izi Risk

IZIRISK PROJECTS

Dates and budgets with their probability.

How likely your project is to finish on time, within budget and with the value it was approved for, and which risks decide it.



Level 1 · Delivery
Schedule and cost, waterfall or agile

Level 2 · Value
Objectives, stakeholders and probability of success

Level 3 · Portfolio
Many projects, period by period

THE PROBLEM

Projects don’t fail for lack of a plan, but because the plan is a single number.

Where reality holds a range, the plan states one date and one cost. Four habits make it worse, and every project director knows the result: commitments made under pressure and contingency that cannot be defended.

1. **Single-point plans**
   With “most likely” durations, delays add up along the critical path while savings rarely do.
2. **Risk matrices**
   They rank by colour but cannot say how many days or how much money each risk adds.
3. **Rule-of-thumb contingency**
   “Add 10%” turns out too much, or too little and the overrun arrives anyway.
4. **Success only in time and cost**
   A project can meet both and still miss the benefits it was funded for.

WHAT IT DOES

Three levels, one question each

Each level builds on the one below, and an organisation can stop at whichever level it needs. The engine underneath is Monte Carlo simulation: the project is played out thousands of times, and the spread of the outcomes is the answer.

LEVEL 1 · DELIVERY

Schedule and cost

Will it finish on time and on budget?

For the project manager and project director. Schedule, costs and risk register, waterfall or as an agile backlog.

LEVEL 2 · VALUE

Objectives and stakeholders

Will it deliver the value it was approved for?

For the sponsor. 32 standard objectives in 8 families, each with its target and its stakeholders.

LEVEL 3 · PORTFOLIO

The organisation’s projects

Are the projects we funded still on course?

For the PMO, finance and the board. Forecast against actuals, exceptions and calibration. Being rolled out.

Every estimate is a range, and the answer is a probability. Instead of “we finish on July 15”, the project says “we have an 80% chance of finishing by July 15”. A date or budget without its confidence level is not a commitment.

SCHEDULE AND COST UNDER UNCERTAINTY

The plan says May 9 and 49,500. The simulation says otherwise.

The model's worked example: five tasks, three cost items and a register of ten risks, with a target date of July 15 and a budget of 80,000. Simulated 10,000 times.

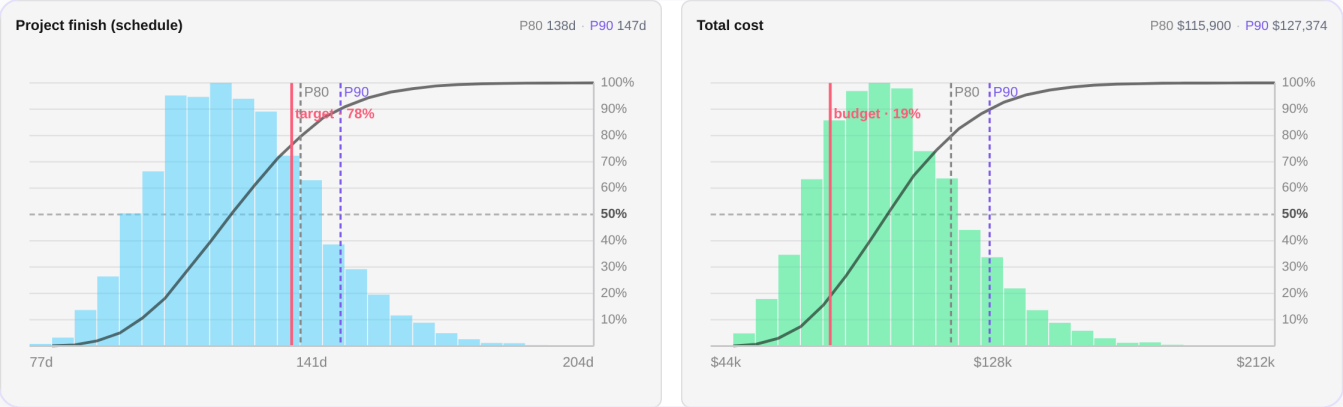
Jul 17
P80 date: 80% chance of finishing earlier

78%
chance to meet the target date

116 k
P80 cost, against 49,500 in the plan

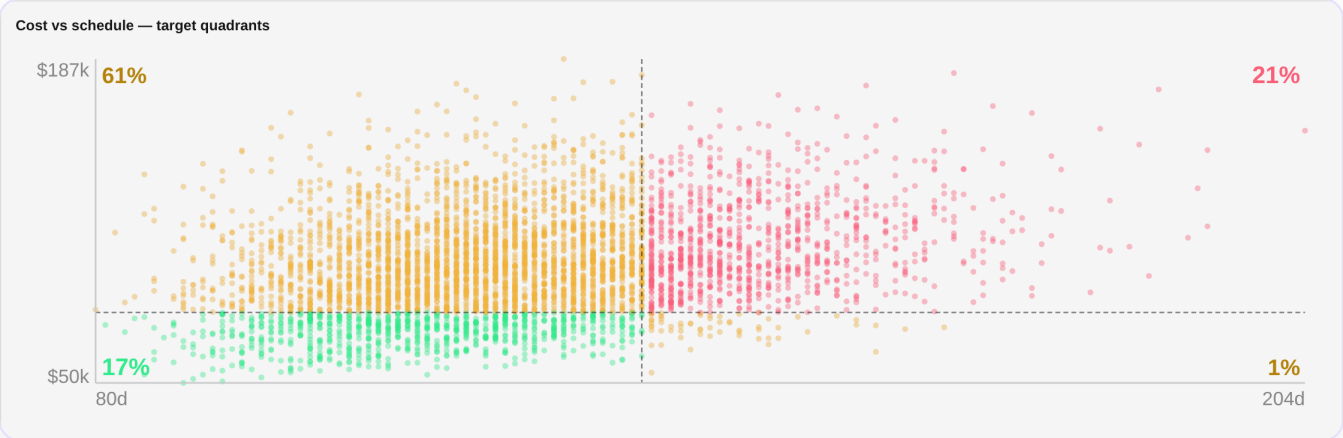
19%
chance of staying within the 80,000 budget

Finish date and total cost: the full range, with the target marked



The bars are the outcomes of the 10,000 runs; the curve is the cumulative probability. The red line is the target: the target date and the budget.

Date and cost together: each dot is one run



17%
of runs meet **both the date and the budget** (bottom left). 61% finish on time but go over budget.

80%
The **joint confidence level** finds the date and budget met together at the chosen confidence, and the contingency they require.

MULTIPLE OBJECTIVES, MULTIPLE STAKEHOLDERS

Schedule, 76.5%. Cost, 78.9%. Project success: 28.2%.

This is the thesis of the PMBOK® Guide, 8th edition: scope, schedule and cost remain performance domains, but within value delivery. In the worked example, a digital transformation, a time-and-cost dashboard would show nothing alarming.

PROBABILITY OF PROJECT SUCCESS ⓘ
28.2%
every Gate achieved, and the weighted Value Index at or above the threshold

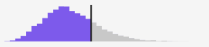
ALL GATE OBJECTIVES ACHIEVED ⓘ
90.0%

VALUE INDEX AT OR ABOVE THRESHOLD ⓘ
31.6%

PROJECT VALUE AT RISK ⓘ
0.33
80% chance the Value Index is at least this

PROJECT VALUE SHORTFALL ⓘ
0.34
average gap below the threshold, when it falls short

Critical and contributory objectives ⓘ
Weighted into the Value Index.

OBJECTIVE	TARGET ⓘ	OUTCOME DISTRIBUTION VS TARGET ⓘ	P(TARGET) ⓘ
Schedule CRITICAL OBJ-1.1 Project duration	<= 135.0		76.5%
Cost CRITICAL OBJ-1.2 Total project cost	<= 120,000		78.9%
Adoption CRITICAL OBJ-4.1 Active-user adoption	>= 0.700		41.8%
Economic Value CRITICAL OBJ-3.2 Net present value	>= 0.000		45.7%

Each objective with its target, the simulated distribution of its outcome and the probability of reaching it. Adoption and economic value are what sink success, not schedule or cost.

Five ideas make it work

- **A shared catalogue:** 32 standard objectives in 8 families, with KPI, target and typical stakeholders.
- **Explicit stakeholders:** a project does not fail in the abstract; it fails in someone's eyes.
- **Joint satisfaction:** three objectives at 80% are not 80%.
- **Gates cannot be offset:** a mandatory objective that fails makes the project fail.
- **One risk, several objectives:** schedule and cost are inherited from Level 1.

Eight objective families

Delivery
Will we deliver it?

Technical & performance
Will it work?

Financial
Will it be worth it?

Customer & user
Will they use it?

Operational
Will the operation run better?

Strategic
Does it move the organisation forward?

Stakeholder & social
Do the people who matter accept it?

Compliance
Is it lawful, safe and durable?

CAPABILITIES

Each feature answers a committee question

Probabilistic schedule and cost
What date and budget to commit to, and with what confidence?

Critical path under uncertainty
Which tasks drive the date, and how often?

Quantified risk register
What does each risk add in days and money?

Mitigation: inherent vs residual
Is the response worth its price, and what is the most to pay?

Shared causes and links
What happens when one supplier affects several things at once?

Joint confidence level
Which date and budget to meet together at 80%, and with what contingency?

Probability of success
What is the chance of delivering the benefits, not just the schedule?

AI assistance
Drafts the model, checks the schedule and writes technical and executive reports.

What a project director gets

- **A date and a budget with their confidence:** “80% chance of finishing by August 20”.
- **A contingency that can be justified:** calculated, not negotiated.
- **The risks that matter,** ranked by the days and money they add.
- **A business case for each response** and its break-even price.
- **Early warning on value** and board-ready AI reports, as PDF or editable PowerPoint, in five languages.

How it fits into existing work

- **MS Project:** imported and saved back in the same format, with the risk model inside.
- **Jira and agile teams:** starts from the team’s own delivery history.
- **Excel:** the iziRisk Quantum add-in brings the same simulation into Excel.
- **Review before each run:** every input marked by its source: your file, an example, the AI or your own edits.
- **AI that assists and never decides;** courses and a panel of experts who answer.

Next step: a pilot on a real project

We start from your MS Project schedule and your risk register, and return the date and budget at different confidence levels, the risks ranked by impact and the analysis of the main responses. Your team sees the method applied to a project it already knows.

Fernando J. Hernández
Consulting and Training Manager
IZIRISK, INC
fhernandez@izirisk.com
+506 7253 9597 · phone and WhatsApp

iziriskhub.com