

Introduction to Choosing by Advantages

Wisconsin Society of Professional Engineers
May 19, 2016

Vogel Bros. Building Co.

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Do You Want To Make Better Decisions?

Mark S. Rounds, P.E.
Vogel Bros. Building Co.
Madison, Wisconsin
Vice President of Corporate Development
mrounds@vogelbldg.com

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Our Decisions Matter

- Is decision making a natural gift? – Genetic Theory
- Is decision making learned? – Environmental Theory
- Is decision making purely analytical? – Logic Theory
- Is decision making purely emotional? – Behavior Theory
- What if there was a better way to make decisions; would you be willing to learn?

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Sound Decision Making

“The simple truth of the matter is that making good decisions requires us to use both sides of the mind. There is no universal solution to the problem of decision-making. The real world is just too complex.” – Jonah Lehrer (“How We Decide”, 2010)

Choosing By Advantages is a “sound” method of decision making (it is not the only method of decision making). It combines rational information with emotional instincts.

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Sound Decision Making

- You don't know what you don't know
- We see the authors of poor decision making repeated over and over, therefore we BELIEVE their methods are sound based on volume
- **“DECISIONS MUST BE BASED ON THE IMPORTANCE OF ADVANTAGES”**

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Different Methods Produce Different Outcomes



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Unsound Methods

- Widely Used – Seemingly Sensible
 - Advantages & Disadvantages
 - Pros & Cons
 - Rational Methods
 - Pairwise Comparison Method
 - Instinctive Method



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Mistakes with Unsound Methods

- Inconsistent Language
- Selection by Attribute
- Incorrect Weighting of Attributes
- Predetermining Impact
- Double Counting
- Unanchored Questions
- Omission of Facts



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Definitions

- ALTERNATIVE
 - People, things or plans from which one will be chosen
- ATTRIBUTE
 - Characteristic or quality or consequence of ONE Alternative
- ADVANTAGE
 - Measured difference of Attributes between Alternatives
- FACTOR
 - Holder for the Attributes
- CRITERION
 - Desired State of the Factor

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Definitions

- 2 Alternatives, 2 Attributes, 1 Factor & 1 Advantage

	Alternatives:	Canoe C	Canoe K
Factor: Weight	Attributes:	65 pounds	75 pounds
Criterion: Lighter	Advantage	10 pounds lighter	

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Choosing Ice Cream

- The ice cream parlor has 31 flavors – which do you choose?
- Now how do you choose between “dish” or “cone”?
 - cone had more food
 - cone adds 49 calories (137 scoop, 49 cone)
 - dish requires two hands
 - ice cream stays in dish and drips from cone
 - cone adds a variety to the taste & texture



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Choosing Ice Cream Two-Options Tabular Method

	Dish	Cone
FOOD		
CALORIES		
DINING PROCESS		
MESSYNESS		
VARIETY		

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Tabular Method

	Canoe J	Canoe M	Canoe Q
Weight	65 pounds	75 pounds	80 pounds
c: Lighter	15 pounds lighter	5 pounds lighter	
Color	Green	Blue	Red
c: darker	Very dark	Slightly dark	
Rod Holders	0	2	4
c: maximum		2 more	4 more
Center bar	Narrow	Wide with pad	Wide with no pad
c: added seat		Very Good 3 rd seat	Fair 3 rd seat
Seats	Flat no pad	Flat with pad	Seat backs with pad
c: comfort		Good comfort	Best comfort
Surface Finish	Slightly rough	Very rough	Mostly smooth
c: smoother	Less smooth		Mostly smooth
TOTAL			



Tabular Method

Rank by importance:

1. 15 pounds lighter
2. Very good 3rd seat
3. Mostly smooth finish
4. Best comfort seating
5. Very dark color
6. 4 more rod holders

The group deciding has given the following reasons for their decisions:
 The canoes will be used on youth trips so weight is important. Want lighter canoes so the youth can carry and portage easier. Will have 2 to 3 people in a canoe, so a comfortable 3rd seat is desired. Desire a smoother finish because it will be easier to paddle and not have rough sides that could scratch the people carrying the canoe. Fishing will not be a common event, so the rod holders is the least important. Decide to take comfortable seating over color.



Tabular Method

	Canoe J	Canoe M	Canoe Q
Weight	65 pounds	75 pounds	80 pounds
c: Lighter	15 pounds lighter	5 pounds lighter	30
Color	Green	Blue	Red
c: darker	Very dark	Slightly dark	10
Rod Holders	0	2	4
c: maximum		2 more	5 4 more
Center bar	Narrow	Wide with pad	Wide with no pad
c: added seat		Very Good 3 rd seat	Fair 3 rd seat
Seats	Flat no pad	Flat with pad	Seat backs with pad
c: comfort		Good comfort	2x Best comfort
Surface Finish	Slightly rough	Very rough	Mostly smooth
c: smoother		25	50
TOTAL		145	125



Tabular Method

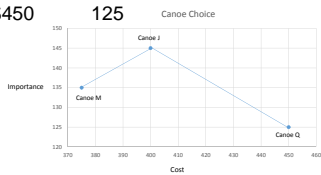
• What if the Canoes do not cost the same?

- o Canoe J \$400
- o Canoe M \$375
- o Canoe Q \$450



Tabular Method

Alternative	Cost	Importance	Must separate Cost from Scores!
Canoe J	\$400	145	• Scores are subjective
Canoe M	\$375	135	• Cost is objective
Canoe Q	\$450	125	• Money follows Utility Theory



Questions

Source: <http://www.decisioninnovations.com/>

Class: MSOE October 11, 2016
<http://www.msoe.edu/admissions/adult-learner/lean-decision-making-introduction-to-choosing-by-advantages/>

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