

"If you want to evangelize and enchant people, you must influence their memories. This book shows you how to do it."

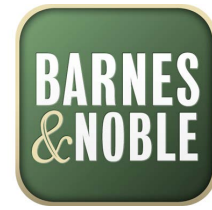
—GUY KAWASAKI, bestselling author of *Enchantment*

# IMPOSSIBLE TO IGNORE

Creating Memorable Content  
to Influence Decisions



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## CHAPTER 2

# A BUSINESS APPROACH TO MEMORY

## Three Steps to Influence Memory and Decisions

In June 2014, ultra-runner Kilian Jornet Borgada raced up and down 20,320-foot Mt. McKinley in 11 hours and 48 minutes. It takes the average mountaineer two weeks to ascend and descend the same mountain. When interviewed by *Outside* magazine about his remarkable record, Kilian talked about his trip in a reserved, humble tone. On the way up, he says, he skinned the steep slopes on skis and then put on crampons for the more technical parts. He spent 10 minutes at the summit before he put his skis back on and raced down. Although Kilian makes it sound easy, he does talk about extreme weather and snow conditions and how at times he had to ski more by feel than by sight.

In the same reserved tone, Kilian confesses he completed his almost 12-hour trip on only one liter of water and one energy gel. He'd packed one other energy bar that he did not eat. Back at base camp, he remembers sleeping for the day, eating some dried food and chocolate bars, and then going back up to 14,000 feet to celebrate his record

with his team: three friends, experienced mountaineers, who had been waiting to applaud him. He is energized as he talks about being at the forefront of the latest trend in ultra-endurance athleticism: FKTs (fastest known times), which have no rules and no schedules—you just pick your window and go. He is proud to have established some FKTs by moving fast and light, believing this new trend is not about winning but about improving. Kilian gets emotional as he mentions the peak of his team’s adventure before leaving the mountain: skiing the Orient Express (a near 45-degree slope) under the midnight sun. When asked about his future mountaineering plans, Kilian estimates that he will conquer Everest, bottom-top-bottom, in about 55 hours. Most people take five weeks just to acclimate. He wants to get the whole thing done in one weekend.

If we could put Kilian in an MRI machine as he is relating this story, we would be surprised by what we see: most of the brain areas involved in reminiscing about the past are the same brain areas involved in planning for the future. Understanding this overlap will impact the way you communicate to be remembered.

When Kilian is thinking about his past mountaineering adventure and imagining a future one, he is drawing from similar types of information. For instance, when he constructs a scene from the past such as the trip to Mt. McKinley, he combines these components into a coherent narrative: vivid visual imagery (skis, snow, midnight sun, skinning the slope, putting on crampons), contextual information (the mountain, Orient Express), facts (details about his three friends, his location), conceptual information (“It’s all about improving, not winning”), personal meaning (he is at the forefront of a growing trend), and emotions (elation when meeting with friends and skiing in a surreal place together). An MRI machine would show us that these processes activate modality-specific cortical areas (e.g., visual, motor, sensory, planning) and that these are the same neural networks that contribute significantly to his description of a *future* trip to Everest.

We know that thinking about the past and thinking about the future are linked not only because of MRI studies but also because of studies on patients who have damage in the areas responsible for relat-

ing past experiences. Many amnesic patients who have trouble with the past are also likely to have difficulty picturing the future.

Of course, there are some neural differences between remembering the past (*retrospective* memory) and “remembering the future” (*prospective* memory). The obvious difference is that the two systems have a different temporal orientation. Past memories are also more vivid and more detailed. And when engaging in prospective thinking, we may combine older pieces of information in new ways. But for the most part, past and future memory draw from the same neural resources.

This is important because it makes us rethink the way we consider memory, especially when we want to influence it in other people and become impossible to ignore. What if memory has evolved to keep track of the future, not the past? After all, there is little evolutionary advantage for humans simply to recall the past. It would do Kilian no good merely to reminisce about his previous mountaineering adventures. The advantage of remembering the past comes from using it to preexperience his future, to predict and prepare for what happens next.

**Remembering the past becomes useful if it gives us insights into **future** outcomes.**

## **A MODERN APPROACH TO MEMORY: THE PROSPECTIVE MODEL**

What are the three most important memory problems you experienced last week? This is a question scientists often ask people when they investigate memory issues more deeply. A series of research studies have found that 60 to 80% of our memory problems are related to forgetting to execute on a future intention. Yesterday you may have intended to give someone a call, send a specific e-mail, or stop by the

store to buy milk, and only remembered these today. Some unfulfilled intentions linger for a longer time. How many books have you promised yourself you will read on your next vacation . . . for the past five years? We have good intentions but forget to execute on them, or if we remember them, the reward is not compelling enough to get us to act. Our audiences are no different. They listen to us, and they may agree that what we say is helpful. When they leave, they might still remember something from what we had said but don't do anything about it. We can address that by changing our approach to how we view memory.

Instead of viewing memory as merely recollecting things from the past, let's look at memory from the lens of the future. This shift is useful for three reasons. First, our audiences' brains are on fast-forward anyway; as they listen to us now, they are by default anticipating the future. The brain has evolved to be a predictive engine because survival is more likely when one can accurately predict what happens next. We can see evidence of our inclination to anticipate the future in many activities: completing other people's sentences, salivating before taking the first bite, or laughing just *before* someone is about to tickle us.

Second, we constantly look to the future to *extract value* for our present actions. Yale psychologists George Newman and T. Andrew Poehlman have studied the human brain's tendency to look to the future and identify value for the present. They sampled 240 YouTube videos showing a child prodigy and an adult performing the same song. In a side-by-side comparison, the child performances garnered 10 times as many views. Some explain the larger viewership as a result of novelty or awe or the skills being incongruent with the kids' age. Some ascribe the youths' talent to a divine source. Consistent with findings on the topic of "conceptual consumption," psychologists estimate that we consume not only the product or the experience in front of us, but also an idea of its future. For child prodigies, we may wonder, "If they are so good right now, imagine where they will be in the future." These projected images about future achievement generate positive emotions, which translate to the feeling of value in the present.

The third reason it is useful to approach memory with the future in mind comes from communicators sharing content with audiences now, hoping they remember and *act on it* later. Imagine that we share content at Point A, and we hope people remember and act on it some-time in the future, at Point B. This “future” can be as close as two minutes from now, two days, two weeks, or longer. So it is pragmatic to ask, what is happening in people’s lives, and what do they intend to do at Point B? If we know this already at Point A, we can prepare for Point B so we can become part of people’s memories and intentions.



Getting people to act on what they remember always starts with an intention—an intention they already have or one you wish to place in their minds. Everyone intends to do something next. Our intentions range from trivial to serious and from automatic to goal oriented. We intend to eat, send e-mails, check Facebook, create documents, revamp a software platform, attend meetings. Dr. Mark McDaniel, one of the most influential researchers in the area of memory and the academic authority on the subject of intentions, says, “I am out of orange juice and I can’t expect that it will magically appear in the fridge. I have to set an intention and go get it.” Even if the fridge were to order it for him, McDaniel would still have to remember to set the command.

Everyone intends to do something. Kilian intends to do Everest in 55 hours and is already starting to plan for his Point B. The sooner we identify people’s existing intentions or clarify a new intention they would benefit from having, the better we can plan on how to be part of their memories and become impossible to ignore.

*Prospective memory*, which means “remembering a future intention,” has remarkable advantages for any business because it keeps us viable: we stay in business when we become impossible to ignore—when people remember what we say and act on it in the future.

## You are a choreographer of delayed intentions.

Sometimes when we tell other people what to do, they forget, but the consequences are benign: “Call me at 4:30”; “Send me that file”; “Pay me back later”; “Take the meat out to defrost.” Failed prospective memory hurts when others forget to call us indefinitely, ignore all our e-mails, don’t set up another meeting, and later we find out that they picked another consultant/vendor/lover. Ouch.

The last few decades have given us more rigorous research findings on prospective memory, revealing specific techniques that increase the likelihood of people acting on what they remember. Most research on prospective memory is carried out by scientists who work with subjects either in laboratory experiments (“Remember to press this button on a keyboard when you see a certain color or a word”) or in real-life situations related to simple goals (“Remember to write down in a journal when this specific event is happening”). The more serious prospective memory research has been done in clinical studies, where it is important for patients to act on future intentions, such as taking medication or showing up for doctors’ appointments.

In advertising, brands are also researching prospective memory because it hurts business when companies spend a large marketing budget and customers remember the ads at the point of purchase, but they either don’t buy that brand or, worse, choose a competitor’s product. From a wider business perspective, whether we work in sales, training, marketing, finance, or IT, we can use findings from research on prospective memory and extract practical insights to help others act on future intentions.

Research reveals that when people act on future intentions successfully, they complete these three steps, sometimes within fractions of seconds:

1. *Notice cues* that are linked to their intentions
2. *Search their memory* for something related to those cues and intentions
3. And if something is rewarding enough . . . *execute*



Let’s say you have a dinner party and want to buy some wine on your way home from work. You tell yourself in the morning, “When I drive by the store tonight, I must stop and buy the wine.” The intention is to buy the wine, and the reward is your guests will think of you as a wonderful host. On your way back, you see the store (*notice cue*); you think, “What was I supposed to do? Oh, yes, buy wine” (*search memory*); and you pull into the store (*execute on intention*).

Now consider your own content and imagine you must help your audiences go through the process described. With this prospective memory model in mind at Point A, you can prime your audiences with the proper cues, help them to keep in long-term memory what is important, and make it easier for them to execute on intentions at Point B. Currently, in the business world, the process of prospective memory is left to chance, and as a result, our audiences forget a lot, and the little they may remember does not always lead to action. We can fix this.

The three steps of prospective memory—*noticing cues*, *searching memory*, and *executing on intentions*—have a few things in common. They are all tied to the brain’s tendency to seek rewards and avoid



punishments. When we speak about future intentions, what we picture is a reward we will get from either moving toward something positive or away from something negative. From an evolutionary perspective, we become more adaptive every time we learn and remember what's rewarding and what's not. Any time you ask people at Point A to act on a future intention, they strike a tacit deal with you. They implicitly say, "I will stay with you to Point B as long as you keep me rewarded." And they will be on the lookout for rewards at all three stages: when they notice cues, when they do a memory search for connections between those cues and intentions, and when they decide to execute. No rewards, no action. In addition, all three components work in the ways identified in Chapter 1: they can be reflexive, habitual, or goal oriented. In other words, they are *automatic* or *strategic*. The more automatic they are, the faster they happen. The less that cognitive effort is involved, the greater the likelihood of action.

How do these concepts apply in business practice?

I remember working with an executive to create a sales presentation. The goal was to sell his company's platform, which made a website more efficient by enabling the user to create content anywhere (using a tablet, smartphone, or computer), distribute it everywhere (various media, including TV), engage viewers (e.g., chat capability), and monetize content (e.g., add a shopping cart for products). The title of the presentation was "Can Your Website Do This?" and it listed these four capabilities. But then we ask, "What will prospects see or hear on their jobs, days *after* the presentation, when they will be more likely to make a decision whether to buy a new platform? What cues will they notice, what memories should come to mind, and what would prompt them to call him back?"

The audience for this presentation was composed of chief marketing officers (CMOs). We asked, "What do CMOs care about?" After a survey, we discovered CMOs considered three things to be important for corporate websites: content, community, and commerce. So we reorganized the structure of the presentation to mimic these three items instead of the original four. These three words were already on listeners' minds and later could act as cues to trigger memories of this presenta-

tion. To make the purchasing decision easier, the presentation emphasized heavily a concern that CMOs have each time a new system must be implemented: Does it fit with what exists? CMOs consider smooth integration rewarding. The presentation provided ample evidence of how this platform was distribution-, tool-, and system-agnostic, as well as its ease of use and customization at an enterprise level. Most of this evidence was based on case studies and third-party testimonials.

The biggest lesson for the presenter in this case was that to craft memorable content, the techniques go beyond beautiful graphics and well-organized information. To become impossible to ignore, we must learn how to create cues, bring important memories to an audience's mind, and help listeners execute on intentions at a future point. Here is a general description of each of the three steps. The descriptions will prompt you to shift your thinking about what memorable content really is and how to create it so that it influences decision making.

## 1. How Cues Help Memory

Cues serve as signals that something must be done at a specific time or during a specific event. For example, the boss sends a reminder to an employee to “call at 1 p.m.” (*time-based cue*) or “call when you get to the office” (*event-based cue*). The effectiveness of cues depends on how strongly they are related to a desired intention and how salient they are to draw attention at the time of remembering.

For example, in the spirit of sustainability, we are being asked on TV, radio, or social media to bring our own shopping bags to the store. This is “Point A” messaging because we’re sitting on the couch or in front of the computer when we see the public service announcement, and yet the sponsoring organizations want us to act on a future intention, at Point B, which materializes at a different time and in an entirely different context. Many of us have made it as far as having extra bags in the car. But how often do you find yourself already in the store, thinking, “Darn it. I left the bags in the car.” Some stores have recently started to display giant signs *in the parking lot*, which read, “Bring your shopping bag.” That’s a great cue to remind us what to do *at a time when it counts*. That’s Point

B messaging. It is *these signs* that we should see on TV or social media, at Point A, associated with the action of bringing the bag into the store. This early priming would make it a lot easier for us to notice the cues at the point of remembering. After all, even with those signs in the parking lot, there is still the possibility that they may compete with other signs in the same parking lot or with the fact that people may be looking at their phones or talking to their companions when they get out of their cars and therefore behave in a state of partial attention.

For cues to work, they must be distinctive enough and tied to an intention people care about. In business contexts, where content creation and delivery are concerned, either one of these two conditions is missing. Sometimes our audiences notice cues at Point B but don't care enough to act. Or they care enough to act, but the cues are not strong enough to be noted and they forget. For example, after attending a training program, people return to work and fail to apply the new information they've learned because cues back on the job are not distinctive enough to remind them of the new skills or cues are not strongly tied to a reward. We must ask constantly at Point A, what will they likely see at Point B that is distinct enough and relevant enough to trigger memories and action?

## You may be only as memorable as your **cues**.

People always intend to do something next. It is more likely they will pay attention to cues linked to *their* intentions versus *your* intentions. Connecting the proper cues to the proper intentions is the first entry point toward influencing others' memory and actions. Chapter 4 presents additional guidelines on how to build proper cues.

## 2. Memory Search: Bridging Cues and Action

If the cue and intention are sufficiently associated when we first present people with information, and if the cue is sufficiently noted when it

counts, then the prospective memory process is effortless. People can act on what you consider important even when they are busy doing something else. In the parking lot, when we see the sign “Bring your bag,” the cue may be linked to the stored memory of “bag = sustainability” or “bag = savings.” If we consider this memory relevant and rewarding, even if we’ve walked away from the car, we’re more likely to turn around and grab the bag.

## Proper cues moderate access to existing memories.

The question is, how are memories formed, stored, and retrieved at the right time? This is important to answer because even in the prospective memory process, at Point B, *retrospective* memory counts. We still need the past to execute on the future.

Our brains experience stimuli through our senses. The hippocampus, along with parts of the frontal cortex, determines whether the stimulus is worth *encoding*. If it is, the memory trace is *stored* and *consolidated* through a process called long-term potentiation, which can take days, weeks, or even years.

We *retrieve* our memories when we are prompted to recall something via an external cue, such as the “Bring your bag” sign in the parking lot, or we retrieve memories on our own accord, through free recall. Cued recall is easier than free recall. A cue asks us to recognize a stimulus we’ve seen in the past; this narrows the search in our memory inventory. In free recall, the search is wider and requires more effort. This is why we prefer multiple-choice tests to essays. And, of course, the greater the association between the cue and the memory, the greater the chance for retrieval.

I recently helped a start-up company create a one-day workshop on best practices for hiring great talent. Initially the executives wanted to divide the workshop into sections that tackled attracting candi-

dates, drafting job descriptions, interviewing, screening, and making acquisitions. We used the prospective memory method and asked, “After the training is over, at Point B, what will participants see and use when they are expected to apply what they learned in the workshop?” He mentioned an online tool that would walk recruiters step-by-step through the hiring process. So we created the presentation to mimic the structure of *that* tool. Since the executive had control of the tool itself, we made it so it would contain no more than four main components and was easy to navigate. We changed the flow and the labels of each section in the training to match the new tool. The tool would provide strong cues at Point B, and if we encode them at Point A, we increase the likelihood that people will retrieve the proper memories and act on them.

When analyzing your own content, ask this: When you are no longer in the room with your listeners, what type of cues will be available in their lives to trigger the appropriate memory and entice them to act? Prime their brains with those cues at Point A, so they are recognizable and will prompt the right memories at Point B.

Also ask, will they have sufficient cues around them to remind them of what you consider important, or will they have to recall something *on their own*, without any external help? There is no right or wrong answer, but clarifying this at Point A increases the likelihood that you’re satisfied with what happens at Point B.

Sometimes people like to choose what they remember, and sometimes they prefer to be reminded what to do (in other words, to be given cues). At work, for example, we expect managers or executives to tell us what to do, so we often externalize our memories to them. When we want to influence other people’s memories, we must consider whether they take control over their own remembering process or expect other people to remind them of action items. For instance, in prospective memory studies, older people perform *better* in natural settings compared with younger adults because they naturally take control of a task. However, in laboratory settings, older people expect an experimenter to tell them what to do, and their prospective memory is worse.

When we take control of a task, and if the task is relevant, we encode more stimuli and therefore form more memory traces, which we are more likely to remember in the future. When Kilian reflects on his experiences on Mt. McKinley months later, it is easy for him to retrieve past memories without any cues because he was there. He encoded vivid images (skiing under the midnight sun), specific actions (skinning a 45-degree slope), and meaning (“It’s not about winning; it’s about improving”). These techniques help with our own memory, but how about influencing *other* people’s long-term memory?

If we can’t rely on external cues to reactivate specific memories in people’s minds, then we have to use additional techniques to make sure they store information long term and retrieve it on their own at Point B. These additional techniques include the variables mentioned in Chapter 1: *context, distinctiveness, emotion, facts, familiarity, motivation, novelty, relevance, repetition, quantity of information, self-generated content, sensory intensity, social aspects, and surprise*. Details about each are included in later chapters. We don’t need to use all of them at once when we communicate, but a combination of several is sufficient to influence others’ long-term memory. Why is it important to go through the extra effort? Because memories fuel execution, and this is the third step in the process of prospective memory.

Memory matters because it  
influences **action**.

### 3. Executing on Intentions

It is possible for people to remember what we tell them but still forget to act. Lots of businesses capitalize on this human tendency. I am sure you know people who:

- Bought products for the rebates but never claimed them
- Have automatic renewal payments for services they no longer need

- Are going to switch to a cheaper health insurance plan or rebalance an investment portfolio that currently has high service fees “some day”

Most of us are humble about our memory for the past, but just as many of us overestimate our ability to remember to do things in the future. Harvard University professor Keith Ericson recently completed a series of studies on our *overconfidence* in remembering future effort. In one experiment, he asked participants to make a choice between receiving larger payments that depended on remembering to claim them six months later or smaller payments that would be sent to them automatically after the same time delay. Participants were allowed to use memory aids and were clearly shown whom to contact in order to claim their payment. Out of the group who selected the larger payments, 76% of participants estimated they would remember to claim the payment, but only 53% did. Even though we assume memory aids can be used, people tend to underutilize them.

Forgetting the future is visible in many fields. Here is a review of a hotel in New York, posted on TripAdvisor: “Stayed 6 nights . . . Had to ask for towels for 4 days. Had to ask for soap for 3 days. Sushi bar in downstairs restaurant was excellent. Restaurant food was excellent. Buffet breakfast included with room was good, but hard to find napkins, silverware on many mornings. Great views of NYC. Good shuttle service to NYC, neighborhood industrial but safe. Housekeeping needs a list for each room to make sure towels, glasses and soap, shampoo etc are restocked daily. We had 3 rooms on different floors and we all had to ask for these things VERY often. Bring sticky notes to leave for housekeeping to remind them.” You can sense the reviewer’s honesty and frustration as the description keeps coming back to failed prospective memory. I am sure the hotel’s housekeeping meant well. The future of staying in business will be to bridge the gap between meaning well and doing well.

The ideal way to study what influences action is to understand it in relation both to memory and to its two close cousins: emotion and motivation. Together, the three processes compute the rewarding or punishing features of a stimulus. Some scientists believe that this com-

bination—memory, emotion, and motivation—is at the basis of the brain’s design. We process stimuli around us with our senses, and in the process, we identify the value of those objects that we can use for a specific outcome. We evaluate which stimulus is associated with which reward, or we form a new association, and then we select an appropriate behavior. *Stimuli do not lead to action. Stimuli contain value codes, which activate emotional states, and these states may lead to actions.*

Let’s consider the following definitions, which are gathering consensus from scientists:

- *Emotions* are states elicited by rewards and punishments.
- *Motivation* is the state we are in when we are willing to work to receive a reward or avoid a punishment.
- *Memory* is the process that leads to the selection of appropriate action to obtain a reward or avoid a punishment.

Remembering rewards and punishments is how we are able to cope efficiently in a complex and changing environment. As scientist Edmund Rolls states, “We guide our behavior toward stimuli that are useful and away from those that are not.” For example, we are motivated to work to obtain rewards such as affection, praise, physical touch, or money. The emotion we feel when we obtain these rewards is happiness. We are also willing to work to avoid negative emotion, such as a boss being disappointed by subpar performance. We feel emotions when we expect a reward and don’t get it, such as frustration when someone else gets the credit for our work. Or we feel relief when a punishing stimulus stops, such as someone quickly answering a cell phone that interrupts an important conversation.

**Memory, emotions, and motivation  
are impacted by the presence, absence, or  
termination of **rewarding** or  
**punishing** stimuli.**



Ponder your own communication efforts right now: Are you making it clear how your content enables others to move toward something rewarding, such as accomplishments, affiliation, efficiency, excitement of discovery, prominence, or freedom from worry? Alluding to any of these motivational drivers in your content increases the likelihood for action. Here are some examples of message changes that participants have made during my workshops. Notice the difference when they switched from a question of topic to a question of reward:

- “Processing Nonretirement Distributions” versus “How to Process Distributions Quickly and Avoid Errors.” The new message works because it alludes to the reward of freedom from worry.
- “4-Step Goal-Setting Process” versus “Earn More Money with Goal Setting.” The new message invokes the reward of accomplishments.
- “Delivering a First-Class Care Webinar” versus “Improving Patient Outcomes Through Increased Patient Education.” The new message works because it intensifies a reward: it is more satisfying to improve patient outcomes than to deliver a great webinar.
- “Challenger Selling Overview” versus “Selling: Are You Doing It Wrong?” The new message alludes to the reward of discovery.

Influencing behavior becomes more complex when people can choose between several alternatives, each associated with different rewards. For example, imagine you are one of four vendors proposing a new marketing platform to a potential client. How do you steer the decision makers in your direction, especially when you may not know specifics about their reflexes, habits, or goals? Despite complex situations and moving variables, there is something that stays the same: the brain’s quest for seeking rewards or avoiding punishments. People execute on intentions, taking into consideration the following variables:

- *Effort.* “How much work am I willing to do to obtain rewards?”

- *Time delay.* “For how long am I willing to wait before I receive rewards?”
- *Risk.* “How much uncertainty am I willing to accept?”
- *Social aspects.* “What are the outcomes of *other* people’s actions in relation to my actions?”

The four variables—effort, time delay, risk, and social aspects—are well balanced in Kilian’s case. On the one hand, he is willing to put in a lot of effort to reach his goal of conquering Everest in 55 hours. However, based on his memories of past excursions, he realizes that while there is some risk involved, his past successes predict a high ratio for the likelihood of his success in the future. In addition, he does not have to wait too long to see the rewards of his work, and he knows there will be a lot of social advantages once he accomplishes his extremely ambitious goal. The *Outside* magazine article in which he is featured, starting tongue in cheek with the words “FKT up,” already treats him with reverence for planning to run up and down Everest, with no oxygen, in one weekend.

Simply put, when it comes to executing on intentions, our brains are after maximizing rewards while minimizing effort and risk in a socially desirable way. In later chapters, we will learn more about these aspects and what pushes people into action in complex situations, when alternative choices are available.

**KEEP IN MIND:**

- Prospective memory, which means *remembering a future intention*, has remarkable advantages for any business because it keeps us viable: we stay in business when people remember what we say and act on it in the future.
- When people act on future intentions successfully, they complete these three steps, sometimes within fractions of

seconds: they *notice cues* that are linked to their intentions; *search their memory* for something related to those cues and intentions; and if it is rewarding enough, they *execute*.

- The effectiveness of cues depends on how strongly they are related to a desired intention and how salient they are to draw attention at the time of remembering.
- Memory, emotions, and motivation are influenced by the presence, absence, or termination of rewarding stimuli.
- People execute on intentions according to the following variables tied to rewards: effort, time delay, risk, and social aspects.