

Decision Matrix

Rating Scale							
5 = Excellent 4 = Very Good 3 = Good 2 = Fair 1 = Poor							
Relative	Evaluation	Alternatives (Strategy, Concepts, Modules, Components)					
Weights	Criteria	Robot Arm		Ski Lift		Conveyor Belt	
		Rating	Score	Rating	Score	Rating	Score
25%	Cost	3	0.75	2	0.5	3	0.75
5%	Weight	2	0.1	1	0.05	2	0.1
15%	Power	3	0.45	2	0.3	4	0.6
30%	Manufacturability	4	1.2	2	0.6	3	0.9
15%	# Of Parts	4	0.6	2	0.3	3	0.45
10%	Accuracy	5	0.5	1	0.1	3	0.3
100%			3.6		1.85		3.1

Weights

Cost (25%): this is presumably only one of many processes, so the cost of this one part needs to be kept low

Weight (5%): under the assumption that the device can be mounted to the ground, weight is not a big issue

Power (15%): the product can be plugged into a standard outlet, but more power will mean high costs

of Parts (15%): the device will likely involve a large install, therefore it should be easy to repair, which is helped by fewer parts

Manufacturability (30%): harder to manufacture parts will drive up costs and make repairs more difficult and expensive

Accuracy (10%): the part needs to be put in the right spot, but there is a reasonable margin of error due to its not insignificant size