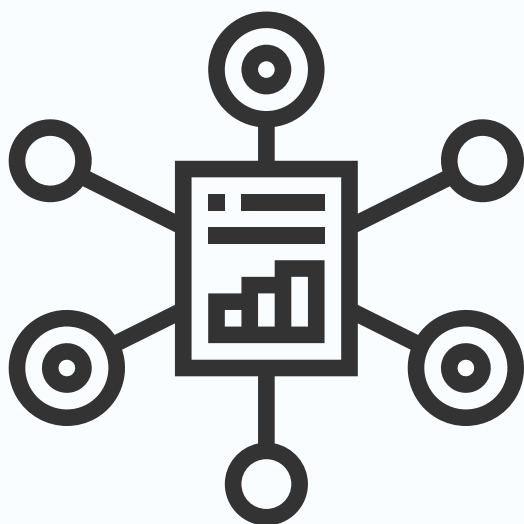# 28 MENTAL MODELS

THAT CHANGED MY LIFE

ALEX BROGAN

Defining Mental Models

The simplest way to think of them is as a "mental hook" to a fundamental idea about the world. One that helps you reason through the various situations you encounter.

Mental models can be thought of in multiple ways and are the overarching term for:

- Methods
- Concepts
- First principles
- Building blocks of knowledge
- Worldviews (including biases)
- Frameworks for thinking and making decisions

We can't store all of the world's details in our brains, so we use mental models to simplify complexity into understandable and organised chunks.

They help us make better decisions without needing to know everything about a situation.

The most useful mental models have applications in a wide range of disciplines and can help you navigate challenging situations to solve complex problems.

Example

Take this example. Imagine you're standing next to a large white lattice. It's nighttime and pitch black. Behind the lattice is a projector screen. Written on the projector screen is a problem. You must solve this problem. But, you can't see the information needed to resolve the problem because it's pitch-black. Luckily, you notice some small light bulbs at each of the intersections on the lattice. You figure that if you can turn enough of them on, you'll be able to solve the problem effectively. Each additional lightbulb will illuminate a different aspect of the problem. The more lightbulbs you have, the greater your chance of solving the problem.

We can consider mental models in a similar light (Ha!). The more you can bring to problem-solving and decision-making, the broader your perspective.

When we do this, we solve problems more effectively. When we solve problems more effectively, we get better outcomes. When we get better outcomes, we have a better life. A better life is what we want, isn't it?

Why are mental models helpful?

Think back to school or university.

In each of your main subjects, try and recall what you remember.

Do you recall isolated facts (names, dates, statistics)?

Or, do you recall overarching concepts?

If you recall isolated facts, you're in rare company.

If you're like most people, you'll remember the core concepts.

Now consider that for each field, there is a similar set of core concepts that carry >80% of the weight of that field.

If you can identify and learn those concepts whilst disregarding all the trivial information, then you'll have a recipe for learning highly efficiently.

Not only that, but you'll build substantial, lasting knowledge that will enable multidisciplinary thinking.

You'll be unstoppable.

What follows are 28 of the most useful mental models I've found for erveryday life.

I hope you find them as useful as I have.

Activation Energy

In chemistry and physics, activation energy is "the minimum quantity of energy required for a specified reaction to take place." In day-to-day terms, it's the cost in terms of effort or time that a task requires to be completed. In general, the higher the activation energy, the easier it is to procrastinate on a task.

A helpful example is as follows: Think of the times that you missed exercise. Typically it will be because, a) you haven't defined what you're doing in your exercise session, or b) the exercise you'd planned takes a level of energy that you don't quite have within you.

In a), there's mental effort required to figure out what you're going to do in the session—that increases the activation energy. In b), there's more physical effort than you can bear at that moment —the activation energy is high.

So, what can you do? Well, with a), you could make sure to explicitly define—before—what you"ll be doing in your exercise session. This means that when it comes time to exercise, you'll only have one barrier to overcome: the physical barrier of exercise. If you hadn't defined what you're doing, you've got a mental hurdle and a physical hurdle. This means the activation energy is high. As it relates to b), the best way around this is to complete a micro-version of the exercise.

That is, instead of a 60 minute exercise session, just do 15 minutes. You'll lower your perception of the activation energy required to do that, and it becomes very easy to do. (Side note: very often when you do a 15 minute version of a habit, you'll feel like continuing for longer—you've hacked your psychology!).

Now, take this habit and apply it to all areas of your life. Say you've got a large, fuzzy project that you need to complete. You've got two problems: 1), the mental effort to define what you need to do, and 2) the effort of actually doing it. So, how can we reduce the activation energy? Well, again, we can define explicitly what we need to do to complete our project. Write before action. Tackling the parts of the project independently—the planning and the doing—makes it a far less gruesome problem.
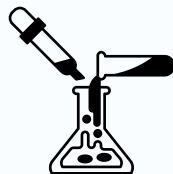
## Temporal Discounting & Delayed Gratification

Humans typically discount the distant future and put a premium on the ever-present now.

The ability to delay the gratification of present pleasures is one of—if not—the biggest drivers of long-term success.

"Delaying gratification is a process of scheduling the pain and pleasure of life to enhance the pleasure by experiencing the pain first. It's the only decent way to live."

—Scott Peck
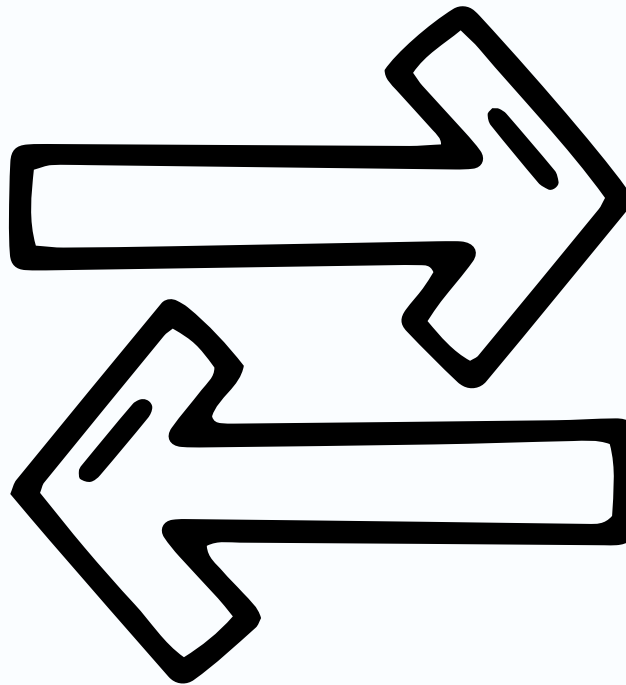
(See The Marshmallow Test).
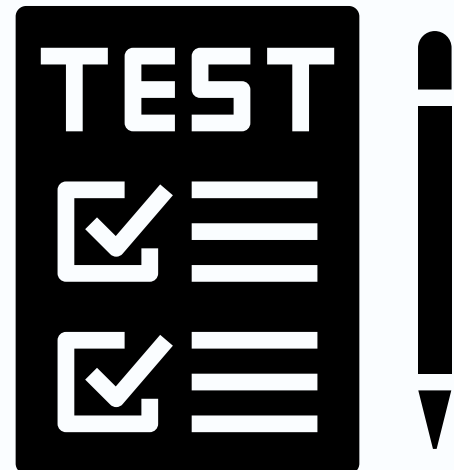
Inversion

When applied to life planning, inversion means starting with the end state that you want in life.

It allows you to work backwards to figure out what you're liable to need to get there, and it helps set a direction for you to head in.

My preferred inversion process is the 10-year vision exercise by Debbie Millman.

Leverage

Leverage is working smarter, not harder. You can achieve considerably more when you give up the false pretence that simply pushing harder is going to make you successful. Working hard is a seat at the table, working smart is what gets you to the head of the table.

Broadly speaking, there are four key types of leverage:

1. **Capital**: Money working for you
2. **Labour**: People working for you
3. **Code**: Software that runs 24/7 working for you
4. **Media**: Content you make once that continues to work for you

Examples of using leverage in my life at the moment are with a virtual assistant, content I produce, capital I've invested, and software products I've helped build. They allow me to achieve far more than I could alone. For those wanting a primer on leverage, I recommend The Life of Leverage by Eric Jorgenson.
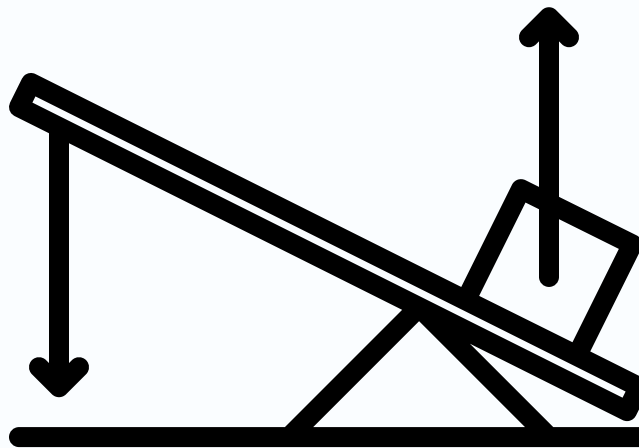
Bezos' Regret Minimization Framework

A few years ago, I was faced with a difficult situation. I had a revered job at a global investment bank that I'd worked incredibly diligently to get. As far as banking stereotypes go, I had a very fortunate setup, working with highly competent and kind people that I learned a lot from—with reasonable hours too. The problem was that I knew my heart wasn't there and I couldn't see myself doing it when I was older.

It was very challenging to rationalise the merits of leaving on a short-term basis as it would mean considerable pain: an immediate, significant cut to my earnings, lots of people asking me, *"What the hell are you doing?"*, and no clear idea what I was meant to do next.

I needed a way to consider more than just the short-term impacts of my decision. And so, there was the Bezos regret minimization framework: **when deciding what to work on, ask yourself, which action would my 80-year-old self most regret not having taken?**

Asking this question allows you to shake yourself out of the present and focus on what really matters in the long-term. I told myself that I had to keep this front of mind and remember that it was a long-term decision I was making, not a short-term positive one.

After I'd set that expectation, it became one of the easiest decisions I've made in that I knew it was the best thing for me on a long-term basis, and that's the basis I valued most highly.
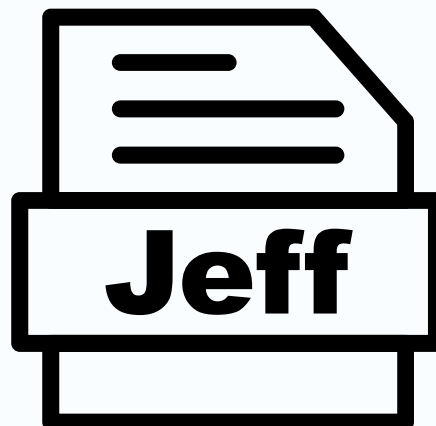
Decomplication

We've been led to believe that our everyday problems—weight loss, productivity, saving money—require complex solutions. This is called 'artificial complexity.'

Decomplication is the process of boiling problems down to their simplest form.

Some good questions to ask to get away from 'artificial complexity' are:
- Am I making this harder than it needs to be?
- What is the simplest way to achieve this goal?
- What is the 80/20? If I only had half the time I have to do this, what would I actually do?

To escape artificial complexity on an individual level, you must recognize when a problem is truly simple, and then seek out the simple solutions.

To lose weight, *"eat whole foods, mostly plants, not too much"* in the words of Michael Pollan.

To network with interesting people, do interesting things. Don't worry about all the BS.

"The core solutions to many problems, maybe most problems, are extremely simple. In one paragraph each, you can explain how to lose weight, how to gain muscle, how to save money, how to be productive, how to sleep better, how to grow a website, and just about any other popular problem.

But, we don't want to hear this. Through a combination of psychological biases, willpower depletion, and effective marketing, we've begun to believe that the simple things are difficult and complex and that we need swaths of information and expertise to solve them.

We've created and been sucked into a world of artificial complexity - one where topics are made more complex than they need to be in order to appeal to our biases and frustrations, and to help companies make more money."

—Nat Eliason

Speed Matters

The faster you do things, the less activation energy is required to do any one thing.

To avoid procrastination, keep the activation energy low by shortening the timeframe for the work that needs to be done, and work faster.

"If there's something you want to do a lot of and get good at—like write, or fix bugs—you should try to do it faster.

That doesn't mean be sloppy. But it does mean, push yourself to go faster than you think is healthy.

That's because the task will come to cost less in your mind; it'll have a lower activation energy. So you'll do it more. And as you do it more (as long as you're doing it deliberately), you'll get better.

Eventually you'll be both fast and good."

—James Somers

Sunk Cost Fallacy

You irrationally cling to things that have already cost you something and use valuable mental energy doing so:

• Projects
• Investments
• Relationships

To escape, ask yourself:

• Had I not already invested in this, would I do so today?

Cut the sunk costs.

Consider Unintended Consequences

Before making a decision, ask,

"What are the possible unplanned outcomes that could occur?"

Focus on the possible second-order effects—can you live with ALL of them?

"We make choices, but we don't always choose the consequences."

—Sean Covey

Via Negativa

When we have a problem, our natural instinct is to add a new habit or buy a solution.

But usually, you improve your life by subtracting instead.

The foods you avoid are more important than the foods you eat.

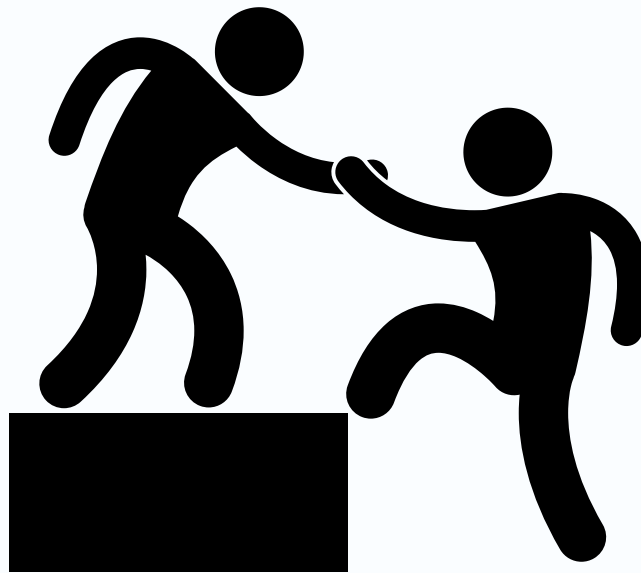Subtracting distractions is the key to productivity.

Help This Person

Every time you encounter another person, think: "How can I help this person?"

It's not altruistic.

Nothing else can so quickly accelerate your career and improve your quality of life.

Helpful people don't ask "how can I help?"

They just help.

Good and Bad Procrastination

Good procrastination is avoiding work with 0 chance of being mentioned in your obituary—like errands.

"Unless you're working on the biggest things you could be, you're type-B procrastinating, no matter how much you're getting done."
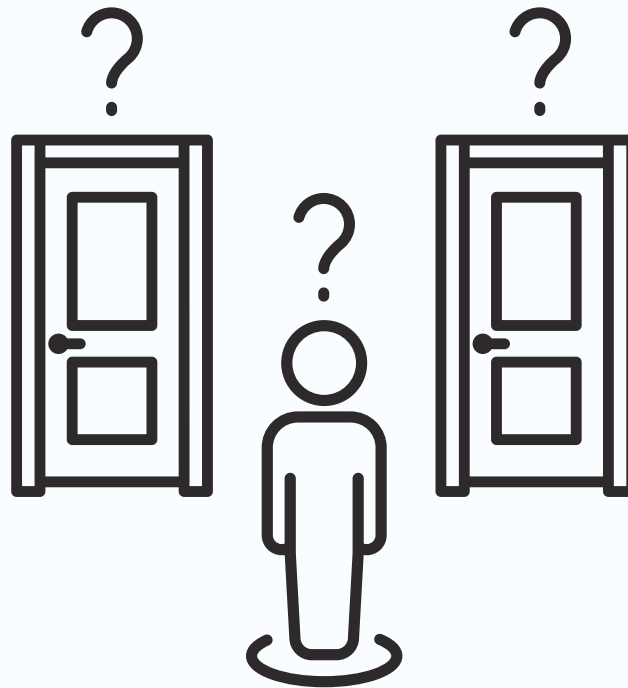
—Paul Graham

Reversible vs. Irreversible Decisions Framework

Irreversible decisions are 'one-way doors.'

They must be made slowly and deliberately.

Reversible decisions are 'two-way doors.'
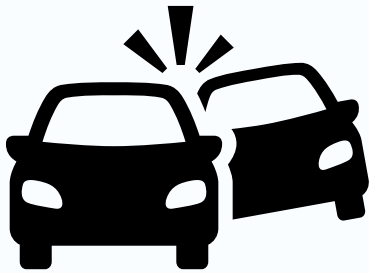
These decisions can and should be made quickly.

Pre-Mortem

Involves assuming that your decision has failed and working backwards to determine what the potential causes were.

This process has multiple benefits:

• Removes overconfidence and irrational optimism
• Reveals blind spots
• Simplifies thinking

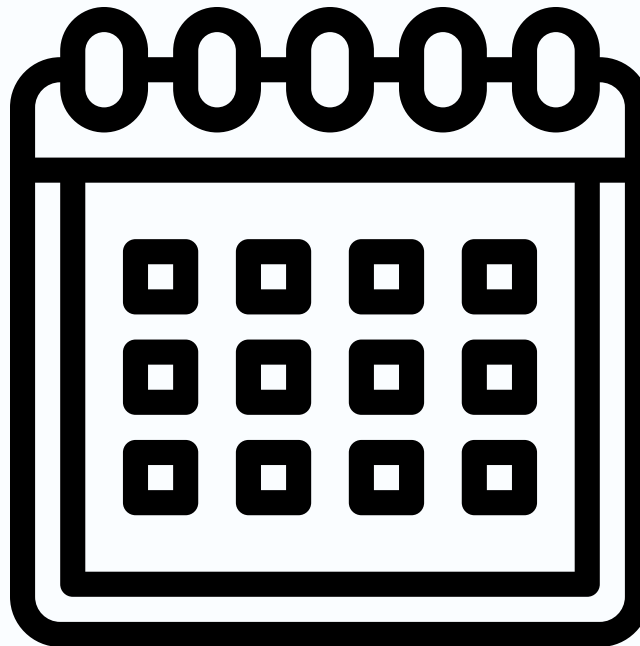# 10/10/10 Rule

We're all guilty of making decisions without thinking about long term consequences.

To avoid this, ask:

• How will I feel about this 10 minutes from now?
• 10 months from now?
• 10 years from now?

This helps clarify the decision that results in a win/win/win.

Think for Yourself

Thinking for yourself is life's greatest competitive advantage—you see opportunities others don't.

How?

• Read History
• Ask, "Is it true?"
• Meet different types of people
• Be less aware of conventional beliefs
• Cultivate independent-minded friends

The World-Class Framework

How you do anything is how you do everything.

Your personal brand is the sum of the thousands of micro-acts you put in over the course of your career or life.

Choose to be "World-Class" in every moment, luck will find you.

North Star

In a company, a north-star is the one metric that the company optimizes for over all others.

It's the metric that produces the most business value over the long term when optimized.

For example, Airbnb's north-star metric is "# of nights booked."

In a personal sense, you should clearly define what your north-star metric (NSM) is.

You can ask the following questions to help draw it out:
- What do I value most highly and how can I optimize my life around it?
- What is a good metric to reflect how happy I will be over the long-term?
- When I'm 80 years old, what will I have wished I prioritized during my life?

Examples:
- Amount of time spent with loved ones
- Amount of value provided to others
- Number of overseas holidays
- Number of novel experiences
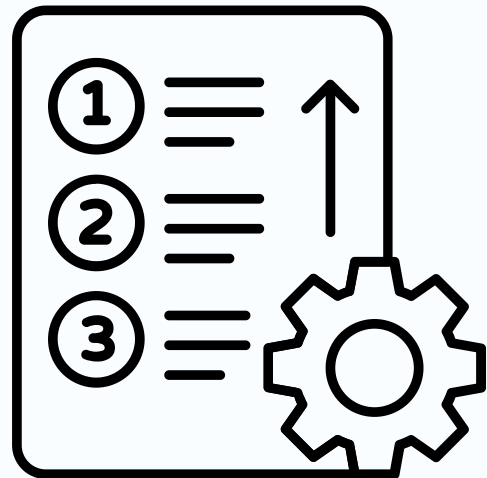- Contribution to community
- Number of books read

Calendar-Priority Alignment

1. "What are your priorities?"

2. "If I look at your calendar, would it be obvious to me that those are your priorities?"

Hack: Use your Calendar as your to-do list so that your highest priority to-dos actually get done.

—Keith Rabois

Pre-suasion

If you want to be persuasive, arrange for your recipient to be receptive to a message before they encounter it.

What we present first changes the way people experience what we present next.

The more generous your offer 'seems', the more attractive it will be.

"A colleague found a consistent way to beat requests for discounts on our fees.

After his standard presentation and just before declaring his $75k fee, he joked, 'As you can tell I'm not going to be able to charge you a million dollars for this.'

The client looked up from the written proposal he'd been studying and said, 'Well, I can agree to that!' The meeting proceeded without a single subsequent reference to compensation and ended with a signed contract.

My colleague claims that this tactic of mentioning an admittedly unrealistic price tag for a job doesn't always win the business—too many other factors are involved in that—but it almost always eliminates challenges to the charges."

—Robert Cialdini

Deep Work

Deep work is single-tasking, limiting your context switching and distractions in your immediate working environment.

Shallow work is logistical-style tasks, often performed while distracted.

How To Do Deep Work

- Quit or limit social media to predefined times and contexts. E.g., Keep your phone in a different room while you study or work
- Remove shallow work (emails, calls, administrative tasks), or limit it to predefined, short-time periods in each day
- Spend more time doing pre-defined work or planning projects you wish to complete—the more time we spend responding to incoming distractions, the less productive we are
- Focus on only the most important task in each working session
- Make deep work routines: Set aside a time each day (e.g., 5-7 am) where you will work distraction-free
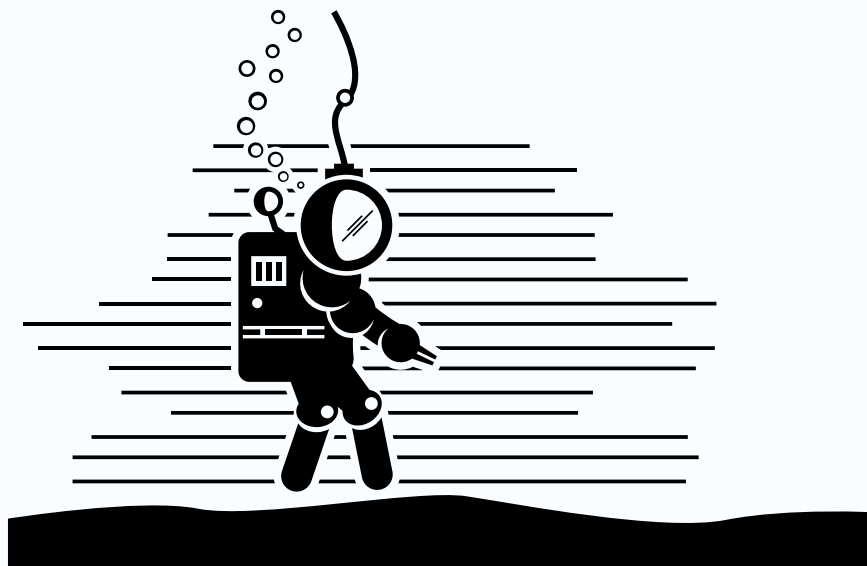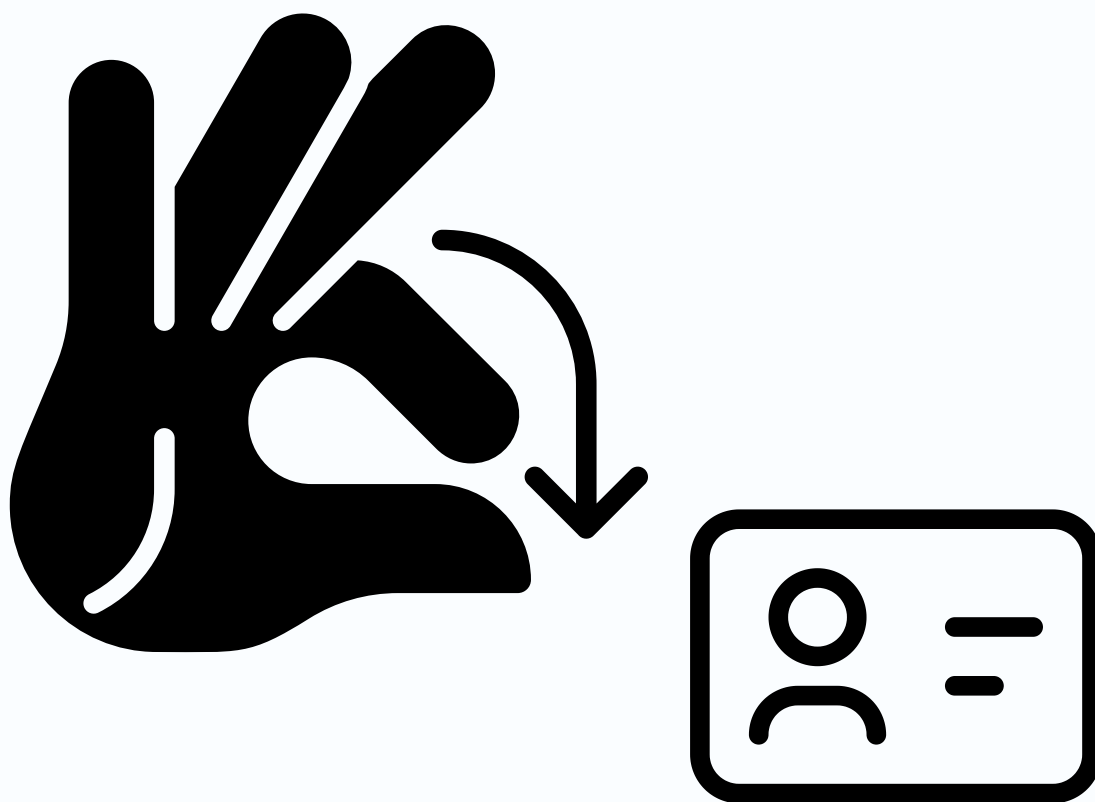
Keep Your Identity Small

We struggle to think objectively about things that become part of our identity.

The more labels we give ourselves, the more emotionally we respond.

The best plan is to let as few things into your identity as possible.
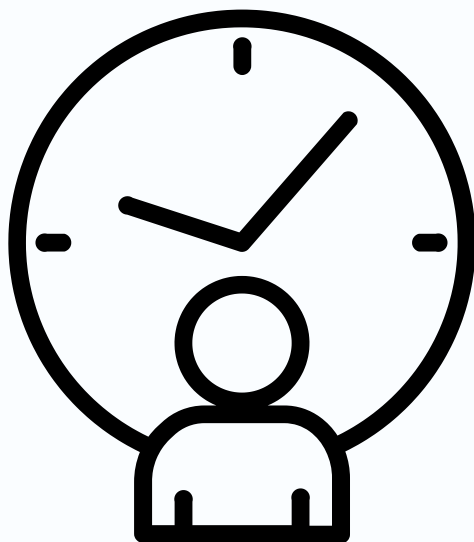
Be nimble and hard to define.

Discipline Equals Freedom

"Discipline and Freedom seem like they sit on opposite ends of the spectrum, but they are actually very connected.

Freedom is what everyone wants.

But the only way to get to a place of freedom is through discipline."

—Jocko Willink

Procrastination Equation

To decrease procrastination:

• Increase the expectancy of success
• Increase the value and pleasantness of the task
• Decrease impulsiveness by removing distractions
• Decrease the delay of reward through deadlines

—**Piers Steel**

$$\text{Motivation} = \frac{\text{Expectancy} \times \text{Value}}{\text{Implusiveness} \times \text{Delay}}$$

2-Minute Rule

"If an action will take less than two minutes, it should be done at the moment it's defined."

Don't let small tasks add up and create a mental overhang.

Do it on the spot if <2-minutes, decline to action it, or schedule it for a specific future date.

"If the next action can be done in two minutes or less, do it when you first pick the item up... The rationale for the two-minute rule is that it's more or less the point where it starts taking longer to store and track an item than to deal with it the first time it's in your hands—in other words, it's the efficiency cutoff."

—David Allen

The Forgetting Curve

Memories weaken over time.

If we learn something new, but then make no attempt to relearn that information, we remember less and less of it as the hours, days and weeks go by.

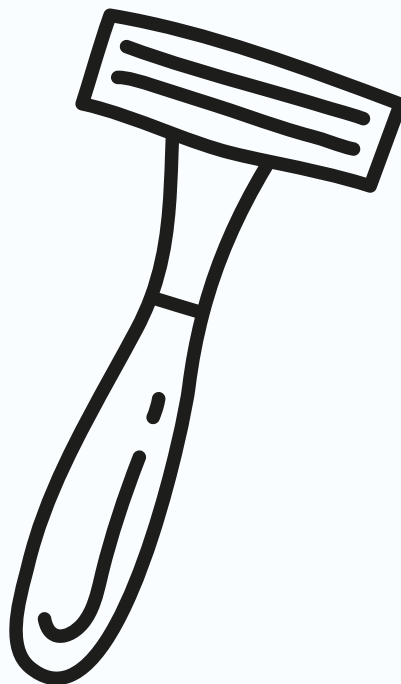The way to combat this curve is through spaced repetition.

Tim Ferriss Discomfort Razor

Your success in life can be measured by the number of uncomfortable conversations you're willing to have.

Growth and comfort don't exist in the same room.

Act accordingly.

The Never-Ending Now

We live in an endless cycle of ephemeral content consumption.

We're a click away from the greatest authors of all time, from Plato to Tolstoy, but we default to social media and the news instead.

Consume wisely, or be consumed.

"I once attended a comedy show with a group of friends. Since the venue was across town, we split an SUV. I sat in the back. You know... all the way in the rear, where the seats get so narrow that you have to do gymnastics just to get back there.

From the moment the driver hit the gas pedal, everybody was on their phones. From the back row, I watched my friends scroll their social media feeds with ferocious intensity. One thing stuck out: the people in front of me only consumed content created within the last 24 hours.
No exceptions. I succumb to the same impulse. Chances are, so do you.

The structure of our social media feeds place us in a Never-Ending Now. Like hamsters running on a wheel, we live in an endless cycle of ephemeral content consumption — a merry-go-round that spins faster and faster but barely goes anywhere. Stuck in the fury of the present, we're swept up in dizzying chaos like leaves in a gale-force wind. Even though on the Internet, we're just a click away from the greatest authors of all time, from Plato to Tolstoy, we default to novelty instead of timelessness.

We're trapped in a Never-Ending Now — blind to our place in history, engulfed in the present moment, overwhelmed by the slightest breeze of chaos.

Here's the bottom line: How can we build an informational environment that prioritizes the accumulated wisdom of humanity over the impulses of the past 24 hours?"

—David Perell