

# Leveraging Historical Data for Better Software Development Estimation

111

Keith Ciocco Vice President Quantitative Software Management, Inc. <u>www.qsm.com</u> Keith\_Ciocco@qsm.com Experts in Project Estimation, Tracking, and Benchmarking

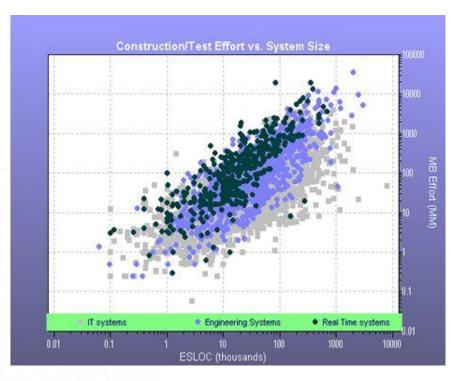
- 43 year track record of innovation and success
- Developers of the SLIM-Suite of estimation and metrics tools
- Leading product & services company, thought leader, and research provider
- We help our clients plan and negotiate their project and portfolio development & delivery more effectively, saving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



(#2)

#### The QSM Industry Database - Over 43 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 software cost, duration, effort, reliability, team size, and scope, which we leverage to help our clients

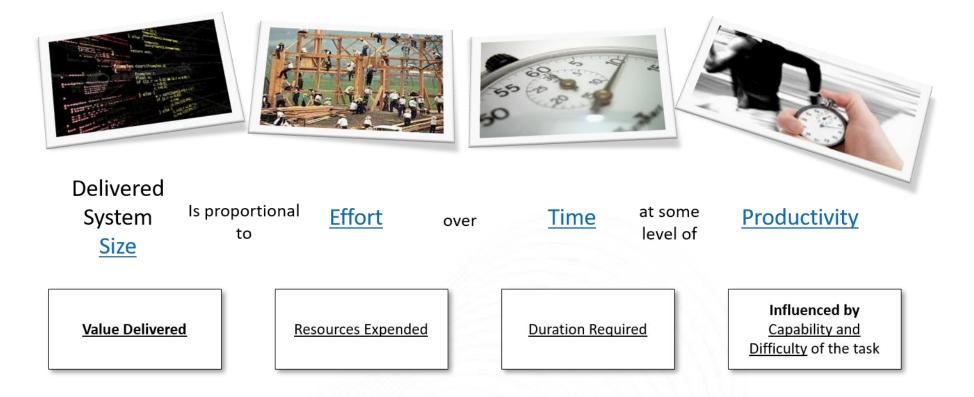




(#3)

#### The Intelligence behind Successful Software Projects

# The Software Production Equation- Key to Historical Data Focus



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

(#4)

#### **Benefits to Leveraging Historical Data**

 Helps uncover strengths and weaknesses for process improvement

 Improves estimation capabilities on in-house & vendor development

Enhances proposal work and the ability to win business

Increases negotiating capabilities





(#5)

What Type of Historical Data are you currently capturing?

(Please choose as many as apply to you)

– Size

- Duration
- Effort
- Cost

(#6)

- Peak Staff
- None of the above

The Intelligence behind Successful Software Projects

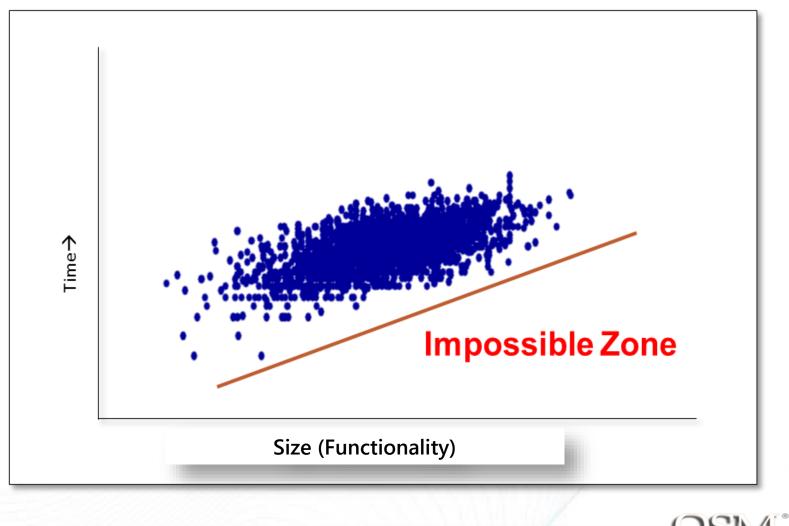
# Streamline your Historical Data Focus for Biggest Impact

		zing Accounting	Custom N	1etrics Quality	Review				
Project Information				Domain			Description		
Project Name	CRM			Software $\sim$					~
Status	Completed		∽ Pi	Predominant Application					
Confidence	Moderate		$\sim$	Realtime					
Preparer Name				i System			Keywords		
Record Creation Date 11/20/2009				E C&C			_	~	Edit
Date Last Modified 1/16/2020				Scientific Process Control					Clear
Docun	nent Links	Edit	(	Business		~		$\sim$	
izing New Modified Unmodified	Requirements Def   Sys 60			m Integration to First Month after					
Phase	Start Date	End Date	Months	PHR	Peak Staff		Staffing Shap	e	
1. CD						Unkno	wn	$\sim$	
2. MACRC	12/12/2005	2/17/2006	2.25	1858.6		Unkno	wn	$\sim$	
3. D,C&T	1/16/2006	4/19/2006	3.15	2262.5	9	Unkno	wn	$\sim$	
4. DEPLY						Unkno	wn	$\sim$	
Life Ovcle	12/12/2005	4/19/2006	4.28	4,121.1	9	PI	= 22.2 MBI = 5	5.7	



(#7)

# Leverage Historical Data to Negotiate and Understand the "Impossible Zone"



(#8)

#### SLIM Suite for Estimating, Tracking, and Benchmarking



# Pause for Questions



The Intelligence behind Successful Software Projects

#### **Questions?**

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

Keith Ciocco Vice President QSM Inc. <u>Keith Ciocco@qsm.com</u> 703-749-3812 <u>www.qsm.com</u>

