

**Build it once and reuse it
everywhere...**

...the Uncertainty Power Plant

**RISK
AWARENESS
WEEK²⁰²²**



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Who is a Risk “Mad Scientist”?



Mad Scientist

A stock character of a scientist who is described as “mad” or “insane” ...

...owing to a combination of unusual or unsettling personality traits...

...and the unabashedly ambitious or hubristic nature of their experiments.



Risk “Mad Scientist”

A traditional “Management Consultant” who has realized the damage done by single point estimation in forecasts (the Flaw of Averages)...

...and that most generally accepted methods of assessing risk are faulty and expose the enterprise to more danger.

Often has an ability to help leaders understand measurable implications of uncertainty in decision-making...

...but whose methods seem unusual or unsettling to other “Management Consultants”



We do the same thing with our risk models

The typical risk management activity...
...Monitoring budget to actuals

Product Revenue \$ Forecast

Estimate	Actual	Variance %
\$ 637 M	\$ 393 M	-38%
\$ 687 M	\$ 910 M	32%
...
\$ 824 M	\$745 M	-10%

IT Project Hours Estimate

Estimate	Actual	Variance %
515	592	15%
452	922	104%
...
735	988	34%

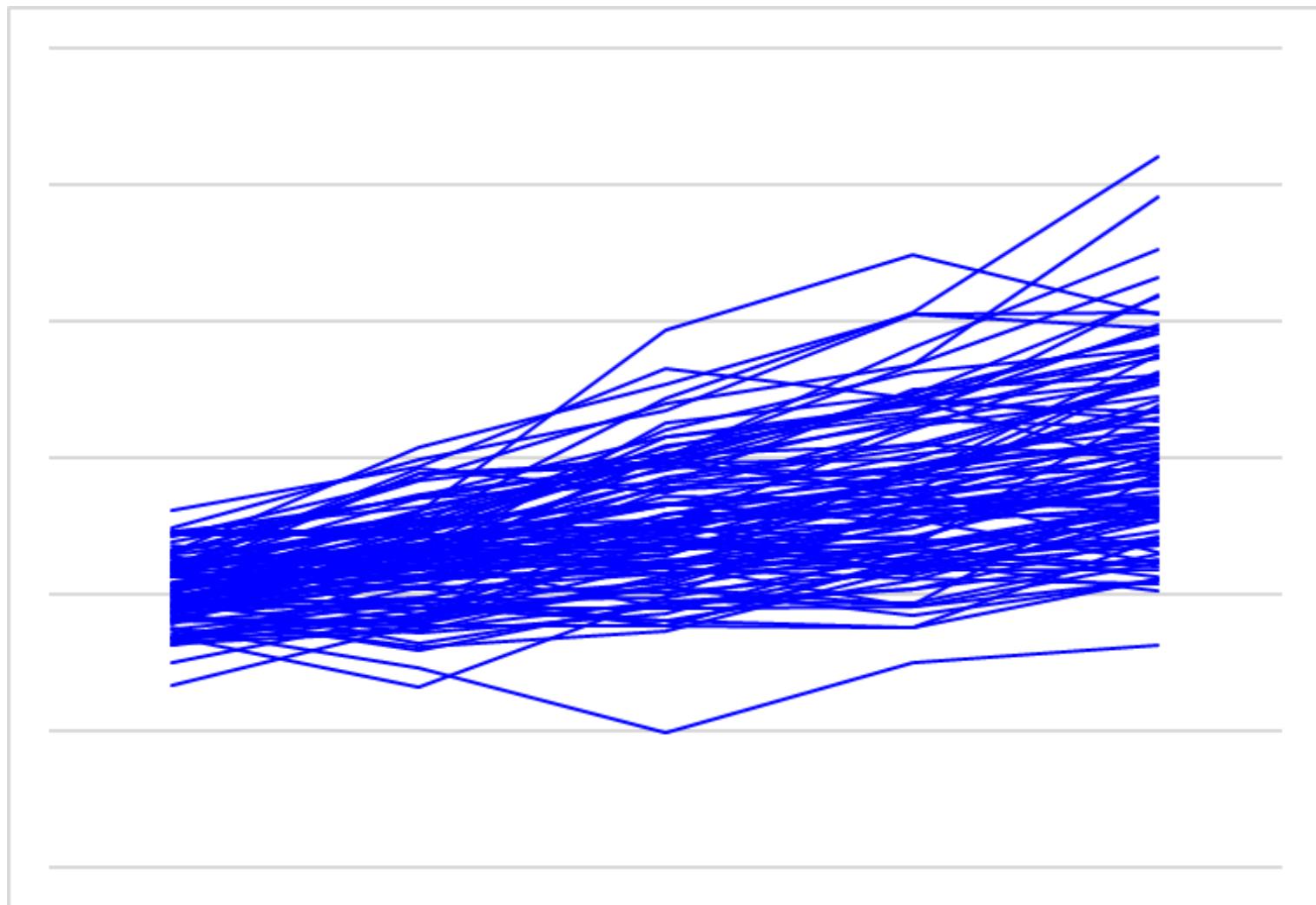
We will just make a guess
for our next estimate.



We do the same thing with our risk models

Sometimes we invest even more in risk...
...Building risk models

Volume Forecast Model



We will just give them
one number!



What is an Economic Capital (ECap) Model?

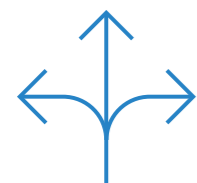
The goal of an ECap Model is to provide comprehensive financial & risk insights to inform capital and strategic decisions.



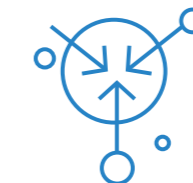
Risk adjusted returns



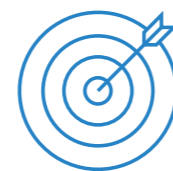
Capital intensity



Capital fungibility and effective deployment



Diversification value

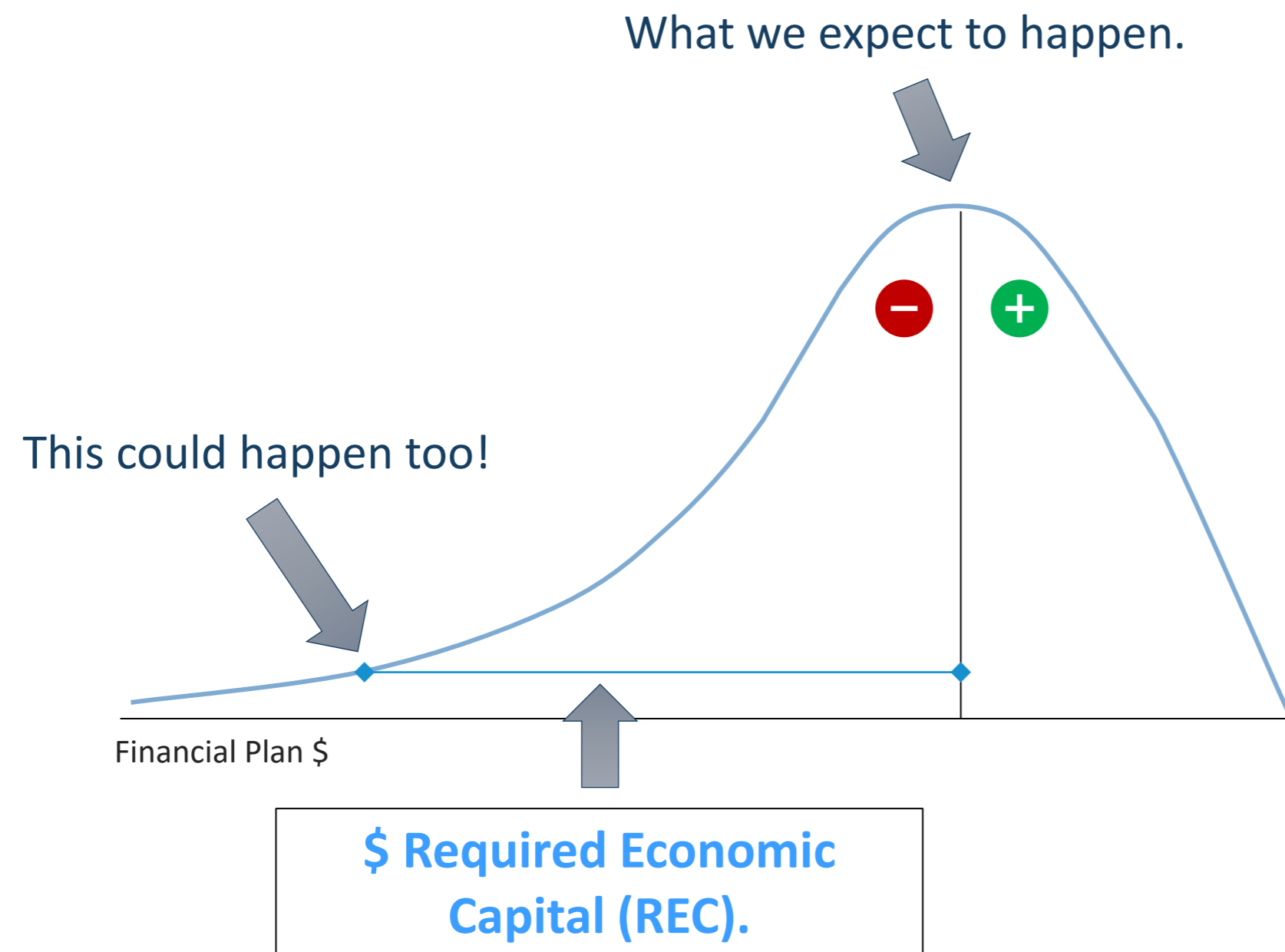


Differential treatment of core mission vs. investment businesses

What is an Economic Capital (ECap) Model?

It measures the uncertainty of your financial plan... .. and how good you are at forecasting!

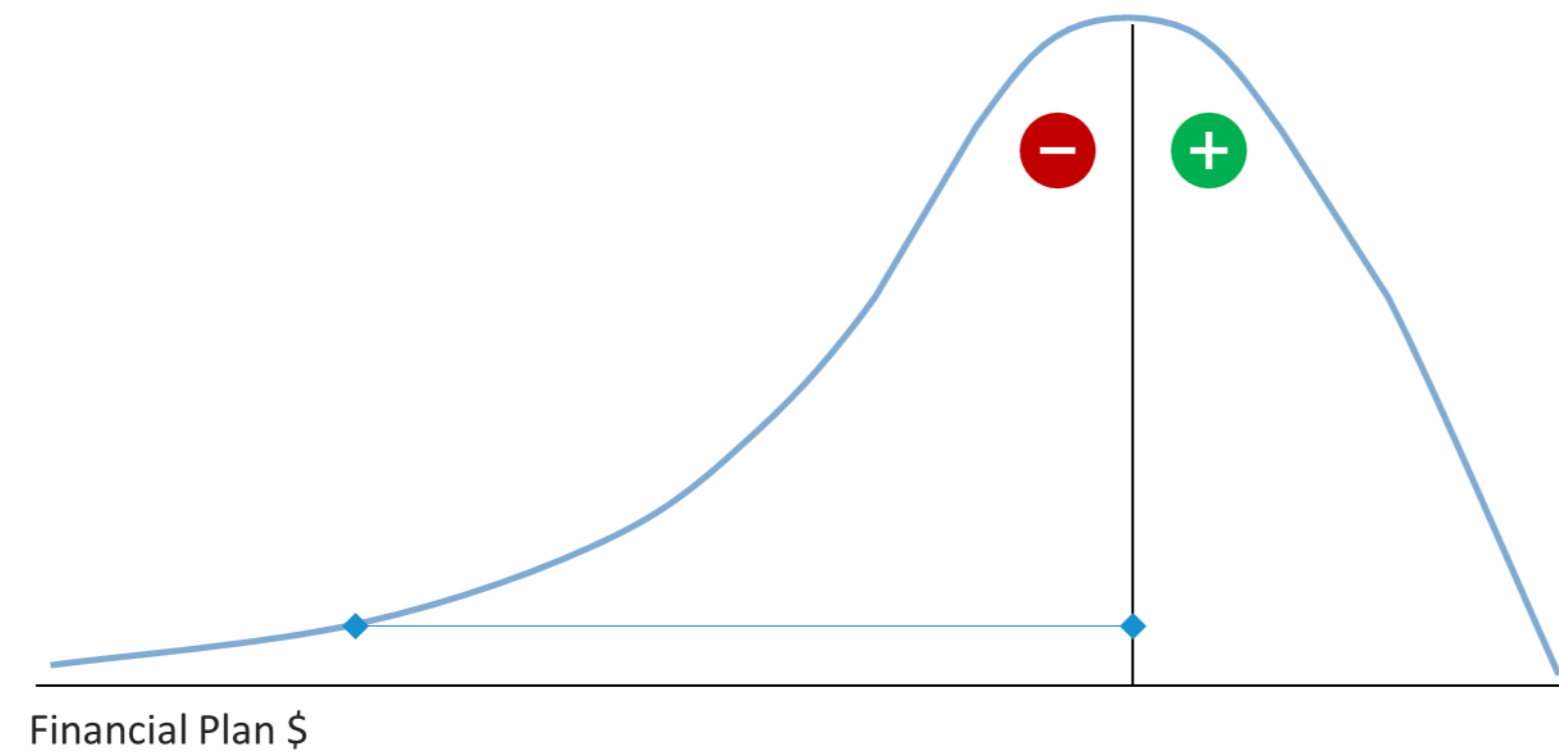
How the model works!



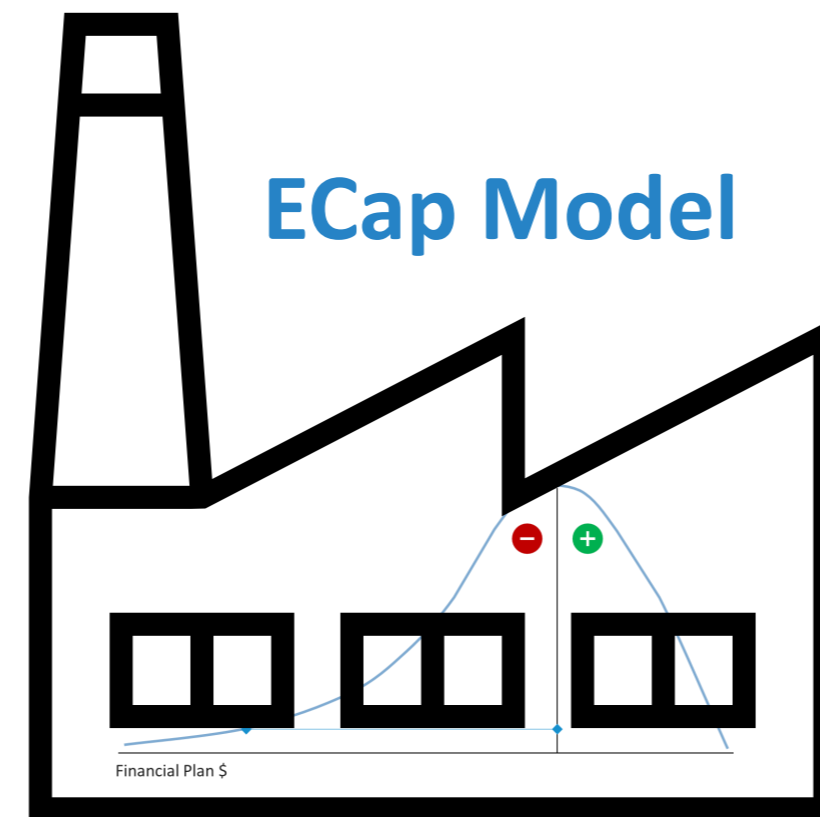
The modeling outcomes!

- 1 Assess capital availability
- 2 Evaluate diversification and fungibility
- 3 **Measure a broad quantification of financial risk**
- 4 Evaluate risk-adjusted performance
- 5 Support strategic decision making, including M&A

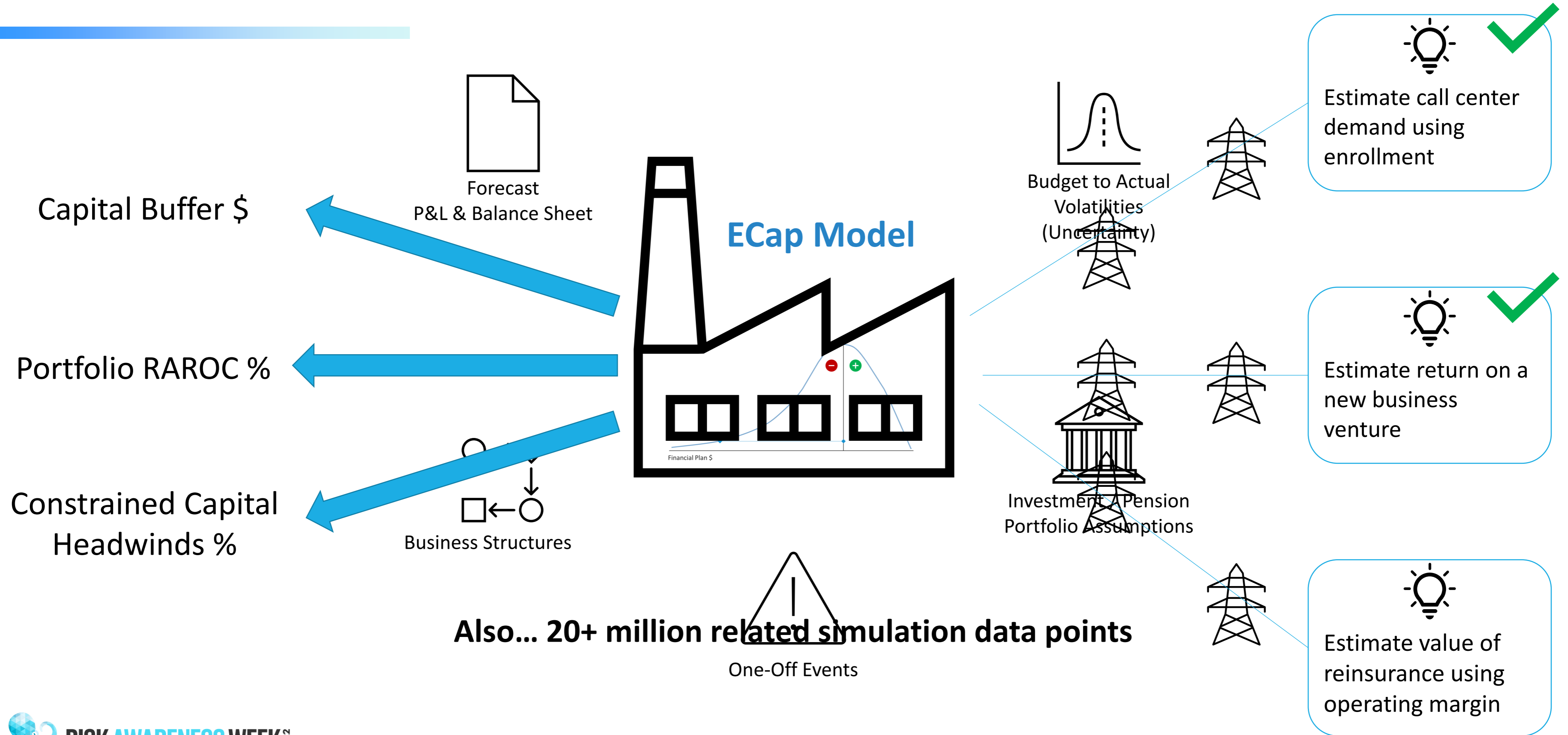
What is an Economic Capital (ECap) Model?



The Uncertainty Power Plant



The Uncertainty Power Plant



Powering light bulbs with the Uncertainty Power Plant

Decision #1

How many people do we need in the call center next year?

Powering light bulbs with the Uncertainty Power Plant

Decision #2

Is this new business venture a good idea?

Next Steps



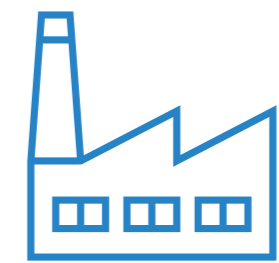
Have the courage to make bold decisions in the face of uncertainty...



Learn how to make simple models using the SIPMath Tools...



Capture some oil from one of your operational processes, make a SIP, and use it in a decision...



Pick a broad financial model to build into an uncertainty powerplant...

Resources

What do I read?

Chancification: How to Fix the Flaw of Averages

- Sam Savage

The Failure of Risk Management: Why It's Broken and How to Fix It

- Doug Hubbard

Decision Quality: Value Creation from Better Business Decisions

- Spetzler, Winter, & Meyer

Where should I visit?

Probability Management.org

- www.probabilitymanagement.org
- www.edx.org

Risk-Academy Blog

- riskacademy.blog

Hubbard Decision Research

- hubbardresearch.com/