Title: The Charleston

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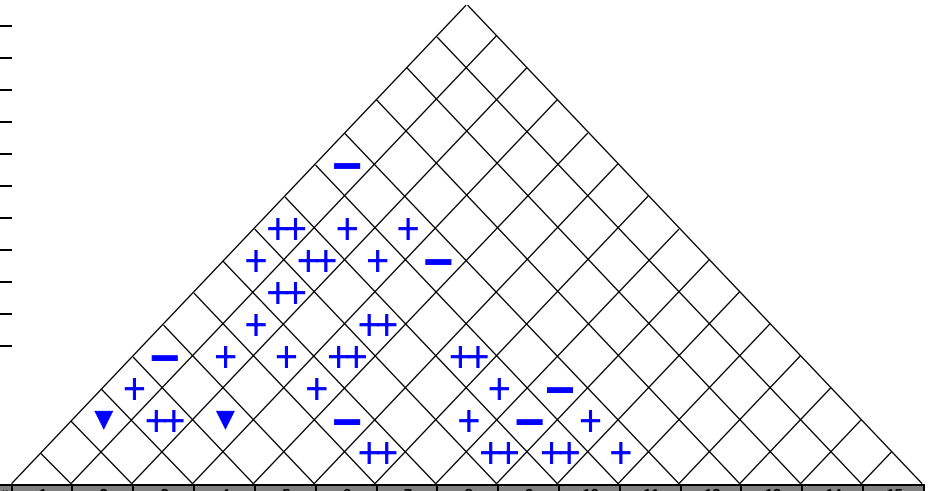
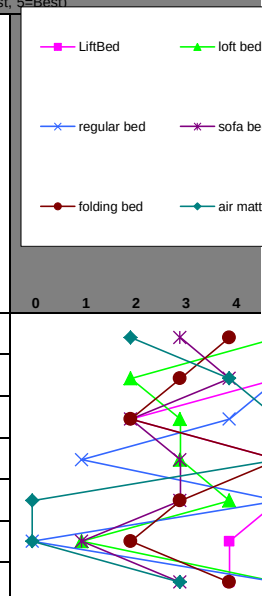
Notes:



Legend	
⊖	Strong Relationship
O	Moderate Relationship
▲	Weak Relationship
++	Strong Positive Correlation
+	Positive Correlation
−	Negative Correlation
▼	Strong Negative Correlation
▼	Objective Is To Minimize
▲	Objective Is To Maximize
X	Objective Is To Hit Target

Row #	Max Relationship Value in Row	Relative Weight	Weight / Importance	Demanded Quality (a.k.a. "Customer Requirements" or "Whats") / Quality Characteristics (a.k.a. "Functional Requirements" or "Hows")	1 Weight of movable bed frame	2 Structure weight	3 Transition Speed	4 maximum load	5 Energy Efficiency	6 Construction Time	7 Mechanical Complexity (number of parts)	8 Maximum Tipping Force	9 Factor of Safety	10 Total Height	11 Bottom Clearance	12	13	14	15	Competitive Analysis (0=Worst, 5=Best): LiftBed	loft bed	regular bed	sofa bed	folding bed	air mattress
				Direction of Improvement: Minimize (▼), Maximize (▲), or Target (x)	▼	▼	▲	▲	▲	▼	▼	▲	x	x	▲										
1	3	7.7	2.0	Comfort										O	O					5	5	5	3	4	2
2	9	19.2	5.0	Safe	⊖	⊖	O	⊖			O	⊖	⊖	▲	O					5	2	5	4	3	4
3	9	15.4	4.0	Price	⊖	⊖	⊖	O	O	▲	⊖	▲	O	▲	O					2	3	4	2	2	5
4	9	15.4	4.0	Space-saving	▲	▲		▲			O		▲	⊖	⊖					5	3	1	3	5	5
5	3	7.7	2.0	Aesthetics		▲	▲				O			O	O					5	4	5	3	3	0
6	9	23.1	6.0	Charleston Awesomeness Coefficient			⊖	⊖	▲		⊖	O	O	▲	⊖					4	1	0	1	2	0
7	9	11.5	3.0	Ease of Use	⊖	▲	O		▲	⊖	⊖			O	▲					4	5	5	3	4	3
8																									
9																									
10																									
				Target or Limit Value	500lbs	1000lbs	7ft/min	1000lbs	10kw/h	fortnight	<one...billion parts	500 lbs	5	10ft	7ft										
				Difficulty (0=Easy to Accomplish, 10=Extremely Difficult)	1	5	2	7	8	0	1	3	6	2	4										
				Max Relationship Value in Column	9	9	9	9	3	9	9	9	9	9	9										
				Weight / Importance	430.8	346.2	446.2	442.3	80.8	119.2	576.9	257.7	303.8	276.9	507.7										
				Relative Weight	11.4	9.1	11.8	11.7	2.1	3.1	15.2	6.8	8.0	7.3	13.4										



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