



**Smart Choices:  
A Practical Guide to Making Better Life Decisions**

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**Authors' Bio:** John S. Hammond is a management consultant based in Lincoln, Massachusetts and is known for helping his clients make tough choices. Ralph L. Keeney is a professor at the University of Southern California's Marshall School of Business and is especially known for his work on making difficult tradeoffs. Dr. Howard Raiffa has been a professor at Harvard and is a pioneer in the development of decision analysis, negotiation analysis and the theory of games.

**Authors' big thought:** Decisions shape our experiences, from choosing which job to accept, to having the right car, to selecting a good accountant. How do we know which is the smart one? How can we be consistent and confident in our decisions? In this award-winning bestseller, readers learn how to approach all types of decisions with a simple set of skills developed from professors from Harvard, MIT, and the University of Southern California.

**1. Making Smart Choices**

**How to think about your whole decision problem: a proactive approach**

- Our decisions shape our lives. Made consciously or unconsciously, with good or bad consequences, they represent the fundamental tool we use in facing the opportunities, the challenges and the uncertainties of life.

***Making decisions is a fundamental life skill.***

- Making good decisions is one of the most important determinants of how well you meet your responsibilities and achieve your personal and professional goals. In short, the ability to make smart decisions is a fundamental life skill.
- The need to make a difficult decision puts us at risk of anxiety, confusion, doubt, error, embarrassment or loss. Our discomfort often leads us to make decisions too quickly, or too slowly, or too arbitrarily.

***You can learn to make better decisions.***

- We don't know how to make decisions well. Few of us ever receive any training in it.
- The only way to really raise your odds of making a good decision is to learn to use a good decision-making process - one that gets you to the best solution with a minimal loss of trust, energy, money, and composure.
- An effective decision-making process fulfills these six criteria:
  - It focuses on what's important
  - It is logical and consistent
  - It acknowledges both subjective and objective factors and blends analytical with intuitive thinking. It requires only as much information and analysis as is necessary to resolve a particular dilemma
  - It encourages and guides the gathering of relevant information and informed opinion
  - It is straightforward, reliable and easy to use, and flexible

***Use the PrOACT approach to make smart choices.***

- This book provides you with a straightforward proven approach for making decisions. It won't make hard decisions easy. Hard decisions are hard because they are complex, and no one can make that complexity disappear.
- Even the most complex decisions can be analyzed and resolved by considering the following set of eight elements. The acronym for these PrOACT, serves as a reminder that the best approach to decision situations is a proactive one. Although this method may not make a decision easy, it will certainly make it easier.

***There are eight keys to effective decision making:***

- Work on the right decision problem.
- Specify your objectives.
- Create imaginative alternatives.
- Understand the consequences.
- Grapple with your tradeoffs.
- Clarify your uncertainties.
- Think hard about your risk tolerance.
- Consider linked decisions.
- The eight PrOACT elements provide a framework that can profoundly redirect your decision making, enriching your possibilities and increasing your chance of finding a satisfactory solution.

***Start making your own smart choices now.***

- A good decision increases the odds of success and at the same time satisfies our very human desire to control the forces that affect our lives.
- A couple of important tips that will help ensure that you get the full benefit of the authors' approach are:
- First and foremost, always focus your thinking where it matters most, cycle quickly through the eight elements to gain a broad perspective of your decision problem. Usually, only one or two elements will emerge as the most critical for the decision at hand.

- Try configuring your problem in various ways. Display it graphically, as a table, diagram or chart, for example. Restate it in several forms, using different words, phrasings, and emphasis. Describe your problem to others, asking for their opinions and advice.
- Take control - create your own decision opportunities and be proactive in your decision making.
- Most important, be proactive in seeking decision opportunities that advance your long-range goals, your core values and beliefs; and the needs of your family, community, and employer. Take charge of your life by determining which decision you'll face and when you'll face them.

## **2. Problem**

### **How to define your decision problem to solve the right problem**

- You can make a well-considered, well-thought-out decision, but if you started from the wrong place - with the wrong decision problem, you won't have made the smart choice. The way you state your problem frames your decision. It determines the alternatives you consider and the way you evaluate them. Posing the right problem drives everything else.
- A good decision to a well-posed decision problem is almost always a smarter choice than an excellent solution to a poorly posed one.

### ***Be creative about your problem definition.***

- It's easy to state the problem in the most obvious way, or the way that first pops into your mind, or in the way it's always been stated in the past. To make sure you get the problem right, you need to get out of the box and think creatively.

### ***Turn problems into opportunities.***

- By stating your problem creatively, you can often transform it into an opportunity, opening up attractive and useful new opportunities.
- Every decision problem has a *trigger* - the initiating force behind it. Most triggers come from others (your boss) or from circumstances beyond your control (new regulations affecting your business). Because they are imposed on you from the outside, you may not like the resulting decision problems. Creating decision situations for you is a great way to create new opportunities, before a problem even arises.

### ***Define the decision problem.***

- Start by writing down your initial assessment of the basic problem, then question it, test it, hone it.

### ***Ask what triggered this decision. Why am I even considering it?***

- The trigger is a good place to start because it is your link to the essential problem.

### ***Question the constraints in your problem statement.***

- Problem definitions usually include constraints that narrow the range of alternatives you consider. They put blinders on you, preventing you from seeing the best options. Identifying and challenging constraints can lead you to better problem definitions and better solutions.

### ***Identify the essential elements of the problem.***

- By breaking a problem down into its component pieces, you can be sure that your problem statement is focused on the right track.

***Understand what other decisions impinge on or hinge on this decision.***

- Thinking through the context of a decision problem will help keep you on the right track.

***Establish a sufficient but workable scope for your problem definition.***

- An ideal solution for a problem that is too narrow could be a poor solution for a more broadly and accurately defined problem.

***Gain fresh insights by asking others how they see the situation.***

- Get some other perspectives to see your problem in a new light, perhaps revealing new opportunities or exposing unnecessary, self-imposed constraints.

***Reexamine your problem definition as you go.***

- Defining your decision problems is in itself a decision problem, the resolution of which will profoundly influence your ultimate choice. It's important not only to consider several possible problem definitions in the beginning, but also to pause along the way and reexamine the definition you've chosen.
- Chances to redefine your problem are opportunities that often lead to better decisions.

***Maintain your perspective.***

- Crafting a good definition takes time; don't expect to get it right in one sitting. But in 99 out of 100 cases, spending extra time defining the problem pays off handsomely in the end.
- Expansive thinking generates better problem definitions, and better definitions open up a broader range of creative solutions.

### **3. Objectives**

**How to clarify what you're really trying to achieve with your decision**

- Pause and think about your objectives. What do you really want? What do you really need? What are your hopes? Your goals? Answering these questions honestly, clearly, and fully puts you on track to making the smart choice.
- Objectives form the basis for evaluating the alternatives open to you. They are your decision criteria. A full set of objectives can help you think of new and better alternatives, looking beyond the immediately apparent choices.

***Let your objectives be your guide.***

- Sometimes, the process of thinking through and writing out your objectives can guide you straight to the smart choice. The objectives you set will help guide your entire decision-making process, from defining alternatives at the outset, to analyzing those alternatives, to justifying the choice you ultimately make.
- Objectives help you determine what information to seek.
- Objectives can help you explain your choices to others.
- Objectives determine a decision's importance and, consequently, how much time and effort it deserves.

***Watch out for these pitfalls.***

- Often, decision makers take too narrow a focus. First, most people spend too little time and effort on the task of specifying objectives. Second, getting it isn't easy. While you might think you know what you want, your real desires might actually be submerged.

- For important decisions, only deep soul searching will reveal what really matters to you. The more relentlessly you probe beneath the surface of "obvious" objectives, the better the decisions you'll ultimately make.

***Master the art of identifying objectives.***

- Identifying objectives is an art, but it's an art you can practice systematically. Follow these five steps:
- *Step 1: Write down all the concerns you hope to address through your decisions.* Flesh out your list by trying some of these techniques:
  - Compose a wish list.
  - Think of the worst possible outcome.
  - Consider the decisions impact on others.
  - Ask people who have faced similar situations what they considered when making their decision.
  - Consider a great, even if unfeasible, alternative.
  - Consider a terrible alternative.
  - Think about how you would explain your decisions to someone else.
  - When facing a join or group decision, one involving family or colleagues, first have each person follow the above suggestions individually.
- *Step 2: Convert your concerns into succinct objectives such as a short phrase consisting of a verb and an object (Minimize costs).*
- *Step 3: Separate ends from means to establish your fundamental objectives.*
  - The best way to do this is to follow the advice of the common Japanese saying "You don't really understand something until you ask five times "why?"" Asking "Why?" will lead you to what you really care about - your *fundamental objectives*, as opposed to your *means objectives*. *Means objectives* represent way stations in the progress toward a fundamental objective, the point at which you can say "I want this for its own sake. It is a fundamental reason for my interest in this decision." *Fundamental objectives* constitute the broadest objectives directly influenced by your decision alternatives.
  - Your fundamental objectives depend on your decision problem. A means objective in one decision problem may be a fundamental objective in another.
  - Separating means and fundamental objectives is critical because both kinds of objectives play important but different roles in the decision making process.
    - Each means objective can serve as a stimulus for generating alternatives and can deepen your understanding of your decision problem.
    - Only fundamental objectives should be used to evaluate and compare alternatives.
- *Step 4: Clarify what you mean by each objective.*
  - Clarification will lead to better understanding, which in turn will help you state the objective more precisely and see more clearly how to reach it. In addition, when it comes time to choose, you'll be better prepared to appraise whether or not the objective is being met. For many objectives, the bottom line will be obvious.
- *Step 5: Test your objectives to see if they capture your interests.*

- Use your list to evaluate several potential alternatives, asking yourself if you would be comfortable living with the resulting choices. See if your objectives would help you explain a prospective decision to someone else.

***Practical advice for nailing down your objectives***

- You will more readily identify your fundamental objectives if you keep the following considerations in mind.
  - Objectives are personal
  - Different objectives will suit different decision problems
  - Objectives should not be limited by the availability of or ease of access to them
  - Unless circumstances change markedly, well thought-out fundamental objectives for similar problems should remain relatively stable over time
  - If a prospective decision sits uncomfortably in your mind, you may have overlooked an important objective.

***For joint or group discussion***

- First have each individual draw up a list separately, and then combine them.
- Phrase each concern as a true objective, using a verb and an object
- Ask "Why?" for each objective
- Ask "What do we really mean by this?"

**4. Alternatives**

***How to make smarter choices by creating better alternatives to choose from***

- Alternatives represent the range of potential choices you'll have for pursuing your objectives. Two important points should be kept in mind. First, *you can never choose an alternative you haven't considered*. Second, No matter how many alternatives you have, *your chosen alternative can be no better than the best of the lot*. Thus the payoff from seeking good, new, creative alternatives can be extremely high.

***Don't box yourself in with limited alternatives.***

- Unfortunately, people don't tend to think a lot about their decision alternatives. Too many decisions, as a result, are made from an overly narrow or poorly constructed set of alternatives.
- One of the most common pitfalls is *business as usual*. Because many decision problems are similar to others, choosing the same alternative beckons as the easy course.
- Sometimes so-called new alternatives represent nothing more than *incrementalizing*-making small and usually meaningless changes to previously devised alternatives.
- Many poor choices result from falling back on *default* alternatives.
- Choosing the *first possible solution* is another pitfall. Develop a new habit: once you find one possible solution, look further - generate new alternatives that could lead to a *better* solution.
- People who wait too long to make a decision risk *being stuck with what's left* when they finally do choose. The best alternatives may no longer be available.

***The keys to generating better alternatives.***

- Try some of these techniques to make the most of your efforts:

- Use your objectives - ask "How?" Since your objectives drive your decisions, use them to guide your search for good alternatives. Ask yourself "How can I achieve the objectives I've set?"
  - *Challenge constraints.* Many decision problems have constraints that limit your alternatives. Some constraints are real, others are assumed.
  - An *assumed* constraint represents a mental rather than a real barrier. Try assuming that a constraint doesn't exist, and then create alternatives that reflect its absence.
  - *Set high aspirations.* One way to increase the chance of finding good, unconventional alternatives is to set targets that seem beyond reach. High aspirations force you to think in entirely new ways.
  - *Do your own thinking first.* Some of your most original ideas, born of innocence, may be suppressed if exposed to others' ideas and judgments before they have been fully formed.
  - *Learn from experience.* You shouldn't let yourself be constrained by history, but you should certainly try to learn from it.
  - *Ask others for suggestions.* After you've thought carefully about your decision and your alternatives on your own, you should then seek the input of others to get additional perspectives. Keep an open mind during these conversations. The primary benefit may not be the specific ideas that others provide, but simply the stimulation that you get from talking about your decisions, from organizing your thoughts into explanations, and from answering questions.
  - *Give your subconscious time to operate.* The subconscious needs time and stimulation to do this well.
  - *Create alternatives first, evaluate them later.* Creating good alternatives requires receptivity - a mind expansive, unrestrained, and open to ideas. Don't evaluate alternatives while you're generating them. That will slow the process down and dampen creativity. Evaluation narrows the range of alternatives.
  - *Never stop looking for alternatives.* Often, the evaluation will turn up shortcomings in your existing alternatives, which may in turn suggest better ones.

***Tailor your alternatives to your problem.***

- Certain kinds of alternatives fit certain kinds of decision problems. Four categories - are particularly well suited to specific kinds of problems.
  - *Process alternatives.* The best alternative is sometimes a *process* rather than clear-cut choice. Process alternatives help to ensure the fairness of decisions involving conflicting interests and thus can help preserve and foster long-term relationships.
  - Familiar process alternatives include: voting, binding arbitration, standardized test scores (to establish minimum requirements), sealed bids, and auctions.
  - To create process alternatives, you can begin by listing all of the basic alternatives from which to choose. Then you should determine the right process mechanism for selecting the best alternative.
  - *Win-win alternatives.* Sometimes devising great alternatives isn't the problem. The problem is that your decision requires some-one else's approval. The key is to step

back and analyze *his* decision problem. What are his objectives, and how can you use them to create a win-win alternative that benefits both.

- *Information-gathering alternatives.* Information helps dispel the clouds of uncertainty hovering over some decisions. When there are uncertainties affecting a decision, first list the areas of uncertainty. Then, for each one, list the possible ways to collect the needed information. Each of these ways is an information-gathering alternative.
- *Time-buying alternatives.* Deferring a decision can provide you with additional time to better understand a decision problem, gather important information, and perform complex analyses. You may, as a result, be able to dispel uncertainties and reduce risks. Sometimes, extra time may allow you to create a new alternative that is much better than all the current alternatives.
  - Deferring a decision usually comes at a price.
  - Devising a halfway alternative, a partial commitment, can sometimes circumvent the drawbacks of a delay in making a full commitment.
- *Know when to quit looking for alternatives.*
  - The perfect solution seldom exists. You need to balance the effort made against the quality of the alternatives found. To strike the right balance, ask yourself questions:
    - Have you thought hard about your alternatives?
    - Would you be satisfied with one of your existing alternatives as a final decision?
    - Do you have a range of alternatives?
    - Do other elements of this decision require your time and attention?
    - Would time spent on other decisions or activities be more productive?
  - If you answered "yes" to each of these questions, stop looking for more alternatives and apply your energies elsewhere.

## **5. Consequences**

### **How to describe how well each alternative meets your objectives**

- To make a smart choice, you need to compare the merits of the competing alternatives, assessing how well each satisfies your fundamental objectives. You'll need to lay out the consequences each alternative would have for each of your objectives.
- Be sure you really understand the consequences of your alternatives before you make a choice. If you don't, you surely will afterwards, and you may not be very happy with them. The main benefit to be derived from describing consequences is understanding. You will gain a better understanding not only of the consequences themselves, but also of your objectives and even of your decision problem.

### ***Describe consequences with appropriate accuracy, completeness, and precision.***

- If you don't define the consequences well, you may arrive at a decision quickly, but it probably won't be the right choice.

### ***Build a consequences table.***

- The trick is to describe the consequences with enough precision to make a smart choice, but not to go into unnecessary and exhausting detail.

- *Step 1: Mentally put yourself into the future.*
- You need to shift your mindset ahead in time to uncover a decision's true significance. Imagine that you have chosen it. Putting yourself in the future will help you to focus on the longer-term consequences of a decision rather than just the immediate ones, and it will help you to view these consequences in their actual context.
- *Step 2: Create a free-form description of the consequences of each alternative.*
- Write down each consequence using the words and numbers that best capture its key characteristics.
- *Step 3: Eliminate any dearly inferior alternatives.*
- This step is a terrific time saver for many decisions because it can quickly eliminate alternatives and may lead to a resolution of your decision. You essentially play "king of the mountain," trying to knock one alternative out with another.
- Take two alternatives. Select one that is the tentative king.
- Use your descriptions to identify the pros (in one list) and the cons (in another) of the king in relation to the second alternative, making sure you cover each objective.
- Continue through your list of alternatives, comparing them in pairs. At the end of the process, one alternative may emerge as the clear selection. If not, continue to the next step.
- *Step 4: Organize descriptions of remaining alternatives into a consequences table.*
- List your objectives down the left side of a page and your alternatives along the top. This will give you an empty matrix. In each box of the matrix, write a concise description of the consequence that the given alternative will have for the given objective. You'll likely describe some consequences quantitatively, using numbers, while expressing others in qualitative terms, using words. The important thing is to use consistent terminology in describing all the consequences for a given objective - in other words, use consistent terms across each row. Now, compare pairs of alternatives again, and eliminate any that are inferior.

***Compare alternatives using a consequences table.***

- A consequences table puts a lot of information into a concise and orderly format which allows you to easily compare your alternatives, objective by objective. It gives you a clear framework for making comparisons, and if necessary, trade-offs.

***Master the art of describing consequences.***

- Try these techniques:
  - *Try before you buy*- Experience the consequences of an alternative before you choose it, whenever it is feasible.
  - *Use common scales to describe the consequences.* Sometimes, verbal descriptions of consequences, however well organized, won't be sufficient to resolve a decision problem. In these cases, scales will enable you to describe consequences more clearly and to make otherwise difficult decisions more easily. To be useful, scales must represent measurable, meaningful categories that capture the essence of your objective. Struggles with difficult-to-measure objectives yield a significant benefit: determining how you would measure an objective forces you to clarify what you really mean by it.

- *Don't rely only on hard data.* Give due recognition to objectives that can't be measured by hard data. Choose scales that are relevant, regardless of the availability of hard data.
- *Make the most of available information.* For some cases you'll have a little data, but you'll need to supplement it with judgment- as well as a good dash of logic.
- *Use experts wisely.* When you seek out the judgment of others, be sure you understand not just the consequences they project but how they derived those consequences.
- *Choose scales that reflect an appropriate level of precision.* Too often, the terms used in describing consequences imply a level of precision that is higher or lower than is reasonable or useful.
- *Address major uncertainty head on.* When the uncertainty is modest, you can usually define consequences using an estimate or representative figure. For many decisions, uncertainty may loom large enough to complicate your ability to describe consequences adequately.

## **6. Tradeoffs**

### ***How to make tough compromises when you can't achieve all your objectives at once***

- Important decisions usually have conflicting objectives - and therefore you have to make tradeoffs. You need to give up something on one objective to achieve more in terms of another.
- Decisions with multiple objectives cannot be resolved by focusing on any one objective.
- Making wise tradeoffs is one of the most important and most difficult challenges in decision making. The more alternatives you're considering and the more objectives you're pursuing, the more tradeoffs you'll need to make. What makes decision making hard is the fact that each objective has its own basis of comparison.

### ***Find and eliminate dominated alternatives.***

- The first step is to see if you can rule out some of your remaining alternatives before having to make tough tradeoffs. To identify alternatives that can be eliminated, follow this simple rule: if alternative A is better than alternative B on some objectives and no worse than B on all other objectives, B can be eliminated from consideration. In such cases, B is said to be *dominated* by A - it has disadvantages without any advantages.
- By looking *for dominance*, you've just made your decision much simpler.
- Consequence tables can be great aids in identifying dominated alternatives because they provide a framework that facilitates comparisons. To make it easier to uncover dominance, you should create a second table in which the descriptions of consequences are replaced with simple rankings.
- Working row by row - that is, objective by objective, you determine the consequence that best fulfills the objective and replace it with the number 1; then find the second best consequence and replace it with the number 2; and you continue in this way until you've ranked the consequences of all alternatives. Dominance is much easier to see when you're looking at simple rankings. Using a ranking table to eliminate dominated alternatives can save you a lot of effort. Sometimes, in fact, it can lead directly to the final decision. The

process of determining dominance also protects you from mistakenly selecting inferior alternatives, because they are removed from contention.

***Make tradeoffs using even swaps.***

- If all alternatives are rated equally for a given objective - for example, all cost the same - then you can ignore that objective choosing among those alternatives.
- The *even swap* method provides a way to adjust the consequences of different alternatives in order to render them equivalent in terms of a given objective. This objective becomes irrelevant. An even swap increases the value of an alternative in terms of one objective while decreasing its value by an equivalent amount in terms of another objective. In essence, the even swap method is a form of bartering - it forces you to think about the value of one objective in terms of another. Whereas the assessment of dominance enables you to eliminate alternatives, the even swap method allows you to eliminate objectives. As more objectives are eliminated, additional alternatives can be eliminated because of dominance, and the decision becomes easier.

***Practical advice for making even swaps.***

- Once you get the hang of it, the mechanical part of the even swap method becomes easy - almost a game. Determining the relative value of different consequences- the essence of any trade-off process - is the hardest part. The even swap method allows you to concentrate on the value determinations one at a time, giving each careful thought.
- You can help ensure that your tradeoffs are sound by keeping the following suggestions in mind:
  - *Make the easier swaps first.* Often, you will be able to reach a decision (or at least eliminate a number of alternatives) by just making the easier swaps, saving you from having to wrestle with the harder ones at all.
  - *Concentrate on the amount of the swap, not on the perceived importance of the objective.* It doesn't make sense to say that one objective is more important than another without considering the degree of variation among the consequences for the alternative under consideration. Concentrating on an objective's perceived importance can get in the way of making wise tradeoffs. When you make even swaps, concentrate not on the importance of the objectives but on the importance of the amounts in question.
  - *Value an incremental change based on what you start with.* When you swap a piece of a larger whole you need to think of its value in terms of the whole. It's not enough to look at just the size of the slice; you also need to look at the size of the pie.
  - *Make consistent swaps.* Although the value of what you swap is relative, the swaps themselves should be logically consistent.
  - *Seek out information to make informed swaps.* Swaps among consequences require judgments, but these judgments can be buttressed by facts and analysis. Think carefully about the value of each consequence to you.
  - *Practice makes perfect.* The even swap method will take some getting used to. Fortunately the process itself is relatively simple, and it always works the same way. Deciding on appropriate swaps, on the other hand, will never be easy - each swap will take careful judgment. As you gain experience, you'll gain understanding.

You'll become more and more skilled at zeroing in on and expressing the real sources of value. You'll know what's important and what's not. Perhaps the greatest benefit of the even swap method is that it forces you to think through the value of every tradeoff in a rational, measured way. In the end, that's the secret of making smart choices.

## **7. Uncertainty**

### **How to think about and act on uncertainties affecting your decision**

- Because life is full of uncertainties, many of the decisions you make will involve calculated risks. But you can raise the odds of making a good decision in uncertain situations. The first step is to acknowledge the existence of the uncertainties. Then you need to think them through systematically, understanding the various outcomes that might unfold, their likelihoods, and their impacts.

### ***Distinguish smart choices from good consequences.***

- Whenever uncertainty exists, there can be no guarantee that a smart choice will lead to good consequences. Although many people judge the quality of their own and others' decisions by the quality of the consequences - by how things turn out- this is an erroneous view.
- Decisions under uncertainty should be judged by the quality of the decision making, not by the quality of the consequences.
- We can't make uncertainty disappear, but we can address it explicitly in our decision making process.

### ***Use risk profiles to simplify decisions involving uncertainty.***

- To make sense of uncertainty, you need to find a way to simplify it - to isolate its elements and evaluate them one by one. You can do this by using *risk profiles*.
- A risk profile captures the essential information about the way uncertainty affects an alternative. It answers four key questions:
  - What are the key *uncertainties*?
  - What are the possible *outcomes* of these uncertainties?
  - What are the *chances* of occurrence of each possible outcome?
  - What are the *consequences* of each outcome?
- By providing a consistent basis for comparing the uncertainties affecting each of your alternatives, risk profiles allow you to focus in on the key factors that should influence your choice.

### ***How to construct a risk profile.***

#### ***Identify the key uncertainties.***

- Selecting the uncertainties important enough to include in a risk profile requires just two steps:
  - List all the uncertainties that might significantly influence the consequences of any alternatives.
  - Consider these uncertainties and to what degree their various possible outcomes might influence the decision.

### *Define outcomes.*

- The possible outcomes of each uncertainty must now be specified. This requires answering two questions:
  - How many possible outcomes need to be defined to express the extent of each uncertainty?
  - How can each outcome best be defined?
- The number of outcomes you'll need to specify will depend on the kind of uncertainty you're addressing. When there are many possible outcomes, you should simplify your expression of them by organizing them into ranges, or categories.
- Because complexity increases as the number of categories increases, you should always seek to narrow the set of outcomes down to the fewest possible. Start by defining a small number of outcomes, and then add more as needed.
- However many outcomes are designated, they must meet three further criteria. First, the categories must differ clearly from one another, with no overlaps (that is they must be *mutually exclusive*). Second, the outcomes must include all possibilities, with every possible contingency falling within one or another category (that is, they must be *collectively exhaustive*). Third, the outcomes must be unambiguously defined, so that when the uncertainty is resolved, the event can be clearly recognized as falling within one or another of the defined categories.

### *Assign chances.*

- Clearly defining the possible outcomes or categories of outcomes will help you in judging the chance that each outcome will occur.
  - *Use your judgment*
  - *Consult existing information* - consider all the potential sources of information that might shed light on the potential outcomes.
  - *Collect new data.* Sometimes the particular data you need may not be available off the shelf - you may need to collect them yourself.
  - *Ask experts.*
  - *Break uncertainties into their components.* Thinking about the components, and then combining the results will help in establishing probabilities.
- Subjective phrases may be sufficient for personal decisions that will not need to be justified to others, but they're not precise enough for most decisions. In most cases, you will want to express chances quantitatively, as actual probabilities, using either a decimal or percentage. Using numbers reduces the likelihood of miscommunication and sharpens decisions.
- Pinpoint precision usually isn't required in assigning chances. Frequently, knowing that a chance falls within a certain range is sufficient for guiding a decision.
- As you proceed through your decision process, regularly reexamine the chances you've assigned to ensure their reasonableness based on your current information.

### *Clarify the consequences.*

- Depending on the complexity of the decision, you should lay out the consequences in one of three ways:
  - *A written description* - although the least precise, a broad written description may occasionally be good enough.

- *A qualitative description by objective.* Consequences expressed qualitatively by objective include more information than simple written descriptions, as they break a consequence into its constituent parts.
- *A quantitative description by objective.* Though they may require the most time to develop, consequences expressed quantitatively by objective - such as cost estimates in dollars - are the clearest, the most easily comparable, and the easiest to use.
- Descriptions of consequences need only be precise enough to provide the information needed to reach a smart choice.

*Picture risk profiles with decision trees.*

- Some decisions, particularly highly complex ones, will require further analysis. That's when a decision tree can be extremely useful. A *decision tree* provides a graphical representation- a picture - of the essence of a decision, displaying all the interrelationships among choices and uncertainties. A decision tree is like a blueprint - it lays out, methodically and objectively, the architecture of a decision.
- Pictures can clarify the relationships among alternatives, uncertainties and consequences. It brings risk profiles to life.
- Decision trees are especially useful for explaining decisions processes to others. Getting into the habit of sketching decision trees can enhance your decision making skills in two ways. First, decision trees encourage thorough, logical thinking about a problem. Second, mastering the mechanical skill of tree construction on simple problems will make it easier to use the technique for more complex ones.
- When describing and comparing risk profiles:
  - Strive to use numbers to clarify the chances of different outcomes.
  - Clarify the consequences by being specific
  - Use the even swap method to convert intangible concerns into a meaningful equivalent value.
  - Take time to think about the important uncertainties influencing a decision. It does require an honest effort to identify the key uncertainties and their possible outcomes and to clarify the chances and consequences of each.

## **8. Risk Tolerance**

**How to account for your appetite for risk**

- Most of us take on some degree of risk, knowing that it goes hand in hand with reward, but not so much that we can't sleep at night.
- You need to focus not just on the risk profile, but on the degree of risk you are willing to assume.

*Understand your willingness to take risks.*

- Your risk tolerance expresses your willingness to take risk in your quest for better consequences. The more desirable the better consequences of a risk profile relative to the poorer consequences, the more willing you will be to take the risks necessary to get them.
- But making the smart choice also requires balancing the desirabilities of the possible consequences with the probabilities they will occur. The more likely the outcomes with

better consequences and the less likely the outcomes with poorer consequences, the more desirable the risk profile to you.

***Incorporate your risk tolerance into your decisions.***

- To take your risk tolerance into account in comparing risk profiles, follow these three steps:
  - First, think hard about the relative desirability of the consequences of the alternatives you're considering.
  - Second, balance the desirability of the consequences with their chances of occurring.
  - Third, choose the most attractive alternative.

***Quantify risk tolerance with desirability scoring.***

- Use numbers to express the desirability of each consequence and, in turn, each alternative.
- 1. *Assign desirability scores to all consequences.* Begin by comparing the consequences and ranking them from best to worst. You assign the score of 100 to the best and 0 to the worst consequence. Then you assign a score to each of the remaining consequences that reflects its relative desirability.
- 2. *Calculate each consequence's contribution to the overall desirability of the alternative.* Account for each outcome's chance of occurring - its probability.
- 3. *Calculate each alternative's overall desirability score.* Add the individual consequence contributions to arrive at an overall desirability score for each alternative.
- 4. *Compare the overall desirability scores associated with the alternatives and choose.* Compare the overall desirability scores of each alternative, and choose the alternative with the highest score.

***Use desirability scoring to make a tough decision.***

- Going through the process of assigning desirability scores to consequences won't be necessary for most decisions. But for resolving some of life's most important and most complex decisions, it can be invaluable.

***The desirability curve: a scoring shortcut.***

- When you have many possible consequences, the assignment of desirability scores can become difficult and time consuming. There is a shortcut: the *desirability curve*. After plotting the desirability scores of a few representative consequences - five, typically - you connect them on a graph to form a curve. You can use that curve to determine the desirability scores of all other possible consequences.
- There's one important limitation to the use of desirability curves; you can use them only when each of the consequences can be expressed using a single, numerical variable, such as dollars, years or lives saved.
- Desirability curves can be so useful, however, that it will often be worthwhile to use the even swap method to convert consequences described by multiple variables into a single, numerical term.
- The desirability curve approach breaks this thought process into manageable bites, allowing you first to carefully think about your desirabilities, then to blend them with probabilities to calculate appropriate value.

### *Interpret desirability curves.*

- The shape of your desirability curve is a very good indicator of your overall risk tolerance. An upwardly bowed curve indicates a risk-averse attitude with a greater risk aversion indicated by a greater curvature. A straight line represents a risk-neutral attitude, and a downwardly bowed curve connotes a risk-seeking attitude.

### ***Watch out for these pitfalls.***

- You can avoid being tripped up by old habits and other common pitfalls. Here are a few to watch out for:
  - *Don't over-focus on the negative.* Consider the full range of consequences, not just the bad ones.
  - *Don't fudge the probabilities to account for risk.* Judge chances on their own merits, without regard for your risk tolerance. Account for your risk tolerance separately.
  - *Don't ignore significant uncertainty.* When uncertainty is significant, develop a risk profile for each alternative which captures the essence of the uncertainty.
  - *Avoid foolish optimism.* Think hard and realistically about what can go wrong as well as what can go right.
  - *Don't avoid making risky decisions because they are complex.* You can deal sensibly with complexity and reach a smart choice.
  - *Make sure your subordinates reflect your organization's risk tolerance in their decisions.* An organization's leaders should take three simple steps to guide subordinates in dealing successfully with risk. First, sketch desirability curves that reflect the risk taking attitude of the organization. Second, communicate the appropriate risk tolerance by issuing guidelines that include examples of how typical risky decisions should be handled. Third, examine the organization's incentives to ensure they are consistent with the desired risk-taking behavior.

### ***Open up new opportunities by managing risk.***

- In making decisions at home and at work - especially financial ones - you may frequently find yourself facing a risk that exceeds your comfort level. If so, there may be ways to manage this risk to make it acceptable to you. Consider adding these techniques to your risk management repertoire. All of these techniques help to manage risk by enlisting others in transactions that reshape the original risk profile, making it more compatible with the decision maker's risk tolerance:
  - *Share the risk.* When a good opportunity feels too risky, share the risk with others.
  - *Seek risk-reducing information.* Try to temper risk by seeking information that can reduce uncertainty.
  - *Diversify the risk.* Avoid placing all your eggs in one basket. Look for ways to diversify.
  - *Hedge the risk.* When fluctuations in market prices or rates (interest rates etc.) expose you to discomfoting risk, look for the ways to hedge.
  - *Insure against risk.* Whenever a risk consists of a significant but rare downside, with no upside, try to insure against it. But don't over-insure.
- It is good to have your advisors challenge your thinking on risk tolerance, but in the final analysis, it's your own risk attitude that matters in making a decision. You should certainly

seek out information and guidance from informed advisors, but you should never let them make a decision for you.

## **9. Linked Decisions**

### **How to plan ahead by effectively coordinating current and future decisions**

- Many important decision problems require you to select now among alternatives that will greatly influence your decisions in the future. The kinds of decisions the authors talk about here involve a necessary connection between the current decision and one or more later ones.
- In such linked decisions, the alternative selected today creates the alternatives available tomorrow and affects the relative desirability of those future alternatives. Linked decisions can be years apart or they can be minutes apart. In all cases, though, they add a new layer of complexity to decision making.

### ***Linked decisions are complex***

- Following are the elements of linked decisions:
  - A *basic decision* must be address now.
  - The desirability of each alternative in the basic decision is influenced by uncertainties.
  - Relative desirability is also influenced by a future decision that would be made after the uncertainty in the basic decision is resolved.
  - An opportunity exists to obtain information before making the basic decision. This information could reduce the uncertainty in the basic decision and, one would hope, improve the future decisions - but at a cost.
  - The typical decision-making pattern is a string of decide, then learn; decide, then learn; and so on.

### ***Make smart linked decisions by planning ahead.***

- Making smart choices about linked decisions requires understanding the relationships among them. The decisions linked to a basic decision can take two forms:
  - *Information decisions* are pursued before making the basic decision. They are linked because the information you obtain helps you make a smarter choice in the basic decision.
  - *Future decisions* are made after the consequences of a basic decision become known. They are linked because the alternatives that will be available in the future depend on the choice made now.
- *The essence of making smart linked decisions is planning ahead.* After making a basic decision and noting developments, the decision maker again plans a few decisions ahead before making the next choice. Continuing to do this, step by step, moves the series of decisions toward the fulfillment of the decision maker's objectives.

### ***Follow six steps to analyze linked decisions.***

- The trick to making such decisions is to size up the situation and then focus your attention on those aspects that matter most. By creating a simplified version of your decision that retains its essential features, you can think sensibly and effectively about it. The following six-step process will help guide you:

*Step 1: Understand the basic decision problem.*

- Begin with the first three core elements of the authors' approach: define the problem, specify objectives, and generate alternatives. Then identify the uncertainties that influence the consequences of the alternatives. The uncertainties are the crux of the linked decisions.
- Draw up a list of the uncertainties. Then narrow the list down, selecting the few uncertainties, maybe just one or two, that most influence consequences. These uncertainties are candidates for developing risk profiles, if necessary in future steps. There is no need to do a full analysis of every uncertainty confronting you.

*Step 2: Identify ways to reduce critical uncertainties.*

- Getting information before deciding means becoming proactive about the learning portion of the decide-learn sequence. You consciously defer making a basic decision in order to seek information that can reduce or resolve future uncertainties and thus improve your basic decision.
- To create information gathering strategies, you need to decide *what* information is important and *how* to gather it.
- For each critical uncertainty, list the kinds of information that could reduce your uncertainty, and then determine how your view of the decision might change in the face of the new information.
- Think about ways to obtain the important information.
- The next step concerning information is *whether* it is worth getting it before making your basic decision.

*Step 3: Identify future decisions linked to the basic decision.*

- Ask what decisions would naturally follow from each alternative in your basic decision. For your linked decisions, list all the future decisions you can think of, and then whittle the list to the few that seem most significant. In most cases, include your basic decision and, at most, two future decisions. Keep it simple.

*Step 4: Understand relationships in linked decisions.*

- You can draw a decision tree to represent the links between choices and learned information in sequence. Here are a few suggestions for drawing a decision tree:
- *Get the timing right.* Anticipating the timing of and the order in which decisions should be made and information gathered is fundamental to making effective linked decisions.
- *Sketch the essence of the decision problem.* Start on the left with information choices (if any) and outcomes, then fill in the middle by defining your basic decision, and finally complete the right side of the tree with future decisions and uncertainties associated with them.
- *Describe the consequences at the end points.* The end points on the tree represent the consequences of having followed a particular sequence of alternatives and outcomes.

*Step 5: Decide what to do in the basic decision.*

- Start at the end of the tree (the right side) and work backward. Lop off the branches representing the alternatives not taken. Continue working backward until you reach the individual alternatives for the basic decision. You will now have made a plan for each alternative so you will be able to evaluate it more clearly.

- Deciding what to do in your basic decision includes deciding what information, if any, to collect before making the basic decision. To do this, first recall the list you composed in step 2. Then, for each item on the lists, estimate the costs and benefits of gathering the information. Costs typically include money, effort, time, discomfort and delay. To understand what benefit you might derive from additional information, you must know what you would choose if you didn't gather the information; new information is of benefit only if it might change a decision. If you'd make the same basic decision regardless of the information learned, then the information isn't worth gathering.

*Step 6: Treat later decisions as new decision problems.*

- However well you have prepared earlier, when you actually reach subsequent decision points, you should rethink the situation. Take advantage of new knowledge to enhance your understanding of your new decision problem and improve your plan.

***Keep your options open with flexible plans.***

- Sometimes uncertainty is so great and the present environment so changeable that it is difficult to plan future decisions with confidence. In these cases, you should consider developing flexible plans that allow you to make the most of whatever circumstances arise. Flexible plans keep your options open.
- *All-weather plans.* They represent a compromise strategy. In highly volatile situations, where the risk of outright failure is great, an all-purpose plan is often the safest plan.
- *Short-cycle plans.* With this strategy, you make the best possible choice at the outset, and then reassess that choice often.
- *Option wideners.* Sometimes the best plan is to act in a way that expands your set of future alternatives.
- *"Be prepared" plans.* These backup plans stress preparedness- having a reasonable response available for most contingencies.

***Maintain your perspective.***

- Just knowing how sets of decisions are linked and using a modest amount of foresight can help considerably in making a smart choice and can practically guarantee avoiding many, if not all, of the dumb ones.
- So, maintain your perspective. Your comfort level with your choices may not be as high on linked decisions as on simpler ones, but your accomplishments may be much greater.
- Over time, making *smart* choices on linked decisions will affect your life and career more positively and profoundly than making *perfect* choices on all your simpler decisions put together.

## **10. Psychological Traps**

**How to avoid some of the tricks your mind can play on you when you're deciding**

- By now you're much better prepared to identify and avoid the eight most common and most serious errors in decision making.
  - Working on the wrong problem
  - Failing to identify your key objectives
  - Failing to develop a range of good, creative objectives
  - Failing to develop a range of good, creative alternatives
  - Overlooking crucial consequences of your alternatives

- Giving inadequate thought to tradeoffs
- Disregarding uncertainty
- Failing to account for your risk tolerance
- Failing to plan ahead when decisions are linked over time
- Research has revealed that we develop unconscious routines to cope with the complexity inherent in most decisions. These routines, known as *heuristics*, serve us well in most situations.
- In this chapter, the authors examine some of the most common psychological traps and how they affect decision making. *The best protection against these traps is awareness.*

***Over-relying on first thoughts: the anchoring trap.***

- In considering a decision, the mind gives disproportionate weight to the first information it receives. Initial impressions, ideas, estimates, or data "*anchor*" subsequent thoughts. One of the most common types of anchors is a past event or trend. Particularly in situations characterized by rapid change, the historical anchor can lead to poor forecasts and, in turn, to misguided choices. Whatever their source, anchors often prejudice our thinking in ways that prevent us from making good decisions.
- You can reduce their impact by using the following techniques:
  - Always view a decision problem from different perspectives
  - Think about the decision problem on your own before consulting others, to avoid becoming anchored by their ideas.
  - Seek information and opinions from a variety of people to widen your frame of reference and push your mind in fresh directions. Be open-minded.
  - Be careful to avoid anchoring other people from whom you solicit information and counsel. If you say too much, you may simply get back your own perceptions
  - Prepare well before negotiating. You'll be less susceptible to anchoring tactics.

***Keeping on keeping on: the status quo trap.***

- Most decision makers display a strong bias toward alternatives that perpetuate the current situation.
- In any given decision, maintaining the status quo may indeed be the best choice. Use these techniques to lessen the pull of the present:
  - Always remind yourself of your objectives and examine how they would be served by the status quo.
  - Never think of the status quo as your only alternative. Identify other options and use them as counterbalances, carefully evaluating all their pluses and minuses.
  - Ask yourself whether you would choose the status quo alternative if, in fact, it weren't the status quo.
  - Avoid exaggerating the effort or cost involved in switching from the status quo.
  - Put the status quo to a rigorous test.
  - If several alternatives are clearly superior to the status quo, don't default to the status quo because you have a hard time picking the best one. Force yourself to choose one.

***Protecting earlier choices: the sunk-cost trap.***

- We tend to make choices in a way that justifies past choices, even when the past choices no longer seem valid. Our past decisions create what economists term "sunk costs" Sunk

costs are irrelevant to the present decision, but nevertheless they prey on our psyche, leading us to make wrong-headed decisions.

- For all decisions with a history, you will need to make a conscious effort to set aside any sunk costs- whether psychological or economic - that will muddy your thinking about the choice at hand. Try these techniques:
  - Seek out and listen carefully to the views and arguments of people who weren't involved with the earlier decisions and hence are unlikely to have a commitment to them.
  - Examine why admitting to an earlier mistake distresses you.
  - If you worry about being second-guessed by others, make this consequence an explicit part of your decision process. Also consider how you would explain your new choice to these people.
  - If you fear sunk-cost biases in your subordinates at work, pick out one who was previously uninvolved to make the new decision.

***Seeing what you want to see: the confirming-evidence trap.***

- This trap leads us to seek out information that supports our existing instinct or point of view while avoiding information that contradicts it.
- The confirming - evidence trap not only affects where we go to collect evidence, but also how we interpret the evidence we do receive, leading us to give too much weight to supporting information and too little to conflicting information.
- There are two fundamental psychological forces at work here. First is our tendency to subconsciously decide what we want to do before we figure out why we want to do it. Second is our tendency to be more engaged by things we dislike.
- Try these techniques:
  - Get someone you respect to play devil's advocate, to argue against the decision you're contemplating. Better yet, build the counterarguments yourself.
  - Be honest with yourself about your motives.
  - Expose yourself to conflicting information.
  - In seeking the advice of others, don't ask leading questions that invite confirming evidence.

***Posing the wrong question: the framing trap.***

- The way you ask a question can profoundly influence the answer you get.
- Psychologists have even shown that when the same question is framed two different ways - ways that are objectively equivalent - people choose differently. Decision researchers have documented two types of frames that distort decision making with particular frequency.
- *Framing as gains versus losses.* People are risk averse when a problem is posed in terms of gains but risk-seeking when a problem is posed in terms of avoiding losses. Furthermore, they tend to adopt the frame as it is presented to them rather than restating the problem their own way.
- *Framing with different reference points.*
- The effect of improper framing can be limited by imposing discipline on the decision-making process:

- Remind yourself of your fundamental objectives, and make sure that the way you frame your problems advances them.
- Don't automatically accept the initial frame, whether it was formulated by you or by someone else. Always try to reframe the problem in different ways.
- Try posing problems in a neutral, redundant way that combines gains and losses or embraces different reference points.
- Think hard throughout your decision-making process about the framing of the problem. Ask yourself how your thinking might change if the framing changed.
- When your subordinates at work recommend decisions, examine the way they framed the problem. Challenge them with different frames.

***Being too sure of yourself: the overconfidence trap.***

- Overly confident about the accuracy of their prediction, people get too narrow a range of possibilities.
- A major cause of overconfidence is anchoring.
- To reduce the effects of overconfidence:
  - Avoid being anchored by an initial estimate. Consider the extremes first when making a forecast or judging probabilities.
  - Actively challenge your own extreme figures.
  - Challenge any expert's or advisor's estimates in a similar fashion. They're as susceptible as anyone to this trap.
  - Do your homework. Substitute facts for opinion wherever possible.

***Focusing on dramatic events: the recallability trap.***

- Because human beings infer the chances of events from experience, from what we can remember we can be overly influenced by dramatic events - those that leave a strong impression on our memory.
- In fact, anything that distorts your ability to recall events in a balanced way will distort your probability assessments or estimates.
- To minimize this type of error:
  - Each time you make a forecast or estimate, examine your assumption so that you are not being unduly swayed by memorable distortions.
  - Where possible, try to get statistics.
  - When you don't have direct statistics, take apart the event you're trying to assess and build up an assessment piece by piece.

***Neglecting relevant information: the base-rate trap.***

- Ignoring the base rate can lead you wildly astray
- Analyze your thinking about decision problems carefully to identify any hidden or unacknowledged assumptions you may have made.
  - Don't ignore relevant data; make a point of considering base rates explicitly in your assessment.
  - Don't mix up one type of probability statement with another.

***Slanting probabilities and estimates: the prudence trap.***

- Even one of our best decision-making impulses - caution- can lead us into error.
- For sound decision making, honesty is the best policy.

- State your probabilities and give your estimates honestly. In communicating to others, state that your figures are not adjusted for prudence, or for any other reason.
- Document the information and reasoning used in arriving at your estimates, so others can understand them better.
- Emphasize to anyone supplying you with information the need for honest input.
- Vary each of the estimates over a range to assess its impact on the final decision. Think twice about the more sensitive estimates.

***Seeing patterns where none exist: the outguessing randomness trap.***

- Despite our innate desire to see patterns, random phenomena remain just that - random.
- To avoid distortions in your thinking, you must curb your natural tendency to see patterns in random events. Be disciplined in your assessments of probability.
  - Don't try to outguess purely random phenomena.
  - If you think you see patterns, check out your theory in a setting where the consequences aren't too significant.

***Going mystical about coincidences: the surprised-by surprises trap.***

- The surprised-by-surprises trap results from a failure or an unwillingness to give reality its sometimes surprising due.
- When it comes to coincidence, people just don't think very clearly. They can't accept the indifference of randomness.
- When a seemingly rare event occurs, don't be so surprised that you forsake logic and the laws of probability and believe instead that all rare events are preordained. Usually a good explanation can be found. Remember the following points:
  - The world presents many potential surprises; you're bound to experience some of them.
  - An enormous probabilistic gulf exists between an event's occurring when it has been flagged ahead of time.
  - Some events that appear rare really aren't.

***Forewarned is forearmed.***

- At every stage of the decision-making process, misperceptions, biases, and other tricks of the mind can distort the choices we make. Highly complex and highly important decisions are the most prone to distortion because they tend to involve the most assumptions and the most estimates. The higher the stakes, the higher the risks.
- We're particularly vulnerable to traps involving uncertainty because most of us aren't naturally very good at judging chances. Though we often make forecasts about uncertain events, we rarely get clear feedback about our accuracy.
- The best protection against all psychological traps is awareness. Forewarned is forearmed. You can build tests and disciplines into your decision making process that can uncover and counter errors in thinking before they become errors in judgment.

## **11 The Wise Decision Maker**

### **How to make smart choices a way of life**

- By now it should be clear that the art of a good decision making lies in systematic thinking. A systematic approach helps you to:

- Address the right decision problem
- Clarify your real objectives
- Develop a range of creative alternatives
- Understand the consequences of your decision
- Make appropriate tradeoffs among conflicting objectives
- Deal sensibly with uncertainties
- Take account of your risk-taking attitude
- Plan ahead for decisions linked over time.

***Other things to remember:***

- *Concentrate on what's important.*
- *Develop a plan of attack.*
- *Chip away at complexity.*
- *Get unstuck.* Find someone to talk to about your decision problem - let your mouth start your mind. Once you get talking, you'll see connections you never saw before. Making notes will jog your mind. A good way to get unstuck is to imagine that you have to advise someone else who has a problem identical to yours.
- *Know when to quit.*
- *Use your advisors wisely.* If you want advice on what to decide, make sure you communicate your objectives, tradeoffs, and risk tolerance along with your perception of the problem. Better yet, decide for yourself after soliciting and incorporating their input on problem definition, alternatives, consequences, and uncertainties.
- *Establish basic decision-making principles.*
- *Tune up your decision-making style.*
- *Take charge of your decision making.*

***What's in it for you?***

- As you come to use the method routinely you will find that the benefits come relatively easily. You will discover that:
  - Most tough decision problems have one, or maybe two, difficult elements.
  - Many of your tough decisions aren't as hard as they look. By being systematic and focusing on the hard parts, you can resolve them comfortably.
  - Describing the problem, clarifying objectives, and coming up with good alternatives form the foundation of good decisions.
  - Identifying and eliminating poor alternatives almost always provides a big benefit, especially when they aren't obviously inferior at the outset. This discipline keeps you from making a foolish choice, ensures a good choice when differences among the remaining alternatives are small. And often greatly simplifies the decision.
  - When there is uncertainty, you can't guarantee that good consequences will result when you've made a smart choice. But over time, luck favors people who follow good decision-making procedures.
- Most important, always remember: the only way to exert control over your life is through your decision making. The rest just happens to you. Be proactive, take charge of your decision making, and strive to make good decisions and to develop good decision making habits. You'll be rewarded with a fuller, more satisfying life.

**Recommendation:** This book presents a process to help you make better choices in your personal life and at work. The authors provide valuable insight and guidance on the inevitable and ongoing negotiation with yourself when facing a difficult decision.



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Frumi is a trusted advisor and leadership coach. She has a passion for helping business leaders, especially entrepreneurs and financial services leaders. She helps them find clarity out of chaos, communicate effectively with their teams, and accelerate their business results. Frumi is a former CEO and CFO herself and has an MBA and a PhD in business administration. She is known as a catalyst for change and when Frumi shows up with dynamite and band aids, change is bound to happen!