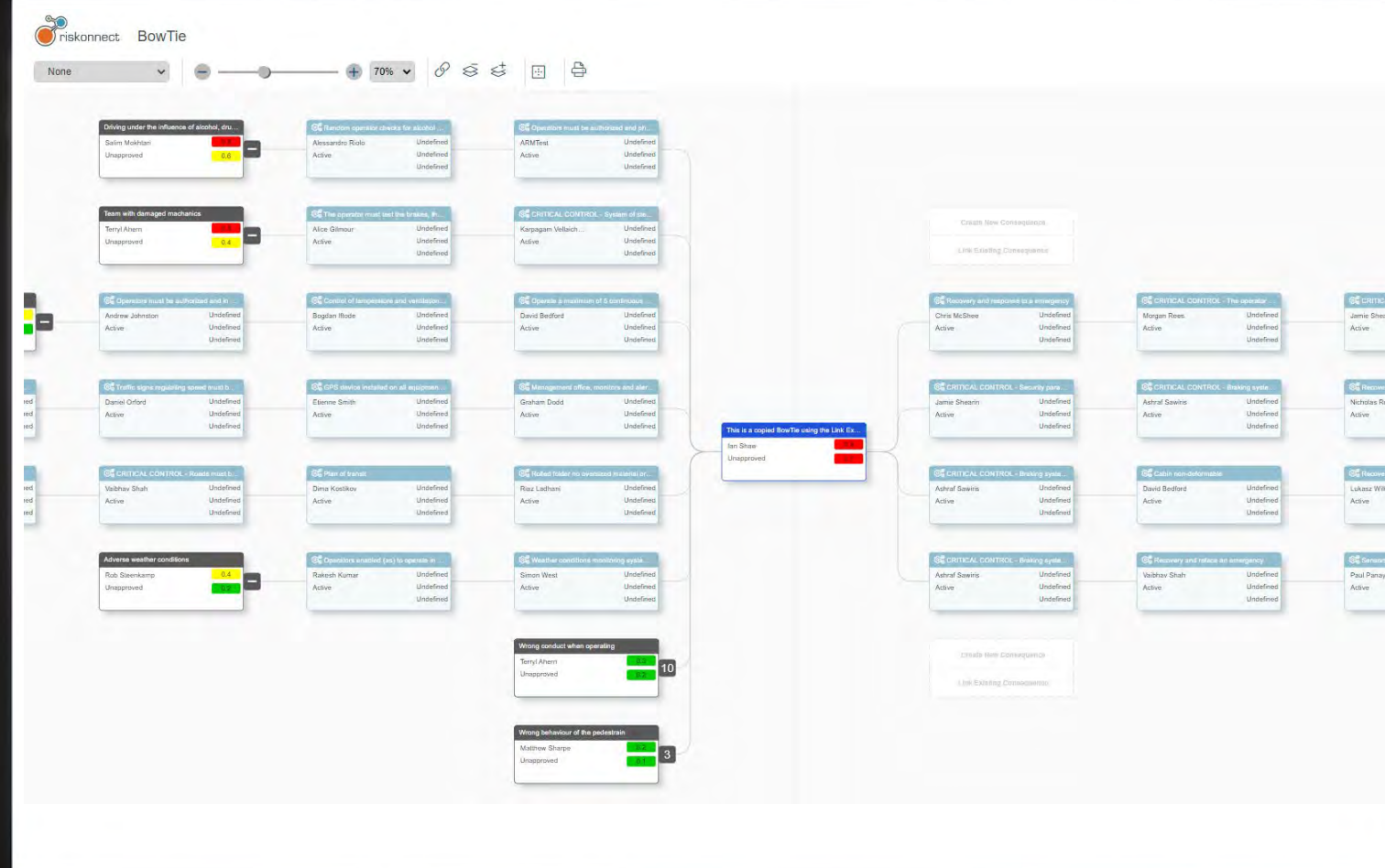
2 — LESSONS + CONCERNS

Timely *communication of concerns*,
a *lack of willingness to acknowledge* those concerns,
leaving *quality inspections* until the end of the project,
and *not learning* from past project experiences.

REVIEW OF
PRINCIPLES

Lessons and Concerns

- Consider historical projects
- Make it easy for risks and opportunities to be recorded
- Much easier in a single place (Risk Under One Roof)
- Escalate risks where appropriate
- Use workshops, BowTie to identify root causes



3 ————— **MOTIVATIONS** —————

Project motivations of select stakeholders, and
decisions made in the alignment with those stakeholder interests,
but not necessarily the best interest of the end users of the project deliverable.

**REVIEW OF
PRINCIPLES**

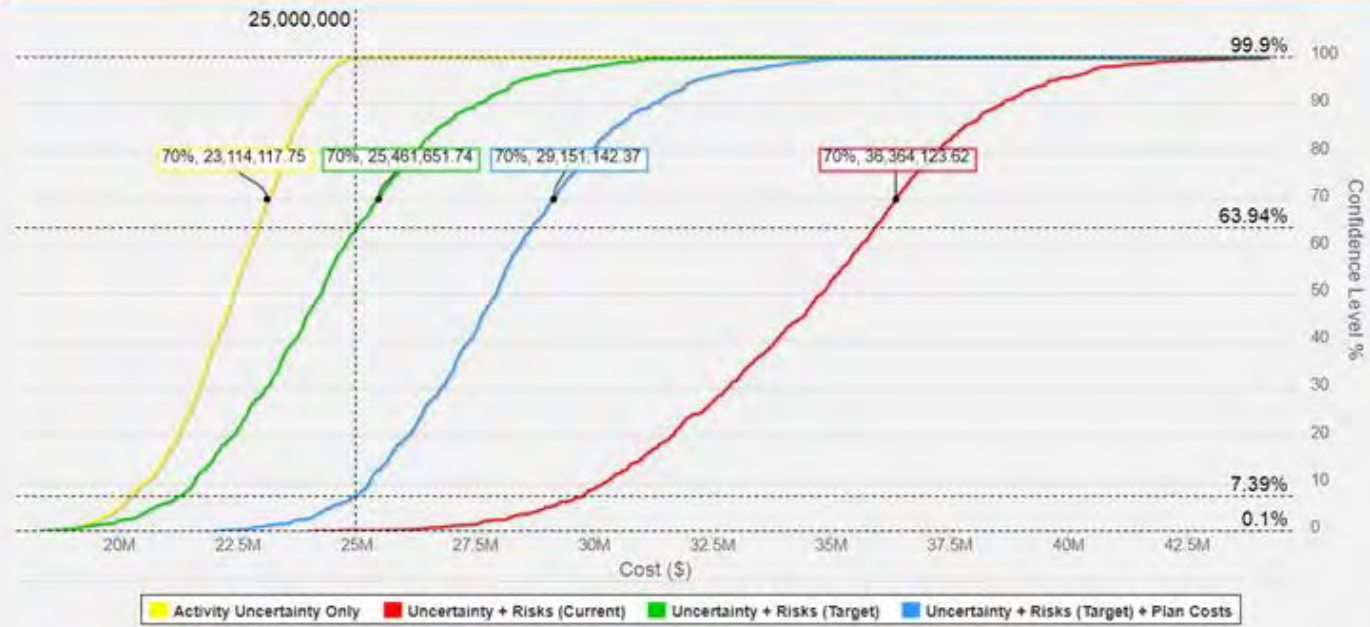
Motivations

- Manage Cost appropriately
- Allow for different viewpoints of the same data
- Encourage and facilitate communication
- Open culture – identification of risk is a *good* thing
- Monte Carlo analysis can give you real data for objective decision making

Analysis Charts for Generic Safety Risk Library, Refinery Upgrade

Run Details

Options



Back

Questions?



erm • project risk mgmt • bcr • health & safety • rmis • claims admin • esg • iprm • compliance • policy mgmt • internal audit

DISCOVER

RISK UNDER
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