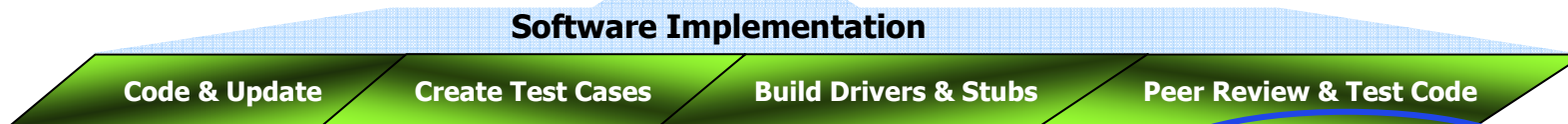
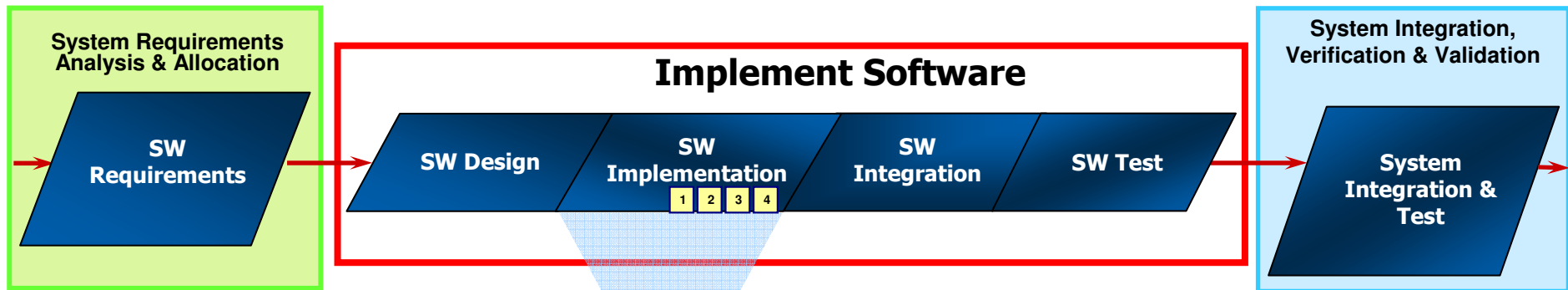


# **Six Years of Controlled Peer Reviews**

Practical Lessons Learned  
25 June 2009

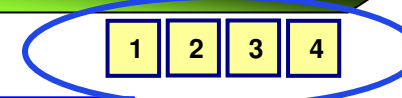
Richard L. W. Welch, PhD  
Associate Technical Fellow  
Steve D. Tennant  
SEPG Lead

# Peer Review Effectiveness Metrics

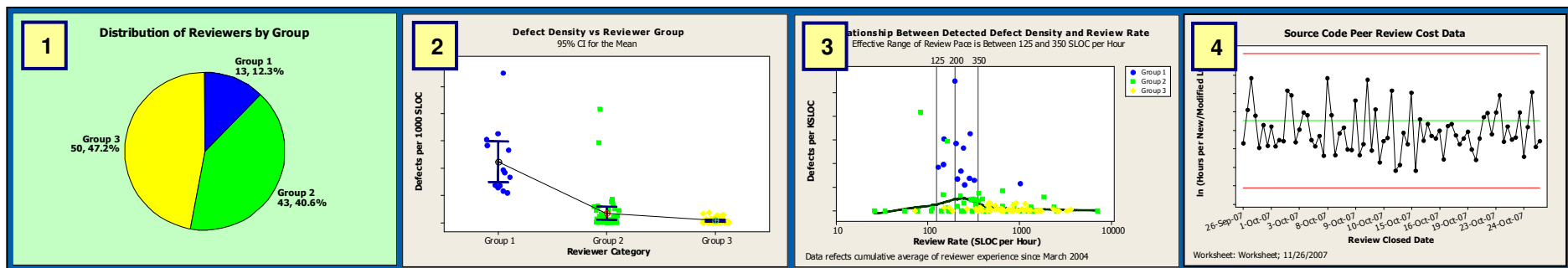


## Metrics:

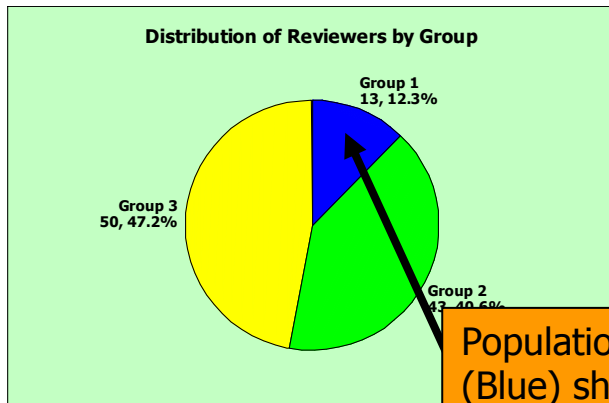
	Peer Review Effectiveness Metrics	Units
1	Percentage of Group 1 Reviewers	Percent of Total Reviewers
2	Average Detected Defect Density	Defects per Thousand SLOC
3	Average Review Rate	SLOC per Review Hour
4	Log Cost Model	Log(Total Hours per SLOC)



**Note: SW Test & System Test are decomposed similarly**

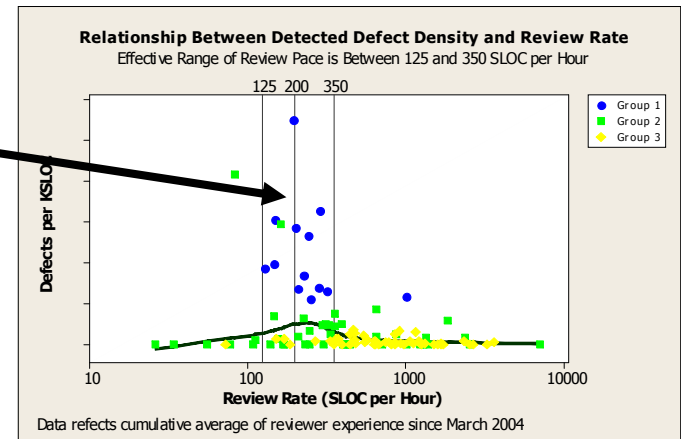


# Forecasting the Outcome

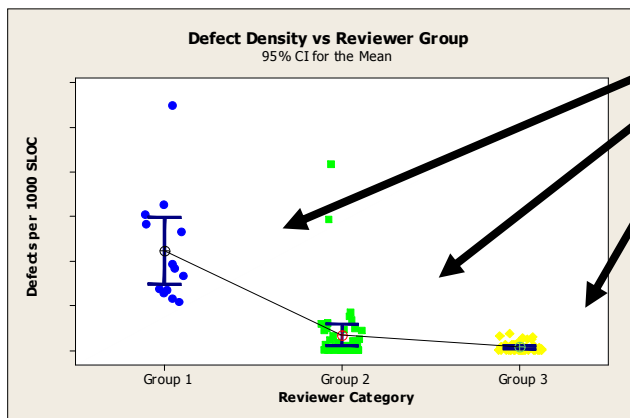


Population should cluster around ideal review rate of 200 LOC/Hr (industry std)

Population of Group 1 (Blue) should increase



We used four ways to measure changes from the initial March 2007 performance baseline. Demonstrating skill development in review effectiveness does not lend to routine control chart monitoring



Detected defect density should increase or remain the same

Process cost performance should remain stable

