Improving Your Decision-Making



by

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Imagine Your Life with No Decisions

Consider the familiar metaphor that a life is like walking down a path on which there are forks that represent decisions at various locations.

Now imagine your life if it had no decisions, no forks.



Fortunately, your life will include numerous decisions.

Your Life with Decisions

- Your life is the result of
 - Decisions you will make,
 - your previous decisions,
 - your actions,
 - the decisions and actions of other individuals and organizations, and
 - happenstance.
- The only way that you can purposeful influence anything in your life is by the decisions that you make.
- Those decisions represent the power that you have to influence the quality of your life.

How Good are We at Making Decisions?

Almost all individuals routinely fall into decision traps that lead to inferior decisions.

Over the past 50 years, psychologists, decision scientists, and behavioral economists have identified over 175 separate biases, errors, and shortcuts that regularly affect our decisions.

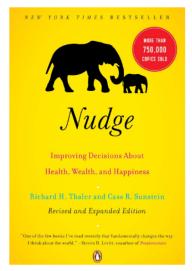
Examples include:

 addressing the wrong decision, not clarifying objectives of the decision, maintaining the status quo, selecting the default alternative or the easiest to implement, anchoring on first thoughts, choosing alternatives to justify earlier decisions (sunk costs), overweighting confirming evidence, and underweighting conflicting information.

Nudging

A nudge is a mental push that helps you make a better decision.

The revolutionary 2008 book <u>Nudge</u> by Thaler and Sunstein indicates how the presentation of decisions nudges individuals to make decisions more in their own interests.



Examples: lines in middle of highways, retirement accounts, cafeteria eating

Nudge units now exist in 200 countries and in numerous organizations, and collectively they have helped millions of individuals make some better decisions.

Give Yourself a Nudge

For most important decisions that you face, no government agency or organization can nudge you. So any nudging for your decisions must be done by you.

The rest of this presentation is about numerous nudges that you can use to help yourself make better decisions, and hence positively influence your quality of life.

These ideas will be in a new book, titled <u>Give Yourself a</u> <u>Nudge</u> to be appear in early 2020 by Cambridge University Press.

How Are Decisions Typically Made?

Something happens that leads you to

- 1. recognize a decision problem
- 2. Identify an alternative (or maybe more than one) to solve it
- 3. evaluate the alternative(s) and implement one

This is Alternative-Focused Decision-Making. It is

Reactive We rarely exert influence over which decisions we end up facing. Nor do we deliberately conceive of decisions to face that would surely enhance our lives if we did.

Constrained We often do not spend the time and effort to create alternatives better than the first acceptable one.

Backwards For most decisions, we do not know all that we want to achieve by making that decision. Not knowing what you want to achieve, how can you thoughtfully achieve it?

How Should Decisions be Made

Once you recognize any decision:

1. Your first thoughts should be about your values for that decision – what you want to achieve.

2. Your values then guide all else that you do regarding this decision.

This is

Value-Focused Decision-Making.

A more useful and empowering approach that requires being proactive.

SAME OLD WAY

A NEW WAY

Value-Focused Decision Framework

Front-End: Define the decision that you face

- 1. State the decision that you want to face.
- 2. Identify your values and state them as objectives.
- 3. Create alternatives that contribute to achieving your objectives.

Back-End: Analyze or thoughtfully examine your alternatives and make your decision

- 1. Describe possible consequences to indicate how well each alternative achieves your objectives.
- 2. Evaluate alternatives by weighing the pros and cons of each.
- 3. Select an alternative using insight from your analysis.

My presentation only concerns the front-end.

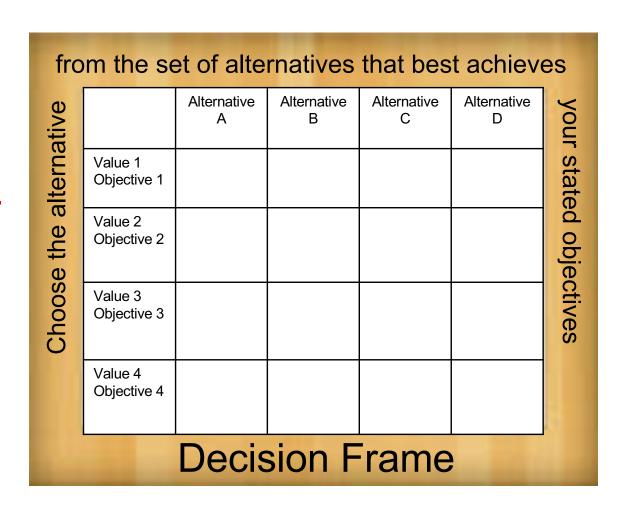
Why the Front-End Is So Crucial

- Defining your decision takes you from a vague thought that you must do something about a problem or opportunity to a unambiguous understanding of the decision you should address
- Most decisions will not have a back-end analysis.
 - 1. Very few individuals could do such an analysis
 - 2. It is rarely worth the time and effort
- In these cases, the only contribution to a quality decision is the front-end decision structure, which nudges you to make better decisions.
- The quality of the front-end greatly enhances the insight from and the quality of any back-end modeling, analysis, and/or appraisal of the alternatives.

Understanding Your Decision: Your Decision Frame

Front-End

- 1. State the decision.
- 2. Identify your values.
- 3. Create alternatives.



Your clearly framed decision: Choose the alternative from the set of alternatives that best achieves your stated values.

Six Crucial Nudges

I am going to discuss six key components of good decision-making, with practical procedures to implement them, that you can use to make significant improvements to your decision-making.



- 1. defining the decision you face
- 2. stating the objectives you want to achieve
- 3. creating alternatives
- 4. identifying decision opportunities
- constructing alternatives acceptable to an authorized decision-maker
- 6. developing strategic objectives to guide your life.

1. The decision statement

- Your decision statement should clearly and concisely state the decision you want to address.
- Its purpose is to provide guidance for identifying your values for the decision and an appropriate set of alternatives to consider.
- These define your decision frame, which then replaces your decision statement.

Composing Your Decision Statement

Develop a statement of your decision that is clear and concise.

Begin any decision statement with the *decide* typically followed by which, what, when, whether, how or if.

Your decision statement clarifies what it is that you wish to decide. The 'what it is' specifies either the values you hope to achieve or the alternatives you want to consider. Respective examples are 'decide how can I have more enjoyable weekends' and 'decide which new pair of skis should I buy'. Then, make sure that it summarizes the decision that you want to make.

Poor Decision Statements

- Decide what to do because my job isn't interesting.
 vague: improve current job, transfer within your organization, get a new job?
- Decide whether to visit Mexico on my vacation this next summer. unclear: what would you otherwise do?
- Decide whether or not to visit your grandmother next weekend. versus decide when to visit your grandmother the next four months; you may never go with sequential decisions
- Decide whether to exercise today. versus policy decision to decide whether to exercise regularly. Then rarely make the daily decision.

2. Identifying and Organizing Your Values



If you don't know what you want to achieve by making a decision, how could you possibly make a good decision?

- Whenever you face a decision, your first thought should be 'what are my values for this decision'.
- A value is anything that you care about achieving in making a decision. It can be stated in any convenient form; just articulating each value is the key.
- Your values should guide your decision-making.

Where Do Values Come From?

From the minds of decision makers

based on thoughts and feelings



Key Questions

- Can individuals list their values for a decision?
- Can they do this well?

The answer to both questions is "often not".

Experiment: Creating MBA Internship Objectives

Step 1: *DMs generate as* many relevant objectives as they can.

Step1a: DMs try harder

Step 2: DMs see the master list and check all objectives that are relevant.

Step 3: *DMs map objectives* from Step 1 to the master list. Checked items that map back are *self-generated* objectives; all others are recognized.

Step 4: *DMs rate the* importance of all checked objectives.

Objectives List

- DM Objective A
- DM Objective B
- DM Objective C
- DM Objective **D**

Master List

- Objective Objective Objective Objective
- Objective Objective
- Objective Objective Objective Objective
- Objective
- Objective
- Objective
- Objective
- Objective

Master List

- Objective Objective Objective **B** Objective **D**
- Objective Objective
- Objective Objective
- Objective Objective Objective
- DM Objective C Objective A
 - Objective
- Objective
- Objective

Master List

- □ Objective Objective \square Objective BObjective D
- □ Objective □ Objective
- **Ø**Objective ☑ Objective
 - □ Objective Objective

(3)

- Objective DM Objective C Objective A
- Objective
- ✓ Objective
- □ Objective

Master List of Summer MBA Internship Values

I would like to choose an internship that...

Is at a well recognized / respected company Allows me to meet interesting people Is with an organization that I am passionate about

Uses skills I have learned in my first year of B-school

Improves my attractiveness for full-time job offers

Makes me more savvy about office politics
Allows me to experience a new geographical
area

Gain experience leading team projects Helps me improve my analytical skills Is in near family or friends Is enjoyable to do

Enhances my knowledge in a particular industry Could lead to a full time offer from that firm Compensates me well

Provides information to help select a job after graduation

Enhances my resume

Helps me develop my leadership skills

Helps me improve my communication skills

Provides flexibility for personal interests during the summer

Gives me a substantial project of which I can feel ownership

Provides opportunities to interact with senior managers

Is with a company whose culture I identify with Gives me pride from landing a prestigious internship

Provides a structured program for learning and training

Is professionally challenging

Let me work with a diverse group of people

Offers the chance to learn new skills

Helps me decide what courses and skills I need to develop next year

Is at a company that sponsors work visas for placement in US offices

Helps me make good networking contacts Is a job that I would like to do full-time after graduation

Helps me decide whether the internship field is good for me long-term

Summary of MBA Internship Experiment Results

	Average Number	<u>Importance</u>
	of Values Created	of Values
Original list	6.4	7.28 average
Then think more/work harde	<u>er</u>	
Review/add as appropriate	0.5	†
Research shows, think		
 Add any you think of 	2.8	7.23
 Add at least 3 	3.1	average
 Add at least 6 	3.9	ı
 Add at least 9 	4.9	
Use categories:	3.6	
Tangible Benefits, Intangible Ber Develop Professional Skills, Enh		
Attractiveness to Potential Emplo		
Checked Objectives	20.1	\

Summary of Experimental Results

For real decision problems:

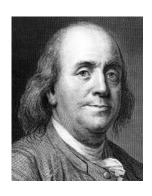
- Individuals often identify less than half of their values
- They miss values roughly as important as those identified



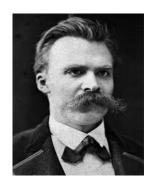
The implication: It is important to dedicate serious effort to help decision makers specify their values

Identifying Values Requires Focused Thought

Some world-renowned individuals have recognized that identifying all of your values for a decision is extremely difficult.



- Benjamin Franklin said that important decisions "are difficult, chiefly because while we have them under consideration, all the reasons pro and con are not present in the mind at the same time, but sometimes some set present themselves, and at other times another, the first being out of sight".
- > Franklin's pros and cons refer to values.



- Friedrich Nietzsche said "forgetting our objectives is the most frequent stupidity in which we indulge ourselves".
- ➤ Nietzsche's objectives are values.

A Process to Help Identify Your Values

- **Step 1** Create a wish list. Include every value you hope to achieve in the decision situation.
- **Step 2** Stimulate additional values by using mind-probing techniques.
- **Step 3** Ask others for suggested values. Their suggestions may be one of your values or stimulate you to think of others.
- **Step 4** Use previously identified values to identify additional values

Step 2: Stimulate Values Using Mind-Probing Techniques

Technique	Questions
Emotions and Feelings	Articulate your emotions and feelings evoked by the decision situation. Ask yourself why you care about these and how your alternatives may address them.
Alternatives	Identify a perfect alternative, a terrible alternative, some reasonable alternatives, the status quo. What is good or bad about each?
Consequences	Think about what might occur after you make your decision. What might occur that is good or bad?
Goals and Constraints	Review any goals and constraints you have. What are your reasons for setting these?
Different Perspectives	Suppose a friend or a competitor you know faced your decision. What might their values be? If you faced this decision at some time in the future, what would concern you?
Strategic Values	Consider the strategic values for guiding your life or your organization that are relevant to the decision? Are any of these values, or aspects of them, relevant to this decision?
Disappointment and Regret	After you have experienced the consequences of your decision, what might disappoint you and what might you regret?
Generic Values	What values have you had for the same or similar decisions that you have faced? Are these relevant now?

Step 4: Using Recognized Values to Search for Missed Values

For each recognized value, ask yourself:



- a. Why do I care about this value?
- b. How can you best achieve this value?
- c. What does this value mean?
- d. What is the general category of this value?



Clarifying Values

- Once you have a list of values for a decision, it is useful to state them in the common format.
- An objective is a value stated in a verb-object format that also clarifies the meaning of the value, for example:
 - 'money' becomes 'maximize my salary' or 'maximize profits' or 'minimize cost'
 - 'dirty lake' becomes 'reduce pollutant inflow' or 'restore habitat' or both
 - 'successful' becomes 'increase my skills', 'be promoted', or 'be respected by peers'

Suppose someone you know has been diagnosed with cancer. What would be a good set of values to guide the creation and appraisal of alternatives? Think of some potential values.

Objectives for Cancer Treatment

- Get all the cancer
- Avoid a recurrence of cancer
- Ensure that the cancer doesn't spread
- Minimize medical risks of treatment
- Minimize medical risks of cancer
- Reduce the likelihood of death in the near future
- Reduce the likelihood of serious complications
- Minimize personal costs of the entire procedure
- Have insurance pay the maximum possible
- Limit any pain and suffering

- Minimize inconvenience to self
- Have a comfortable hospital room
- Avoid worry about treatment
- Have trust in doctors
- Minimize inconvenience to family
- Receive good communication
- Have the best physicians
- Receive quality healthcare
- Limit time in hospital
- Minimize limits on activities after recuperation
- Receive friendly service at the hospital
- Provide future financial security for family
- Have the treatment soon

It is difficult to make sense and gain insight from such a long and multifaceted list of objectives

Organizing Your Values

Stating your values as objectives helps to understand their relationships and to facilitate their use.

Relationships between objectives

- Means Objective: an objective whose importance stems from its influence on achieving another objective, referred to as an ends objective.
- Fundamental Objective: an objective that defines a basic reason for caring about a decision.

Means and Fundamental Objectives for Cancer Treatment

Means Objectives

Get all the cancer

Avoid a recurrence of cancer

Assure that the cancer doesn't spread

Minimize medical risks of treatment

Minimize medical risks of cancer

Receive friendly service at the hospital

Reduce the likelihood of serious

complications

Have insurance pay the maximum

possible

Have a comfortable hospital room

Have trust in doctors

Receive good communication

Have the best physicians

Receive quality healthcare

Have the treatment soon

Fundamental Objectives

Minimize the likelihood of death in the near future

Minimize personal costs of the entire procedure

Limit any pain and suffering

Avoid worry about treatment

Minimize inconvenience to

self

Minimize inconvenience to

family

Minimize limits on activities

after recuperation

Provide future financial

security for family

Limit time in hospital

Uses of Means and Fundamental Objectives

 Only fundamental objectives should be used to evaluate and compare alternatives.

 Means objectives can be used to create alternatives.

3. Creating Alternatives

- Alternatives are the potential choices for pursuing your objectives.
 - Alternatives must be completely under the control of the decision maker
 - 2. Alternatives are defined such that only one alternative is chosen for a specific decision. This is not a limitation.
- Two important facts about alternatives:
 - You can never choose an alternative that you haven't identified
 - Your chosen alternative can be no better than the best of those that you have identified

Pitfalls when Creating Alternatives



- Stopping your search after one alternative is identified
- Thinking too narrowly (e.g. Business as usual)
- Inappropriate constraints
- Focusing on alternatives presented by others
- Incrementalizing existing alternatives
- No (or little) time spent creating alternatives
- Lack of guidance for creating good alternatives

Conventional Advice: Think Outside of the Box

The spirit of this advice is worth following.

With this reasonable advice, it is natural to think that one should not think inside of a box.

However, outside of the box is everywhere else, which is a phenomenally large space to look for anything.

You cannot look everywhere effectively or efficiently. Guidance on where to look would be useful.



"the proverbial box"



"outside the box"

My Advice: Think Inside the Right-Sized Box

You need to think "outside of <u>the</u> box", but not "outside of <u>a</u> box". You should think inside a bigger 'right-sized' box.



The size of this right-sized *Alternatives Box* is defined by your objectives.

How Should You Create Alternatives Inside the Alternatives Box?

- Since alternatives are the means to achieve the objectives ...
- Thinking about 'how to better achieve each objective' can suggest alternatives or elements of alternatives that will contribute to achieving your objectives

Creating Alternatives to Enhance One's MBA Internship

What alternatives could you initiate prior to and/or during your MBA internship that would enhance meeting your objectives?

When Asked	Average Number Created
Before listing objectives	5.5
After listing – using objecti	ves +3.9
After, focus separately on	each objective +5.7

Some Alternatives Created to Enhance An MBA Internship

- Interact proactively with senior management
- Seek out mentors
- Be proactive in taking responsibility
- Talk to previous interns at the company
- Create a list of people to meet and make appointments
- Network extensively during internship
- Review courses/concepts from first year
- Research the company and industry
- Prioritize what I want to learn from internship
- Choose useful elective courses

Practical Guidance for Creating Alternatives

Create alternatives using your objectives.

First identify alternatives to achieve each objective.

Second, use pairs of objectives, and then larger sets of objectives.

Third, enhance alternatives that you have already created. Initially, work alone to create alternatives, so you do not anchor on suggestions made by others.

Fourth, have friends and other knowledgeable individuals suggest alternatives or enhancements.

4. Decision Opportunities

- It seems odd that the words decision and problem are so intertwined in everyday use. We say 'I have a decision problem'.
- Yet our decisions are the only purposeful way to influence anything. Our decisions are the opportunities to guide our lives, hopefully for the better, and to positively influence the well-being of others, our communities, our countries, and our planet.
- So are decisions really problems?
 Most of our current decisions are!



How Do Your Decision Problems Occur?

- Your decision problems are caused by the decisions of others, happenstance, actions that you take without thinking, and bad consequences of your decisions (from good decisions or poor decisions).
- Respective examples are when your employer eliminates your job, you contract a serious illness, or a fire damages your home.
- Each of these situations presents you with a decision problem and it is definitely a problem.

Your Decision-Making

- Who should make your decisions?
 - You should!
- Who should choose the decisions that you face?
 - You should, at least more than you do.
- Making decisions on problems that you must face is reactive.
- Making decisions on 'problems' (i.e. opportunities) that you choose to face is proactive.

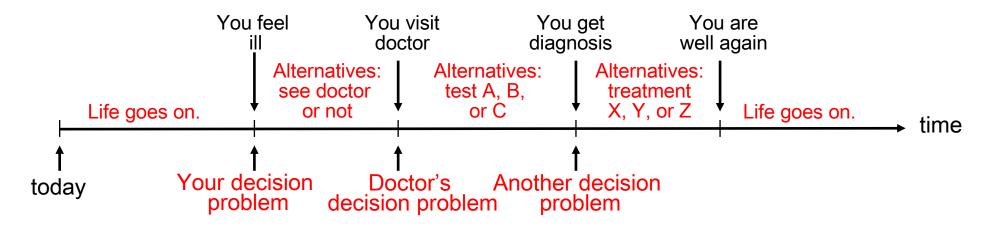


Creating Decision Opportunities

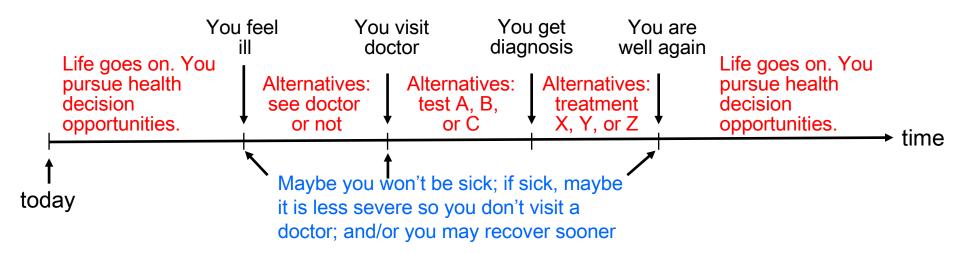
- You have the power to create some of the decisions you will face. I refer to these as decision opportunities.
- Decision opportunities are more attractive decisions than the decision problems that you must face.
- You can create decision opportunities by
 - converting decision problems into decision opportunities by creating a broader set of objectives and/or more appealing alternatives.
 - proactively creating decision opportunities that offer you the possibility to achieve very desirable consequences.
- Value-focused thinking helps you be systematic about creating decision opportunities.

Reactive versus Proactive Decision-Making for Health Decisions

Reactively Solving Decision Problems

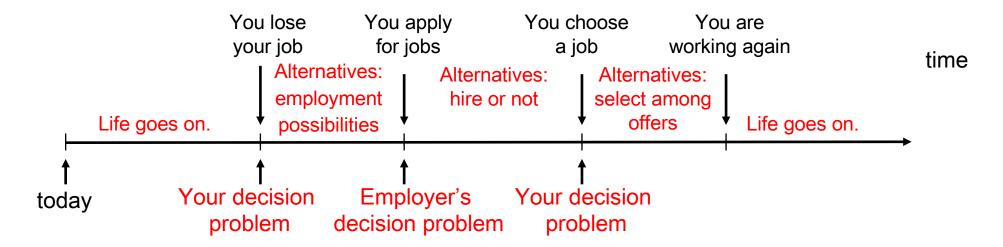


Proactive Pursuing Decision Opportunities

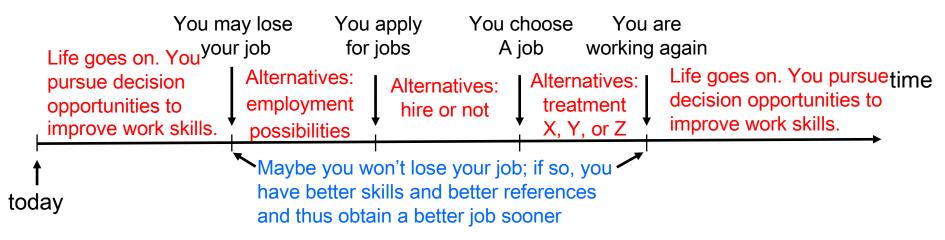


Reactive versus Proactive Decision-Making for Employment Decisions

Reactively Solving Decision Problems

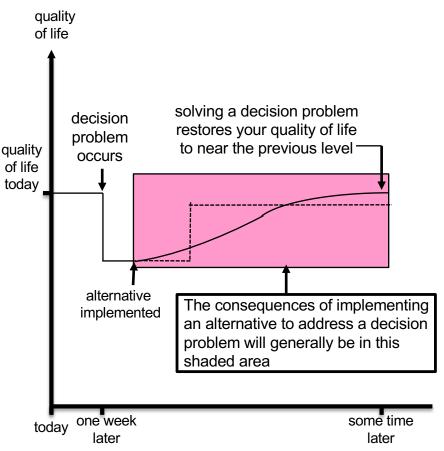


Proactive Pursuing Decision Opportunities

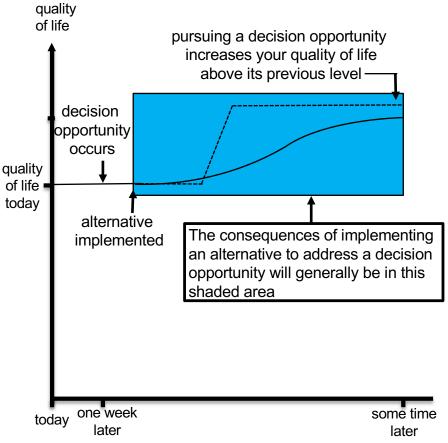


A Key Distinction between Decision Problems and Decision Opportunities

Decision problems usually do not improve your life



Decision opportunities usually do improve your life



A Decision Problem

A Decision Opportunity

Why Don't Decision-Makers Routinely Create Decision Opportunities?

Two main hindrances to creating decision opportunities:

- We don't have a distinct concept or name for what I'm calling a decision opportunity, so we not routinely think about utilizing this idea.
- We think of decisions as problems,
 we have enough problems already,
 we don't like problems,
 so why should we create any for ourselves?

Stimulate the Creation of Decision Opportunities

My life is less interesting than desired how to meet more interesting people

Experiencing Z would be great to experience Z

I admire people who have skill S to develop skill S

I'd like to do X, but I can't because ... to eliminate the reason why I can't do X

Something is bothering me to eliminate the bother

Do not accept a decision problem as presented; consider changing it into a decision opportunity, that is a better decision to face.

Before implementing an alternative, declare a decision opportunity, namely how can I improve my chosen alternative?

5. Decisions Requiring Authorization

- The situation: another individual an authorized decision-maker controls whether an alternative that you want can be implemented.
- You and an authorized decision-maker both recognize your joint authority to implement alternatives that you each pursue (a standard negotiation, buying - selling a house)
- Only you recognize that an authorized decision-maker shares the joint authority to implement an alternative that you jointly pursue (a silent negotiation, co-authoring an article)
- Only you recognize that an authorized decision-maker can allow you to implement an alternative that affects only you (a silent negotiation, working remotely)

An Offer that Cannot Be Refused

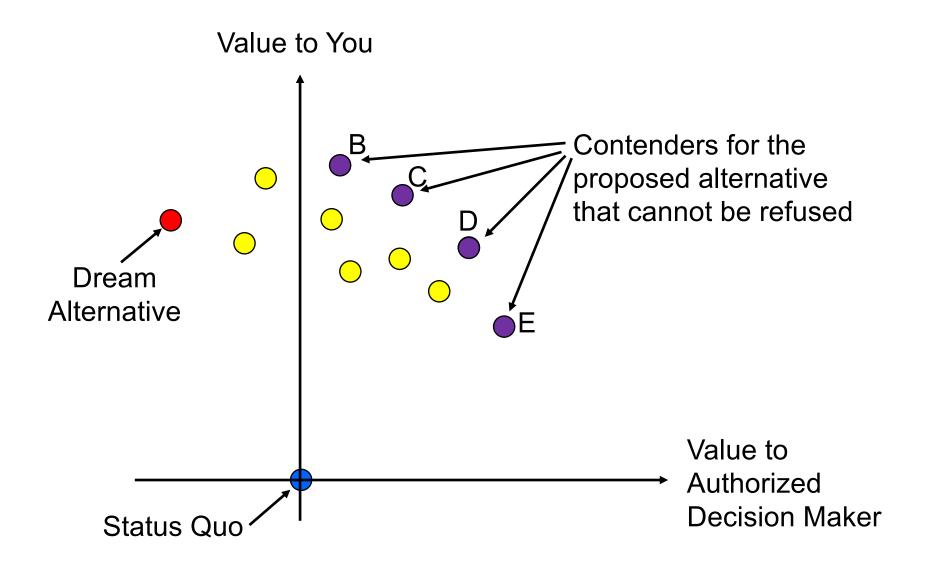
For a decision opportunity, you create a 'dream' alternative, but you need someone's (e.g. boss, friend, parent, teacher, colleague) authorization to implement it. At this time, the authorized decision-maker is unaware of your thoughts.

Identify: the values of the authorized decision-maker for the alternative that you want.

Create: an alternative that provides what you want and also is better than the status quo of the authorized decision-maker.

Act: propose that win-win alternative to the authorized decision-maker, which should be an alternative that can't be refused.

An Alternative that Can't Be Refused



- Co-authoring a book
- ► Leave of absence

Identifying Values of an Authorized Decision-Maker

There are four possibilities for articulating the values of a specific authorize decision-maker:

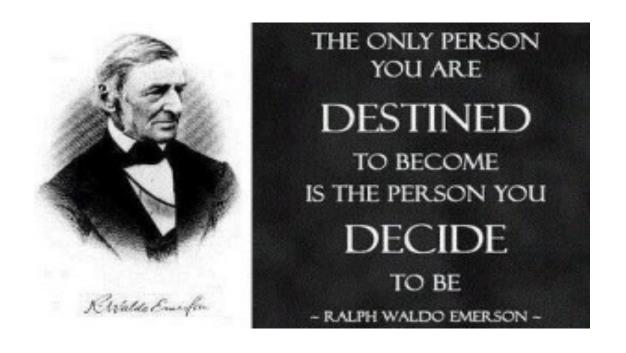
- You know the authorized decision-maker and articulate their values.
- You know the authorized decision-maker and ask them about their values. It's in their interest to indicate their values.
- You ask someone else, who knows the authorized decision-maker well, about their values.
- Use your general knowledge and common sense about likely values of the authorized decision-maker. Also, their values may have been documented.

Practical note: you only need to know some of the authorized decision-maker's values to create an alternative that is better for them than their status quo.

Creating Desirable Alternatives for the Authorizing Decision-Maker

- Assume that there are such alternatives; the authorizing decision-maker has a multitude of values.
- For jointly implemented decisions, modify the dream alternative to reduce negative consequences or increase positive consequences.
- For separately implemented decisions, identify an alternative in a different setting that has sufficient positive value for the authorizing decision-maker to accept the two decisions together.

6. Developing Your Strategic Life Objectives



Your strategic values, stated as your strategic life objectives, describe who you want to be and guide your decisions to become that person.

(same as strategic values for an organization)

A Comment on Life and Life Objectives

"I always knew I wanted to be somebody, but perhaps I should have been more specific."

– Lily Tomlin



Constructing Your Life Objectives

 Your overall life value should be to "maximize your quality of life".

You need to define your quality of life:

- Identify your life values (what you care about)
 - Hard thinking over time
 - Expand to be complete
- Organize your values
 - Convert values to objectives
 - Relate means and ends objectives
 - Identify components of major objectives
 - Identify strategic life objectives

Stimulating Thoughts to Identify Your Life Values

Each of these can suggest life values

- Consider activities (e.g. work and leisure) that you have spent a significant time doing that you like or dislike.
- Reflect on both very good and very bad decisions that you have made.
- Identify very good and very bad consequences that did or could have happened to you.
- Imagine your concerns at different ages in the future;
 think hard about your life values you may have then.
- Inquire about perspectives of your family and friends.

Understanding Your Reasoning for Each Value

- State values as objectives (i.e. verb-object format).
- Ask yourself why you care about each objective.
- Then ask why for the response, and for its response.
 Push yourself to better understand what it is that you want out of life.
- Consider whether to modify or expand any objective to clarify its meaning.

Organize Your Life Objectives

- Cluster objectives. Combine objectives into groups concerned with a similar focus. Clarify major objectives with components.
- Identify relationships of objectives. Specify inclusion and means-ends relationships.
- Select your strategic life objectives. Your strategic life objectives are the fundamental objectives of your life. They essentially define what you ultimately want to achieve in your life.
- Strategic life objectives should be stable.
 Otherwise, they are not life objectives.

Means Life Objectives

Make Good Decisions

Pursue worthwhile activities

Pursue worthwhile relationships

Maximize freedom of choice

Maximize opportunities for choice

Minimize constraints on freedom of choice

- Maximize health
- Maximize financial well-being
- Maximize available time

Minimize constraints on opportunities for choice

- Maximize creative thought
- Minimize constraints due to others

Have Enriching Experiences

· influences —

Strategic Life Objectives

Maximize my quality-of-life

Enjoy life

Have fun

Have excitement

Revel in emotions

Relish experiences

Be intellectually fulfilled

Learn

Know

Understand

Reason

Enhance the lives of family and friends

Wife Janet and Son Greg Other family and friends

Contribute to society

My employer

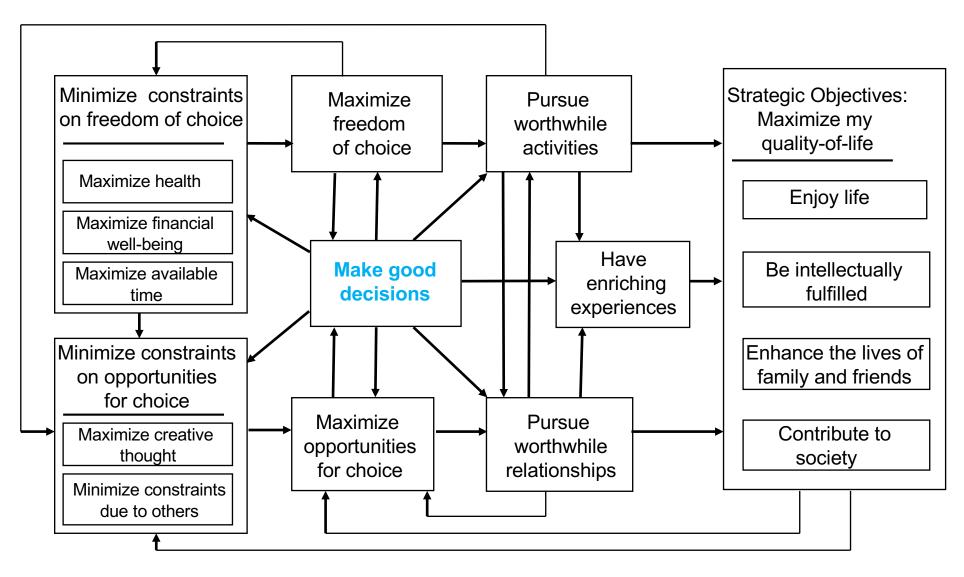
Organizations to which I belong

My professional field

My community

Individuals

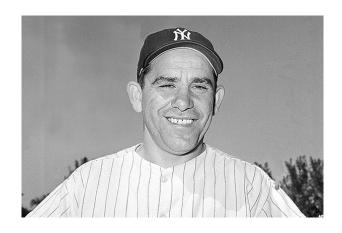
My Strategic Life Objectives Network



Note: an arrow means "influences"

Pursuing your Life Objectives

"If you don't know where you are going, you just might end up somewhere else." *Yogi Berra*



- With a clear understanding of what you hope to achieve in life, you have a better chance of achieving it.
- The logic is simple. If you do not know what you want to achieve, you are less likely to think of ways to achieve it, less likely to pursue it, and so less likely to achieve it.

Your Life Objectives Guide Your Life

Your strategic life objectives help coordinate all of your decisions toward enhancing your quality of life.

- Your life values are like a car navigation system.
- A car navigation system provides guidance for any travel. Your life values provide guidance for your life travels (i.e. decisions). Many vehicle trips are familiar, so you don't use your navigation system explicitly, but your travel is consistent with its suggestions.
- Many of your decisions are also familiar, so you do not need to explicitly use your life objectives. They are internalized and naturally used to guide your decisions.

Becoming a Value-Focused Decision Maker

Being a value-focused decision maker requires mastering a set of skills. This requires that you:

- Learn what the concepts are and their the usefulness,
- Learn how to use those concepts on decisions.
- Practice using these skills.

Notice that this is analogous to what is necessary to become competent at any other skills, such as any sport, playing a musical instrument, being a good parent, or cooking. You can learn how to be skillful by reading, but you will not be skillful without significant practice.

Last Thoughts

Being a proactive value-focused nudging decisionmaker is conceptually easy, but requires some thoughtful effort.

Most of us have years of experience and a life-long habit of being a reactive alternative-focused decision maker.

It is hard to break such an engrained habit, but I hope that you recognize the usefulness of value-focused nudges and, therefore, of the effort necessary to develop your skill at using it.

Thank You

Improving Your Decision-Making



by

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Steps of Value-Focused Brainstorming

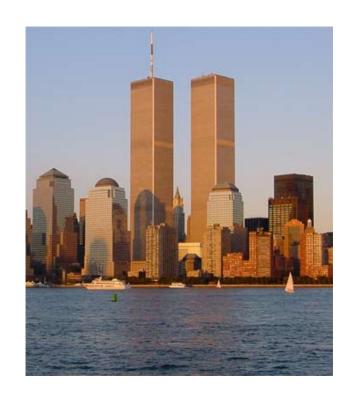
When a group is creating alternatives

- 1. State the decision to be solved.
- 2. Identify the values of the decision.
- 3. Individually generate alternatives.
- 4. Collectively generate alternatives.

Avoids the shortcomings of traditional brainstorming;

Value-Focused Brainstorming: Emergency Evacuation of Large Buildings

- In the 2001 terrorist attack on the World Trade Center, 2,602 individuals lost their lives. Many fewer would have died had they been able to evacuate the buildings.
- A federal investigation recommended developing much better emergency egress systems.



A Value-Focused Brainstorming Workshop

Purpose: to identify new, creative, and useful ways for emergency evacuation from buildings. The need could be due to fires, natural disasters, or human-caused problems including terrorist attacks.

Response: A 2.5 day invitation-only workshop sponsored by the National Institute of Standards and Technology and the National Institute of Building Sciences

Participants: Approximately 35 experts with expertise about architecture, fire safety, legal issues, standards and codes, people with disabilities, emerging technologies for egress, and human behavior.

Results of the Workshop

On day 1, objectives were elicited from all participants.

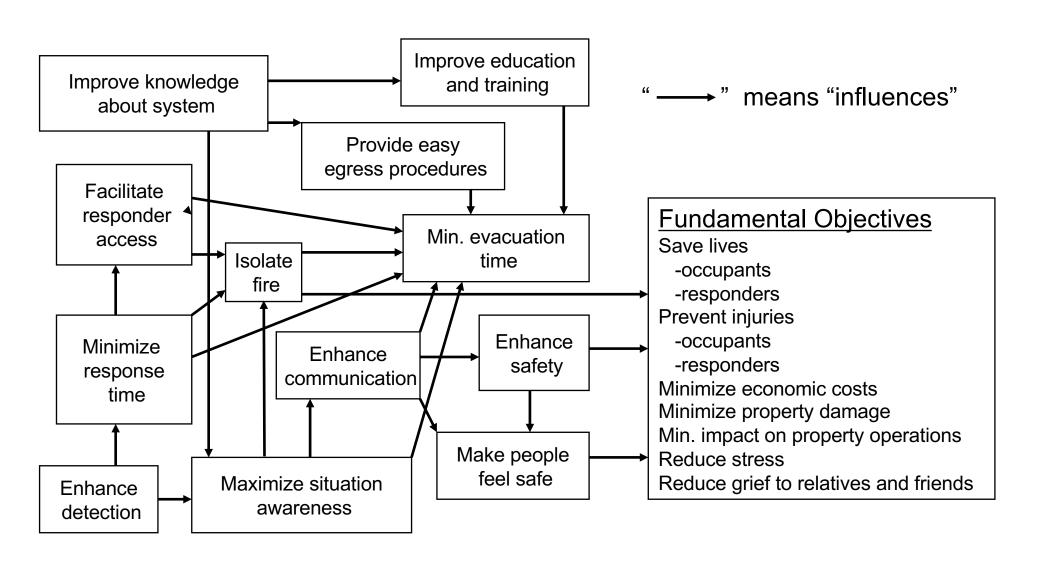
That evening, facilitators constructed a means-ends objectives network to provide a basis for creating new alternatives.

On day 2, participants use the objectives to create alternatives working individually at first and then in small groups.

That evening, facilitators identified about 400 alternatives or elements of alternative that could facilitate evacuation from large buildings. These were categorized into several types of alternatives to facilitate understanding, communication, and use.

The collections of alternatives and of objectives should provide a sound basis for further fruitful thinking about emergency evaluation and its consequences.

Means-Ends Objectives Network for Emergency Evacuation



Some Alternatives Suggested to Improve Emergency Evacuation

Involving Sprinklers / Active Suppression Systems

Increase sprinkler density with building height Involving Protect in Place / Areas of Refuge

Zoned floors to create "safe" areas for people awaiting evacuation

Involving Building Construction Changes

Reduce fuel loads in buildings

Involving Building Material Changes

Hardened evacuation routes

Involving the Fire Service

Equipment lift for fire fighters

Dedicated firefighting stairwell

Stairwell mini-door for firefighting hoses

Involving Elevators

Protected elevators for evacuation of transitional refuge areas

Involving Societal /Regulatory / Legal Changes

Don't build high buildings

Make occupants more fit

External to the Building

Chutes / slides / controlled descent devices

Horizontal egress or skybridge

Involving Communication

Use technology such as cell phones, PDA's, computers, phones for timely communication

Universal emergency ringtone

Involving Information Systems

Dynamic reactive signage

Involving Pre-event Planning

Present occupants with actual simulation/videos of what could happen in a real event

Involving Efficient Use of Egress System

Enhanced stairway descent devices

To Enhance Stairwell Evacuation / Reduce

Stairwell Load

Use electroluminescent strips in hotels

Impacting the Design Process / Risk Informed Performance-Based Design

Perform analysis to evaluate emergency procedures

That Enhance Reliability of Building Systems

Two remote sources for sprinkler water

That Involve Event Procedural Changes

Stairs to refuge floors, elevators from there

That Enhance Event Detection

Use thermal imaging systems for detection

Note that understanding the decision context is important for developing alternatives.