air academy ASSOCIATES

Data Science, Design of Experiments, and Predictive Analytics

A Tutorial at the 2018 SETE Conference
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Slides 1, 18-19 (reprinted with permission)

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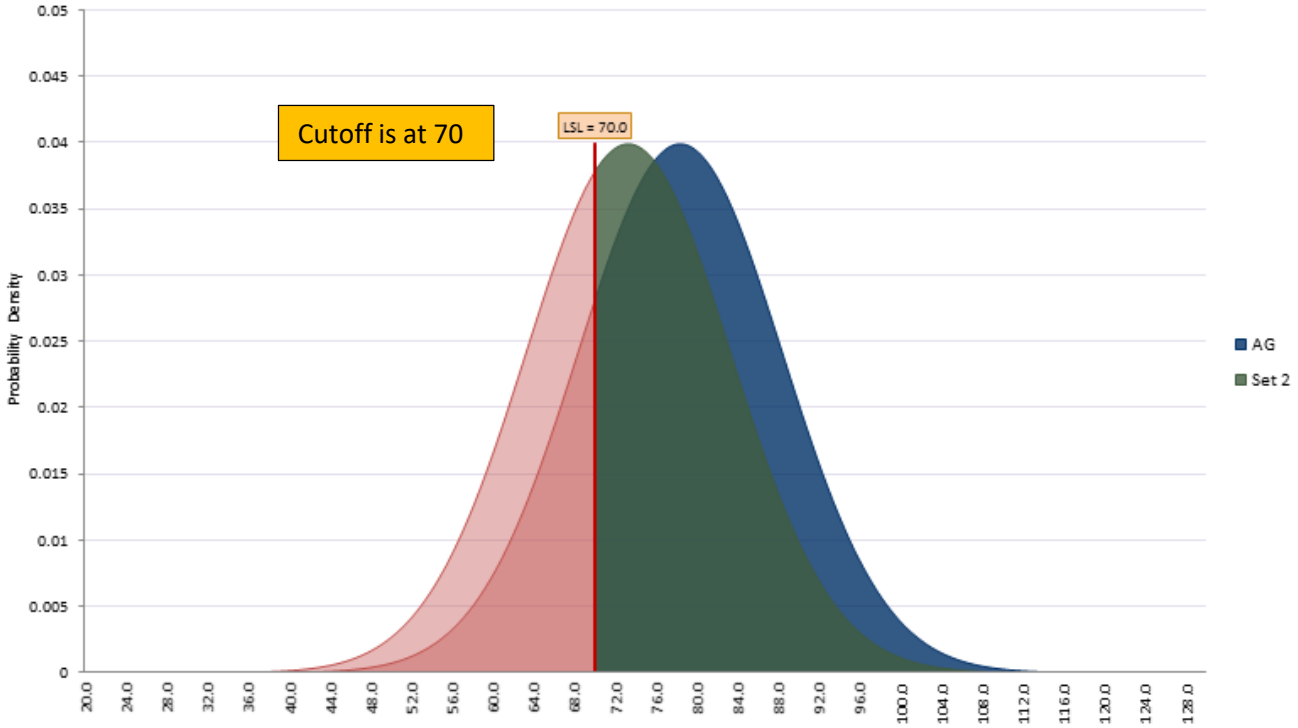
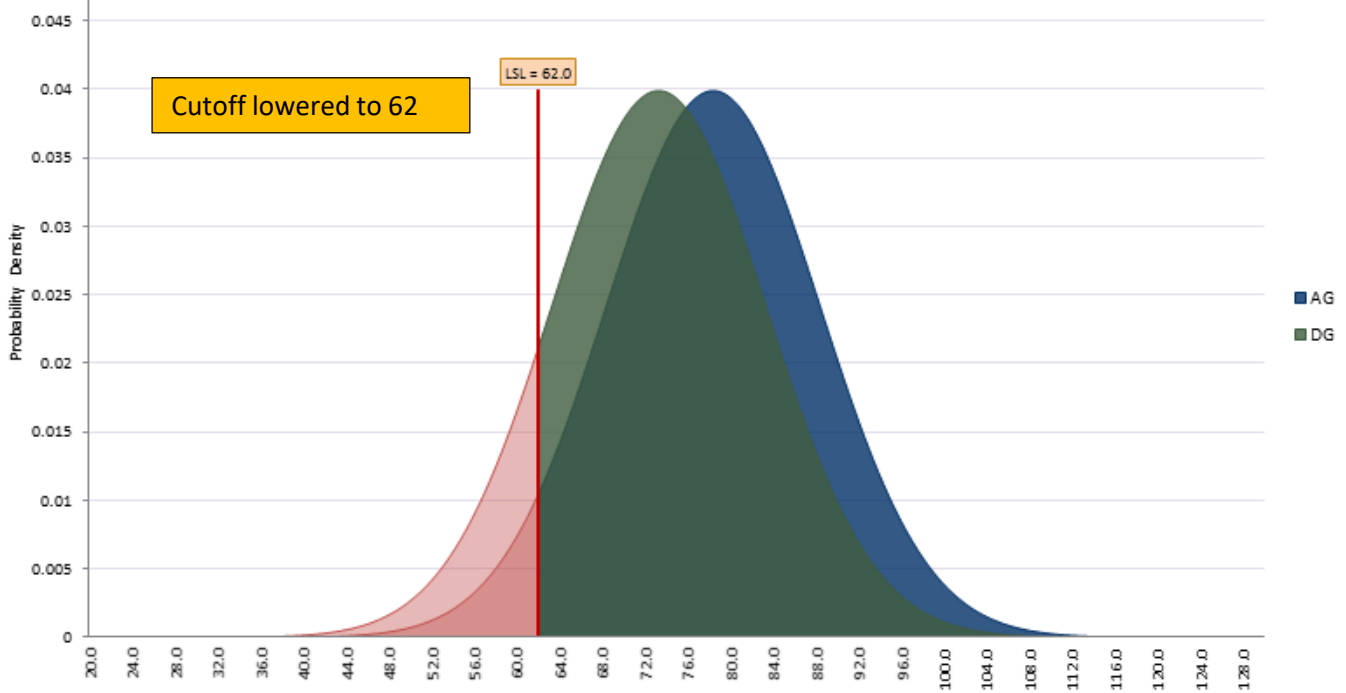
Critical Thinking Case Study 3 (cont.)
(Scanlan's Rule)



	AG	DG
Capability Statistics		
Cp	***	***
Cpk	0.28	0.11
Sigma Level	0.84	0.33
Sigma Capability	2.34	1.83
DPM	200,454	370,700
Statistics		
Sample size	Not Avail	Not Avail
Mean	78.4	73.3
Stdev	10.0	10.0
Min	Not Avail	Not Avail
Max	Not Avail	Not Avail

Ratio of Adverse Outcomes for the DG to AG ≈ 370/200 or about 1.85

Critical Thinking Case Study 3 (cont.)
(Scanlan's Rule)



	AG	DG
Capability Statistics		
Cp	***	***
Cpk	0.54667	0.37667
Sigma Level	1.64	1.13
Sigma Capability	3.14	2.63
DPM	50,502.6	129,238
Statistics		
Sample size	Not Avail	Not Avail
Mean	78.4	73.3
Stdev	10.0	10.0
Min	Not Avail	Not Avail
Max	Not Avail	Not Avail

Ratio of Adverse Outcomes for the DG to AG ≈ 129/50 or about 2.58