



Making Better IT Cost & Scope Decisions with Top-Down Estimation

Keith Ciocco

Vice President

Quantitative Software Management, Inc.

www.qsm.com

Keith_Ciocco@qsm.com



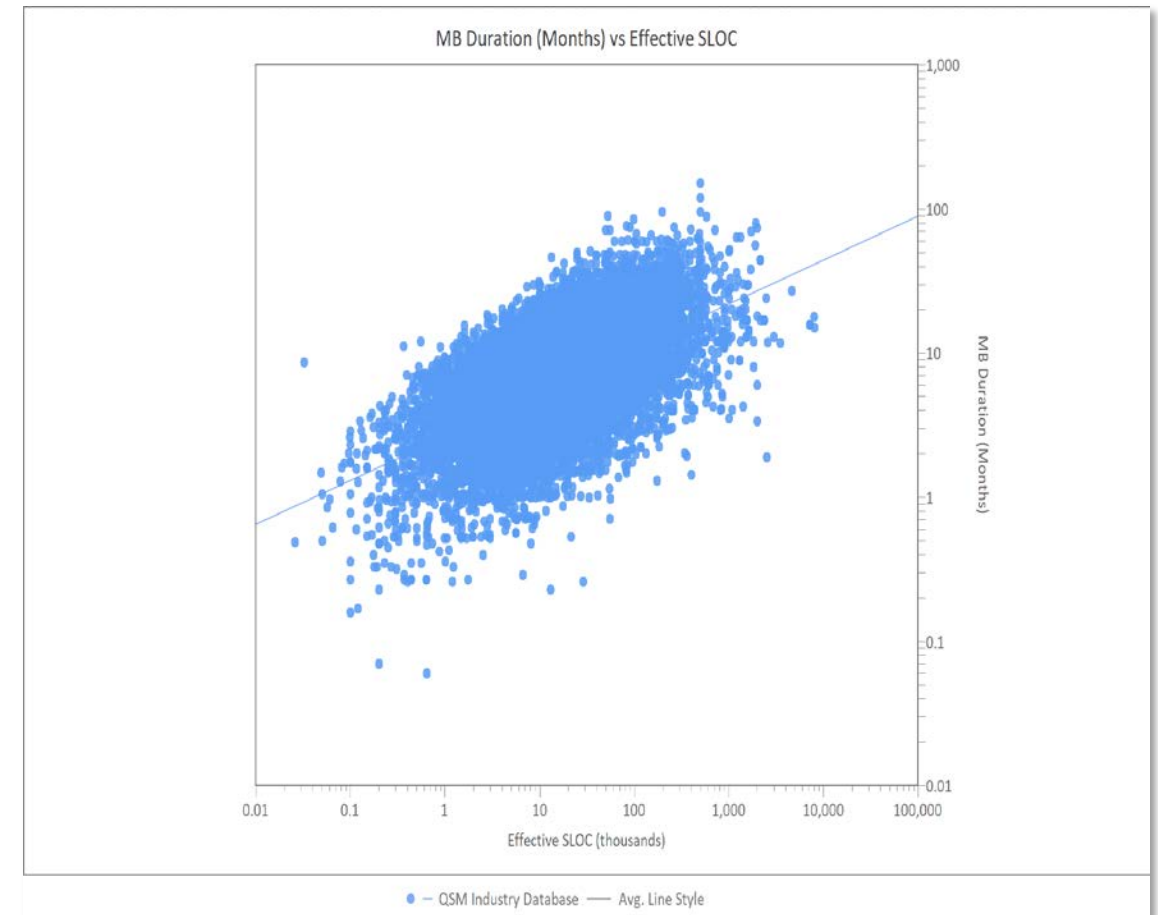
Experts in Estimating, Tracking, and Benchmarking

- 44 year track record of innovation and success
- Developers of the SLIM-Suite of estimation and metrics tools
- Leading product and services company, thought leader, and research provider
- We help our clients plan and negotiate their project and portfolio development and delivery more effectively, saving big money and time

The QSM Industry Database - Over 44 years of Research



- Industry-leading research that validates the SLIM estimation model, over 13,000 completed projects
- Gives us a good understanding of the fundamental relationships
- Provides the latest information on cost, duration, effort, reliability, team size, and scope, which we leverage to help our clients



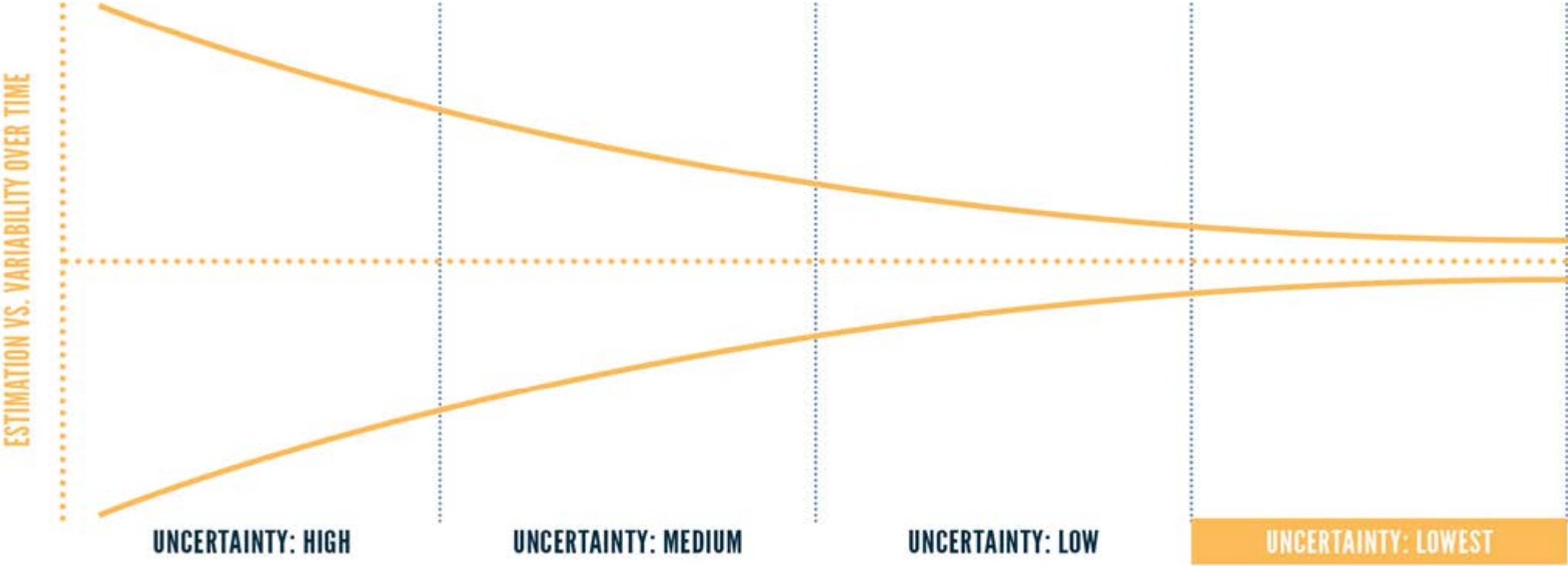
Top-Down Estimation



- Estimating the overall release or project first, based on scope and historical data.
- Then based on those initial high-level estimates, we can follow with estimates at a more detailed level.



Cone of Uncertainty-We Want to Manage This When Estimating!



Benefits to Using a Top-Down Approach



- Provides the ability to see the “Big Picture” and generate reliable early estimates before detailed planning takes place
- Provides the ability to make go or no-go decisions and perform risk trade-off analysis when only a small amount of information is available
- Increases the chance of meeting cost, staff, scope, schedule and quality targets
- Improves negotiation and communication capabilities
- Helps manage the uncertainty that comes with early decisions



Polling Question- Approximately 1 minute to answer



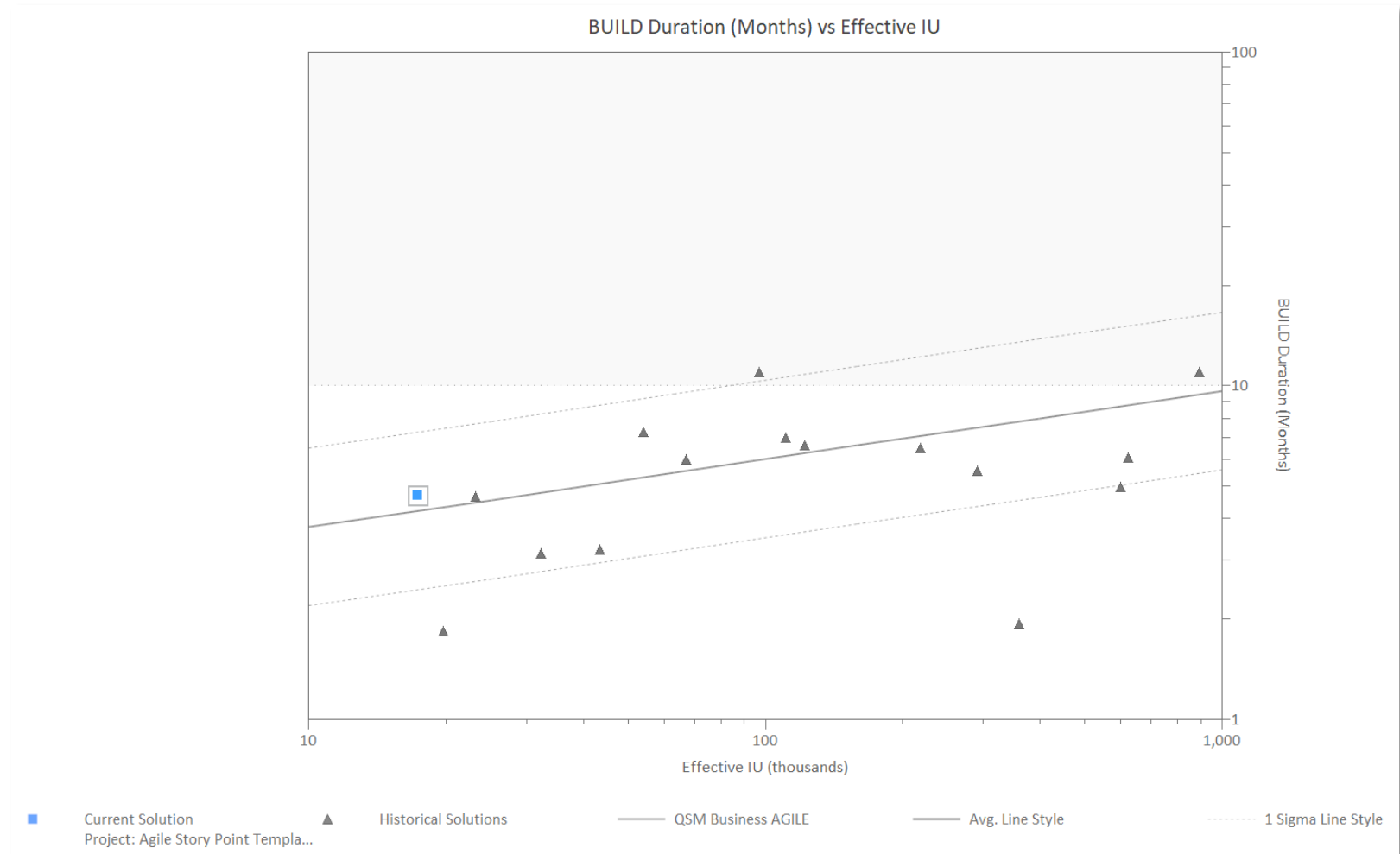
How do you currently estimate your projects?

- Top-Down
- Experience
- Bottom-Up
- Spreadsheets
- Gut Feel
- None of the above

QSM Recommended Historical Data for Top-Down Estimates



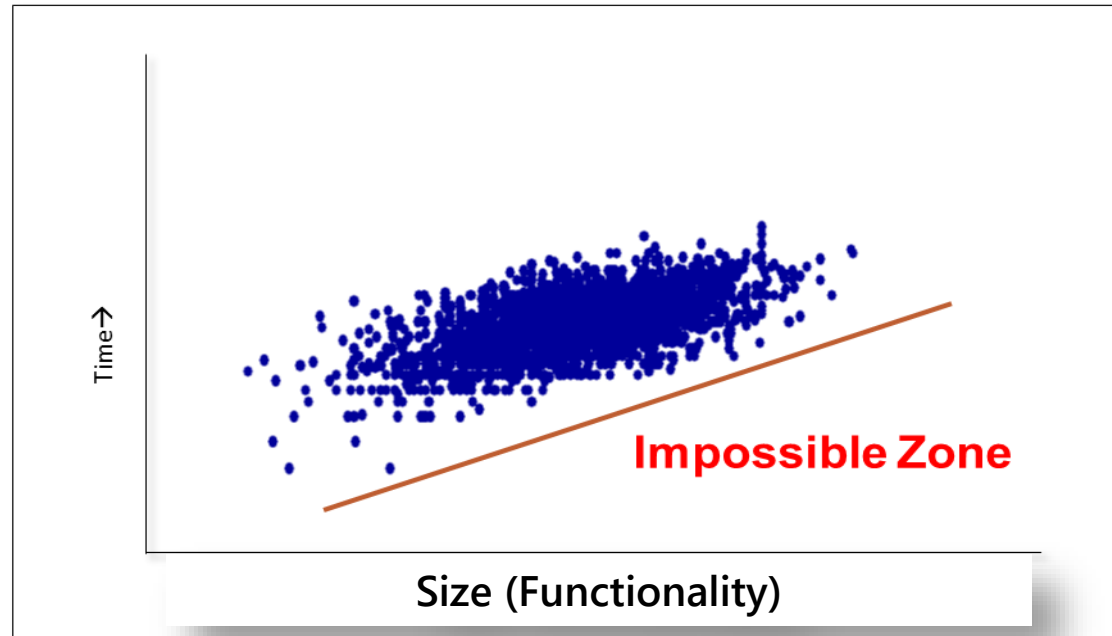
- Size/Scope
- Duration
- Effort
- Productivity



Understanding The “Impossible Zone”



Studying data relationships helps improve estimation and risk management capabilities.



The Software Production Equation



Delivered
System
Size

Is proportional
to

Effort

over

Time

at some
level of

Productivity

Value Delivered

Resources Expended

Duration Required

Influenced by
Capability and
Difficulty of the task

This equation can be re-arranged to solve various estimation problems

SLIM-Suite for Estimating, Tracking, and Benchmarking



Pause for Questions



Questions?



Please feel free to contact me with any questions. Thank you!

Keith Ciocco

Vice President

QSM Inc.

Keith_Ciocco@qsm.com

703-749-3812

www.qsm.com

