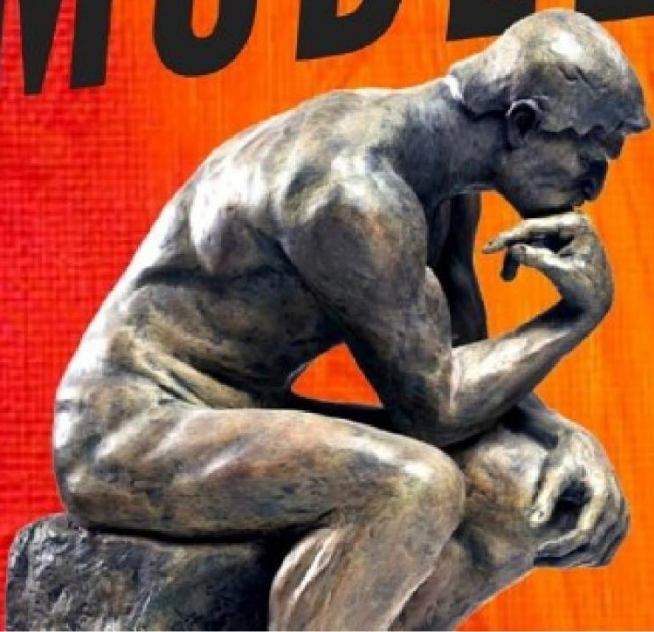
30 Thinking Tools that Separate the Average From the Exceptional. Improved Decision-Making, Logical Analysis, and Problem-Solving.

MENTAL MODELS



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Chapter 1. Decision-Making for Speed and Context

The name Charlie Munger might not ring a bell, but you're probably familiar with his business partner, Omaha billionaire Warren Buffett, one of the world's most famous investors and, accordingly, one of the world's richest people for decades running.

The two of them have worked side by side for Buffett's multi-conglomerate Berkshire Hathaway since 1978. Although Munger isn't in the spotlight as much as his partner, Buffett credits an overwhelming amount of his success to his alliance with him. And in recent years, Munger has begun to build a following in his own right based on how he has articulated his approach to life.

This mostly began when Munger emerged from the shadows to give a commencement speech at USC Business School in 1994 entitled "Lesson on Elementary, Worldly Wisdom as It Relates to Investment Management & Business." The impact of Munger's speech has proven to be highly influential in the decades after it was delivered, as it introduced the concept of "mental models," which was subsequently disseminated to the public at large. He mused,

> What is elementary, worldly wisdom? Well, the first rule is that you can't really know anything if you just remember isolated facts and try and bang 'em back. If the facts don't hang together on a

latticework of theory, you don't have them in a usable form. You've got to have models in your head. And you've got to array your experience—both vicarious and direct—on this latticework of models.

You may have noticed students who just try to remember and pound back what is remembered. Well, they fail in school and in life. You've got to hang experience on a latticework of models in your head.

What are the models? Well, the first rule is that you've got to have multiple models—because if you just have one or two that you're using, the nature of human psychology is such that you'll torture reality so that it fits your models, or at least, you'll think it does. You become the equivalent of a chiropractor who, of course, is the great boob in medicine.

It's like the old saying, "To the man with only a hammer, every problem looks like a nail." And of course, that's the way the chiropractor goes about practicing medicine. But that's a perfectly disastrous way to think and a perfectly disastrous way to operate in the world.

So you've got to have multiple models. And the models have to come from multiple disciplines—because all the wisdom of the world is not to be found in one little academic department. That's why poetry professors, by and large, are so unwise in a worldly sense. They don't have enough models in their heads. So you've got to have models across a fair array of disciplines.

You may say, "My God, this is already getting way too tough." But, fortunately, it isn't that tough—because eighty or ninety important models will carry about ninety percent of the freight in making you a worldly wise person. And of those, only a mere handful really carry very heavy freight.

He went on to emphasize at a later point,

> You must know the big ideas in the big disciplines and use them routinely—all of them, not just a few. Most people are trained in one model—economics, for example—and try to solve all problems in one way. You know the old saying: to the man with a hammer, the world looks like a nail. This is a dumb way of handling problems.

While I wouldn't go so far as to say that having deep expertise in a discipline is *dumb*, it's certainly not an optimal or efficient way of solving or understanding situations that life will toss your way. It leaves you woefully unequipped for whatever lies outside your primary knowledge base, but the answer isn't to become an expert in every field. It's finding your own *latticework of mental models*.

Thus, Munger makes it clear that to navigate the world without a set of mental models is tantamount to blindfolding yourself and randomly pointing to a spinning globe while trying to find Cuba. Without mental models as a blueprint to guide your thinking, you are only able to see haphazard, individual elements with no connection to each other.

To continue with his hammer analogy, if you are working on a construction site, it would serve you well to know how to use a hammer, saw, nails, drill, sander, and so on. The more tools you are familiar with, the better you can handle different and novel construction jobs; the more mental models you acquire, the better you can deal with and understand old and new life occurrences.

So what exactly is a mental model?

It's a blueprint to draw your attention to the important elements of whatever you are facing, and it defines context, background, and direction. You gain understanding even if you lack actual knowledge or experience, and the ability to make optimal decisions.

For instance, if you are an aspiring chef, most of what you end up learning amounts to mental models: what kind of flavor profiles exist, what basic ingredients are needed for a stock or a sauce,

typical techniques to use for different meats, and the conventional beverage and food pairings. Understand those, and you will generally know how to handle yourself with any type of cuisine. Absent a latticework of underlying models, each new recipe would present entirely new struggles.

Although many are universal, different situations will require different types of blueprints—and that's why Munger so emphasized the latticework of mental models so as to be prepared in as many situations as possible. Without a mental model, you might see only a random assortment of lines. But *with* an applicable mental model, it's like being handed a map to what all those lines mean—now you can correctly interpret information and make an informed decision.

Mental models provide an understanding of the situation, and predictable results for what will happen in the future. You can call them life heuristics or guidelines to evaluate and comprehend. You can also think of them as a set of goggles you can strap on when you want to focus on a specific goal.

You might be thinking that no model is an entirely perfect reflection of the world, but they don't have to be. They just need to point us in the right direction to the complexity around us and filter the signal from the noise. Anyway, that's better than the alternative of being completely blind.

We each already have our own mental models gleaned from years of simply living and noticing patterns of everyday life. Most of us have an idea of how to act in a fancy restaurant because we've been exposed to it in some way. We also have a set of mental models based on our values, experiences, and unique worldviews. You may refuse to use banks out of distrust for large institutions and keep your money tucked under your mattress as a rule of thumb—no one ever said all mental models are useful, accurate, or widely applicable. Indeed, some can consistently lead us down the wrong path.

By definition, our personal mental models are limited and only reflect a biased perspective.

If *my* mental approach is the *only* thing I use when I'm trying to perceive and understand the world, I'm not going to have a very

broad spectrum of comprehension about the world. Invariably, I will get some things completely wrong and would come up blank in other situations when nothing in my experience can apply.

That's where this book comes in. I want to introduce a latticework of mental models for you to operate better in the world. Some are specific, while some are universal and widely applicable. They will all assist you in thinking more clearly, making better decisions, and finding clarity in confusion.

Seeing the same object or event through different mental models will give you vastly different perspectives based on what you are focusing on, and certainly a wider array than if you would have just stuck to your own frame of reference. The more varied perspectives you possess, the more of the world we can understand.

Our aspiring chef from earlier can view a basket of ingredients through a baker's lens, a classic French chef's lens, a sandwich artist's lens, or a Szechuan Chinese chef's lens. None of these models is necessarily the most optimal, but they give you a frame of reference as opposed to just staring at a bunch of ingredients and not having any idea of what to do with them.

Perhaps the most important part of mental models is that they act to prevent human error—appropriately, another one of Munger's famous speeches was titled, "The Psychology of Human Misjudgment."

With too few mental models, you risk falling prey to the fable of the blind men and the elephant, which goes something like the following; there were once six blind men, and they all reached out and could only feel different parts of an elephant: the knee, the side, the tusk, the trunk, the ear, and the tail. None of these blind men were wrong in isolation, but they could only see from a single perspective, so they were wrong about the elephant's overall appearance.

Multiple models challenge each other to produce a more unified overview, whereas just using one or two restricts your long-range view to a limited context or discipline. Having a huge range of mental models can expand your viewpoint and cancel

out some of the stray "errors" that using just one or two models would produce.

This doesn't mean you have to know all the ins and outs of a million different disciplines to use multiple mental models. You just need to understand the basic points and fundamentals of a few essential ones. Just don't be the person with a single hammer.

This first chapter delves deeply into decision-making mental models. In a sense, most mental models eventually help us with decisions, but these specific models are about how to process information more quickly and find an outcome that you are more likely to be happy with. In other words, they get you from Point A to Point B in less time, and they might also help you define what Point A actually is.

Most of the time with decisions, we are overloaded with information—the classic signal-to-noise ratio problem. You will learn to become selectively deaf and only intake what matters. That's where we start with the first mental model.

MM #1: Address "Important"; Ignore "Urgent"

Use to separate true priorities from imposters.

Even when we are relaxing, we can fall into sudden panic and feel a rush of adrenaline when we try to make a decision. We can be as cool as a cucumber, lounging in a pool, and still have this feeling. Why is that?

This is our brain fooling us into one of the most dangerous fallacies—one that will keep you perpetually focusing on what doesn't matter. Everything, seemingly, is an emergency to be handled as soon as humanly possible, and horrible consequences will follow if you don't personally act.

The mistake is thinking of "important" and "urgent" as synonymous and not realizing the huge gulf of difference

between the two terms and how you should prioritize them. The ability to distinguish the two is a key step in lowering your anxiety, stopping procrastination, and making sure that you are acting in an optimized way.

This mental model probably has the most cache in the realm of productivity, where time is at a premium. We spend far too much time on *urgent* tasks when we should be focusing on *important* tasks.

Important task: These contribute directly to our short-term or long-term goals. They are absolutely imperative to our work, responsibilities, or lives. They cannot be skipped and should be prioritized. They may not need to be done immediately and thus don't appear to be important. This makes it easy to fall into the trap of ignoring the important for the urgent. But they are what truly impact your various bottom lines, and serious negative repercussions would follow from skipping them.

Urgent task: These simply demand immediacy and speed, and usually come from other people. Of course, this naturally creates a reaction on your end that can make us forget what's important. They *can* overlap with an important task, but they can also just demand your immediate attention without deserving it. These are usually smaller and easier to complete, so often we turn to them out of procrastination, and it allows us to feel quasi-productive even though we've ignored what we *really* need to be doing. Many urgent tasks can be delayed, delegated, or flat-out ignored.

As a quick example, if you are an author under a tight deadline, an *important* task for you would be to continue writing your book. You need to hit 5,000 words a day for the next two weeks or else you are going to be eating bread and oatmeal. This would qualify as a priority.

An *urgent* task would be dealing with that annoying "check engine" light that keeps flickering on and off in your car. Your car can probably survive a few more trips, and even though the light winking can be seductive, you need to resist it, because this is urgent masquerading as important.

Typically, you'll find that an important activity or project might not have that many urgent tasks connected with it. This tends to cause confusion of priorities. Luckily, there is a tried and true method of distinguishing between urgent and important, and the method draws its name from one of the most famous American presidents, Dwight D. Eisenhower. It's called the Eisenhower Matrix, and it will help you prioritize and identify what you really need to be juggling at the moment.

Eisenhower was a five-star general during World War II before being elected president and serving two presidential terms from 1953 to 1961. In addition to leading the Allied forces to victory in the war, Eisenhower oversaw the creation of NASA, the American interstate highway system, and new civil rights legislation while navigating the United States through the Korean conflict and the instigation of the Cold War.

To master his impossibly complicated schedule, Eisenhower developed a system that helped him sort his activities and demands into matters that were most important and identify the most vital processes to serve those important elements. It also helped him determine which less-essential tasks he could either designate someone else to complete or eliminate entirely. In other words, important versus urgent.

Some tasks could lead to new civil rights legislation but never quite appear urgent. Other tasks could appear to be screamingly urgent but would never make a difference either way. Any person, especially one as impactful as the President of the United States, should simply know what matters.

Eisenhower's matrix is easy for anyone to employ and goes a long way toward improving efficiency and accomplishment. The template is a simple two-by-two grid divided between "important" goals and "urgent" tasks, as seen below.

Important tasks. The top row of the matrix represents the most important obligations or responsibilities one has in their life. These are things that require our most mindful and active attention. For work, these might include the most pertinent aspects of our job descriptions—overseeing a budget, managing a long-term project that defines our business, or maintaining constant operations. For personal matters, it could mean directing our health (or that of our loved ones), sustaining a relationship or marriage, selling a house, or establishing a business. Whatever things most impact every other thing in our lives or work are the most important.

However, just because something is extremely important doesn't mean every activity that supports it needs to be done immediately. Some can be put on the backburner (indefinitely, even), some aren't even ready to be dealt with, and some depend on other people moving first. In short, you can't do them all *right now.* That's where the "urgency" metric comes in: the top row of the matrix is thus divided according to what can happen now and what can be delayed (but must happen at some point in the future).

Urgent: Do. Objects in the "do" quadrant are things that absolutely need to be done posthaste. They must be completed to stave off

unfavorable outcomes or uncontrollable circumstances, and the sooner they're done, the less work (and more relief) there will be in the future. "Do" tasks typically revolve around deadlines: final term papers, court filings, car registrations, school applications, and so forth.

They also include emergencies or activities that need to be completed to avert disaster. "Do" tasks are best thought of as duties that need to be completed immediately, by the end of today, or tomorrow at the very latest. They cause anxiety because they're high-effort duties that you dread doing but need to do nevertheless.

Not urgent: Plan. Tasks that reside in the second quadrant need to be done at some point—but not necessarily *now*. The world isn't going to collapse if they're not done today; they're not on a strict deadline to be completed. Still, they have to be done at *some* point, usually relatively soon, so they need to be scheduled. "Plan" tasks include setting up a future meeting with a big client, arranging a time for a roof leak to be fixed, studying or reading class materials or work documents, or maintenance duties that cover the long term.

Schedule them after the fires are put out. Plan them for the near future, but not so imminent that it interferes with your truly urgent *and* important tasks. "Plan" tasks are also key components of your medium-to-long range plans: when you're planning a week or a month or advance, "plan" tasks should be put on your timetable.

The danger with these "not urgent" tasks is deprioritizing them too much. They're important to keep normal operations afloat, and if they're discarded or forgotten, they may well turn into emergency tasks in short order. Take the "check engine" light in your car from earlier—anecdotally, I have driven with that light on for close to a year and nothing terrible has happened, so even though it's theoretically important, it doesn't demand urgent attention.

Not-important tasks. The bottom row of Eisenhower's matrix represents tasks that aren't that significant to you personally. That doesn't mean they're unimportant to other people (though

it might), but they're activities that might be more appropriate or meaningful for somebody else to finish up. Other people will certainly attempt to present them as important to you, but they're often just projecting their own self-interests. Is there an impact on you? Minimal, if any. The not-important tier is also divided up by relative urgency.

Urgent: Delegate. Perhaps the most befuddling square in this matrix is the "not-important but urgent" box. It perhaps makes the most sense in a work environment: these are tasks that might really need to be done, but it's not vital for *you* to take care of them yourself, even if you could. If you *did* complete them yourself, they might impose on the "important" items that you absolutely have to do either now or later.

For those reasons, items in this box should be eliminated, preferably by being delegated to somebody else. When you're working as the leader of a team, you should be able to find someone else to handle these tasks for you.

Not-important/urgent tasks can be identified by measuring how vital they are to what's happening now. These can very generally be described as interruptions: phone calls, emails, ongoing family situations, and so forth. During times of inactivity these all may be important to focus on, but at the moment they could distract or misdirect you from what you have to get accomplished toward your overall goals.

You may be fielding customer support emails even though you are the CEO of the 100-person company. These customer support emails represent extremely angry and disturbed clients, and they're urgent to everyone involved—except you.

There really is no point or importance for you to be involved in this daily minutia, and thus, you must eliminate it from your schedule through delegation.

Not urgent: Eliminate. Finally, there are some activities and functions that are neither important nor time-sensitive to the priorities at hand. What are they even there for? Mostly to distract you or serve as an escape from doing what you need to do: leisure activity, social media, binge-watching, long phone calls, extensive hobby time, and so forth. In the name of

efficiency and prioritizing, these things are dead weight—we might not always be optimizing for those things, but it is still helpful to simply know.

These are just things that grab your attention for one reason or another and try to force a response; they're even hard to name sometimes because they feel so insignificant and fleeting. But they add up. (If you ever want to shock yourself and see how much they add up, install trackers on your phone and computer to see how much time you log on truly useless pursuits.)

These are the activities you shouldn't account for in your schedule at all and should only be done when everything else is completed. Only keep items that are important to the bottom-line success of your project or life. This doesn't mean you can't *ever* do them (and you'd be mistaken not to allow yourself a little bit of escapism now and then). But when you're in the middle of other important items that need your attention or oversight, take them off your plate completely. They'll be more meaningful and rewarding when you've finished the important tasks anyway.

Just because something appears to demand a quick response doesn't mean you should give it, and just because something is slowly ticking in the background doesn't mean you should ignore it. Learn to balance the two for optimal decisions.

MM #2: Visualize All the Dominoes

Use to make decisions that are as informed as possible.

When faced with the need to make a decision, most of us only consider the immediate impact that decision will have—especially if it's a time-sensitive or urgent one. We think in terms of one domino ahead; life is never so simple and quarantined. What about the rest of the dominoes? They don't simply disappear.

We perceive most of our everyday decisions as isolated situations that don't have a ton of consequences, positive or negative. We practice a disturbing lack of foresight on a daily basis because that's how we're biologically wired as humans, and yet our instincts don't serve us very well here. Typical human thinking cannot be faulted: I step on a nail, and I jump to the side in pain and end up falling off a cliff. It just happens.

This is generally known as first-order thinking, and it is where we focus exclusively on resolving a question or decision at hand and don't consider the more long-lasting ramifications or how our decision will play out in the distant future. If it helps, call it *first-domino thinking.*

But many of our decisions, especially the ones we toss and turn over at night, have consequences that extend beyond what we can see right before us. In terms of consequences, humans are as blind as bats. Small decisions one might make could result in effects down the road they didn't foresee, resulting in a sort of butterfly effect. The outcome isn't just limited to the immediate changes we've decided upon—other people or situations can be affected as well. Some of them may have been truly unpredictable, and some might be invisible until they rear their ugly heads. Others, though, only catch us by surprise because we didn't think the situation through quite deeply enough.

Okay, you've heard enough about what *not* to do, so what *should* we do? Visualize all the dominoes, otherwise known as *second-order thinking.*

This is simply trying to project into the future and extrapolate a range of consequences that you can use to conduct a cost-benefit analysis for your decisions or solutions. Instead of merely being satisfied about buying a new apartment, think about what it means for your credit, debt, and ability to own a huge dog in the future. Instead of bleaching your hair every week, consider that your bald spots have been increasing due to the harsh bleach and that a toupee may be soon necessary.

Yes, second-order thinking has the usual effect of making you think twice about what you're doing and helps eliminate rash decisions, as you might expect when you consider the prolonged

aftermath of your choices. It's the practice of seeking out as much information as possible to make measured decisions.

What's the first domino to fall after a decision? Now what are the three paths that can lead to? And where do those lead? You simply don't stop your analysis once the most obvious situations are articulated. Instead, you consider as many long-term, possible ramifications as you can. How will your decision cause other dominoes to fall? If you tip this domino, which other dominoes will you be unable to tip because of time or effort (opportunity cost)?

Famous investor Howard Marks provides a dead simple way this can apply to daily life:

> A good example can be seen in the hypothetical newspaper contest John Maynard Keynes wrote about in 1936. Readers would be shown 100 photos and asked to choose the six prettiest girls, with prizes going to the readers who chose the girls readers voted for most often. Naive entrants would try to win by picking the prettiest girls. **But note that the contest would reward the readers who chose not the prettiest girls, but the most popular.** Thus the road to winning would lie not in figuring out which were the prettiest, but in predicting which girls the average entrant would consider prettiest. Clearly, to do so, the winner would have to be a second-level thinker. (The first-level thinker wouldn't even recognize the difference.)
>
> This can be carried one step further to take into account the fact that other entrants would each have their own opinion of what public perceptions are. Thus the strategy can be extended to the next order and the next and so on, at each level attempting to predict the eventual outcome of the process based on the reasoning of other agents.

> "It is not a case of choosing those faces that, to the best of one's judgment, are really the prettiest, nor even those that average opinion genuinely thinks the prettiest. We have reached the third degree where we devote our intelligences to anticipating what average opinion expects the average opinion to be. And there are some, I believe, who practice the fourth, fifth and higher degrees." (Keynes, *The General Theory of Employment, Interest and Money*, 1936).

Think about it this way: very rarely does something happen with no chain of events to follow. It's your job to look past the positive reinforcement and gratification you may receive, which frankly may be blinding you, and understand what could go wrong, how wrong it could go, and why it might go wrong. What if you viewed each decision as having the potential to topple 15 other dominoes and set about identifying them? *Tedious yet informative.*

Second-order thinking allows you to project the totality of your decisions. Even if you don't change your decision because of what you determine through second-order thinking, you think through ten times as many scenarios and thus make far more informed choices than you would otherwise. Sometimes, that's the best we can do as a person. We can't predict the future, but we can't not think about it.

If second-order thinking's so great, then why doesn't everybody do it? Because it's hard. Humans aren't a shining example of doing the right thing on a consistent basis. Just look at our diets and how much money the weight loss industry generates on an annual basis. Questioning how our actions will affect situations beyond what's right in front of us takes probing into the unknown and leads one into a labyrinth of thinking that can be strenuous or complicated. Other people might say we're "overthinking" a decision or problem.

The fact is, second-order thinking allows you to think clearly—at least more clearly than your competition. Most of the time, that matters. Nobody ever rises above average through making the

obvious choices or accepting the most convenient, simplest answers. Being able to project and foresee happenings on a deeper, futuristic level is a hallmark of successful people and almost always turns out to be worth the extra effort. Adopting this mental model will improve your decision-making and stop letting things slip through the cracks.

To think in a second-order fashion, Howard Marks provides some guiding questions.

How broadly will this decision affect things in the future? What will your decision do beyond change your immediate concerns? What concerns will be *created*? Will your decision's purpose be fulfilled?

Which result do I think will happen? Think beyond the simple resolution of the most immediate problem: if you take this course of action, what effect will it have if it succeeds or fails? What do those outcomes look like? What do semi-success and semi-failure look like? This naturally leads to the next question.

What are the chances that I will succeed or be right? From an objective standpoint as possible, what is the probability that your assessment is accurate? Is your prediction realistic or at least a little steeped in fantasy or paranoia? Every decision has a cost-benefit ratio to it. Are you too openly courting failure or semi-failure?

What does everybody else think? Hopefully you have access to at least one or two people—optimally more—who will give you an honest opinion about your prediction and whether they think you're on the right track or not. Although you shouldn't be unduly swayed by popular opinion, it's beneficial to know how your forecast is received. Consensus in numbers isn't really something to be preached, but rather, a complete lack of reality usually works alone, so you are really just trying to prevent the latter.

How is what I think different from everyone else? What are the prime splitting points between what you think and what popular knowledge and opinion dictates? What specific aspects of your information and prediction are different and why? What are they based on? What could I be missing? And again, this naturally leads to the final point.

What dominoes do other people visualizing falling? Regardless of whether you actually have someone to bounce your ideas off of, the point of this last question is to step out of your own biased perspective and view decisions as other people. Actively seek out and articulate the domino chain that other people might see, and see how the dominoes fall from their perspective. Not all perspectives are valid, but this gives you more information.

Remember, this mental model's purpose is to expose and inform. We can't circumvent our human instinct of jumping to conclusions and deciding on a whim entirely, but we can be a bit more methodical about decision factors.

This mental model very well could have been named "Ignore the Monkey's Paw" but that seemed unnecessarily morbid. So instead, I'll just briefly recount the origins of the Monkey's Paw and you can decide for yourself which is more effective in forcing you to examine secondary consequences.

The Monkey's Paw is a short story written by W.W. Jacobs in 1902. It's about a man who finds a blessed (or cursed?) monkey's paw, which will grant him three wishes. Little does the man know that even though each wish will be *technically* fulfilled, there will be harsh consequences.

For his first wish, he wishes for $200. The next day, his son is killed at work, and the company gives the man $200 as payment. For his second wish, he wishes for his son back. In a short amount of time, he hears a knock at the door, and when he peers outside, he discovers that it is his son's mutilated and decomposing body. Frightened beyond belief, his third wish is for his son to disappear. Unintended consequences matter!

MM #3: Make Reversible Decisions

Use to strategically remove indecision whenever you can and have an action bias.

In theory, decision-making is easy. Some people do it with their gut, some try to do it with their brain, and some do it entirely out of self-interest—*what's in it for me*?

That said, decision-making is not our goal—*optimal* decision-making combined with speed is. To improve the second portion—speed—we must understand the mental model of distinguishing between reversible and irreversible decisions and how it helps us take action more quickly.
One of the biggest reasons we have for inaction is the anxiety associated with the seeming finality of decisions. We are conditioned to think that there is no turning back, and to be a "man/woman of our word."

To be blunt, this approach is dead wrong and will keep you standing on the sidelines for longer than needed. Not all decisions have to be set in stone. Most are actually written in pencil. Most are completely changeable, and approaching decisions as such will lead you to action more often than not. For instance, do you feel more comfortable buying a car on "final sale" (irreversible) or if there is a 100% money-back guarantee (reversible)? What about with painting a bathroom (reversible) versus adding a new bathroom (irreversible)? What about shaving your cat (irreversible) versus dying its hair (reversible)? The circumstances where you would feel more comfortable taking immediate action are all more reversible in nature.

Being able to tell the difference between reversible/irreversible decisions is one of the keys to speed. Add this to your decision-making analysis: *how can I make this decision reversible, and what would it take? Can I do it?* Then do that.
But knowing the difference also gives you a whole lot of information that would be impossible to know otherwise.
That's because action will almost always tell you more than analysis before the fact. When you buy a car, you are likely buying it without knowing how it will truly perform on a day-to-day basis. If you had a 100% money-back guarantee, you would

buy the car instantly and gain valuable information about how it performs every day for you. Then, depending on your level of satisfaction, you can reverse the decision or not; either way, you will be extremely informed and confident in your decision. Not distinguishing between reversible/irreversible makes you slower and more ignorant.

Reversing a decision is rarely going back on your word; it's just adjusting your position in the face of new information. You'd be silly not to. Thus, *make more reversible decisions.* It doesn't matter if you're right or wrong, but you lose nothing, you gain information, and if you end up deciding correctly/optimally, you're ahead of the pack. The worst-case scenario is you're right back where you started, which isn't so bad.

Those that are still wringing their hands about a reversible decision are just losing precious time, falling behind, and using incomplete information. Architect Wernher Von Braun had this to say on the matter: "One good test is worth a thousand expert opinions."

Knowing the difference between reversible and irreversible decisions can dictate the pace and momentum of your life. If you favor reversible decisions, you keep yourself always in motion and learning. You're not overanalyzing or becoming mired in analysis paralysis. You're not the proverbial *Buridan's donkey*, the morose donkey who was stuck between two bales of hay and starved to death as a result of indecision and analysis. This may not change your thought process of irreversible decisions, but those shouldn't be rushed, anyway. For everything else, you have nothing to lose and can only gain.

Jeff Bezos, the founder of Amazon.com, who bears an increasing resemblance to Lex Luthor and is, as of this writing, the richest man in the world, classified these two types of decisions in his own way.

"Type 1" decisions are irreversible. They're the big, often monumental decisions that one can't take back. "Type 2" decisions are reversible, and while Bezos also warns against over-relying on them at the risk of being rash, used judiciously they allow the decision-maker more latitude to move quickly.

On the pitfalls of confusing the two, he states,

> As organizations get larger, there seems to be a tendency to use the heavy-weight Type 1 decision-making process on most decisions, including many Type 2 decisions. The end result of this is slowness, unthoughtful risk aversion, failure to experiment sufficiently, and consequently diminished invention. We'll have to figure out how to fight that tendency. And one-size-fits-all thinking will turn out to be only one of the pitfalls. We'll work hard to avoid it... and any other large organization maladies we can identify.

He's on our side regarding the action bias toward reversible decisions. It's what he sees as a hallmark of nimble, smart companies and is probably bemoaning the fact that every decision at a company as large as Amazon.com feels relatively heavyweight and irreversible.

There's a big caveat to making reversible decisions: they may inspire more possibilities and give you more flexibility, but they should still be based on facts—not unfounded projections, wishes, or excessive emotion. Reversible decisions work when they're realistic and supported by data or historical results. Even if you're making a decision that you can reverse out of, it's much easier to pivot inside and from a reversible decision if it's tethered to some kind of provable or established information.

As mentioned, decision-making alone is not a difficult task. But if we want to make the best decision possible, we can go ahead and use reversible decisions to learn exactly what you need to know.

MM #4: Seek "Satisfiction"

Use to achieve your priorities and ignore what doesn't matter.

Satisfiction *is* a made-up word, but not by me. I suppose that means it could be a real, official word.

The next mental model for decision-making focuses on increasing our speed by focusing only on what we need. In doing so, we will probably realize that we *need* far fewer things than we originally thought and that our desires are masquerading as needs.

The word *satisfice* is a combination of the words *satisfy* and *suffice*. It's a term that Herbert Simon coined in the 1950s, and it represents a handy alternative from those of us who seek to maximize the benefit we derive from a decision. As it turns out, most of us are split into two categories of decision-makers: *satisficers* and *maximizers*.

The maximizer is someone you might be familiar with. They want everything possible, and they'll try and try until they get it. They're picky to the point of being frustrating, and take all of their allotted time to make a decision, every time. Even then, they'll still second-guess themselves and regret their decision. The satisficer, on the other hand, can more accurately determine what really matters and focuses on those things. They get in and get out, and happily move on with their day.

Suppose that you are shopping for a new bike.

The maximizer would devote hours to researching their decision and evaluating as many options as possible. They would want to get the best one possible for their purposes and want to leave no stone unturned. They want 100% satisfaction, despite the law of diminishing returns—the poor return on investment from so many hours of research. The tires must be a certain brand, the frame must have a certain ratio of metal and plastic, and the brakes must be a certain color. Also, they want all of these things at a far below market price. This would make sense if the maximizer was a professional cyclist that frequently competed in

For example, if you go on a shopping trip for a new jacket, helpful boundaries are to only look at jackets that are made out of cotton, navy blue, and within a certain price range. It narrows your scope based on predetermined requirements. It allows you to quickly eliminate options while also knowing you will be satisficed at the end of the process.

A corollary to setting boundaries is to first decide upon a *default choice* up front if you can't decide within a set amount of time. The act of creating the default choice is important because you will have automatically selected something that fits your requirements or desires. You'll be happy in either case, in other words.

In many instances, the default is what you had in mind the entire time and where you were probably going to end up regardless of going through the motions and endless debate. You go through the mental exercise of choosing a "default" with the idea that you might end up there anyway.

MM #5: Stay Within 40–70%

Use to balance information with action.

A famous comedian has clever input on the matter of battling indecision: "My rule is that if you have someone or something that gets 70% approval, you just do it, 'cause here's what happens. The fact that other options go away immediately brings your choice to 80, because the pain of deciding is over."

This is surprisingly similar to what former U.S. Secretary of State Colin Powell has to say on the matter. Powell has a mental model about making decisions and coming to a point of action no sooner than necessary yet no longer than necessary.