



Give Yourself a Nudge to Make SMARTER BUSINESS DECISIONS

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Ralph Keeney offers innovative concepts and practical guidelines for making smarter business decisions. They will help you to determine and define the decision you need to make, identify the complete set of objectives which your decision should achieve, and create a range of high-quality alternatives. Learn these skills to obtain the ultimate business advantage: making smarter decisions.

Decision making should be considered the primary management skill because the only way you can purposefully improve your business is through the decisions you make. If you want to introduce a new marketing campaign, nothing happens until you decide on and enact a specific strategy. If you want to manage your cybersecurity more effectively, nothing happens until you identify the threats and decide how to address them. If you are choosing a new CFO, all the effects take place after the decision is made.

Making excellent decisions is challenging. Some executives and managers, especially those who have earned MBAs, have taken courses that included decision-making techniques. But following prescriptive rules to guide your decision can be complicated and slow, and most managers have neither the background nor the time for a formal evaluation of alternatives. You can hire decision consultants, but they tend to be expensive and time-consuming. So most business decisions are made using an intuitive decision process, rather than a systematic evaluation. Our intuitive decision-making processes are based on ingrained habits that we have developed over time. When something occurs that requires a decision, we react. Our initial thinking to solve that problem is to find a 'solution'. If the first alternative that comes to mind will solve the problem, we usually select it. Otherwise, we think a bit more to find an alternative that will solve the problem. I call this process *alternative-focused decision-making*, which

is severely limiting if your purpose is to make high-quality decisions.

How can you arrive at a quality decision if you have not first identified all of the objectives that characterize quality for that decision? How can you create quality alternatives without thoroughly understanding what quality means to you? How can you make a quality decision if you haven't examined a desirable set of alternatives? Intuitive decisions essentially neglect the front-end elements of a decision process that systematically addresses these three factors which are the key to improving the quality of your business decisions. The good news is that we can all improve our decision-making and thereby improve the success of our businesses. The better news is that you can learn the concepts and procedures necessary to do this and that they are practical to use.

The Importance and Uses of Nudges

Over the past few decades, psychologists and behavioral economists have identified numerous biases that erode the quality of everyone's decisions, including executives and managers and me. Behavioral economists have demonstrated that the decisions we make are influenced by the way the alternatives are presented to or framed by the decision-maker. For example, when considering whether to make an important change concerning how a business operates, we feel a strong bias to maintain the status quo.

Thaler and Sunstein, authors of the book *Nudge*,¹ present numerous decisions for which individuals, using their intuitive decision processes, select inferior alternatives that negatively affect their lives. They define the term 'nudge' as any aspect of the presentation of a decision to a decision-maker

which is designed to improve the chances that the decision-maker will select the alternative that best achieves his or her interests. They also demonstrate that nudges significantly influence us to make better decisions.

Until now, the concept of nudges has only been applied to decisions for which some organization, such as a government agency, has the responsibility to present alternatives from which someone else must choose. Over the last decade, numerous authorities throughout the world have used nudges, influencing millions of people to make better decisions about nutrition, retirement savings, traffic safety, pollution, and going to college. Your business decisions are not guided by any external organization or individual. Only you can generate or collect useful information about the decisions you face to improve the quality of your choices. Each piece of useful information influences your perception of the decision. That information constitutes part of the presentation of the decision to you, the decision-maker, and nudges you toward a smarter decision. Such nudges are consistent with Thaler and Sunstein's definition of a nudge since the presentation of that information helps you, as the decision-maker, to make a smarter decision.

One key to making a smart business decision is to clearly state all of your values for that decision.

One key to making a smart business decision is to clearly state all of your values for that decision. Each stated value is a nudge. Collectively, they define everything pertaining to that decision that the business cares about. All subsequent steps in your decision-making process should pursue these values. I call this process *value-focused decision-making*. Value-focused decision-making helps you to develop insightful nudges which improve your decisions.

The nudges discussed here are rooted in a clear articulation of the three fundamental front-end elements that structure any decision: defining the decision, identifying the objectives you want to achieve, and creating an appealing set of alternatives. Collectively these elements frame your decision as illustrated in Figure 1. This frame precisely describes your decision, helping you to select the alternative from those identified that best achieves the stated objectives. The frame also defines any additional information that you may need to make a sound decision, such as the projected consequences of each alternative. These descriptions provide a sound basis for evaluating

Figure 1: Your Decision Frame

Alternatives ► Objectives ▼	Alternative A	Alternative B	Alternative C	Alternative D
Objective 1				
Objective 2				
Objective 3				
Objective 4				

the alternatives and also nudge you toward smarter decisions.

Once you have completed the fundamental front-end elements of a decision, it will be clear what must be done to describe the consequences and evaluate your alternatives, the back-end elements. The front-end work that goes into a decision has a much greater influence than the back-end work. A quality front-end

- defines unambiguously the decision you should face, so that you don't waste time and effort solving only part of the problem or making the wrong decision,
- specifies everything you want your decision to achieve, improving your chances of achieving it,
- identifies better alternatives for your decision than those you initially recognized,
- establishes an appropriate basis for your back-end evaluation of the alternatives, and
- provides a logical guide for meaningful and comprehensive discussions about the decision.

Once you have developed a quality frame for your decision, using it to think clearly about the pros and cons of each alternative will provide the basis to make a sound and justifiable decision. For complex business decisions, this frame is the foundation for a quantitative evaluation of the alternatives that explicitly incorporates the relevant data, uncertainties about the possible consequences, and the associated value trade-offs of the decision.² As most decisions will not include any detailed back-end analysis of the alternatives, a quality front-end is particularly vital.

Your decision statement should describe clearly and concisely what you want to decide.

Defining Your Decision

Once you recognize a problem or opportunity for your business, you must make a decision to address it. Creating a decision statement is the first step in a value-focused decision process. Your decision statement should describe clearly and concisely what you want to decide. This statement is a nudge because it is the basis for your detailed thinking about the next two elements, specifying your objectives and creating a set of promising alternatives.

In stating the decision that you intend to face, one simple rule is very helpful: begin with the word *decide*, generally followed by *which*, *what*, *when*, *where*, *how*, or *if*. For example: 'Decide which of three companies to partner with on a given activity,' or 'Decide where to build our new manufacturing facility.' Anyone who reads a good decision statement should be able to understand the decision under consideration. In composing decision statements, avoid the three common shortcomings of being ambiguous, having too narrow a focus, or describing the wrong decision.

Never simply accept a decision statement as you initially conceive it. You have a choice, actually a decision in itself, about how to express the decision you face. It is often useful to develop several potential statements of your decision and to thoughtfully consider which best describes it. Once you've chosen the best one, try to make it better.

Decision statements which take the form of 'decide whether to do something' are often ambiguous. Consider the statement 'decide whether to select company X as the supplier of a key component of your major product.' This statement is not adequate because it gives no indication of what *not* selecting company X entails. It is impossible to evaluate the relative desirability of selecting company X without knowing what the other alternatives might be.

A broad decision that you did not explicitly recognize is often composed of a series of narrower decisions. By addressing these separately, the collection of the best alternatives for the narrower decisions constitutes the alternative for the broader decision. But sometimes, the result is a poor choice for that broader decision. In composing your decision statement you should be sure to address the broader decision.

Years before the coronavirus pandemic, many companies considered allowing employees to do part of their work from home. Initially, different managers who received such requests probably made their decisions for different reasons. As such requests became more common, companies realized it would be better to establish a policy rather than considering each request separately. They would have to consider policy alternatives in terms of the criteria for allowing employees to work from home, procedures for evaluating the quality of work done remotely, and guidelines for revoking permission to work at home if necessary. Following a policy requires much less management time than addressing each request separately and facilitates making consistent decisions.

Sometimes when a problem occurs, we rush to solve it without carefully defining the decision that should be faced. The result of this haste may be making little headway with the real problem and, sometimes, disaster. Consider the case of a company that had produced a relatively new high-quality, expensive, and profitable consumer product, but before it became well established, the national economy went into recession and some consumers became more cost conscious. The company's sales of the product dropped, and within two years, were so low that the product was barely profitable. A marketing study

informed the division manager that consumers who had stopped purchasing the product were discouraged by its relatively high price. The manager concluded that the company needed to reduce the cost of the product.

Her team suggested various ways to cut product costs and they chose the one that seemed best. Sales stabilized for the next six months, but then began to drop again. New market research concluded that the remaining loyal customers, who were not particularly cost-conscious, had stopped purchasing the product because its quality had declined. In less than a year, the product's sales were too low to maintain production. A post-mortem study concluded that the company had addressed the wrong decision by considering only cutting costs to regain lost customers and attract new customers.

The manager should have taken the time to carefully consider *which* decision she should be making. Her decision statement might then have been 'decide how to increase the profitability of our product,' a far broader statement than the one focused only on cutting costs. It would have included, for instance, investing in advertising, improving product quality, streamlining operations, raising the price, and the possibility of other profitability management options. With a nudge from this broader decision statement, the company might have made its original premium product profitable again.

When you compose an important decision statement, it is best to consult all the professionals who will be involved. By doing this, you insure that all members of your team feel included and that thoughts which have merit are heard. It is also the first step in building the team that will work on the decision. It sets the stage for the rest of the decision process,

which will progress more smoothly if it is rooted in a definition of the decision that everyone agrees on.

Identifying Your Values

Once you define a decision that you intend to face, you should specify what you want to achieve by making that decision. This process is effectively done in two steps. First identify everything that you care about in making that decision. I refer to anything that you care about as a value. A manufacturing manager who has composed the statement "decide how to manage the solid waste from our manufacturing process" might list values including efficient manufacturing, reducing waste in landfills, the cost of managing the waste, and the environment.

Identifying values for your decision requires creative thought. When you begin thinking about the values for a decision, anything that comes to mind is likely to be either a relevant value or the basis for one. Describe these values in the way that makes sense to you. Using specific guidelines to identify values can restrict the creative thought process by diverting your attention away from what you do care about and toward considering whether a particular thought 'counts' as a value. This limitation could leave you with an incomplete set of values.

Once you have created the list of values for your decision, state each value as an objective.

Once you have created the list of values for your decision, state each value as an objective. Phrase each objective in the common format of a verb and an object to clarify the meaning of that value.

In the manufacturing waste example, objectives for the first

three values listed might be described as 'reduce the amount of waste generated,' 'minimize land-fill material,' and 'minimize cost of treating the waste.' The environmental value might be better described by two objectives: 'minimize short-term damage to the environment' and 'minimize long-term damage to the environment.' Each objective nudges you toward smarter decisions. Conversely, if you fail to identify one of the relevant objectives, you are more likely to select an alternative that performs poorly in that area.

When facing an important decision, most of us believe that we know our values and would need only a couple of minutes to make a corresponding list of objectives. This is rarely true. Many consulting experiences and several scientific experiments demonstrate that when we initially list our objectives for a significant business or personal decision, we tend to miss important objectives.³⁴

► Identifying Objectives for an MBA Internship

A full-time MBA program usually consists of two academic years with an internship in the summer between. The internship is particularly important because it helps students to discover their preferred field and sometimes leads to employment after graduation. As part of a homework assignment, the 295 students of an MBA class at a respected university were asked to list all of their objectives for their internships. Beforehand, my colleagues and I generated a master list of thirty-two objectives that an MBA student might want to consider in choosing an internship. After the students reported that their lists of objectives were complete, we gave them our master list and asked them to check all of the objectives that were appropriate to them. Next we asked them to match objectives from their own lists to the

corresponding objectives on the master list. On average, the students' lists consisted of 6.4 objectives, yet they selected an average of 20.1 objectives from the master list. Although they were seriously trying, the students' initial lists included only 32 percent of their actual objectives for one of the most important decisions they would face during their MBA years.

One possible explanation is that the students initially listed their most important objectives and those they subsequently selected from the master list were much less important. To test this idea, we asked the students to rate the relative importance of each of their objectives on a scale from 1, meaning very low importance, to 9, meaning very high importance. The average rating they gave objectives from their own lists was 7.28, whereas the average rating for objectives selected from the master list was 7.23. The responses showed essentially no difference in importance between the two categories. The implication is that almost all the students who participated, most of whom are now managers or executives, did not recognize many of their own objectives for a decision they considered to be very important. ◀

A Process to Identify Your Values for a Decision.

To address this difficulty in composing a complete set of values for a decision, four simple-to-follow steps are useful. The first is to produce a wish list of everything you can think of that you care about concerning the decision. The second uses several tactics to stimulate your thinking and expand the list. The third is to ask others for suggestions. And the fourth uses the values you've already listed to help you search for any that might be missing.

Step 1. A Wish List. Your decision statement will focus your

thoughts about the values for that decision. Include any idea that comes to mind on your wish list; you can always delete it later if you decide it's not relevant. Do your own thinking first. Asking for suggestions before you have thoroughly considered your values may anchor your thinking to the ideas of others and lead to serious omissions. When you feel you've run out of ideas, challenge yourself to add a few more and you probably will. Take a break and return later; you may identify still more of your relevant values.

Step 2. Value Stimulation Techniques. Table 1 demonstrates several techniques you can use to identify additional values. They will help you to generate useful nudges. You can find further details on how to apply these techniques, as well as examples, in my 2020 book.⁵

Step 3. Ask Others to Suggest Values. Friends, colleagues, and advisers can offer insight about your decisions. Just ask them, "What considerations would you take into account in making this decision?" You might also ask them to suggest pros and cons of your alternatives. These pros and cons could themselves suggest values you had not recognized. You might ask directly, "What do you think I should do?" If they have a definitive response, ask how they reached that conclusion. If you are facing a specific decision for the first time, it is particularly useful to talk to people who have faced similar decisions.

Step 4. Use Previously Identified Values. Values that you have already articulated for a decision are a useful source for uncovering additional relevant values.

Table 1. Techniques to Help Identify Appropriate Values for Business Decisions

Technique	Questions
Alternatives	Describe a hypothetical perfect alternative, a terrible alternative, some reasonable alternatives, and the status quo. What is good or bad about each?
Emotions and Feelings	Articulate the emotions which your decision evokes. Why do you care about these emotions and how do your alternatives affect them?
Consequences	Think about what might occur as a result of your decision, focusing on particularly good or bad consequences.
Goals and Constraints	Review any goals and constraints that influence your decision. What are your reasons for them?
Different Perspectives	Suppose a colleague or a competitor faced this same decision. What would their values be? If you faced this same decision at some time in the future, what would concern you?
Strategic Values	Consider the strategic values that guide your organization. Do these suggest any values relevant to this decision?
Disappointment and Regret	Which potential consequences of your decision might disappoint you? Which might you regret?
Generic Values	What were your values for similar decisions in the past? Are they relevant here?

Use three simple questions: “what do you mean by that value,” “why is that value important,” and “how can you achieve that value.” Suppose you have several job offers and need to choose one. You have listed your initial values as interesting work, a good salary, and convenience. Asking yourself what you mean by interesting work may suggest working on substantial issues, making significant contributions, having enjoyable coworkers, and avoiding involvement in legal and regulatory affairs. Considering how your work could be more interesting might lead you to values such as interacting professionally with people in and outside the company, the desire to travel on business, continuous learning, and not being at a desk all day.

Objectives for Group Business Decisions

Business decisions are often made by more than one person. In making such decisions, it is useful for each person to separately list the values that they think are important. As well as producing a broader collective list of values, this method increases the chances that everyone will really think about what the decision should achieve.

Next, create a combined list of values. In doing this, inquire about the meaning of stated values; individuals often use the same words for different values and different words to express the same value.

Once you have a complete list of the business’s values, members of the group should collaborate to state each value as an objective. This process will ensure that everyone understands the meaning of each value and its relevance to the decision. Now you have an agreed-upon set of values, articulated as objectives, which characterizes the decision and includes the originally stated values of

everyone on the team, building their sense of a common purpose.

Clarifying the Roles of Different Types of Objectives

Once you have compiled all your objectives for your decision, it is useful to distinguish between two types of objectives: means objectives and fundamental objectives. To discover the fundamental objectives, examine pairs of objectives from your list. If achieving one of the objectives influences, positively or negatively, the extent to which the other objective is achieved, they have a means-ends relationship. The former objective is thus a means objective, and the latter an ends objective. However, that ends objective may be a means objective to some other objective on the list. As an example, maximize sales is a means objective to maximize income, and maximize income is a means objective to maximize profit. A means objective can have more than one ends objective, and an ends objective can have more than one means objective. An ends objective that is not a means objective to anything else is a *fundamental* objective.

Distinguishing between means objectives and fundamental objectives simplifies the decision and focuses your attention on what is crucial.

Distinguishing between means objectives and fundamental objectives simplifies the decision and focuses your attention on what is crucial. Only fundamental objectives should be used to evaluate your alternatives. By including means objectives, which contribute to fundamental objectives, you would end up double

counting some of the pros and cons of your alternatives. By eliminating means objectives from your evaluation, you will reduce the number of objectives you have to consider, which makes the evaluation easier and nudges you toward a smarter decision. That doesn’t mean your means objectives aren’t important; each is a stimulus to create new alternatives and improve existing ones.

Just creating one new alternative that is better than your previously recognized alternatives constitutes a strong nudge toward a smarter decision.

Creating Alternatives

For most decisions, it is important that you put some time and effort into creating your alternatives. You can never choose an alternative has not been identified and the chosen alternative can be no better than the best of those that have been identified. Just creating one new alternative that is better than your previously recognized alternatives constitutes a strong nudge toward a smarter decision. Getting what you want from a decision often depends more on the quality of the alternatives identified than on the quality of your choice between them.

It is true that some decisions don’t require you to work hard at creating alternatives since you can readily list them. If you needed 20,000 square feet of office space in Austin, an inventory of available office buildings constitutes a list of all possible alternatives. For most decisions, however, there is no predetermined list of all the potential alternatives. Creating one requires focused effort.

Pitfalls in Creating Alternatives

There are several common pitfalls which can result in an inadequate set of alternatives.

Not Allocating Time to Create Alternatives. Too often, people fail to grasp the substantial benefit of creating a rich list of alternatives and so devote little or no effort to the endeavor. They instead consider only the most obvious alternatives and choose the one that best ‘solves’ the problem quickly.

Stopping the Search after Finding One Alternative. When facing an important decision with no obvious set of alternatives, you naturally begin to search for a solution. If you find one that is good enough, your first impulse is to choose it. But if you do that, you have essentially just decided based on a search process, rather than a decision process. While it is often tempting to select the first solution that comes to mind, remember that once you identify one alternative, it becomes easier to think of a few more. The extra few minutes of effort you put into creating alternatives will probably turn out to be a wise investment.

Thinking Too Narrowly. We rarely push ourselves to think of alternatives that are harder to find. Instead, we choose the low-hanging fruit, the ‘business as usual’ alternatives. If our decisions seem similar to past decisions, we tend to consider the same alternatives as before, perhaps with minor modifications.

Inappropriate Use of Constraints. Constraints are intended to focus our thinking on the realistic alternatives, but they can also seriously limit our thinking. Constraints become a hindrance when they conflict with the individual objectives of the decision. We tend not to consider an alternative that clearly exceeds four of our five constraints, but just misses on the fifth. Yet that alternative may be much better than one that barely meets all five constraints.

A number of experiments have shown that people have difficulty in creating a good set of alternatives for decisions worthy of thought.⁶ Although the study participants considered the decisions presented relevant, they were not facing those decisions at the time of the study. Would they still have had serious difficulties in generating alternatives for an important pending decision? The following experiment sought to find out.⁷

► Creating Alternatives to Benefit from a Business Internship

Most undergraduate or masters students pursuing a business curriculum at a German university choose at least one internship with a business, non-profit, or government organization near the end of their studies. Their purpose is to obtain practical work experience and to improve their future employment opportunities. The internship is generally recognized as an important experience, and students want to benefit as much as possible from their internships.

Before conducting this experiment, a colleague and I developed a list of all the types of alternatives which an intern could use to enhance the quality of an upcoming internship. The master list comprised thirty-one distinct alternatives including: apply skills learned at university, ask a supervisor for a specific project, establish contact with supervisors, contribute to a good work atmosphere, and enhance skills in workshops and training courses.

Over 200 students participated in our study, which consisted of four steps. In step 1, we asked participants to list all the ways they could think of to enhance their internships. In step 2, we gave them a master list of our thirty-one alternatives and asked them to check those they thought would be personally useful. In step 3, participants matched the

alternatives from their own lists to corresponding alternatives on the master list. Finally, in step 4, they ranked all of the alternatives they had generated or selected in steps 1 and 2 in terms of significance, defined as the likelihood that they would use that alternative during their internships. On average, the participants created 6.66 distinct alternatives on their own lists and selected an additional 11.27 from the master list. Faced with this important personal decision, most participants came up with only about 37 percent of the possible alternatives which they later selected as useful to them.

Moreover, only 44 percent of the participants’ most significant alternative as ranked in step 4 were on the list they personally created in step 1. Of participants’ top five ranked alternatives, on average only 1.86 were on their original lists.◀

Focus your search for alternatives where high-quality alternatives might be found and expend no effort in looking where no realistic alternatives exist.

A Practical Process for Creating Alternatives

The conventional advice for finding better alternatives is to ‘think outside the box.’ While the idea behind it is certainly useful, this advice provides no practical guidance on how to find great alternatives. Inside the metaphoric box we generally find standard alternatives that are quite similar to each other. Outside is everywhere else, which tends to be a phenomenally large space to search for anything. It is advantageous to focus your search for alternatives where high-quality alternatives might be found and expend

no effort looking where no realistic alternatives exist.

To focus your effort on creating good alternatives, you definitely want to think outside **the** box, but not outside just **any** box. Instead, think inside the *alternatives box*. For every decision, there is a box of the right size which contains all realistic alternatives for that particular decision. The alternatives box is much larger than the inside of the proverbial box and much smaller than the world outside.

The purpose of any decision is to best achieve our objectives. It is therefore legitimate to consider any alternative that contributes to achieving any of the stated objectives for a given decision. The alternatives box is therefore delineated by the stated objectives of a given decision. The objectives guide us in creating realistic alternatives.

Any objective can nudge you toward an innovative alternative for your decision. Consider each objective separately and try to identify alternatives that would help you achieve it. Next, use pairs of objectives, and then larger subsets of objectives, to stimulate your thinking. After having conceived of several distinct alternatives, produce more by finding aspects of your existing alternatives that can be combined. These procedures will help you to search the entire alternatives box without wasting your time on searching outside it.

Value-Focused Brainstorming

Rooted in the idea that groups of people should have more ideas than one person, brainstorming is a well-known means of generating ideas. Brainstorming involves a group working together to generate ideas and traditionally fosters creativity by welcoming all ideas and refraining from evaluation during the generation process.⁸

Traditional brainstorming has two shortcomings for generating alternatives for a decision.

Traditional brainstorming has two shortcomings for generating alternatives for a decision. First, the participants generally work with little guidance about specific objectives for the alternatives. Second, brainstorming usually involves one person at a time speaking while all the others listen. The speaker's ideas may therefore anchor the listener's thoughts. It is also difficult to think deeply while either listening or speaking.

Value-focused brainstorming, described in Table 2, addresses these shortcomings. The first three steps are those by which an individual would create alternatives. The first shortcoming of traditional brainstorming is addressed in step 2, which provides guidance for creating useful alternatives. The brainstorming session is framed by the values, stated as objectives, which define the alternatives box. The same participants, or a selection of them, can establish these values in an initial brainstorming session, or the person who convened the session could provide them. Step 3 addresses the second shortcoming of traditional brainstorming by allowing each individual to create alternatives independently before meeting to take advantage of the traditional interpersonal strengths of brainstorming in step 4.

Value-focused brainstorming is useful for business and

organizational decisions. One important instance in which I applied it concerned developing alternatives to improve emergency evacuation from large buildings.⁹

► Evacuation from Large Buildings

After the terrorist attacks on the World Trade Center in 2001, one of the federal government's recommendations was to improve emergency evacuation from large buildings. I facilitated an invitation-only workshop to come up with innovative alternatives. There were over thirty participants knowledgeable about different aspects of emergency evacuation. Collectively, their expertise covered firefighting, architecture, design, building standards, building codes, communications, building construction, materials science, handicapped accessibility, human behavior, and emergency management.

Since the participants all knew a great deal about evacuation, I began by asking each to list alternatives they thought would improve evacuation. I wanted each participant to feel confident that their original ideas would be documented and considered. Collectively the group suggested 221 alternatives. In keeping with the process described above, I next asked them to list all of their values regarding the evacuation of buildings and then to state each those values as objectives, which allowed us to understand and combine them more readily. Thirty-two people submitted 361 objectives, some of which, such as "save lives," appeared on many lists. On the first evening, two colleagues and I compiled a comprehensive list of all the objectives. We organized them into nineteen major objectives such as save lives, minimize property damage, enhance communication, increase safety, and improve education and training.

Table 2. Steps of Value-Focused Brainstorming

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

On the second day, I asked the participants to use these major objectives to create alternatives that would facilitate evacuation. They generated a further 179 alternatives by using the nudges offered by their objectives in the value-focused brainstorming. On the third morning, we investigated whether alternatives created by the value-focused brainstorming were innovative and of high quality. Nine separate groups of two to four participants conducted a preliminary evaluation of the same selected set of thirty-seven alternatives created in the brainstorming session. They used three criteria for this evaluation: usefulness, defined as contribution to improving evacuations, feasibility of implementing the alternative within ten years, and creativity, on a scale ranging from a well-known alternative to one that was completely new. We found that some of the most useful, feasible, and creative alternatives were previously unknown to this very experienced group. This finding demonstrates that using values to nudge the brainstorming processes can produce some very desirable alternatives, even among experienced and knowledgeable professionals. ◀

Few people have been practically trained in making decisions, and fewer still have considered deliberately practicing decision-making skills.

Practice is Important

To become proficient in any skill, you must first learn to perform the necessary actions, and then you must practice them. Few people have been practically trained in making decisions, and fewer still have considered deliberately practicing decision-making skills. This article has introduced you to the tasks you need to pursue to thoroughly understand the decisions you face and described practical procedures to help you effectively accomplish them. You will not get enough practice using your newfound skills if you use them only for your important business decisions. Not only are such decisions few and far between, they also involve intertwined complexities which make it difficult to practice your basic skills. Fortunately, we all face many less important decisions, both business and personal, which provide a rich practice ground. You can

strengthen your grasp of the concepts and procedures that will improve your decision-making skills by using them on these decisions. In the process, you will also make these decisions more wisely.

With practice, you will master creating useful nudges by using value-focused front-end decision skills to structure the decisions you face. These nudges will lead you to make smarter decisions. As you begin to reap the benefits, this way of thinking will start to feel natural when you face decisions, becoming a habit as you become more proficient. You will learn to quickly focus on the values that matter in any decision and achieve those values by developing appropriate nudges to make smarter decisions. ■



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