

This presentation is based off Keith Braithwaite's Agile 2007 presentation. The full slide set is available at:

<http://www.keithbraithwaite.demon.co.uk/professional/presentations/index.html#measure3>

Cyclomatic Complexity



“measures the number of linearly-independent paths through a program module”

“A low [cc] contributes to a program's understandability and indicates it is amenable to modification at lower risk than a more complex program. A module's [cc] is also a strong indicator of its testability”

http://www.sei.cmu.edu/str/descriptions/cyclomatic_body.html

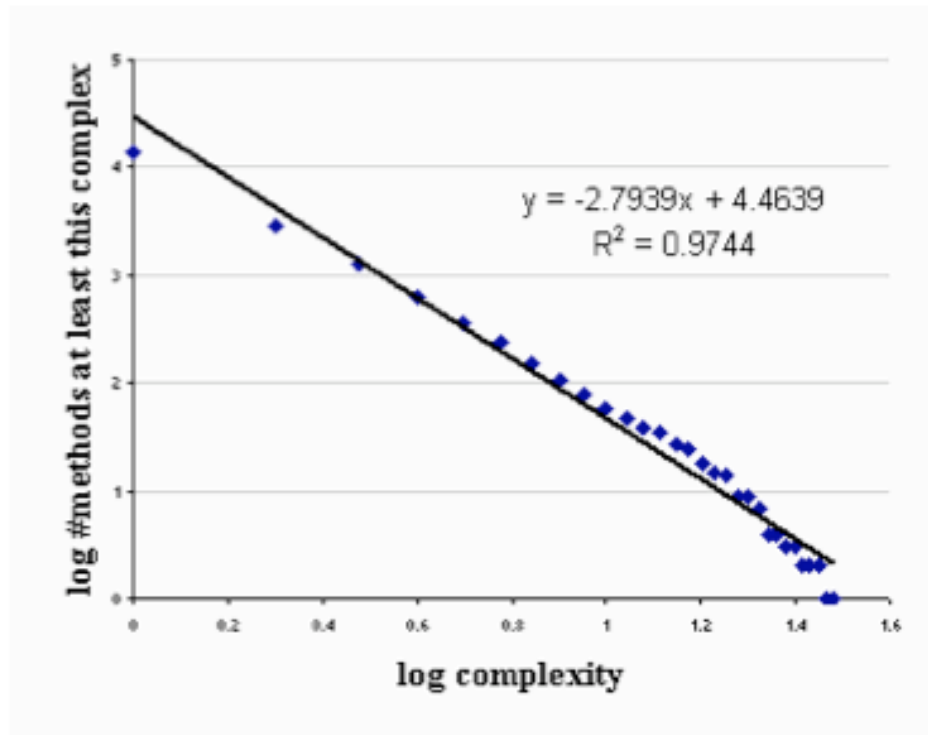
Measuring the Effect of TDD
Slide 6

Keith Braithwaite

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slide taken from Keith Braithwaite's Agile 2007 presentation

Distribution of Complexity



Further Refinement

	Codebase	Slope	Intercept	R²	Automated unit tests?
	Jasml 0.1	0.95	3.52	0.73	N
	Jruby 0.9.2	1.47	6.27	0.76	Y
	Smallsql 0.16	1.54	5.87	0.80	Y
	Sunflow 0.06.3	1.59	5.67	0.90	N
	m-e-c scehdule α3-10	1.69	4.94	0.92	N
	NanoXML 2.2.1	1.77	5.26	0.94	N
	Syncbuilder1999	1.84	5.93	0.9	N
	ltext 1.4.8	1.88	7.99	0.91	N
	Xcool 0.1	1.93	4.60	0.84	N
	Ant 1.7.0	2.25	8.90	0.93	Y
	Jfreechart 1.0.3	2.30	8.58	0.94	Y
	MarsProject 2.79	2.33	7.9	0.96	Y
	Log4j 1.2.14	2.43	7.34	0.96	Y
	Junit 3.8.1	2.49	5.99	0.94	Y
	Jmock 1.1.0	2.79	6.38	0.96	Y
	Spring 2.0.1	2.78	9.70	0.96	Y

year	TDD	slope
2001	yes	2.08
2002	no	1.80
2002	no	2.19
2003	yes	1.89
2003	yes	2.36
2004	no	2.01
2006	yes	3.46
2007	yes	3.39
May-07	yes	2.67
Aug-07	yes	2.47
AO, tests, < 2.0		
not AO, no tests, > 2.0		