



The Intelligence behind Successful Software Projects

Leverage Top-Down Estimation for Better IT Planning

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Vice President

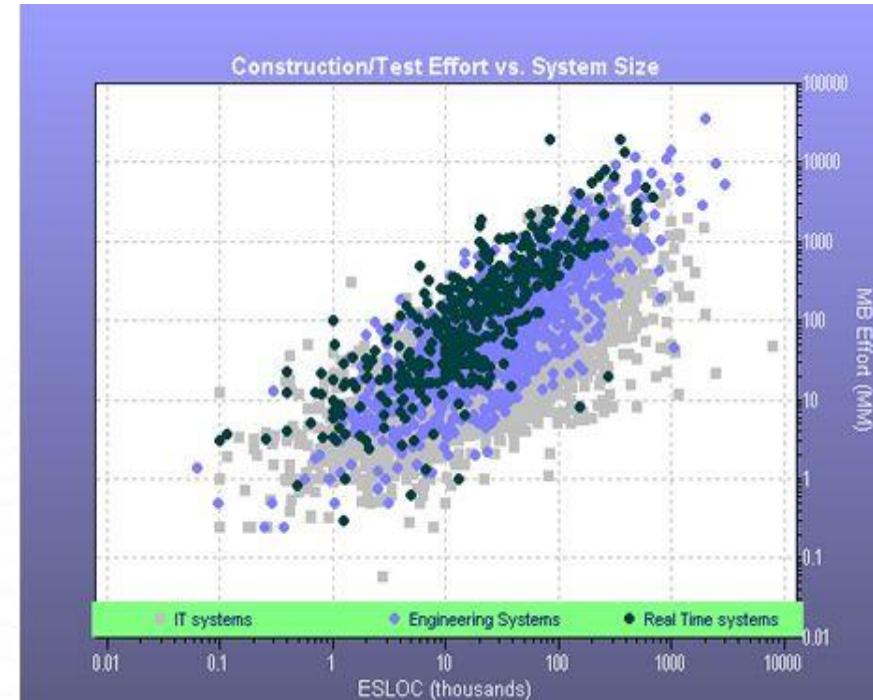
Quantitative Software Management, Inc.

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- Experts in the Field of Project & Portfolio Estimation & Metrics
 - 43 year track record of innovation and success
 - Developers of the SLIM-Suite of estimation and metrics tools
 - Leading product & services company, thought leader, and research provider
 - We help our clients plan and negotiate their project cost, duration, & quality targets more effectively, saving big money and time

- 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 software cost, duration, effort, reliability, team size, and scope, which we leverage to help our clients



The Software Production Equation



Delivered System Size Is proportional to Effort over Time at some level of Productivity

Value Delivered

Resources Expended

Duration Required

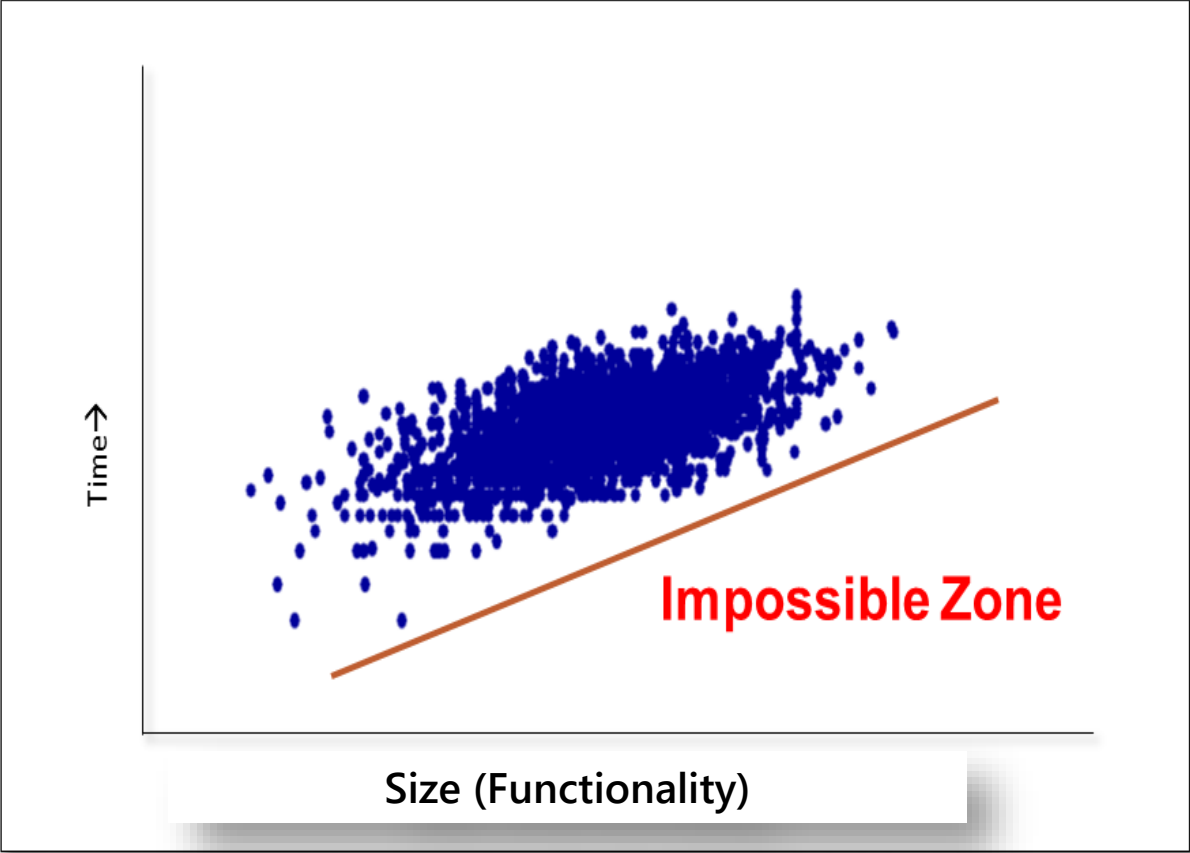
Influenced by
Capability and
Difficulty of the task

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

- Minimal information available
- Short time frame to make decisions
- No data driven approach
- Unrealistic cost, scope and schedule targets
- No “Big Picture” analysis available

- Generate top-down estimates before detailed planning
- Leverage sizing and historical data
- Leverage empirically based models and industry data to evaluate risk
- Leverage analytics to communicate and negotiate





The screenshot shows the SLIM-Collaborate web application interface. A dialog box titled "Edit Estimate Project: Program Increment 3" is open, displaying the "Sizing" tab. The dialog contains the following information:

- Project Settings** (selected tab): Assumptions, Sizing, Description, Access
- Solution Method**: Method: Feasibility (dropdown). Description: "The Feasibility solution method produces early ROM estimates using high-level size inputs, your desired schedule and staff/cost goals. These solutions should be validated against industry or your own data to ensure they are achievable. This method is used early in the requirements definition phase when detailed requirements are fuzzy, but schedule and budget are known. [Read Less]"
- Project Start**: Development Start: 13-May-2019 (calendar icon)
- Phase Tuning Override**: Use Phase Tuning from Trends
- Size**: Effective IU: 276,903
- Duration**: Months Available: 6.00 (input field)
- Goal**: Goal Type: Average Staff (dropdown), Goal: (FTE): 25.00 (input field)

The background shows a "Time Series: Staffing" chart with "FTE per Month" on the y-axis (0 to 35) and months on the x-axis (Jun 19, Jul 19, Aug 19). A green area chart shows staffing levels increasing from June to July and remaining constant through August. Below the chart are "Chart Type" (Time Series) and "Metric" (Staffing) dropdowns, and checkboxes for "Text", "Comparison solution", and "Legend".

Leads All Leads - Dynamics 3 | Feed | LinkedIn | Saved Lead Searches | Sales | Inbox | Sales Navigator | Webinars | QSM SLIM-Estima | SLIM-Collaborate - Project: P | + - [Paused]

keith.collab.qsm/qsmcollab/project/current/60/program-increment-3

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Est Program Increment 3 Current Solution

The Dashboard is modified.

* 00 FEASIBILITY ASSESSMENT

Time Series: Staffing

Staffing

FTE per Month

Jun 19 Jul 19 Aug 19 Sep 19 Oct 19 Nov 19 Dec 19 Jan 20

Current Solution Balanced Risk Solution

Chart Type: Time Series Metric: Staffing

Text Comparison solution Legend

Solution Summary

	Current	Balanced
Solution Name	Current Solution	Balanced Risk Solution
Solution Workflow Status	Estimate Approved	
Start Date	5/13/2019	5/13/2019
End Date	11/11/2019	1/16/2020
Total Duration	6.01 Months	8.18 Months
Total Effort	25,792 Phrs	44,791 Phrs
Total Cost	3,175,456 USD	5,514,656 USD
Total Avg Staff	24.80 FTE	31.65 FTE
Effective IU	276,903 IU	276,903 IU
Productivity Index	24.5	22.1
Development Duration	6.01 Months	8.18 Months
Development Effort	25,792 Phrs	44,791 Phrs
Development Cost	3,175,456 USD	5,514,656 USD
Development Avg Staff	24.80 FTE	31.65 FTE
Development Constr Rate	46,073.71 IU/Mo	33,851.22 IU/Mo

Chart Type: Summary

Comparison solution

Trend: Total Effort

QSM Business GOVERNMENT Trends

Total Effort (Phrs)

Effective IU

Balanced Risk Solution: Total Effort is Typical.

Current Solution: Total Effort is Moderately Risky.

Chart Type: Trend Metric: Total Effort

Text Comparison solutions

Please feel free to contact me with any questions.

Thank you!

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