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STOP PREDICTING, START FORECASTING

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2017 Project Management Symposium

About Me

http://pmsymposium.umd.edu/pm2017/

- 30+ years in Information Technology
- Systems analyst / technical project manager
- Agile evangelist
- Adjunct professor @ Palm Beach State College
- Pluralsight author
- Presenter @ 2016 PMI Global Congress

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Learning Objectives

- Distinguish between *predictions* and *forecasts*

- Understand how *forecasting* equips decision-makers to make better decisions

- Recognize that anyone can create project forecasts using Statistical PERT®

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We call them…

WEATHER FORECASTERS
(NOT WEATHER PREDICTORS)

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Meteorologists

- Make both predictions and forecasts
- Collect data about atmospheric conditions from 10,000 worldwide weather stations
- Use thousands of ships
- Use 500 weather balloons
- Plus aircraft and satellites

Predictions v. Forecasts

- Predicting is, "a specific estimate of the expected value of a key variable at a future point in time,"
- Forecasting is, "an estimate of the probabilities of the possibilities for a key variable at a future point in time"

Source: Bauer, J. C. (2014). Upgrading Leadership's Crystal Ball. Boca Raton, FL, USA: CRC P

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Predicting weather temperatures

Forecasting the chance of rain

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DAY		DESCRIPTION	HIGH / LOW	PRECIP
TONIGHT APR 20		Partly Cloudy	--/72°	20%
FRI APR 21		Mostly Cloudy	82°/73°	20%
SAT APR 22		Mostly Cloudy	83°/73°	10%
SUN APR 23		Thunderstorms	82°/70°	100%
MON APR 24		Partly Cloudy	86°/64°	20%

Forecasting a hurricane's path

Predictions

- Do not indicate how likely they are to occur
- Fail to align stakeholder expectations
- Do not lead to informed decision-making by organizational leaders

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Forecasts

- Indicate *how likely* they are to occur
- Align stakeholder expectations
- Allow an organization to match project estimates to the risk policy of the organization (or project)
- Permit dynamic and right-sized project buffering
- Create better, more informed decision-making by organizational leaders

PROJECT FORECASTING

Which project will you choose?

- Three projects: A, B and C
- Each project's expected revenue benefit is **$2.5M**
- Expected value is a deterministic estimate
- This is a prediction—no sense of risk

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Which project will you choose?

- **Project A** has a 67% chance of earning at least $2M of revenue
- **Project B** has an 83% chance of earning nothing at all
- **Project C** has a 50% chance of losing money, and 50% chance of making money
- These are forecasts—you get a sense of risk

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Which project will you choose?

Die Roll	Proj. A	Proj. B	Proj. C
"1"	$0	$0	$1
"2"	$1	$0	$2
"3"	$2	$0	$3
"4"	$3	$0	$0
"5"	$4	$0	$6
"6"	$5	$15	$15
	$2.5	**$2.5**	**$2.5**

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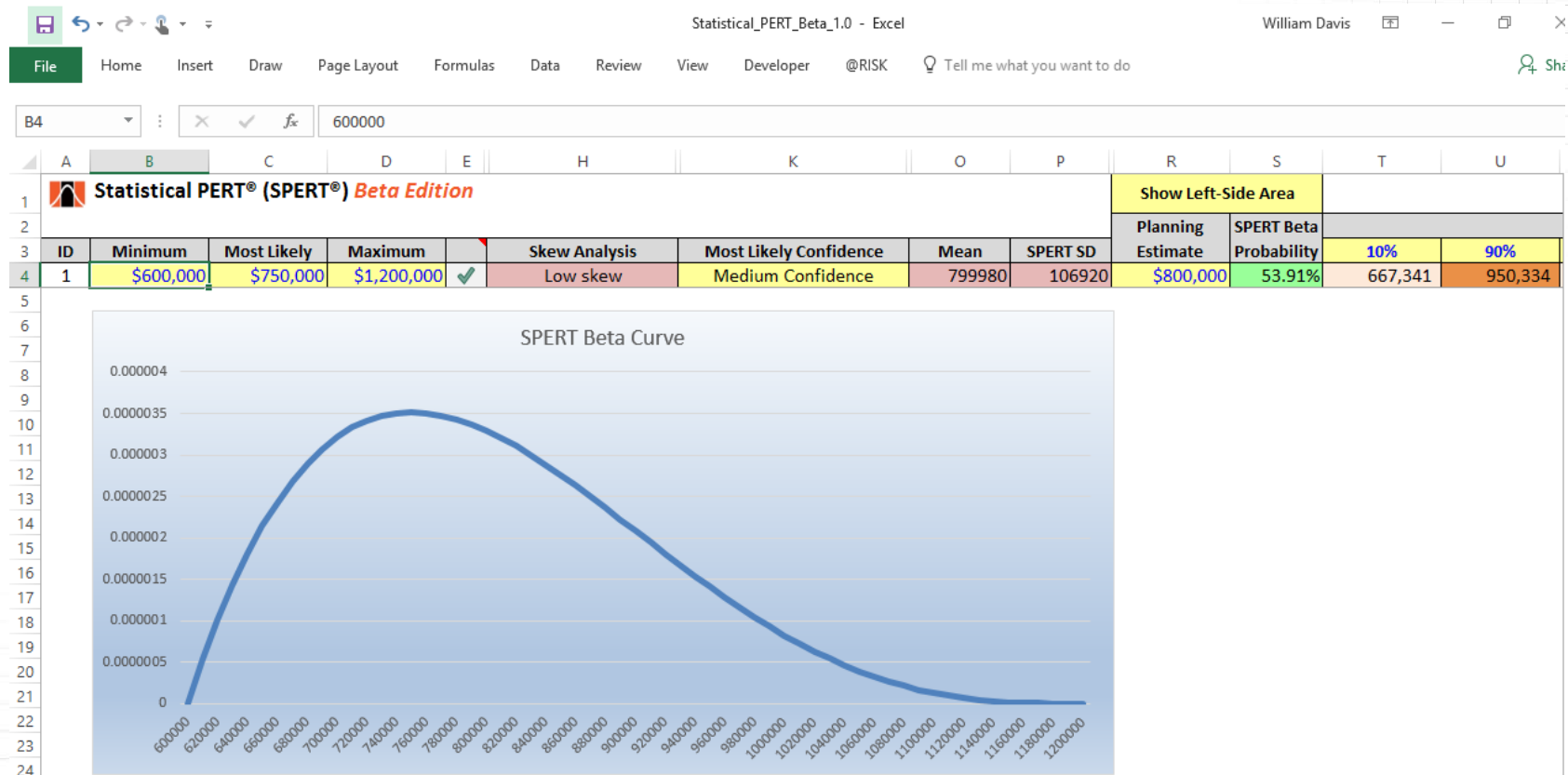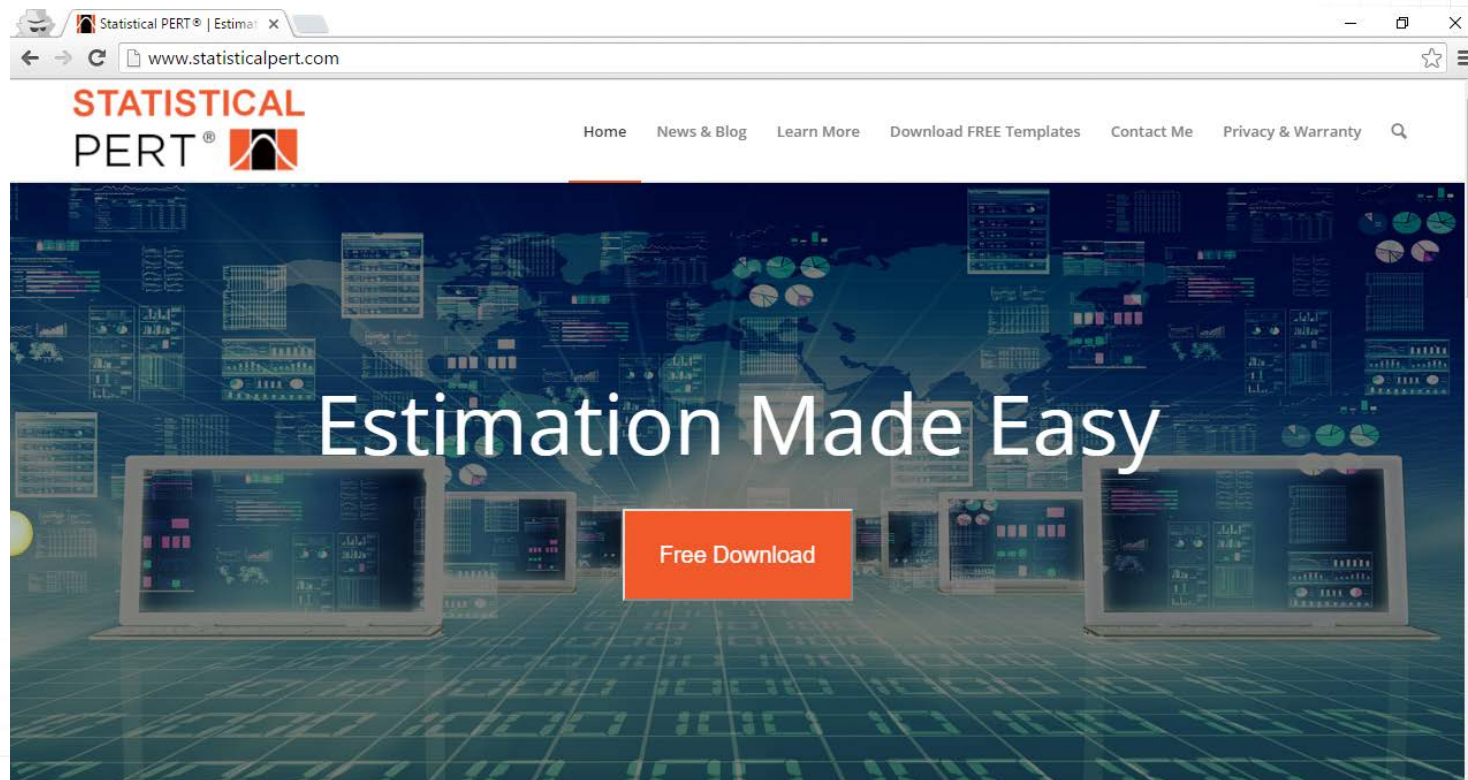http://pmsymposium.umd.edu/pm2017/

Anyone can make project forecasts!

STATISTICAL PERT®

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