



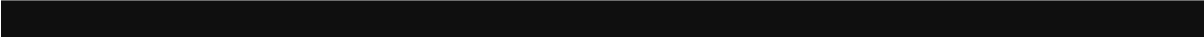


Accuracy Paradox





Accuracy Paradox

		\hat{y} (Predicted DV)	
		0	1
y (Actual DV)	0	9,700	150 
	1	50 	100







Accuracy Paradox

		\hat{y} (Predicted DV)	
		0	1
y (Actual DV)	0	9,700	150 
	1	50 	100

Scenario 1:

Accuracy Rate = Correct / Total
AR = 9,800/10,000 = 98%

Accuracy Paradox

		\hat{y} (Predicted DV)	
		0	1
y (Actual DV)	0	9,850 	0 
	1	150 	0 

Scenario 1:

Accuracy Rate = Correct / Total
AR = 9,800/10,000 = 98%

Accuracy Paradox

		\hat{y} (Predicted DV)	
		0	1
y (Actual DV)	0	9,850 ← 0	0 ⚠
	1	150 ⚠ ← 0	0

Scenario 1:

Accuracy Rate = Correct / Total
AR = 9,800/10,000 = 98%

Scenario 2:

Accuracy Rate = Correct / Total
AR = 9,850/10,000 = 98.5%

Accuracy Paradox

		\hat{y} (Predicted DV)	
		0	1
y (Actual DV)	0	9,850 ← 0	0 ⚠
	1	150 ⚠ ← 0	0

Scenario 1:

Accuracy Rate = Correct / Total
AR = 9,800/10,000 = 98%

Scenario 2:

Accuracy Rate = Correct / Total
AR = 9,850/10,000 = 98.5% ↑

This is the reason why we shouldn't only look at the accuracy rate but look at other factors as well.