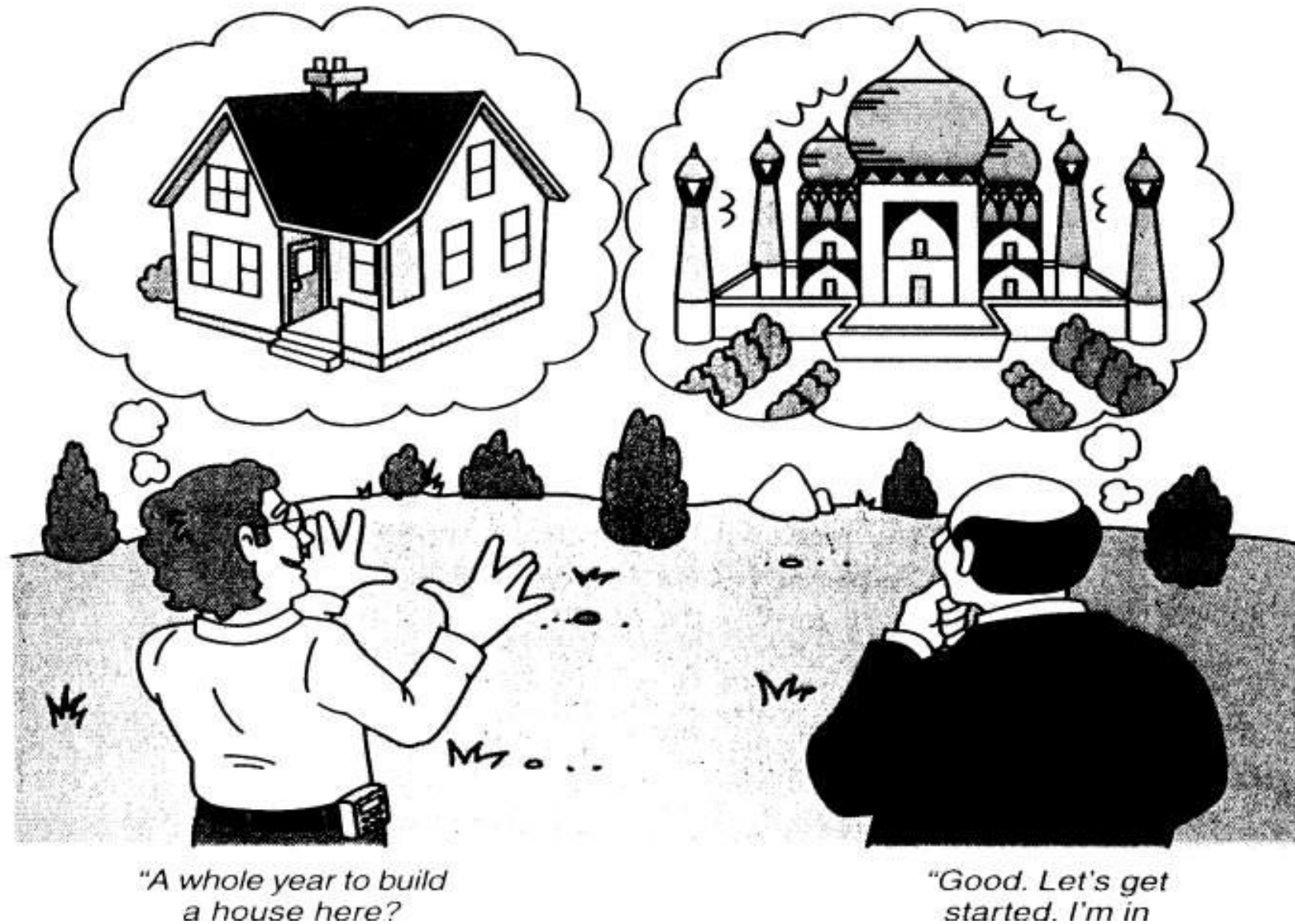
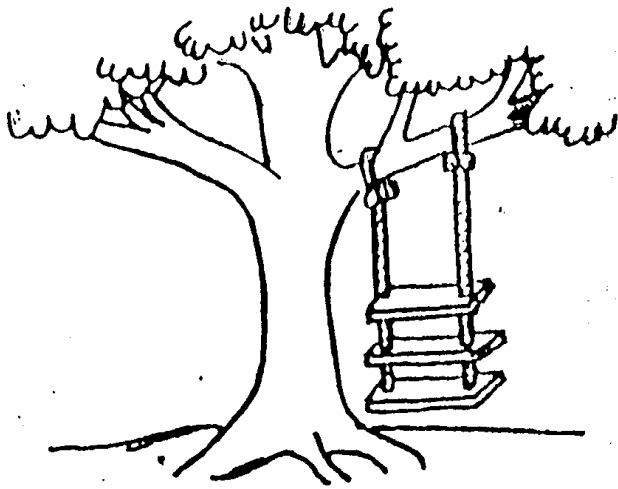


The Good, the Bad and the Puzzling: The Agile Experience at 5 Companies *(Updated!)*

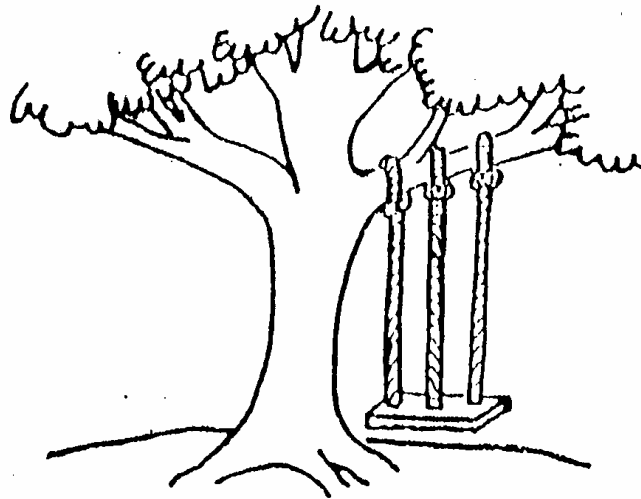


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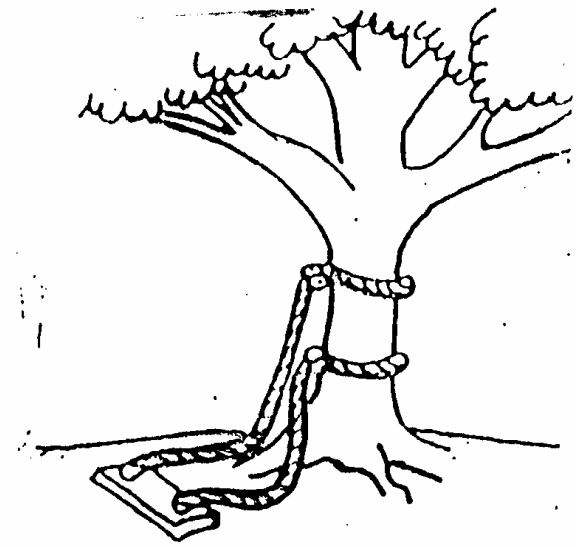




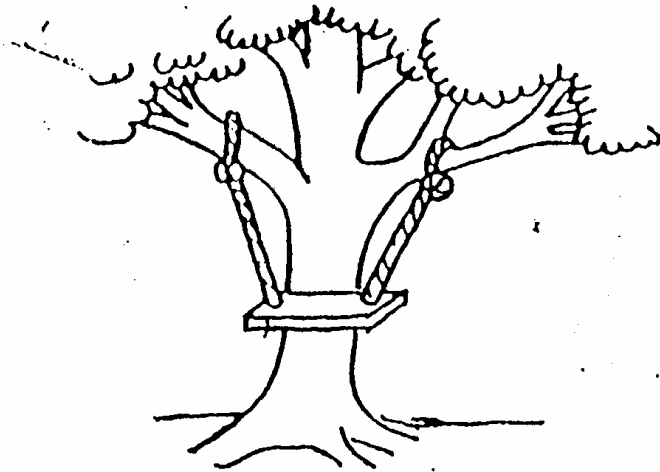
AS MANAGEMENT REQUESTED IT.



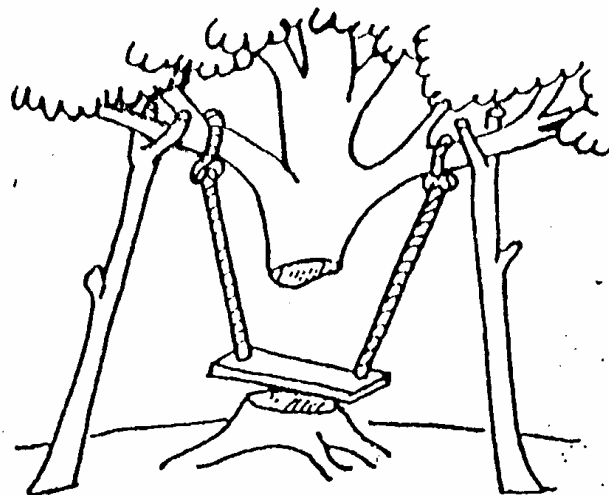
AS MARKETING ENVISIONED IT.



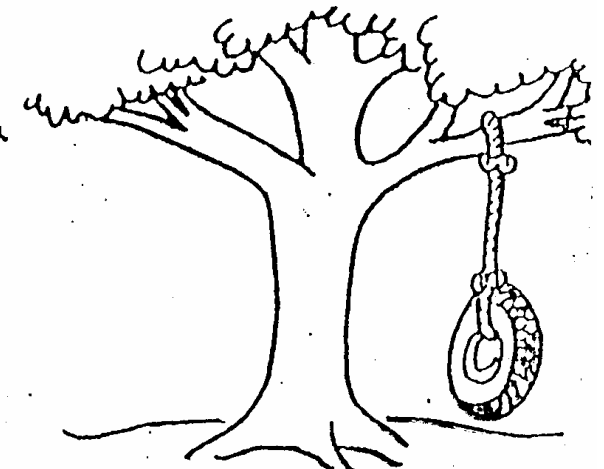
AS PROGRAMMING DESIGNED IT.



AS SYSTEMS INTEGRATED IT.



AS TEST INSTALLED IT.



WHAT THE CUSTOMER WANTED!

Are You Getting Lean?



Co-Located XP - Follett Software

- ❑ Team size
 - ❑ 24 Developers
 - ❑ 7 Testers
 - ❑ 3 Customers
 - ❑ 3 Project Leaders
- ❑ Code Base
 - ❑ 1,000,000 lines of code
 - ❑ 7,000 automated unit test
 - ❑ 10,000 automated acceptance test



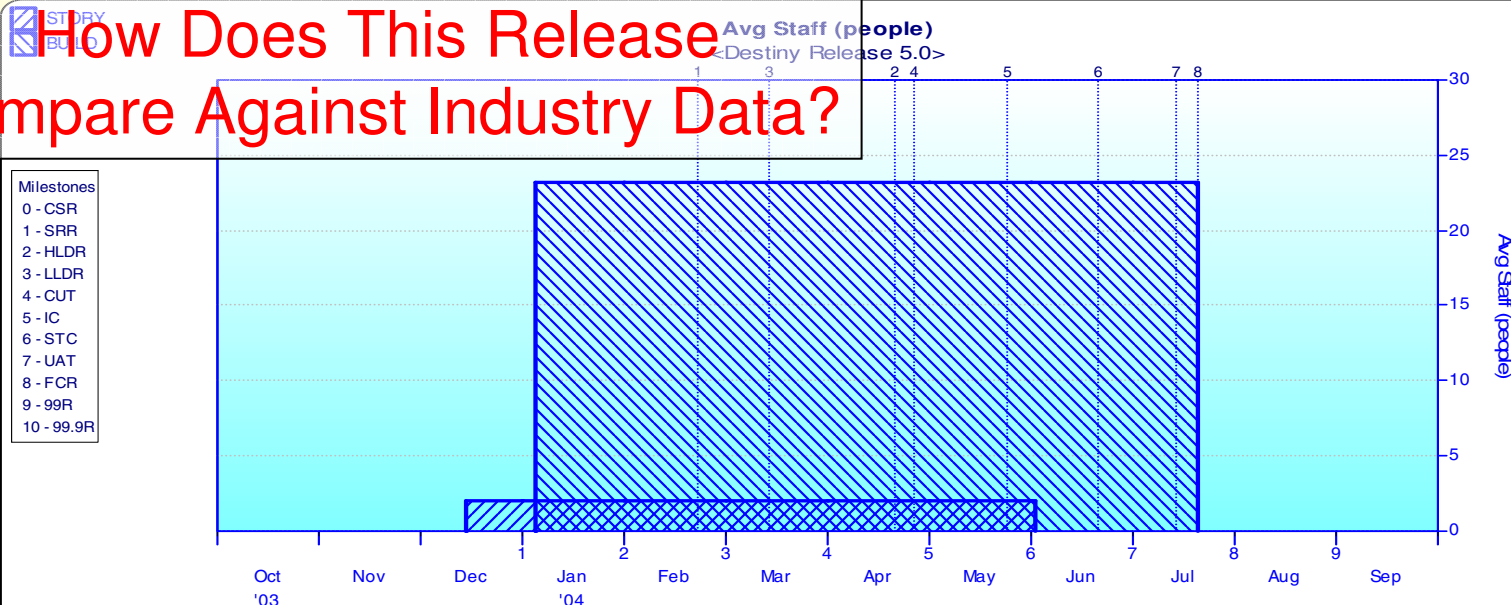




SLIM Replica – Destiny 5.0

Staffing & Probability Analysis

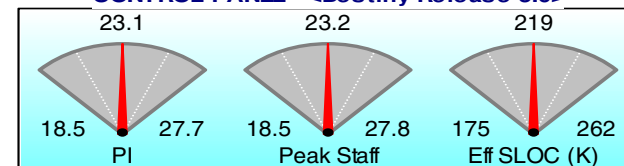
How Does This Release
Compare Against Industry Data?



SOLUTION PANEL - <Destiny Release 5.0>

	BUILD	Life Cycle	
Duration	6.5	7.2	Months
Effort	151	162	PM
Cost	1283.5	1377.2	\$ (K)
Peak Staff	23.2	23.2	people
MTTD	0.675	0.675	Days
Start Date	1/5/2004	12/15/2003	
PI=23.1 MBI=5.6 Eff SLOC=218,531			

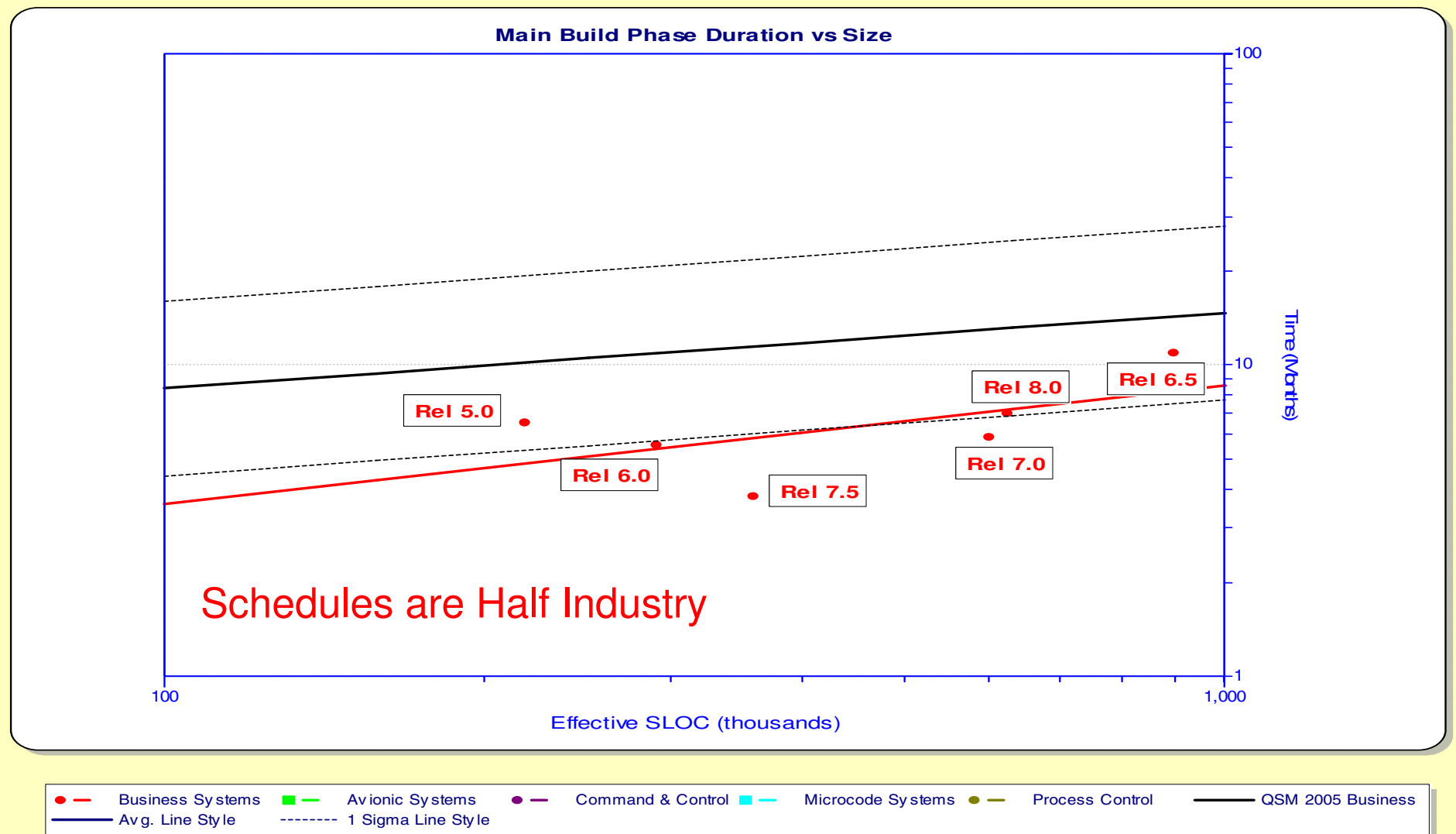
CONTROL PANEL - <Destiny Release 5.0>



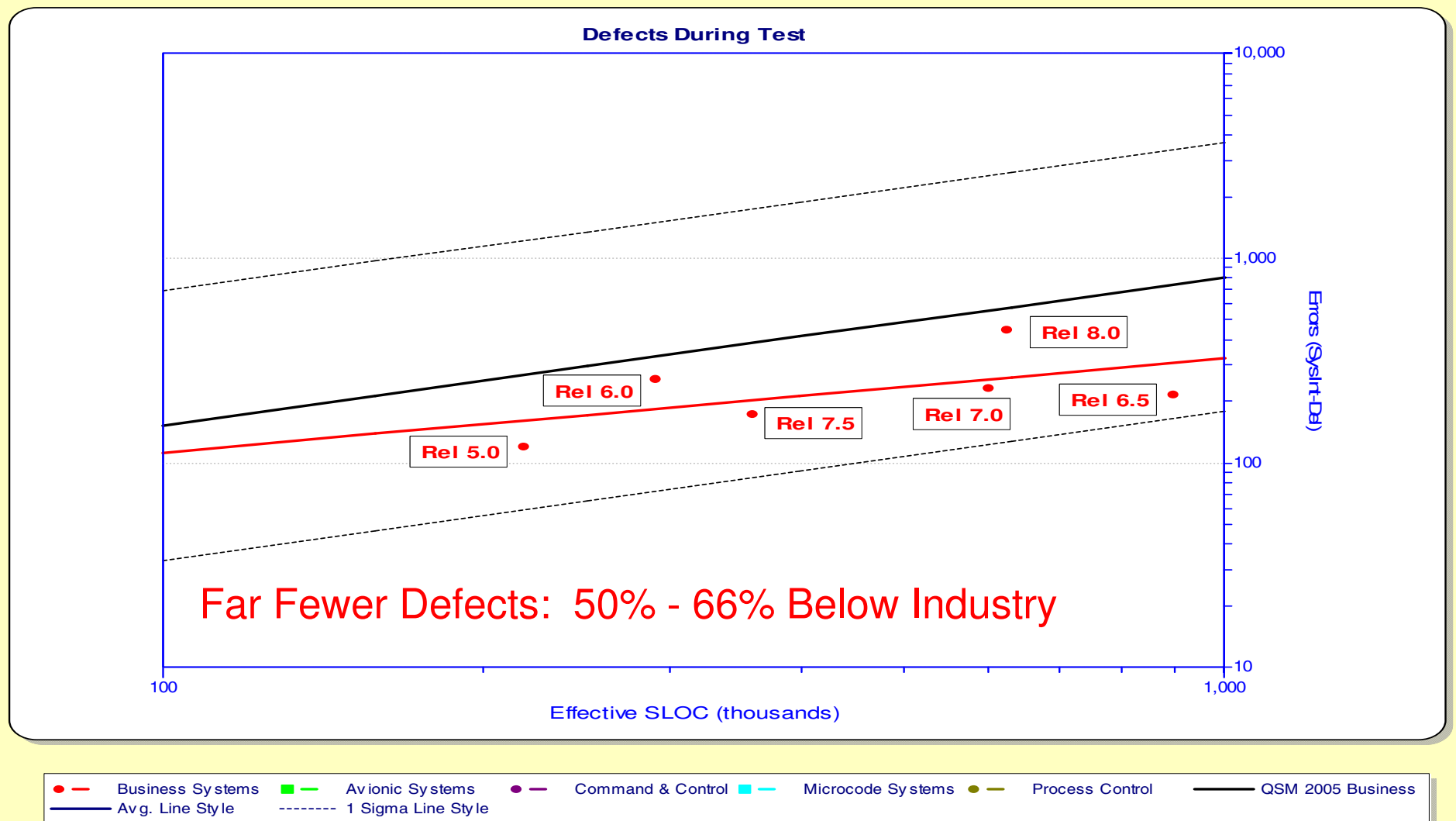
Follett vs. Industry Average

	Industry Average	Current Performance	Delta
Project Cost	\$3.5 Million	\$2.2 Million	-\$1.3M
Schedule	12.6 months	7.8 months	-4.8 mos
QA Defects	242	121	-50%
Staffing	35	35	n/a

Trendline Assessment – Build Phase Schedule



Trendline Assessment – Defects/Quality



Follett and XP: It has worked incredibly well...

❑ Destiny Library Manager:

🏆 **Award of Excellence 2004**, presented by Technology and Learning magazine (December 2004).

🏆 **Awards Portfolio 2004**, presented by Media and Methods magazine (May/June 2004).

🏆 **Technology & Learning Award of Excellence 2006, 2007**

❑ Destiny Textbook Manager

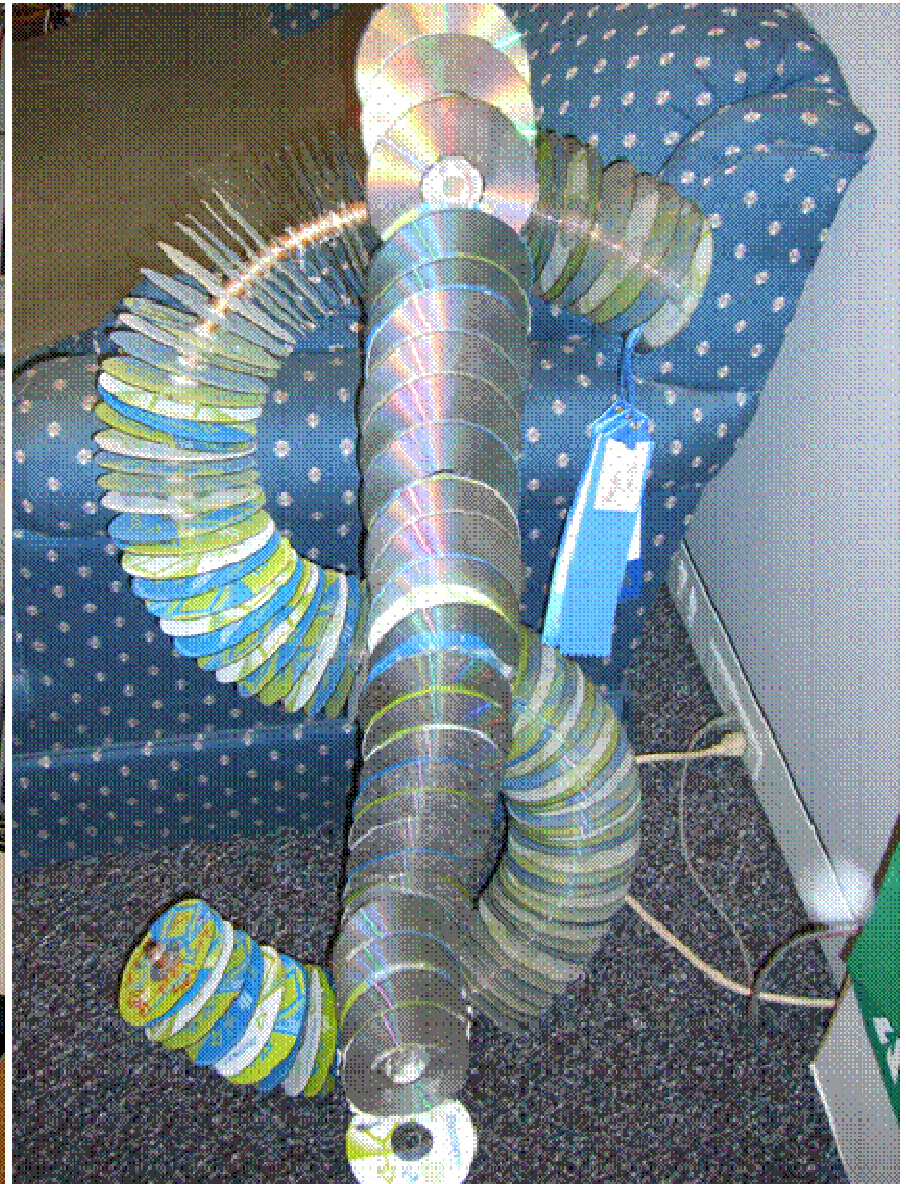
🏆 **Awards Portfolio 2005**, presented by Media and Methods magazine (May/June 2005).

🏆 **Technology & Learning Award of Excellence 2007**

❑ Destiny Enriched Services

🏆 **Technology & Learning Award of Excellence 2007**

Follett Software provides Library Automation Solutions to **52% of the K12 market**. Destiny Library Manager: **Single largest product market share** in K12 with 19% of the total market and continues to **outpace the competition in market growth**.



Domain Knowledge

- ❑ Smart people, experienced people
- ❑ Coding is moving knowledge from mind into the machine
- ❑ Inexperience costs money



Short Feedback Loops

- ❑ Paired programmers
- ❑ Instantaneous code reviews
- ❑ Accelerated learning and execution
- ❑ Face to face communication channel



Time Boxing

- ❑ Short iterations
- ❑ Clear and discernible progress
- ❑ Anticipation of the next important feature
- ❑ Efficiency



Avoiding Burnout

- ❑ XP = Sustainable pace
- ❑ 40 Hour Work Weeks
- ❑ Prevent productivity collapse for overworked teams



Craftsmanship Over Craft

- ❑ Take pride in what you do
- ❑ Do not compromise professionalism
- ❑ Simple design
- ❑ Upfront testing
- ❑ Prevent costly rework
- ❑ Build it right the first time
- ❑ “Measure Twice, Cut Once”
(says Norm Abram)



Transparency

- ❑ The best teams hide nothing
- ❑ Daily stand-ups
- ❑ Iteration Demos
- ❑ Scrum sessions
- ❑ Velocity and burn-down charts



High-bandwidth Communication

- ❑ The best teams have “wide-open pipes”
- ❑ Domain knowledge moves among the team
- ❑ Information flows rapidly and accurately



Avoiding Waste and Costly Rework

- ❑ Rework has high cost
- ❑ Rework takes time
- ❑ Rework creates defects
- ❑ Rework is bad
- ❑ Refactoring can be a cover up



Distributed SCRUM – BMC Software



Input to SLIM-DataManager

Project ID 2: Performance Manager Rel 2.3 (Record 2 of 3)

Basic Information | Application | Sizing | Accounting | Custom Fields | Environment | Quality | Review

Project Information

Project Name: Performance Manager Rel 2.3
Status: Completed
Confidence: High
Preparer Name: Mike Lunt
Record Creation Date: 6/19/2007
Date Last Modified: 7/19/2007

Predominant Application Type

- System
 - Operating System
 - Environments
 - Middle Ware
 - Tools (DBMS, etc.)
 - Compilers
 - Network Mgmt
 - LAN/WAN OS

Description

BMC Performance Manager allows clients to manage the availability, performance, and business impact of a distributed systems environment, including network, applications, databases, and operating systems via a common presentation interface. R2.3 focuses on Atrium integration (CMDB), and a focus on large

Sizing

Source Lines of Code

New: 211178
Modified: 633533
Unmodified:

Requirements: 443

Defects

System Integration to Delivery: 635
First Month after Delivery:

Size

Defects

	Phase	Start Date	End Date	Months	PM	1000 \$	Peak Staff	Staffing Shape
1.	CD							
2.	R&D	6/1/2006	10/1/2006	4.03	32	320	10	Rayleigh Front Load
3.	C&T	7/1/2006	12/8/2006	5.26	488	4880	93	Level load
4.	P_Mnt	12/8/2006	12/31/2006	0.77	30	300	45	Level load
	Life Cycle	6/1/2006	12/31/2006	7	550	5,500	93	PI = 28.3 MBI = 8.3

Time

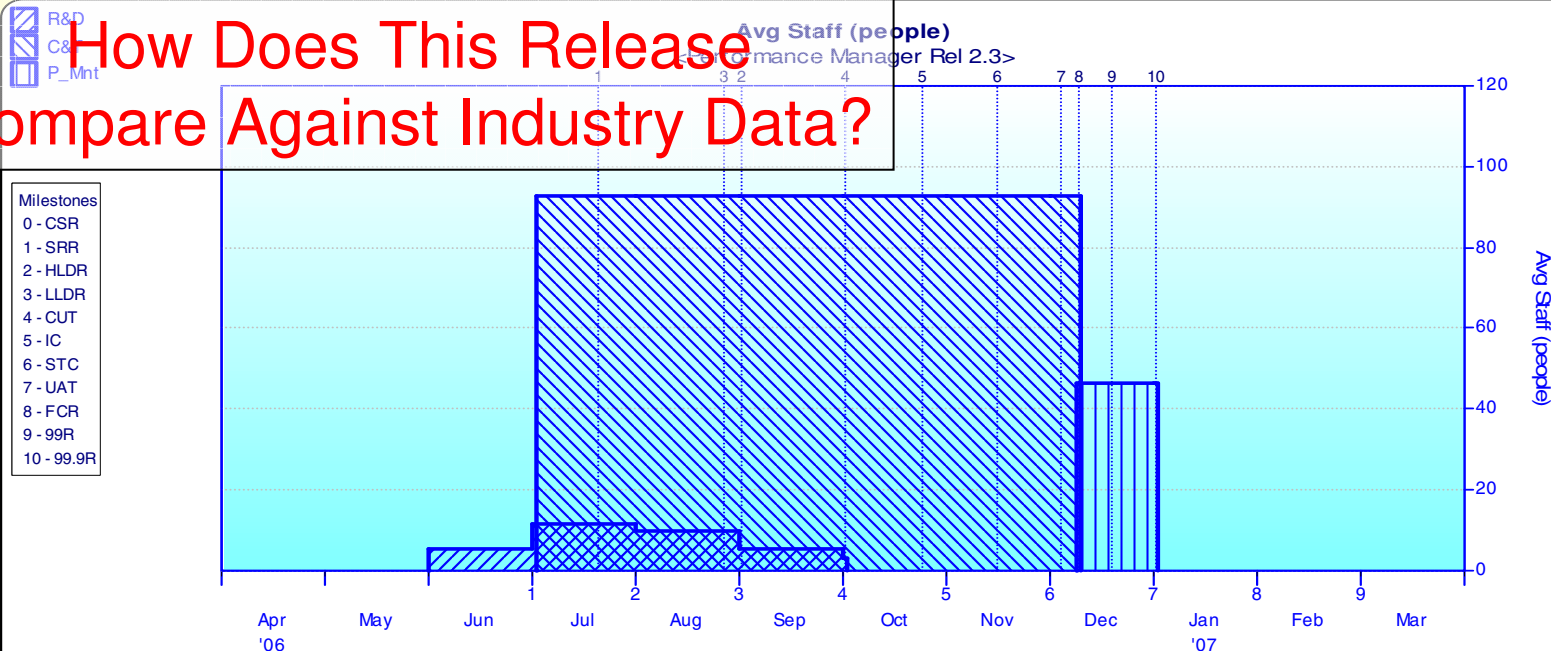
Effort

Delete First Prior Next Last Add OK Cancel Help

SLIM Replica – Rel 2.3

Staffing & Probability Analysis

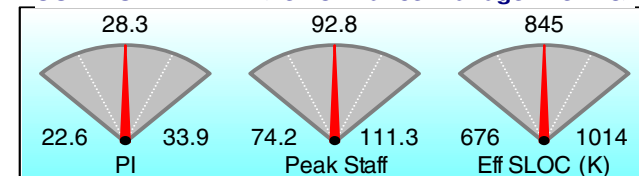
How Does This Release
Compare Against Industry Data?



SOLUTION PANEL - <Performance Manager Rel 2.3>

	C&T	Life Cycle	
Duration	5.3	7.0	Months
Effort	488	556	PM
Cost	4880.0	5561.2	\$ (K)
Peak Staff	92.8	92.8	people
MTTD	0.104	0.232	Days
Start Date	7/2/2006	6/1/2006	
PI=28.3 MBI=8.3 Eff SLOC=844,710			

CONTROL PANEL - <Performance Manager Rel 2.3>



BMC vs. Industry Average

	Industry Average	Current Performance	Delta
Project Cost	\$5.5 Million	\$5.2 Million	-\$.3M
Schedule	15 months	6.3 months	-8.7 mos
QA Defects	713	635	-11 %
Staffing	40	92	+52

BMC “Secret Sauce”



BMC “Secret Sauce” (con’t)

☐ Buy-In

- ☐ VP-Level (or higher) Senior Executive Sponsorship
- ☐ Scrum Master Training
- ☐ Core Group Energized and Passionate

☐ Staying “Releasable”

- ☐ Nightly Builds/Test
- ☐ 2-week Iteration Demos
- ☐ Frequent, Rigorous Peer Code Review

☐ Dusk-to-Dawn Teamwork

- ☐ Communication Techniques for Information Flow
- ☐ Wikis, Video-conferencing, Periodic On-Site Meetings
- ☐ Co-Located Release Planning
- ☐ Scrum of Scrum Meetings (US Time)

BMC “Secret Sauce” (con’t)

☐ Backlogs

- ☐ One Master Backlog AND Multiple Backlog Management
- ☐ One Setup for User Stories Across Teams
- ☐ Added “Requirements Architect” to Interface Product Mgt with R&D

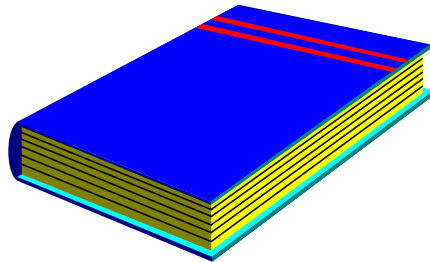
☐ “Holding Back the Waterfall”

- ☐ Test Driven Development
- ☐ Retrospective Meetings to Not Regress into old Waterfall Habits
- ☐ Outside Source to Audit the Process

Agile Release Retrospectives



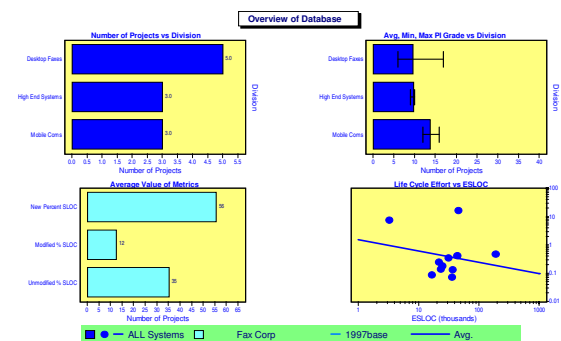
1 - COLLECT AND VALIDATE PROJECT DATA



4 - DOCUMENT RESULTS

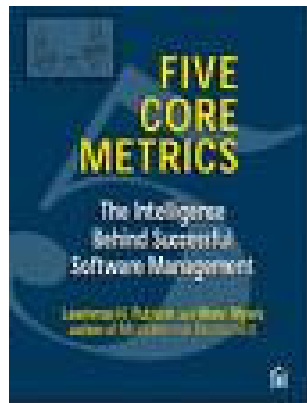
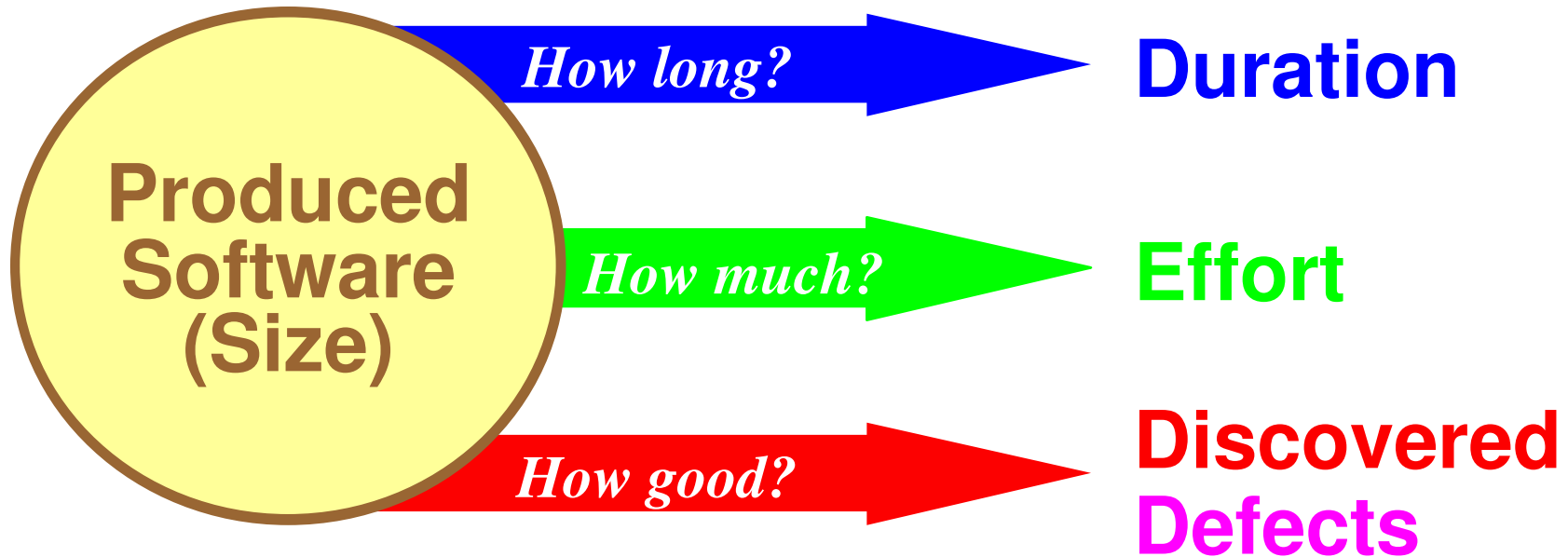


2 - ANALYZE PROJECTS USING QSM REFERENCE DATABASE



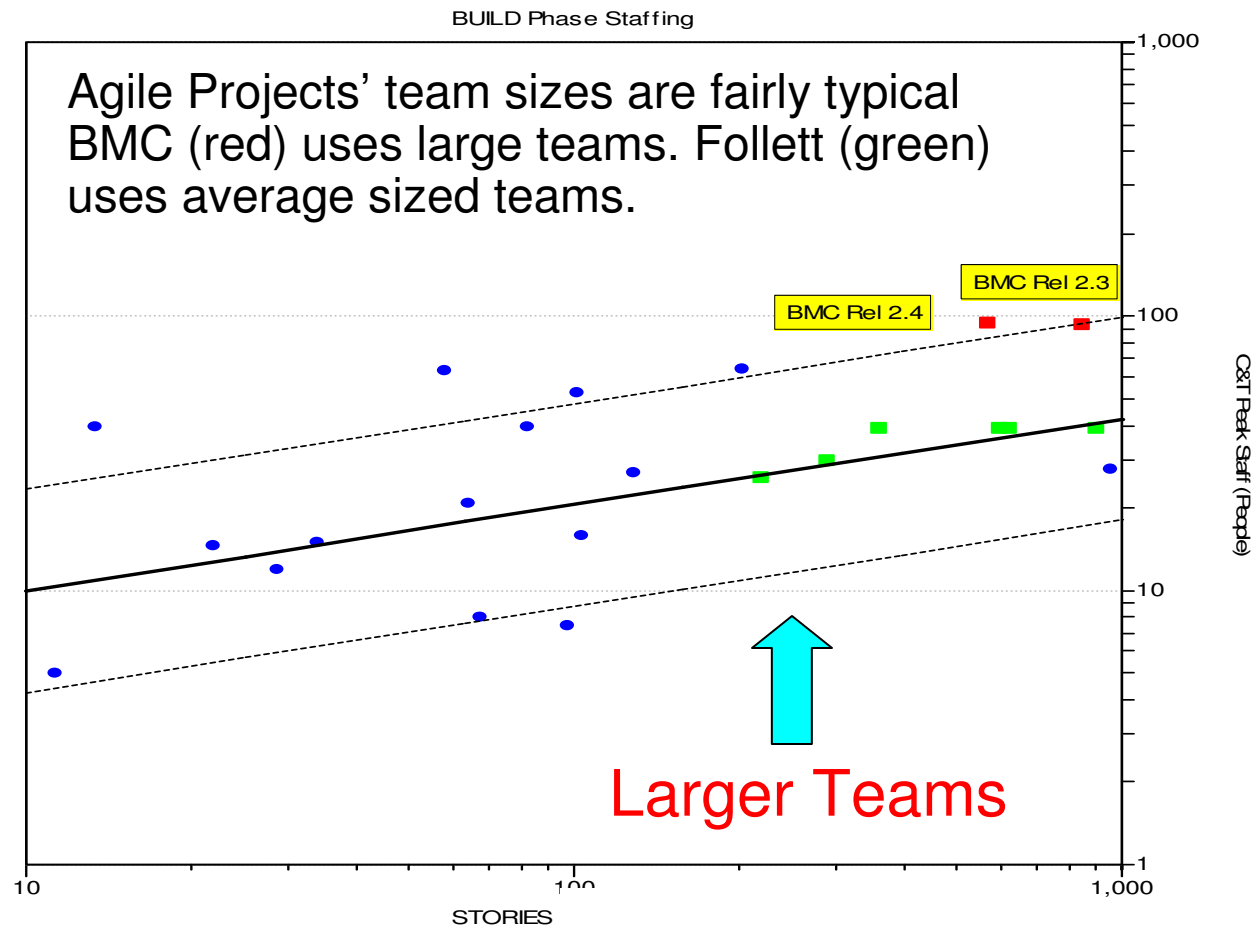
3 - DETERMINE PROCESS METRICS & PROJECT POSITIONING

Four Core Metrics: *Your History*



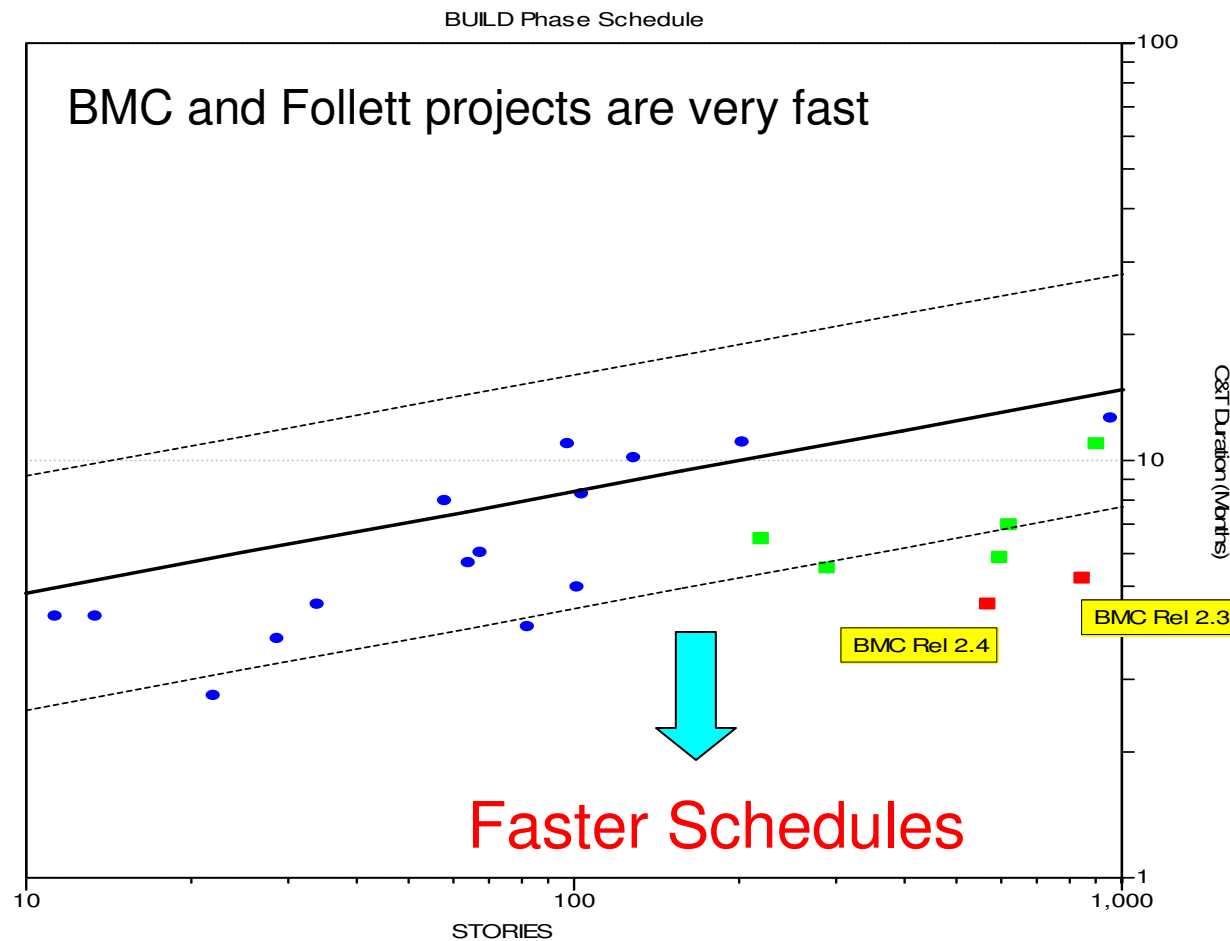
Productivity - "The Fifth Metric"

Agile Assessment — Staffing



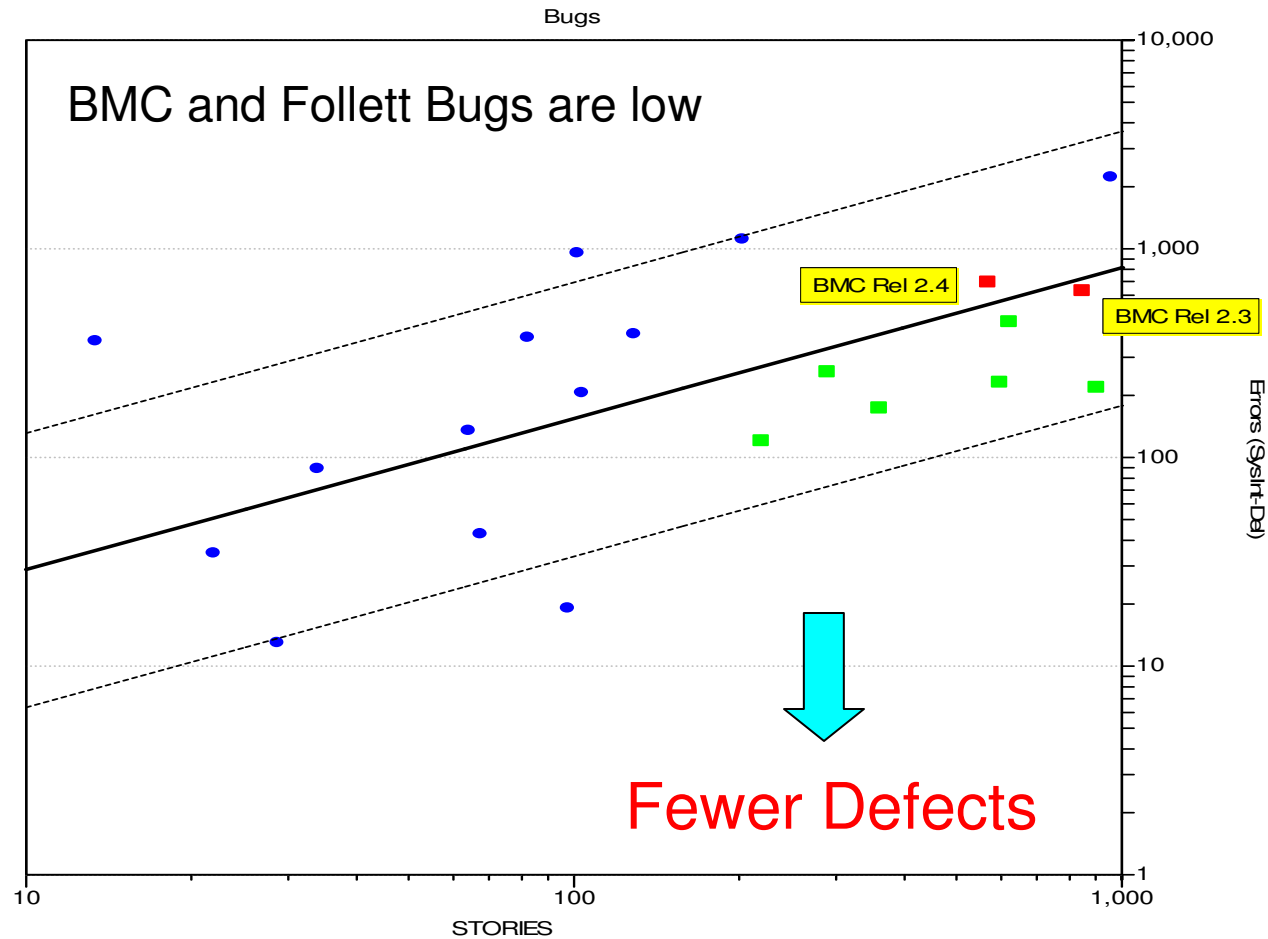
● Agile Companies ■ Company B SCRUM ■ Company A - Agile XP — QSM 2005 Business — Avg. Line Style
----- 1 Sigma Line Style

Agile Assessment — Schedule



● Agile Companies ■ Company B SCRUM ■ Company A - Agile XP — QSM 2005 Business — Avg. Line Style
----- 1 Sigma Line Style

Agile Assessment – Quality

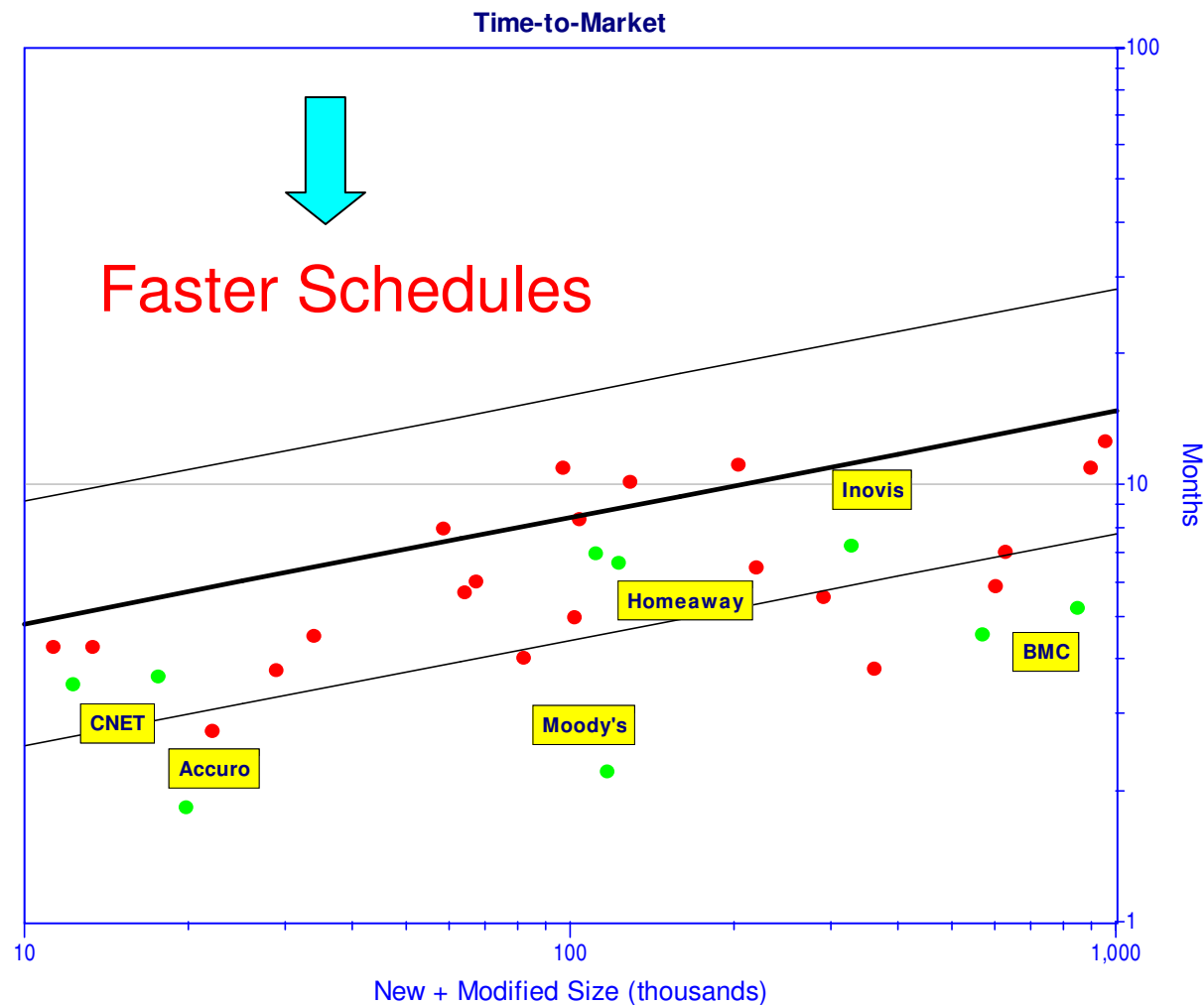


● Agile Companies ■ Company B SCRUM ■ Company A - Agile XP — QSM 2005 Business — Avg. Line Style
----- 1 Sigma Line Style

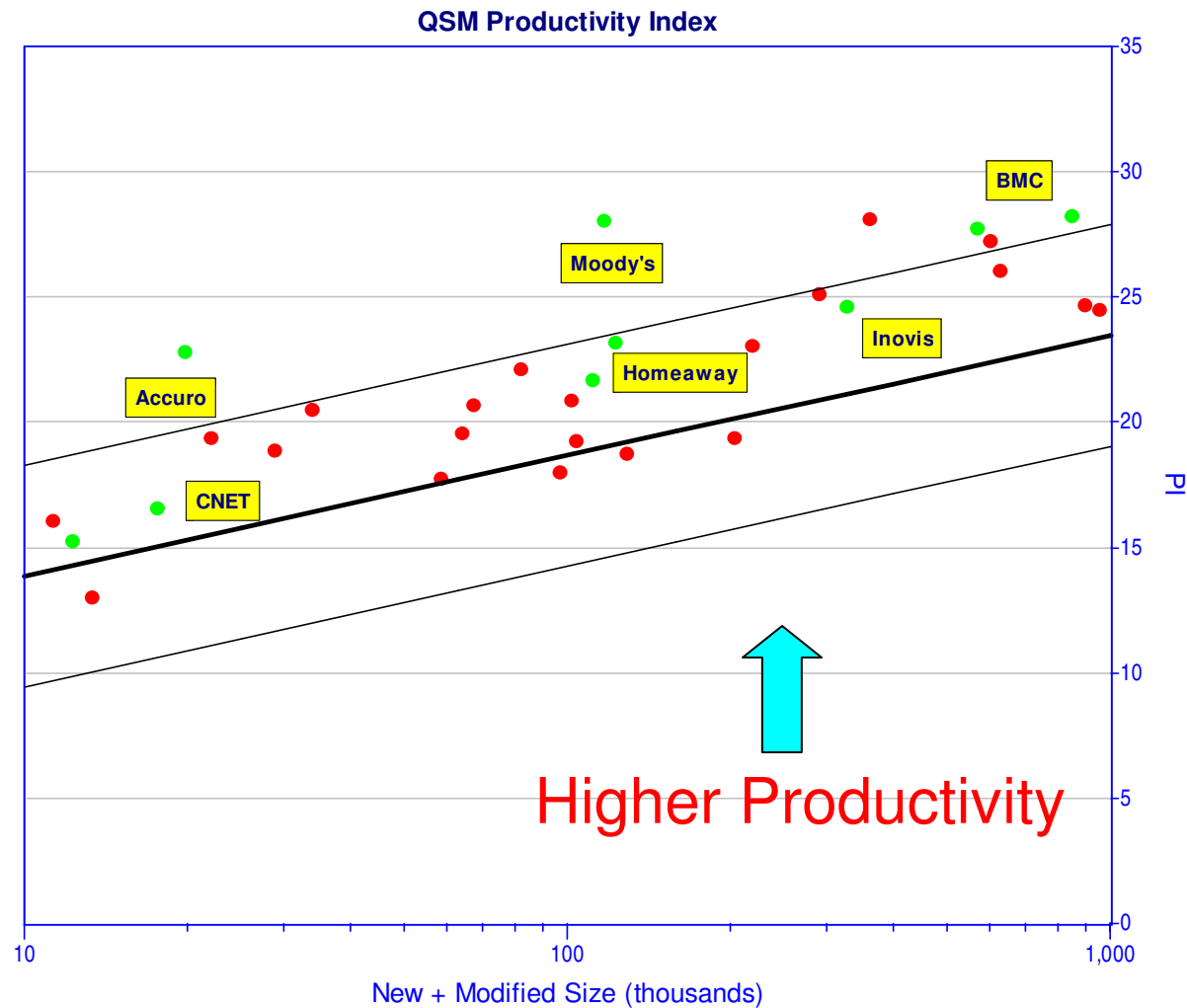
The Agile Impact Report:

Time-to-Market and Productivity Trends

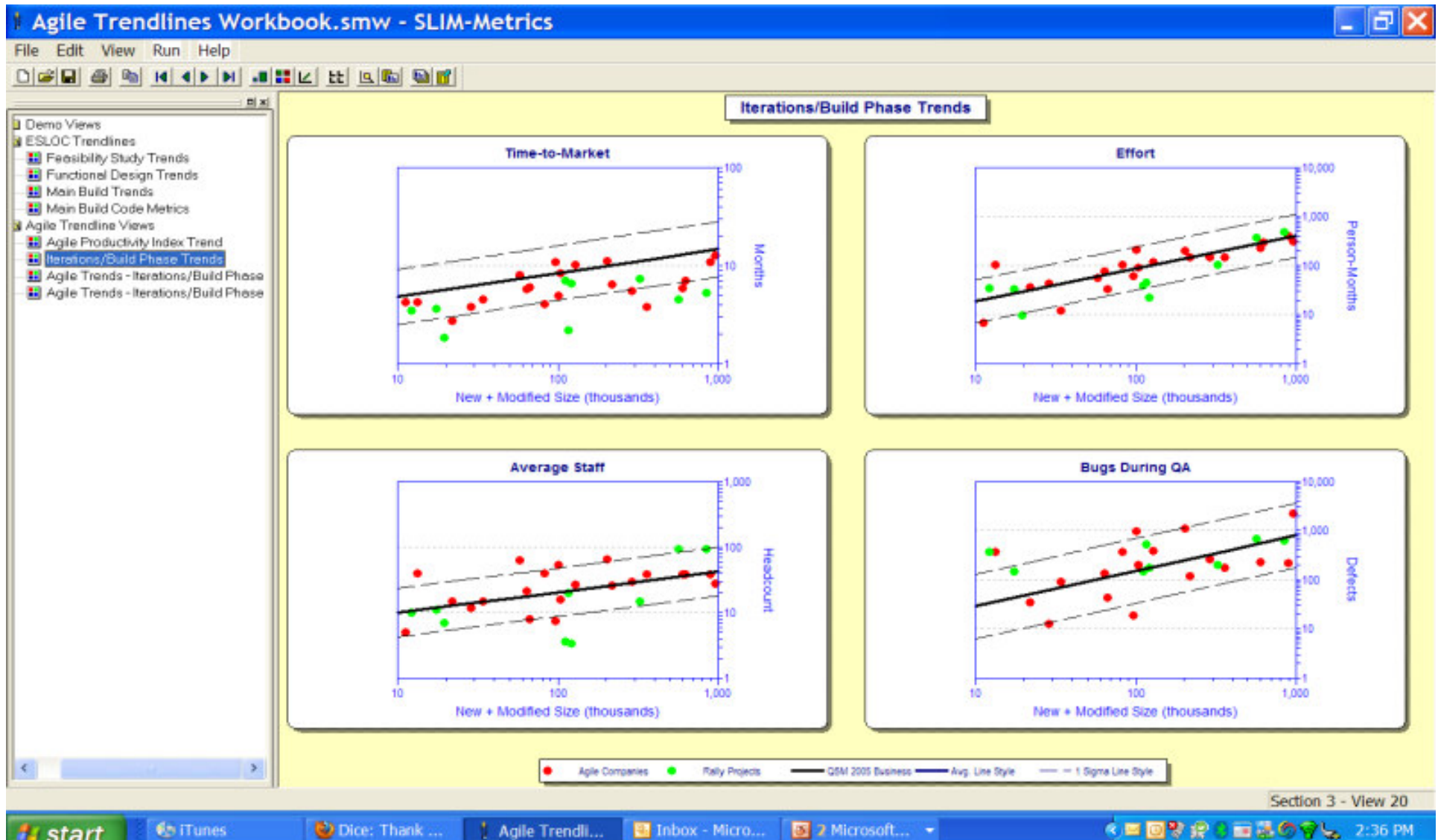
Time-to-Market Trend



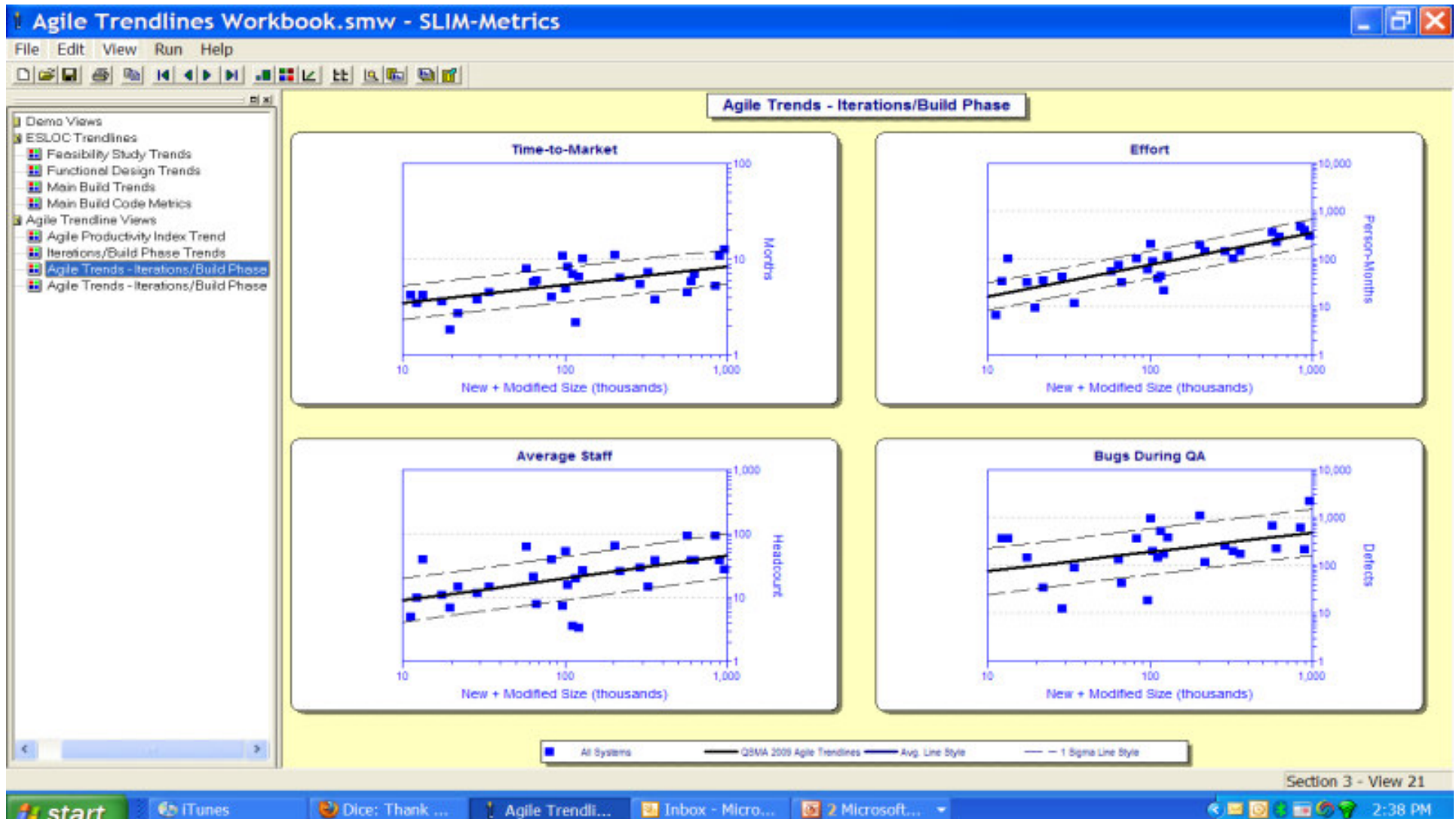
Productivity Trend



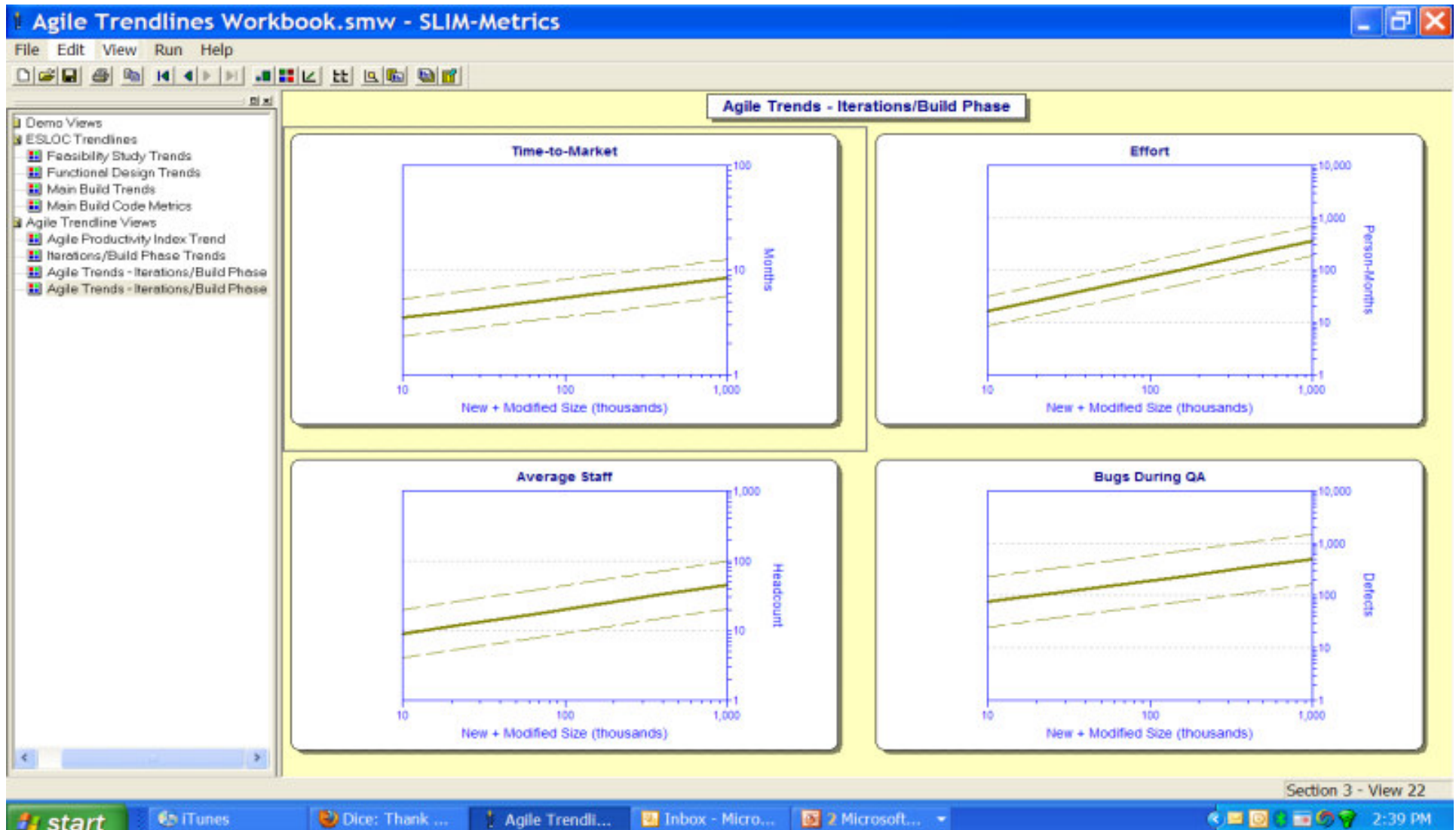
Agile Database vs. Industry Trends



Curve Fitting and Creating Agile Trends



New Agile Benchmark Trends



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Optimal Friction



NEW!

Michael's Blog
exploring the
world of dynamic
software develop-
ment.

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conversation >>**

**Other Musings
from Michael >>**

TOOL NEWS

Evolved & Improved...SLIM 7.0

The leading software development
tools are shipping...contact us for
a look...

*Features new templates and
robust portfolio management via
improved SLIM-MasterPlan!*

Community

Introducing Cutter's
Benchmarking
Community
The new place to get feedback,
the new insight you gain

Find out how
to become a
member of
the Cutter
Benchmark
Community
and get a

TRAINING ALERT

Learn More...

BREAKING NEWS! Join
Michael Mah, via **Rally
Development's Agile
University** and understand
how to "Measure & Manage
the Agile Environment."

**Dec 3-5, 2008...FINAL 2008
CLASS**

**SLIM Training Alert...OCT
2008 SOLD OUT! Act**

RESOURCES

Read All the Latest Findings...

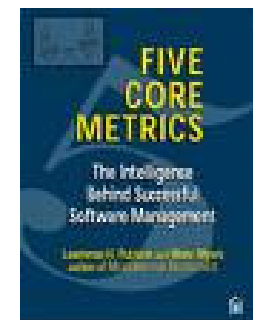
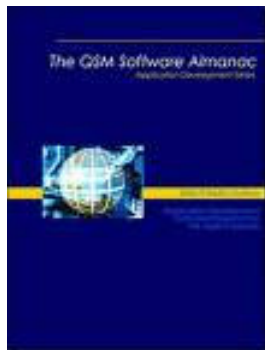
**From Agile 2008 Toronto -
Rally Dev/QSMA Study.**
The "real world" Agile metrics
you've been waiting for!

**View the On Demand Events
Here**

**Cutter Consortium now
featuring 3 On-Demand
Webinars on recent Agile
results and insights...**

Who We Are:

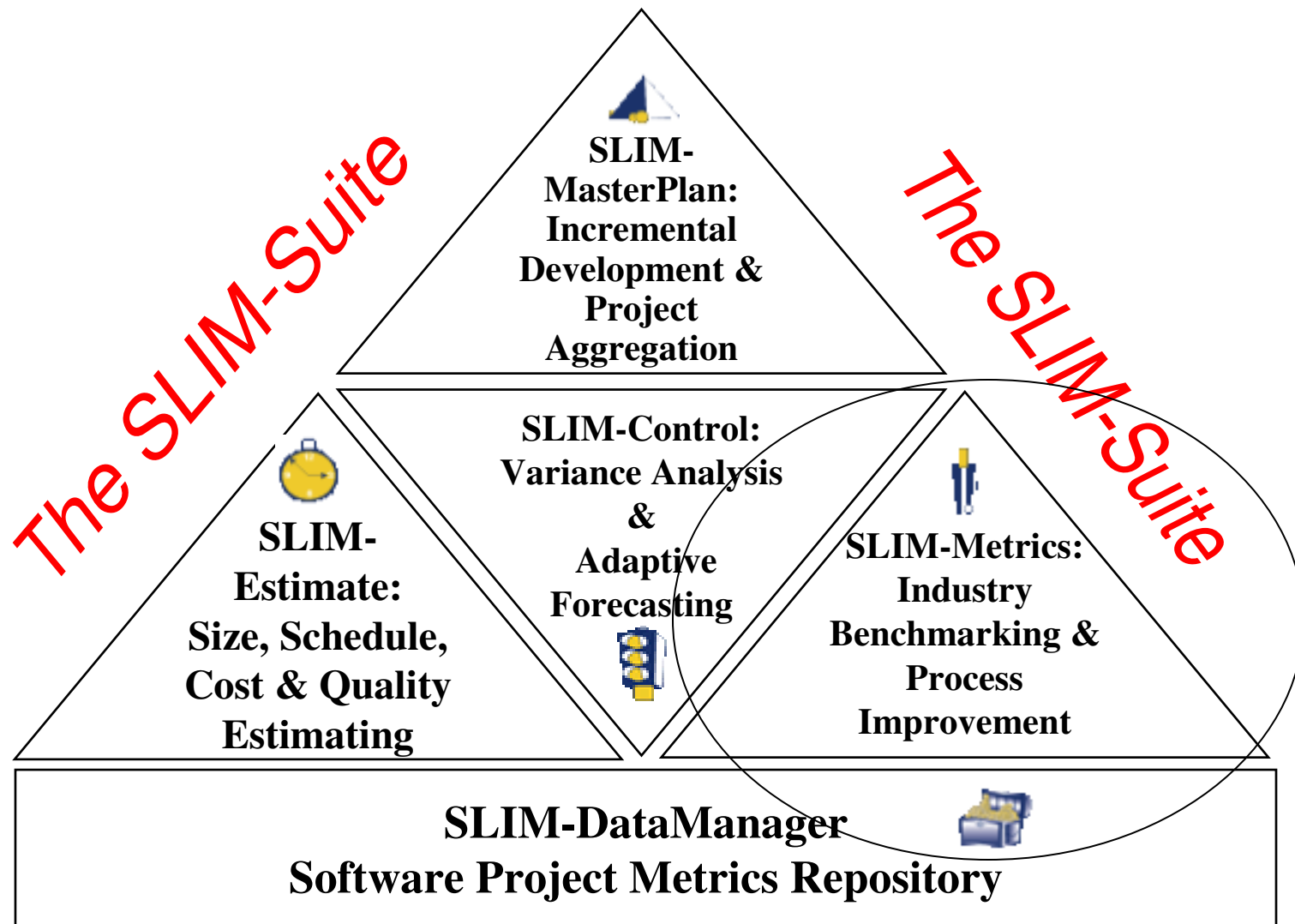
- ❑ QSM maintains the world's largest benchmarking database of 8,000+ completed software projects collected worldwide. We put industry productivity statistics [on the desktop](#).
- ❑ The QSM SLIM database contains projects in all industries, waterfall, Agile, offshore/outsourced, in-house, new development, and maintenance.
- ❑ SLIM tools enable managers to measure and estimate Agile and/or waterfall projects, and determine ROI.



Partial List of Clients



- ☐ British Telecom
- ☐ SAP
- ☐ Microsoft
- ☐ Intel
- ☐ AT&T/BellSouth
- ☐ BMC Software
- ☐ Motorola
- ☐ VerizonWireless
- ☐ Progressive Insurance
- ☐ Allstate
- ☐ IBM
- ☐ DirecTV
- ☐ JPMorganChase
- ☐ Boeing
- ☐ Bank of New York Mellon
- ☐ Lockheed Martin
- ☐ Siemens Medical
- ☐ Vanguard Group



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