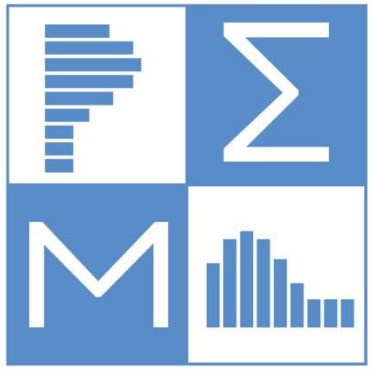

Probability Management

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2017 Annual Conference

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We gratefully acknowledge the support we have received form the following organizations

- Foundation for Creativity in Dispute Resolution
- Computer Law LLC

Probability Management

- Why
- What
- How

Probability Management: Why

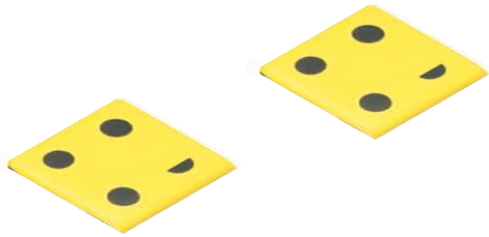
The Flaw of Averages

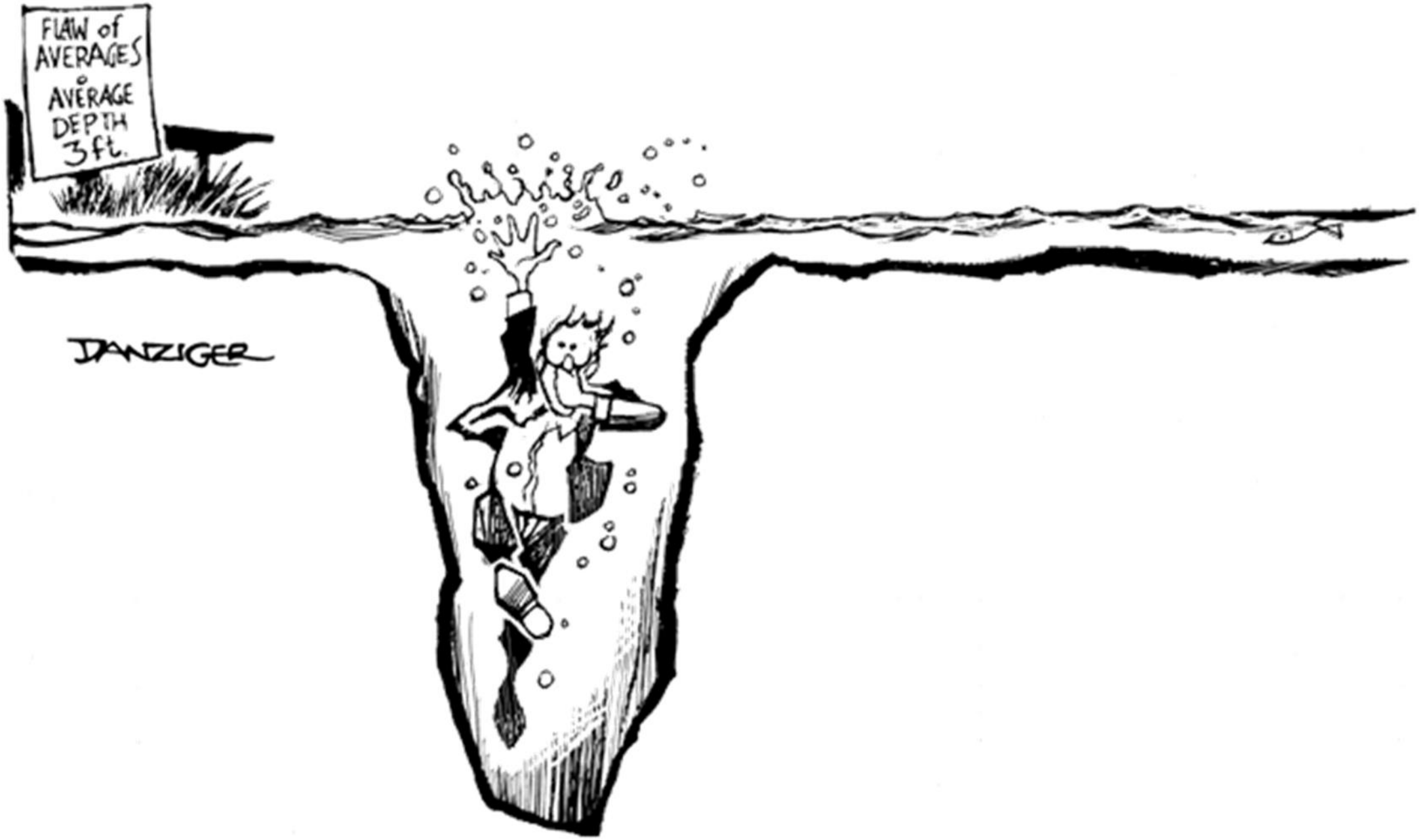
A Set of Systematic Errors That Occur When Uncertainties are Replaced with Single Numbers

The Flaw of Averages

Plans Based on Average Assumptions

Are Wrong on Average




FLAW of AVERAGES
AVERAGE DEPTH 3ft.
DANZIGER

Explains why so many things are

Behind schedule

Below projection

Beyond Budget

Examples

Probability Management: What

Simulation Cures the Flaw of Averages

But…

Probability Management: What

The general public cannot use ***simulation*** because they don't know how to generate the required distributions of ***random numbers***.

Does this mean the general public cannot use ***lightbulbs*** because they don't know how to generate the required ***electricity***?

Probability Management: What

The Power Grid of Probability

The “Electricity” Represents Uncertainties as Arrays of Auditable Data (SIPs). Stochastic Information Packets

The “60 Cycle AC 110 standard” is the SIPmath™ Standard, which guides the structure and Meta Data of the SIPs.

SIPs are vectors of potential outcomes of an uncertainty.

Probability Management: What

Why Now?

Microsoft Excel became powerful enough to process SIPs without macros or add-ins.

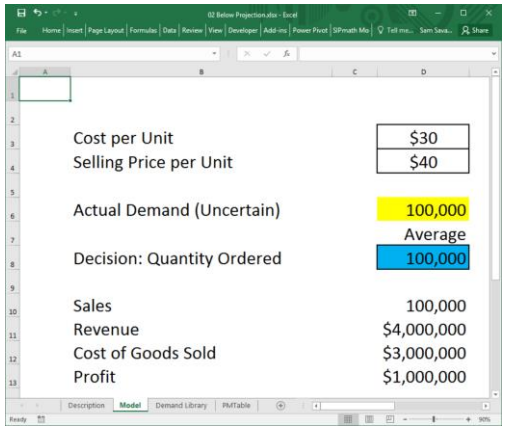
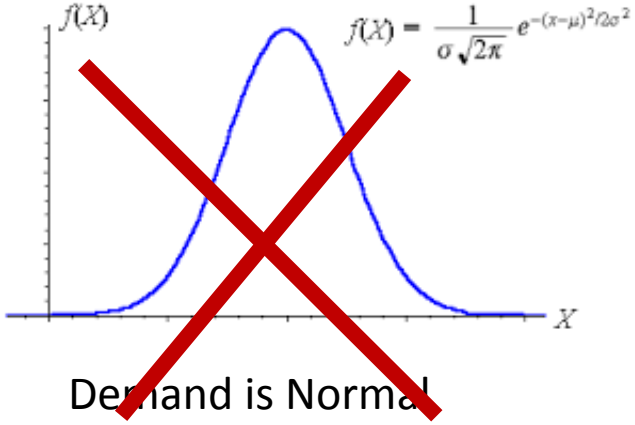
Probability Management: What

“Transformational” Gartner Inc.

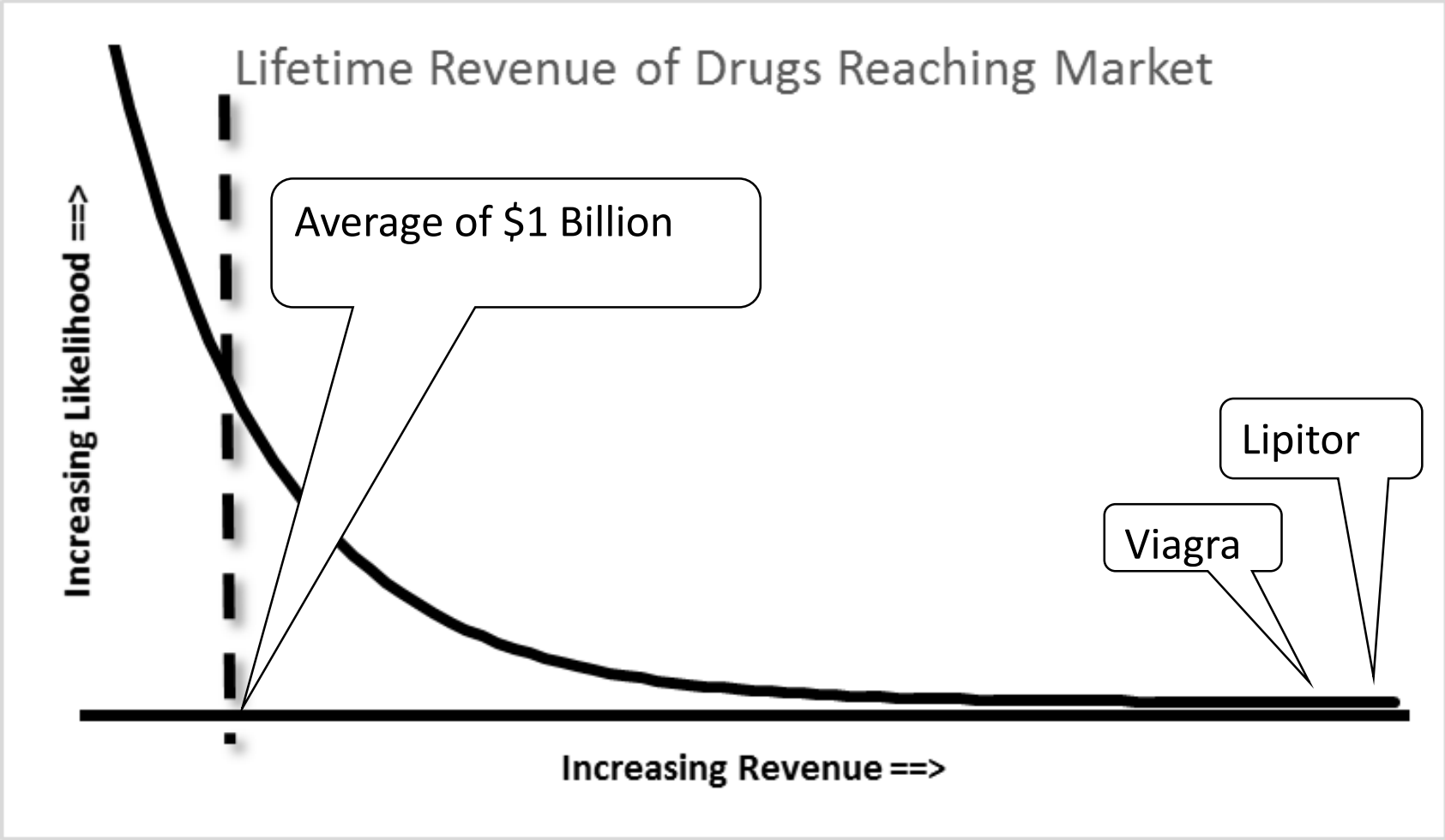
Examples

SIPmath™ Open Standard for Conveying Uncertainty

- Actionable
- Additive
- Auditable
- Agnostic

		Not Actionable	Actionable
Making Toast		~~900 W~~ ~~60 cycle~~ ~~AC 120v~~	
Making Decisions Under Uncertainty		 Demand is Normal μ=100, σ = 15	SIPmath™ 2.0 Certified Probability Management.org

Additive


Lifetime Revenue of Drugs Reaching Market
Increasing Likelihood ==>
Average of $1 Billion
Lipitor
Viagra
Increasing Revenue ==>

Auditable

Distributions Stored as Auditable Data with Provenance

Agnostic

SIPmath™ 2.0
Certified

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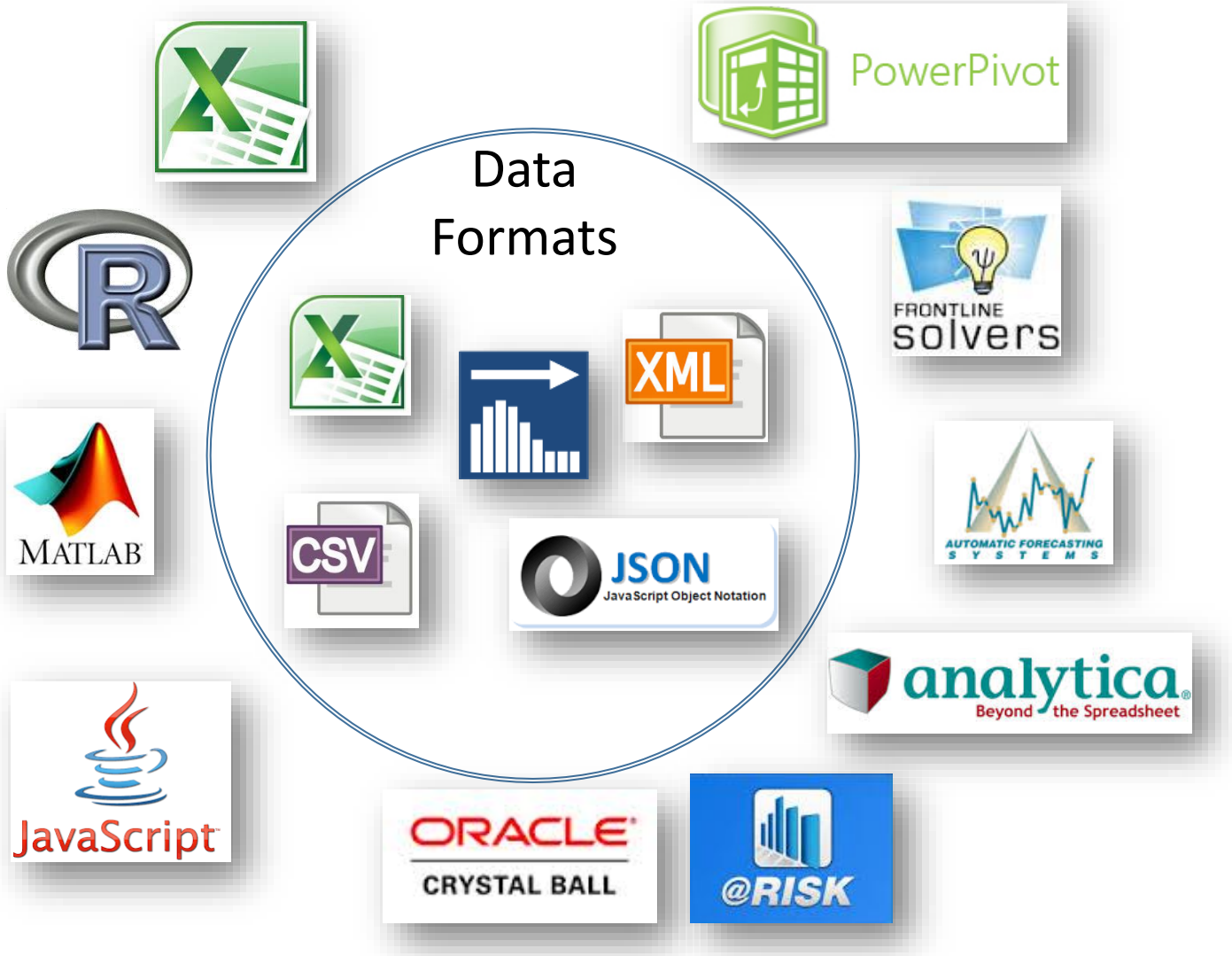
Management.org

- Actionable
- Additive
- Auditable
- Agnostic



Probability Management: How

That’s what the conference is about

So no one is representing uncertainties using averages any more, right?