AGILE FORECASTING WITH THE WISDOM OF CROWDS

MORE SCIENCE IN AGILE!
INTRODUCTIONS

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WARNING / DISCLAIMER

There are no answers in this session. Just some really good questions.
THE WISDOM OF CROWDS

JAMES SUROWIECKI

WITH A NEW AFTERWORD BY THE AUTHOR
average of 800 guesses = 1,197
actual weight of the ox = 1,198
SIR FRANCIS GALTON
1822 – 1911
MEDIAN
STANDARD DEVIATION
REGRESSION TOWARD THE MEAN

(PROMOTED)
"NATURE VERSUS NURTURE"
CLASSIFYING FINGERPRINTS
FIRST
WEATHER
MAP
340+ PAPERS AND BOOKS
POPULATION : 17,205
WoC GUESS : 1,287 Lbs
ACTUAL : 1,355 Lbs
VARIANCE : 5%
IDEA
EXPERIMENT?
LET’S EXPERIMENT!

- NEED A DEVICE WITH A BROWSER
- NO BROADCASTING YOUR GUESS
Story:

Title: Agile 2018

Description: How Many Beans?

Put your estimate in here:

0

submit

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HOW MANY JELLY BEANS?
RESULTS...

NUMBER OF PEOPLE:

WISDOM OF CROWDS GUESS:

ACTUAL:
WHAT IS A CROWD?
OUR FIRST EXPERIMENT

- **Actual**: 1009
- **WoC**: 1054
- **Population**: 154
- **Variance**: 4.46%
ANALYSIS

How big is a crowd?
UNKNOWN UNKNOWNS
UNKNOWN UNKNOWNS
UNKNOWN UNKNOWNS

- **Actual**: 843
- **WoC**: 874
- **Population**: 150
- **Variance**: 3.57%
THIS DOESN'T ENTAIL THAT RELATIVE ESTIMATION DOESN'T WORK - ONLY THAT IT IS NOT PROVEN.
RELATIVE ESTIMATION
RELATIVE ESTIMATION

- **Actual**: 1009
- **Average**: 1360
- **Population**: 154
- **Variance**: 35%
BACK TO WORK
WISDOM OF THE CROWDS

WoC : 33 PERSON DAYS
Population : 50 people
Confidence : 70%
Forecast : 23 – 40 person days
WISDOM OF THE CROWDS

WoC : 33 PERSON DAYS
POPULATION : 50 PEOPLE
CONFIDENCE : 70%
FORECAST : 23 – 40 PERSON DAYS

248 PERSON HOURS
8 HOURS = 31 DAYS | 6%
7 HOURS = 35 DAYS | 6.5%
6 HOURS = 41 DAYS | 8%
MORE SCIENCE IN AGILE
Putting Relative Estimation to the Test

by Ron Quartel
PSYCHOLOGICAL BIASES?
OPTIMISM BIAS

UNDERESTIMATING THE TIME NEEDED – ON ONE’S OWN TASK
PSYCHOLOGICAL BIASES

• Optimism Bias
• Anchoring
• Conformity and Group Think
• Communal Reinforcement
1951
SOLOMON
ASCH
CONFORMITY
EXPERIMENT
PSYCHOLOGICAL BIASES

• Optimism Bias
• Anchoring
• Conformity and Group Think
• Communal Reinforcement
MORE SCIENCE IN AGILE
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