

Decision Making — Exercises

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Values Part 1

Exercise Value Tree

1. Start with a brainstorming of all your “values”, by which we mean all the **issues that matter for your decision:** your goals, things you want, things you don't want, things that will make you happy, etc – anything that is relevant for your decision. Write each value on one sticky note.

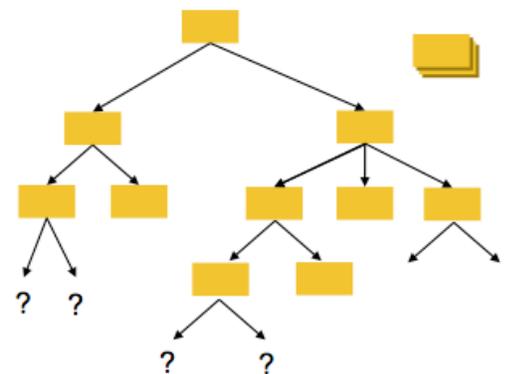
During and after brainstorming:

Consider the following topics to help you to come up comprehensive set of values, interests, and concerns that are relevant for your decision:

- Stakeholders
 - Consider who is affected by the decision and what their values might be. Stakeholders may be family, friends, neighbors, society, future generations, or other species, but they can be anyone who could be substantially impacted by your decision, whether intentionally or unintentionally.
- Basic human needs
 - Consider whether any of the following needs that we all share might be relevant to your current decision:
 - Health & Nutrition
 - Safety from Harm
 - Love & Belonging
 - Respect (How will others think of you for having made this choice?)
 - Putting Meaning into Your Life (How will you feel about yourself for having made this choice?)
- Personal life goals
 - Take time to think about your life goals, and then ask for each goal whether it is relevant to this decision.
- Pros and cons
 - For each alternative, ask yourself what's good about it and what's bad about it.
- Future values
 - Consider future impacts, as well as those in the present. People have a strong tendency to neglect or underweight future consequences.
 - Imagine yourself in the future, perhaps on your death bed, looking back on this decision. What would be important to you?
- Costs and risks
 - We tend to start our planning by thinking about the positive goals we hope to achieve. It takes extra effort to think about the costs and risks, as well, but thinking about them is the first step toward avoiding them.

2. When you can't think of any more values, start arranging your sticky notes into a "value tree".

That is, group similar concepts together, and put the broadest goals on top and let them branch out into more specific sub-goals. You may at that point come up with additional goals to fill some gaps, or discard goals that that now seem superfluous.



Alternatives (Options)

Creativity Exercises: Searching for Additional Options

Pick one of your most important goals from the value tree. Rephrase it as:

“In what ways could I....”

or

“In what ways could we....”

With one another person:

Brainstorm about options that would fulfill this goal/value, regardless of all other values of the tree.

Make a (long!) list of all ideas, regardless of how crazy.

Switch roles after 5 minutes.

As a next step, add a second goal of your value tree, search for options that would fulfill both values, etc.

Give ideas in the format:

“In what ways could you...”

In groups of 4-6

Take turns:

- One minute for one person to present their most important goal
- Then three (five?) minutes for the others to come up with ideas, write each idea down. Somebody else needs to be the note-taker, NOT the person who is being gifted with ideas (no editing/censuring ideas at this stage!).

Values Part 2

Getting your values and options into a shape that can be used in a decision table:

Final Value Set

Based on your value tree, come up with a smaller set of fundamental values with which you will continue working. Your final value set should fulfill the following **criteria**:

Completeness:

Is everything covered that matters to anybody involved?

- Test: imagine two options that are equal on all your values. Would you be willing to toss a coin between them? If not, what breaks the tie? This may be an additional value you overlooked.
- If you imagine going through with one alternative, do you have any concerns that are not covered by your values?

Meaningfulness:

Does each value make sense for each option? Find a description of each value that is meaningful for each of your alternatives.

Non-redundancy:

The values should be separate and not overlap, so that you don't inadvertently double-count some aspects.

The values should be **fundamental goals**, rather than instrumental goals.

- A fundamental goal is pursued for its own sake and does not need to any justification
- An instrumental goal is pursued because it may fulfill another (more fundamental) goal

=> Ask yourself: "Why is this goal/value important?"

If a goal X is only important to reach another goal Y, it should be dropped and replaced by Y

Why focus on fundamental goals?

- More alternatives will be possible (fewer constraints)
- No double-counting of one value
- Effect of X on Y may not be as expected

Independence:

You should care about each value independently of your other values.

- Example: if you are deciding between careers, the values "compensation" and "benefits" may not be independent, because the extent to which you expect to get benefits will affect how much compensation you would happy with.

Quantifiability:

Find a description of your value and units of measure (look at the fact table for nice examples).

- Warning: for some decisions this can be very hard and may feel artificial, but it really helps to clarify what you mean by each value (especially if several people are making a decision together).
- Your values are quantifiable enough if:
 - you can fill facts into your table based on the value description,
 - you can search for relevant information based on the value description,
 - you can you rate each cell from 1 (worst) to 10 (best).

Note:

- Not all values need to be equally important! Different weights can be used later on.
- For most decisions, a final set of 5-6 values works great, but depending on your topic you may need fewer or more. It doesn't hurt to have too many values.
- Teams: keep your color-coding system: you can each have your own values in your own color, and a third color for values that you all consider important.

Evaluation of Options

After all the previous work, your *alternatives* and *values* should be in a good shape by now to be used in decision tables:

- Values will be column headers.
- Alternatives will be row headers.

Criteria for a Value Set

- Completeness
- Relevance
- Non-Redundancy
- Testability/Measurability
- Meaningfulness
- Value Independence

	V1	V2	V3
A1			
A2			
A3			

Criteria for an Alternative Set

- Multiple Alternatives
- Mutually Exclusive Alternatives
- Varied Alternatives

Anderson, 2006

Example

		Value 1: Financial stability	Value 2: Diversity of daily activity	Value 3: Flexibility of schedule	Value 4: Autonomy/ freedom of expression	Value 5: Aesthetics/ surroundings	Value 6: Contribution to society	Value 7: Quality of Interactions with colleagues	Totals
	<i>Weights</i>	8	3	5	5	6	6	7	
Option 1: Keep business in current state	Raw Ratings	4	5	8	8	7	3	4	
	<i>Weighted Ratings</i>	32	15	40	40	42	18	28	215
Option 2: Keep business but different partners	Raw Ratings	5	5	8	9	7	6	7	
	<i>Weighted Ratings</i>	40	15	40	45	42	36	49	267
Option 3: Take new job, sell business	Raw Ratings	6	2	3	3	3	5	5	
	<i>Weighted Ratings</i>	48	6	15	15	18	30	35	167
Option 4: New start-up	Raw Ratings	3	7	5	4	8	3	8	
	<i>Weighted Ratings</i>	24	21	25	20	48	18	56	212
Option 5: ...	Raw Ratings								
	<i>Weighted Ratings</i>								

Procedure

1. Rate:
 - Fill in the raw ratings: rate each alternative on each value from best to worst on a scale from 1 to 10.
 - You may need to collect information first in order to be able to rate your option. In that case, use the table structure to collect information. Create a fact table, which will help you decide on a rating.
2. Weight
 - Each column (= value; attribute) is assigned a weight that reflects its relative importance
3. Multiply down
 - Multiply each raw rating with the weight of its column to get the weighted rating
4. Add across to get the totals

The total tells you which alternative is the winner, according to your own values.

- The higher the total, the better your alternative.
- The number is only relevant in relation to your other alternatives, there is no absolute maximum.

Important: Once you have a winner, ask yourself how you feel about that. Uncomfortable? Happy? Relieved? Scared? If something doesn't feel right, go back to thinking about your values. Maybe you missed an important one...

Advantages of using Decision Tables

- Offloading Working Memory
- Irrelevant values don't hurt (avoid sunk cost fallacy, escalating commitment)
- The table format forces us to be systematic
- Great tool for searching info (fact table)
- Team/couples decisions: tables can help us becoming aware of how our values and interests may be different without turning this into a problem or fight.

Selected References on Decision Aiding Techniques

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Example of a fact table with quantifiable values (Anderson, 2006)

	Contribution to Society (children's/women's/ cultural rights, reading, community)	Intellectual Challenge (creativity, academic knowledge, qualitative skills, variety)	Cultural Diversity	Compensation (Family)	Time for Family	Work Culture
	<i>Number of people/year affected (also duration of impact)</i>	<i>Percentage of time engaged in self-planned, skilled activities</i>	<i>Percentage of time working with people from other cultures</i>	<i>Dollar value of annual salary plus benefits</i>	<i>Hours/week with family</i>	<i>Percentage of time free from fixed schedule, location, and dress code</i>
University Professor		75%	55%	\$45,000	30 hrs/wk	80%
Other Research		60%	55%	\$40,000	15 hrs/wk	80%
Other Dissemination		65%	30%	\$32,000	40 hrs/wk	50%
Fund-Raising/PR		35%	25%	\$60,000	50 hrs/wk	5%

Template

	Value 1:	Value 2:	Value 3:	Value 4:	Value 5:	Value 6:	Value 7:	Totals
	<i>Weights</i>							
Option 1:	Raw Ratings							
	<i>Weighted Ratings</i>							
Option 2:	Raw Ratings							
	<i>Weighted Ratings</i>							
Option 3:	Raw Ratings							
	<i>Weighted Ratings</i>							
Option 4:	Raw Ratings							
	<i>Weighted Ratings</i>							
Option 5:	Raw Ratings							
	<i>Weighted Ratings</i>							
Option 7:	Raw Ratings							
	<i>Weighted Ratings</i>							