

Table 1: Review coverage model statistics (Reviewed churn instead of reviewed changes).

		Qt		VTK		ITK	
		5.0	5.1	5.10		4.3	
Adjusted R ²		0.64	0.66	0.38		0.44	
Optimism-reduced adjusted R ²		0.62	0.63	0.20		0.19	
Wald χ^2		2,360***	2,615***	114***		177***	
Budgeted Degrees of Freedom		89	89	11		14	
Degrees of Freedom Spent		17	24	9		9	
		Overall	Nonlinear	Overall	Nonlinear	Overall	Nonlinear
Size	D.F.	4	3	4	3	1	1
	χ^2	85***	57***	81***	73***	4*	-
Complexity	D.F.	2	1	2	1	1	1
	χ^2	7*	5*	8*	7*	1°	-
Prior defects	D.F.	2	1	2	1	2	2
	χ^2	49***	32***	83***	11***	102***	82***
Churn	D.F.	1	-	1	-	1	-
	χ^2	< 1°	-	< 1°	-	< 1°	-
Change entropy	D.F.	2	1	4	3	1	†
	χ^2	12*	7*	34***	33***	< 1°	-
Total authors	D.F.	3	2		†	1	†
	χ^2	64***	14***			50***	-
Minor authors	D.F.		‡	4	3		1
	χ^2			78***	52***		25***
Major authors	D.F.		†		†		†
	χ^2						
Author ownership	D.F.	2	1	3	2	1	1
	χ^2	4°	2°	8*	7*	< 1°	-
Reviewed changes	D.F.		†		†		†
	χ^2						
Reviewed churn	D.F.	1	-	4	3	1	1
	χ^2	1°	-	48***	48***	9**	< 1°

Discarded during:

† Variable clustering analysis ($|p| \geq 0.7$)‡ Redundant variable analysis ($R^2 \geq 0.9$)Statistical significance of explanatory power according to Wald χ^2 likelihood ratio test:◦ $p \geq 0.05$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

- Nonlinear degrees of freedom not allocated

Table 2: Review coverage model statistics (Major authors instead of total authors).

		Qt		VTK		ITK	
		5.0	5.1	5.10		4.3	
Adjusted R ²		0.62	0.68	0.40		0.44	
Optimism-reduced adjusted R ²		0.60	0.65	0.22		0.22	
Wald χ^2		2,197***	2,872***	120***		109***	
Budgeted Degrees of Freedom		89	89	11		14	
Degrees of Freedom Spent		17	24	10		11	
		Overall	Nonlinear	Overall	Nonlinear	Overall	Nonlinear
Size	D.F.	4	3	4	3	1	1
	χ^2	148***	88***	61***	60***	4°	-
Complexity	D.F.	2	1	2	1	1	1
	χ^2	12**	7*	7*	7*	< 1°	< 1°
Prior defects	D.F.	2	1	2	1	2	1
	χ^2	349***	43***	37***	1°	106***	79***
Churn	D.F.	1	-	1	-	1	-
	χ^2	< 1°	-	< 1°	-	< 1°	-
Change entropy	D.F.	2	1	4	3	1	-
	χ^2	40***	30***	16**	14**	1°	-
Total authors	D.F.		†		†		†
Minor authors	D.F.		‡	4	3	1	1
	χ^2		‡	84***	50***	40***	-
Major authors	D.F.	3	2	3	2	1	3
	χ^2	3°	1°	56***	7*	16***	4°
Author ownership	D.F.	2	1		‡	1	1
	χ^2	16**	7*		‡	4°	< 1°
Reviewed changes	D.F.	1	-	4	3	1	1
	χ^2	1°	-	52***	51***	13***	< 1°
Reviewed churn	D.F.		†		†		†
	χ^2						

Discarded during:

† Variable clustering analysis ($|p| \geq 0.7$)‡ Redundant variable analysis ($R^2 \geq 0.9$)Statistical significance of explanatory power according to Wald χ^2 likelihood ratio test:◦ $p \geq 0.05$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

- Nonlinear degrees of freedom not allocated