

Quantitative Methods in Systems Engineering

WEEK 2: VALUE-ORIENTED DECISION MAKING

Week 2: Value-Oriented Decision Making > Operationalizing Value Models

ATTRIBUTES FOR SATELLITE RADAR SYSTEM

	Attribute Name	units	range (U=0 to U=1)
Tracking	Minimum Target RCS	dB	12 --> 0
	Min. discernable velocity	m/s	40 --> 1
	Number of target boxes	#	0 --> 10
	Target acquisition time	min	3000 --> 30
	Target track life	min	0 --> 30
	Tracking latency	min	60 --> 1
Imaging	Resolution	m	100 --> .01
	Targets per pass	#	0 --> 50
	Field of regard	km ²	100 --> 1000000
	Daily revisit frequency	#	0 --> 8
	Imaging latency	min	1440 --> 10
Program	Baseline cost	\$B	100 --> 5
	Deviation from cost	%	200 --> 0
	Baseline schedule	years	20 --> 3
	Deviation from schedule	years	5 --> 0