

Achieving high productivity and mental peace - for entrepreneurs

# **EWOR's Entrepreneurship Productivity Bible**

by Daniel Dippold

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# The Philosophy of This Book

The Vast Gap Between the Extraordinary And the Ordinary

In the heart of Pretoria, South Africa, during the late 70s, a young boy sat in front of a computer, eyes focused intently on the glow of the screen. The computer was crude by today's standards, but to Elon Musk, it was a gateway to a whole new universe. He was not even a teenager, but he had already developed a singular focus that would come to define his approach to entrepreneurship and change the world.

Elon Musk, the man who would later launch rocket ships into space and revolutionize the electric vehicle industry, started his journey here – in front of a Commodore VIC-20. His story is a testament to the power of personal productivity and how it can shape the world.

Despite the countless challenges, Elon was persistent. He taught himself to code at a young age and even sold a video game, Blastar, he created at the age of twelve. Even then at 12 years old, he leveraged every moment for learning and growth.

From an early age, Elon Musk was an avid reader, often found with a book in his hand, his eyes hungrily consuming its contents. His thirst for knowledge led him to read up to two books a day by some accounts, spanning genres from science fiction to historical biographies. It was as if he was on a personal mission to absorb all the knowledge the world had to offer. His mother, Maye Musk, often joked that Elon was like a walking encyclopedia, filled with facts about everything under the sun. His bookish nature wasn't just about a love for reading; it was a foundational element of his productivity. The wide

array of knowledge he acquired through reading helped him to see connections others missed and to synthesize information in new and innovative ways. Whether he worked on a business deal or dreamt up the next technological breakthrough, his expansive knowledge base, much of it self-acquired through reading, played a significant role in his remarkable productivity and achievements.

When he was 17, he moved to the United States to attend the University of Pennsylvania. There, he studied both physics and economics. During his university years, his productivity was astonishing. He worked through courses at a rapid pace, sometimes even taking extra courses, while also managing to run a small business with his roommate. They turned their house into a club at nights, using the money earned to pay their way through college.

In 1995 when he was 24, he and his brother Kimbal started Zip2, a software company, which they eventually sold to Compaq for \$300 million in 1999 of which he netted \$22 million and his brother \$15 million. That capital helped him lay the foundation for his next venture, X.com, an online payment company which would later be known as PayPal (after a merger with Peter Thiel's and Max Levchin's PayPal). Since then, he used the domain X.com for different ventures, now redirecting to Twitter.

When Musk sold PayPal to eBay in 2002 for \$1.5 billion, he was already dreaming of the stars. His next project, SpaceX, aimed to reduce the cost of space travel and make human life multi-planetary. At the same time, he took over as CEO of Tesla, a small, struggling electric car company. Through a culture of high productivity and constant innovation, he transformed it into a global leader in sustainable transportation. Now,

Elon is managing multiple companies at the same time and millions of people just want to ask him one burning question: How on earth does he have the time to do all of this so well and simultaneously?

Before I provide my personal answer, I want to discuss another remarkable figure that shaped the modern world and was a productivity fanatic: Benjamin Franklin.

Born into a family of modest means in 1706 Boston, he quickly established a reputation as a child with immense curiosity. Lacking the resources to procure formal education, he found a clever route to master the art of writing. He would take essays from publications like the "Spectator," a famous 18th-century paper, and jot down the main points. Then, he'd try to rewrite the piece using his notes, aiming to keep the original meaning but with his own words. Comparing his work with the original, he learned from the differences, understanding how the authors formed their sentences and arguments. This method wasn't just about copying good writing; it was about understanding how it worked. This is one of the most effective ways to improve your writing and as we will later see, a clear example of effectiveness rather than efficiency.

Franklin didn't just want to understand the world; he wanted to change it. His scientific achievements are well-known, like his experiments with electricity that led to the lightning rod and his invention of bifocal glasses. He even invented the stove, showing that he was both an incredible theoretical and practical thinker.

He was not just a man of science but also one of business; in his young years, he transformed a small printing house into a successful enterprise. It was his knack for organization and productivity that brought this venture to life, the same principles that

would later inspire his involvement in public services and civic duties as he founded the University of Pennsylvania and established the first public lending library and the first volunteer fire department.

This relentless journey culminated in his role as one of the founding fathers of the United States. His wisdom, charisma, and strategic mind were instrumental in the drafting of the U.S. Constitution, shaping the very bedrock upon which the nation was built.

I was always fascinated by Franklin, because I never understood how one single man is responsible for making world-changing scientific discoveries, building a flourishing business, founding one of the top universities in the world, and even starting a country. Throughout his entire autobiography, Benjamin Franklin highlights how his productivity played a key role in his success, allowing him to juggle the manifold responsibilities and contribute meaningfully in each sphere. He outlined his relentless pursuit of character development, his time management, and his prudent decision-making framework in his notes. Franklin's life was, in essence, a grand experiment in self-improvement. He was the architect of his destiny, meticulously designing each day with discipline, purpose, and an unwavering commitment to productivity.

Just like Elon Musk, Benjamin Franklin's progress was built on small, steady improvements that over time created positive feedback loops. When Elon Musk and Benjamin Franklin were little, both of them were average in school. Despite both of them reading a lot, they were initially hard to distinguish from other children. Now, the perceived difference to ordinary people couldn't be more vast. There has clearly been a

component of exponential growth.

Picture this exponential growth through an analogy: In a vast pond with thousands of carps, the slightly larger ones gain a competitive edge. They outpace their peers in the race for food, thereby growing even larger. Being even larger, they get even more food. This creates a positive feedback loop, resulting in a select few carps growing significantly larger than the rest and subsequently consuming the biggest share of the food. Eventually, the distribution of carp sizes in the pond mirrors a Pareto distribution, where a minuscule number of carps account for the majority of the consumption. In a similar vein, the incremental efforts Elon Musk and Benjamin Franklin made in their youth were tiny at first compared to others but have expanded exponentially, creating a staggering gap between them and others, whether in terms of wealth, productivity, or societal influence.

My aim with this book is to provide you with a manual to start your own system of positive feedback loops, propelling you towards continuous and compounding improvement. The differences might be small in the beginning, but a decade or two later, the effects created by these small changes will be so vast that others look at you as if you were not from this earth, just as people think about Elon Musk and Benjamin Franklin today. It is my deep believe that if you take this book seriously and embark on a journey of continuous improvement, you will be outperforming others slightly, then more and more, just like that carp, and eventually people will ask themselves the question: How on earth can one single person be responsible for such drastic change in this world?

Setting the Frame: Luck and The Two Phases of Entrepreneurship

A natural question emerges: Is entrepreneurship simply about having the right idea? How significant is the role of luck, and what impact does learning about productivity have? Earlier, I used the carp analogy to give a basic understanding of this, but there's a more nuanced, quantitative perspective from Michael J. Mauboussin. Understanding his framework lays the theoretical groundwork for the mindset I hope you will adopt while reading this book.

#### The Luck-Skill Continuum

All activities, ranging from business operations to playing the lottery and checkers, fall somewhere on a continuum between luck and skill. The lottery sits at the far left of this continuum, epitomizing a game of pure luck. In a well-constructed lottery system, players have no means to influence the game's result. Therefore winning the lottery is entirely dependent on luck. On the other hand, winning at checkers is a matter of skill, as argued by Maboussin in his book "The Success Equation."

Marion Franklin Tinsley was an American mathematician and widely regarded as the greatest checkers player in the history of the game. Tinsley's reign as world champion stretched from 1955 to 1958 and then again from 1975 to 1991. His record in the game was near impeccable; he never lost a world championship match and suffered only a handful of defeats (two to the Chinook computer program, one while drunk, and one during a simultaneous exhibition) from 1950 until his passing in 1995. Even among his peers, his skill was held in the highest esteem. Derek Oldbury, himself considered one of the all-time greats in checkers, compared Tinsley's mastery of the game to Leonardo

da Vinci's contributions to science, Michelangelo's influence in art, and Beethoven's legacy in music.

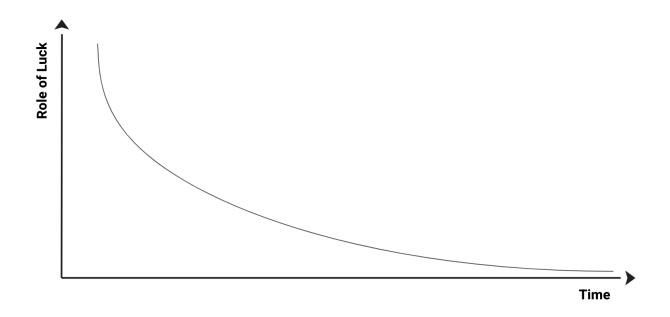
During a memorable game in their 1990 match, his opponent – a computer programme – operating the white pieces, made an error on the tenth move. Tinsley, with his characteristic insight, immediately commented: "you're going to regret that." His opponent conceded defeat just 26 moves later, at move 36. In a retrospective analysis, Jonathan Schaeffer, the lead programmer behind his opponent, delved into the database and made an astonishing discovery. Tinsley had chosen the only strategy that would have led to victory against Chinook from that point in the game. Tinsley had foreseen the winning move a staggering 64 moves ahead, showcasing his extraordinary strategic foresight and deep understanding of the game. In the case of Tinsley, who has lost less than 0,1% of all games he played, one could argue that the outcome of a checkers game is almost 100% an outcome of pure skill.

Entrepreneurship, like many things in life, sits somewhere in the middle of the luck-skill continuum. It's a bit tricky because there's a lot of path dependency and positive feedback loops in entrepreneurship. This makes some people think it's more about luck, especially in the early stages. Often, it looks like successful entrepreneurs just had the right idea at the right time. But from working with lots of entrepreneurs in my non-profit and through my investments, I've seen that in the long run execution is more important than the idea. Having a great idea is one thing, but executing well over a long time frame is what really matters. I've witnessed later entrants in a market outperforming the pioneers by building more efficient startups and I've seen many entrepreneurs with brilliant ideas fail under the mental strain of running a company, whether due to burnout

or a lack of self-leadership skills. Thus, clearly both skill and luck are involved in entrepreneurship.

There's a useful principle to remember in such scenarios: consistent, good processes lead to success over time. Take, for instance, playing Black Jack. The game combines elements of skill and luck. You can't control the cards drawn, but you can make strategic moves that optimize your chances of winning over time. Even the best player might lose \$500K in one night, but with sufficient capital and skill, they're almost guaranteed to profit in the long run by outperforming less skilled players.

As we move further towards the luck end of the continuum, it takes a longer average time for good processes to yield favorable outcomes. In entrepreneurship, this is particularly evident. I've seen many brilliantly run businesses have less success than those managed inefficiently, which can be disheartening to watch. I've seen many great entrepreneurs who compare themselves to others quit their businesses and feel particularly disillusioned. However, entrepreneurs who persistently adhere to productive processes and habits generally outperform their less disciplined counterparts over the long term. In the first year of entrepreneurship, the role of luck is substantial, and you'll notice a wide variance in success: talented individuals will struggle to raise, while average ones announce huge funding rounds. But over time, this disparity diminishes. In short, in the initial stages, there may be a low correlation between productivity, that is the "right" processes, and entrepreneurial success. In the long run, there is a high correlation between productivity and entrepreneurial success.



To everyone entering the world of entrepreneurship, understanding this is paramount. Starting to work on your productivity today will immediately increase your chances of success, but in comparison to others - as so much luck is involved in the process - it might not look like it. You will have to be patient and define success in terms of comparing yourself to whom you were yesterday instead of comparing yourself to other entrepreneurs.

In my coaching sessions, I've observed that understanding the luck-skill framework boosts confidence among skilled individuals. It helps them cope with the frustration of seeing less skilled peers temporarily outperform them. I've also seen how this framework encourages patience. If you compare yourself to your peer group of entrepreneurs, immediate customer traction for one person doesn't guarantee the same for everyone. It might just take longer for you. Under no circumstances should you compromise your explorative efforts just to match the sales numbers of your friend. In essence, if another entrepreneur achieves Product-Market Fit, possibly through luck, it

doesn't mean you've reached the same stage or are ready to scale your business in the same way. You will need patience.

#### **Product-Market Fit**

Marc Andreessen, the founder of Netscape, which was sold for \$4.3 billion to AOL, and founder of one of the world's most renowned venture capital firms, coined Product-Market Fit (PMF) in his influential article "The Only Thing That Matters". He thinks that, above all else, finding the perfect alignment between what your product offers and what the market needs is the key to success. This alignment, this 'fit', is what separates successful entrepreneurs from those that struggle or fail.

At its core, it's about creating a product that meets a significant, existing demand in the market. It's not just about having a great product; it's about having a product that the market craves, needs, and is willing to pay for. It's the sweet spot where your product's value proposition intersects with the market's desires and requirements. In his view, PMF is not just one aspect of building a successful business; it's the aspect. It's the foundation upon which all other business activities should be built, whether it's marketing, sales, or customer support.

Reaching this fit is not always straightforward. It requires deep understanding of your customers, continuous adaptation, and sometimes, even a willingness to pivot entirely. It's about listening to feedback, observing market trends, and being agile enough to respond to what you learn. When you have PMF, everything else falls into place.

When setting goals as an entrepreneur, there are hence two phases: Before PMF and After PMF. Especially the first part of this book is highly influenced by this concept as

the way you set goals pre-PMF is inherently different as finding PMF is mostly explorative while the time after PMF is both explorative and exploitative. Setting quantitative sales goals is something that makes sense once you have found PMF, but not necessarily before. Therefore, entrepreneurs need to manage exploration-exploitation tradeoffs as they begin to found their startup.

## My Personal Motivation For Writing This Book

I've always loved reading biographies and learning from great thinkers and business leaders. But I soon found out that what works for one person might not work for another. What helped Steve Jobs succeed was different from Benjamin Franklin's approach, and different again from what works for me. Over time, I learned that there are some rules that usually work for everyone, and some mental strategies that depend on the individual.

My own journey began in university. I wanted to get the best grades possible in several subjects while starting a business on the side. I learned I had to manage my goals, time, and energy to succeed in everything I cared about. I always had trouble focusing on one thing and would often switch tasks. When I was younger, my teacher was convinced I had ADHD, so I knew I needed to get better at prioritizing. But then I discovered that I was wasting a few productive hours each day because of bad energy management. I figured out how to get by on 7 hours of sleep instead of 9 without losing energy. I learned how to stay focused for 4 hours at a time with the right diet and routine. I managed my stress so I didn't burn out, even when working 100 hours a week. And

when I started working that much, I realized it's not about doing a lot, but focusing on the most important things. Balancing my time and energy management taught me a lot.

After I got better at sticking to a daily routine, I started to closely watch how I spent my time and what affected my energy. This helped me learn more about how I use my time, energy, and productivity, and how they relate to my goals. After this experiment, I really understood what made me productive. In my twenties, I created a global non-profit, built organizations worth over €100 million, and started investing in startups.

As a result, I began a new learning journey. I worked with entrepreneurs who were very different from me and saw that my methods didn't always work for others. I've invested in 50 startups as I am writing this paragraph and worked closely with many founders, which helped me understand which principles are universally true and which aren't. It was the perfect sounding board for me as I could now test my subjective beliefs of what works against a greater sample size. As a strongly mathematically-inclined person, I like to run A/B tests, try to isolate variables, and measure results against certain interventions. When I coached entrepreneurs, I noticed some common themes. I realized I needed to organize my thoughts on personal growth, so I made a set of presentations that explain the basics. As more people wanted to see these presentations, I decided to write this ebook and share it with everyone for free.

#### **Entrepreneurs Change the World**

This book is written for entrepreneurs. As entrepreneurs, we are unique beings. We dare to dream, not just of what can be but of what should be. We are trying to build organisations that are essentially taking our vision and then turn it into reality. In a

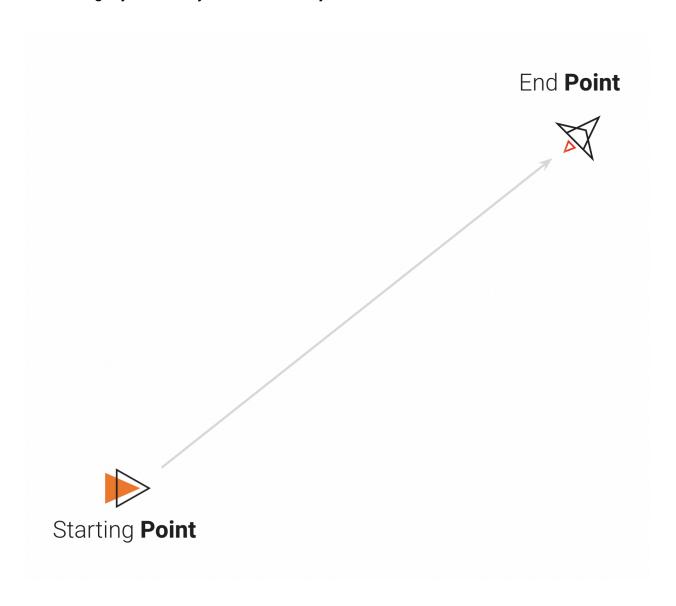
sense, I personally like to see organisations as the mathematical functions that take an entrepreneurs' vision (later hopefully a collective vision as the organisation will play a role in co-shaping it) and translate it into reality. We, as entrepreneurs, measure our lives not just in years, but in the impact we make, the legacies we create, and the difference we make in the world. And in the quest for creation and change, there is one single most important lever that allows us to amplify ourselves and our ventures' productivity.

This book is about individual productivity, but in no means do I want to imply that individual productivity is all that counts. Personal productivity merely is the keystone of any great entrepreneur – the ability to manage your own goals, time, and actions forms the foundation for managing a team. Without the discipline to guide oneself, the task of guiding others will be tough and even impossible in some cases. I have seen extraordinary visionaries fail to build great organisations by being too chaotic, unstructured, and sometimes overly controlling. It is not enough to gather a small team and attract some first customers. To make a lasting impact, you need to create a long-lasting organisation with a sustainable business model, a clear structure, and sustainable internal operations. However, this is all highly correlated with your own function of productivity, i.e. your ability to manage yourself well.

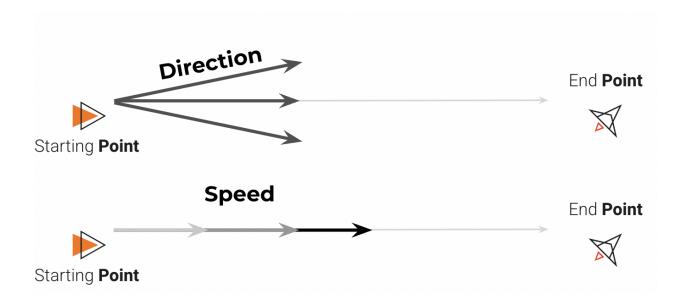
#### The Structure of This Book

My ambition with this book is to provide the most holistic productivity and personal development guide in the realm of entrepreneurship. The structure I chose is therefore philosophically clean and there shouldn't be any inconsistencies.

This book is written in three parts that follow a chronological order. Part I will help you understand yourself, that is where you are now, and set your goals, that is where you want to be. Without having defined those two points, it is impossible to draw a clear line between what you want and what you have. Thus, any comments on time or energy management would be premature. No prioritisation technique nor all the energy in the world will get you where you want to be if you don't know where that is.



In part 2, I will examine the line between your starting point and end point, which represents how you allocate your time most effectively. Now that you know where to go, the main question of this chapter will be: How can I do the right things as fast as possible to reach my goals? There are hence two levers you can pull: 1) Walk the line faster (efficiency) and 2) walk in the right direction (effectiveness). With a clear understanding of your starting and end point, both speed and direction can be optimised in a very logical manner.



Knowing how to make the most of your time in theory is all good and well. But if you can't peel yourself off your couch and start working, all that knowledge isn't going to do you much good. That's why we're going to take a deep dive into managing your energy in part 3 of this book. I see your ability to manage your energy as the practical counterpart to enacting the intellectual work of good time management. Learning how to keep your energy tank full – consistently – is key to getting out of theory land and

into getting-stuff-done city. We'll look into managing your physical energy, i.e. feeling physically well rested and energised during the day, and managing your mental energy, i.e. tricking your mind into doing hard things, being able to concentrate for long amount of time, and staying mentally sane (which is often the hardest when running a company). "There's a difference between knowing the path and walking the path." (Morpheus, Matrix)

In order to make the most of this, I will share both theory and practice. Each chapter in every part will have a theory subchapter and an "action and habits" subchapter. I will use the most recent scientific discoveries, principles (such as in stoicism), and practical tips, mostly in the form of habits, to help you translate abstract ideas into practical steps that you can start with immediately. With every chapter, this book will get more practical. Defining your starting point and endpoint is less practical than managing your time, which is less practical than managing your energy. You'll see that every chapter will get a little more concrete.

Lastly, I will not cover specific skills in this book. Of course, there are certain skills that are particularly helpful to entrepreneurs: Writing good code, thinking conceptually and creatively, public speaking, and many more. However, this book is one abstraction layer above mastering certain skill-sets. It will help you manage your time and master prioritisation for you to decide which skills to learn in the first place and it will provide you with designing the optimal learning environment for acquiring any skill.

By adopting the habits in this book, I believe that you will automatically start living a live that makes you more successful, become much more skilled and well-read, and get into the habit of acquiring the necessary knowledge to turn your venture from a small team into a huge organisation.

Lastly, I want this book to be a living document. I encourage you to contact me and provide feedback. While trying to be as perfect and philosophically clean as possible I understand that I am human and thus there will be mistakes and gaps in this book. I encourage you to help me identify those and improve this book as a collective effort to creating the world's most holistic entrepreneurship productivity guide.

All of the habits and actions presented stem from 10 years of work of rigorous personal development and coaching. I personally adhere to all of the habits presented in this book and have tested all of them with the companies I invested in and some of my befriended entrepreneurs.

# **Part 1: Defining Your Starting and End Point**

One of my favorite conversations of all time is purely fictional. It was written by Lewis Carroll in his famous book "Alice's Adventures in Wonderland". It goes as follows:

- Alice: Would you tell me, please, which way I ought to go from here?
- Cat: That depends a good deal on where you want to get to.
- Alice: I don't much care where.
- Cat: Then it doesn't much matter which way you go.

In the world of entrepreneurship, it's surprisingly common to find people running around like headless chickens. Especially in the pre-seed stage, before product-market fit has been found, it's so easy to get caught up in the hustle and lose sight of where you

actually want to go. People are pushing forward, without really knowing where 'forward' is. They are building companies without a product, win pitch competitions without building real traction, and start hiring people without knowing what they should do. It's like they're Alice, wandering in Wonderland, not really caring where they end up.

If you don't know where you're going, any road will take you there, sure, but is 'there' where you want to be? And real life is even more difficult, because just as important, if not more so, is understanding where you're starting from. In my experience, most entrepreneurs don't understand themselves and their starting points well enough. They assume they do, but the deeper you dig, the unclearer they are. Where you are right now might not be pretty, but that's okay. It's not about judging your starting point, it's about understanding it.

That's why defining your starting and end point is so vital. Your end point – your goal – is the North Star that guides your decision-making, shapes your strategy, and gives you the motivation to keep going. And knowing your starting point helps you plot the course to get there. It's like having a map and compass in the wilderness. It'll make sure you're heading in the right direction. My advice is to not start the journey without the map. Get the map first.

### Explorative Goal Setting and Planning (e.g. Before PMF)

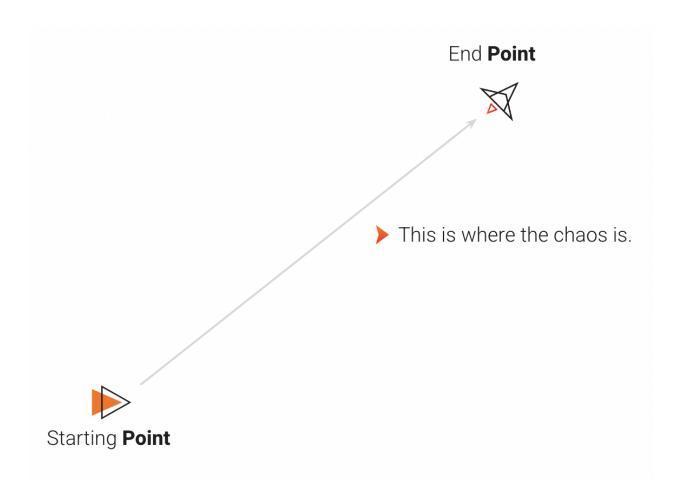
This section is especially important during the search of PMF, but its application is universal. All following passages will remain relevant as you will develop new features, think about entering new markets and so on. Therefore, I recommend to read these

sections even though you might have concluded for yourself that you have already found product-market fit. It will provide guidance during phases of exploration.

Theory

#### **Exploration-Exploitation Tradeoffs**

The first question entrepreneurs in the search of PMF often ask: How can I define clear goals if finding Product-Market-Fit is all about figuring out what your goals should be? This is partly true, but goals exist on multiple levels: On a high level, you will likely have an impact or financial goal that is independent of Product-Market-Fit. However, reaching your goal will likely require you to reach Product-Market-Fit, which is a sub goal of your high level impact goal – and this is the most difficult part to manage. Your starting point can be assessed very clearly and so can your long-term vision, but your mid-term goals need to change all the time. The mid-term is where good goal setting comes into play. This is where the chaos is.



#### **The Multi-Armed Bandit Problem**

In order to manage this chaos, entrepreneurs need to manage exploration-exploitation tradeoffs. The best way to understand them is by exploring the multi-armed bandit problem, which is a classic problem in probability theory that showcases the complexity of decision-making.

Imagine walking into a casino, and in front of you is a row of slot machines, each referred to as a 'one-armed bandit'. Now, let's say you've got a fixed number of coins to play with. The question then becomes: how do you maximize your winnings?

Each machine has its own unknown probability of payout. You could get lucky with the first machine, but there might be another one that pays out more. Do you stick with the first machine, or do you try your luck with the others? This is the 'multi-armed bandit problem'.

Let's use three slot machines, Bandit A, B, and C, and generate some hypothetical payout data:

- Bandit A: [2€, 2€, 2€, 3€, 2€, 2€, 2€, 2€, 3€, 2€]
- Bandit B: [0€, 0€, 0€, 0€, 0€, 0€, 0€, 0€, 0€, 0€]
- Bandit C: [1€, 5€, 1€, 6€, 1€, 4€, 1€, 7€, 1€, 5€]

Now, let's calculate the mean (average) and standard deviation for each bandit:

- Bandit A: Average = 2.2€, varies little
- Bandit B: Average = 10€, varies a lot
- Bandit C: Average = 3.2€, varies more than Bandit A and less than Bandit B

Now, how sure can you be that the average is the real average? Only pulling the bandits twice and calculating an average won't help much (e.g. you would have concluded that Bandit B would be the worst slot machine, even though it is the best).

This demonstrates the need to evaluate both the average outcome (mean), the variability of the outcome (standard deviation), and the certainty gained through enough experiments when making decisions under uncertainty, whether it's playing slot machines or making strategic decisions in entrepreneurship.

Essentially, the multi-armed bandit problem presents a dilemma between exploration and exploitation. And it's far closer to real-life than one would guess when learning about it for the first time. 'Exploration' is about gathering more information, in this case, trying out different slot machines to see which one gives the best return. 'Exploitation' is about using the information you have to get the best possible outcome, like sticking with a machine you know gives decent payouts.

Running a startup is a lot like standing in front of those slot machines. You have a finite amount of resources and an array of options on where to invest those resources for the best return. There's multiple startups you could build and even once you've decided on a start up there are multiple customer groups you can target and multiple products you can build to target those customer groups. These options could be different markets, product features, business strategies, and so on. 'Exploration' in this context means trying out new options, like entering a new market or changing the product. 'Exploitation' is about focusing on known options that work, such as investing in a successful product or doubling down on a profitable market.

If you do too much exploration, you spread your resources too thin, potentially missing out on capitalizing what's already working well. But if you do too much exploitation, you might miss out on new opportunities that could be even more rewarding. In entrepreneurship, as in the multi-armed bandit problem, the goal is to find the right balance between exploration and exploitation to maximize return on your resources.

Most entrepreneurs enter the market with an exploitation-mindset. They are already convinced that their product will sell like wildfire and they just want to push their new

technology or product into the market as soon as possible. The multi-armed bandit problem is a nice mental model that allows you to understand how detrimental this can be. Even though exploration doesn't often feel productive as you are not making more sales and winning lots of new customers, but it is simply the most productive thing you can possibly do when starting your venture. Only after you are dead sure that your product sells as easily as Mark Andreessen describes in his article, should you start to set quantitative goals.

There is no golden rule about how to optimise exploration-exploitation tradeoffs in general, especially since real life is way more complex than the mathematics of theoretical examples about these trade-offs. However, there is a nice example that helps to build intuition for exploration problems.

#### The Square Root Solution

In simple terms, if you have 'N' options to explore, you should explore the square root  $(\sqrt{N})$  of them before settling on the best one you come across. The beauty of this strategy lies in its balance between exploring (looking at options) and exploiting (making the best choice based on available information).

Let's break this down with a practical example – say, choosing the best possible office from 100 potential options (N=100).

According to the square-root strategy, you should 'explore' the square root of 100, which is 10 offices. After checking out 10 offices, you shift from 'exploration' to 'exploitation', where you now look for an offices which is better than all the offices you've seen so far.

Essentially, you've used the exploration phase to set a 'baseline' for what you're looking for, and now you're ready to commit to an office which exceeds that baseline.

In entrepreneurship, this matters in many scenarios:

- Co-Founder Search: If you have a list of 25 potential co-founders (N=25), the square-root strategy suggests meeting and discussing your venture with  $\sqrt{25} = 5$  people, and then partnering with the next person who surpasses all the previous potential co-founders.
- Hiring First Employees: If you receive 100 applications for a role (N=100), interview the square root of 100, which is 10 applicants, and then hire the next candidate who surpasses all the previous interviewees.
- Exploring Different Business Models: If you have 16 potential business models
   (N=16), the strategy advises you to test out the square root of 16, i.e., 4 business
   models. Then, commit to the next business model that performs better than
   those initial four.

The square-root strategy offers a mathematical framework for making decisions when faced with multiple options. It helps you balance between exploration and exploitation, ensuring you make data-informed decisions without becoming paralyzed by endless possibilities.

It shows two realities. Firstly, always explore a little bit (the square root at least) in order to maximise your outcome and secondly, never explore all options if there are too many as this is not very resource efficient. Think of it this way: if you're about to dive headfirst into the next big move without even checking out a handful of alternatives, you might as

well be stepping off a plane into unknown territory without a map. You need to do a little exploring, get the lay of the land, before you can truly start conquering it. Secondly, though, you don't need to scour every square centimeter of the land. Just a fraction. For instance, if you got a thousand pieces to explore, 32 samples will be a good number for your baseline.

This is a useful framework for far-reaching decisions when you want to make sure to explore enough options. Many other decisions will be insignificant and hence won't need any exploration. Every entrepreneur needs to find this balance, and based on my observations from dozens of angel investments, the best entrepreneurs strike this balance really well. They are not moving too slow by trying to explore every single option but also don't blindly focus on any solution that seems appropriate.

And keep in mind that this strategy is a heuristic and may not be optimal in every situation. It's a tool in the entrepreneur's toolkit, and like any tool, it's most effective when applied judiciously and in the right context. Especially for options that can be mapped quantitatively and yield many decisions, I find it very handy.

#### Living "Horizonally"

In his beautiful book, "Finite and Infinite Games," [LINK] James P. Carse writes some outstanding philosophical passages about "living horizonally" and our limited vision which I personally draw inspiration from when setting my goals.

He suggests that our scope of vision – how we perceive and interpret our world – can impose constraints, but the world itself is boundless. In essence, our perspective, shaped by our beliefs, experiences, and knowledge, frames what we see. It's the lens

through which we view the expanse of possibilities, and it's this lens that can limit us, not the world or its opportunities.

The Chinese idiom "frog in a well" (井底之蛙, jǐng dǐ zhī wā) is used to describe a person with a limited outlook and narrow perspective. The full idiom is "a frog in a well knows nothing of the great sky," implying that the frog, living at the bottom of a well, only sees a small patch of the sky and is unaware of the vast world outside. It's a metaphor for someone who is ignorant or lacks experience and knowledge of the wider world.

Consider an entrepreneur, let's call her Sarah. She's been successful running a local bakery and sees her world through the lens of this experience. Her vision of possible futures may be confined to expanding her bakery or opening more branches. But the possibilities in the world – starting a completely different venture, writing a cookbook, creating an online baking course - are limitless. It's Sarah's vision, not the world, that sets these boundaries.

Carse's concept of "living horizontally" is equally fascinating. It captures the idea that our horizon is in essence a phenomenon of vision. As we move towards our horizon, it shifts, revealing new landscapes previously hidden from our sight. This means our perspective and understanding of the world continually evolve as we move forward.

In Sarah's case, as she moves forward with her bakery, her horizon changes. She learns about online marketing, uncovers new customer preferences, discovers innovative baking techniques. As her horizon shifts, her world expands. Would Sarah have set all of her long-term goals during the foundation of the company, none of her goals will encompass the new horizon she will have after one year of operating her venture.

The concept of limited vision reminds us that our goals are often shaped by our current understanding and past experiences. It encourages us to challenge the constraints of our own vision, to push the boundaries, and to continually question and expand our perspective. This is why I read, listen to podcasts, talk to other entrepreneurs, and constantly have my goals challenged.

The idea of "living horizontally" urges us to recognize that our goals are not static but should evolve as we grow, learn, and progress. Just as our horizons shift, our goals too should be dynamic, capable of adapting and changing as we do. This way, we're not merely chasing a distant, fixed point, but we're engaged in a process of continual learning, growth, and evolution. This is why I only set one, big stretch goal that is so ambitious that it could not possibly be defied by my limited horizon. It needs to feel as if it is 100X bigger than what I believe is yet possible. Only afterwards do I set quarterly goals as this gives me the possibility to update them continuously as I approach the horizon.

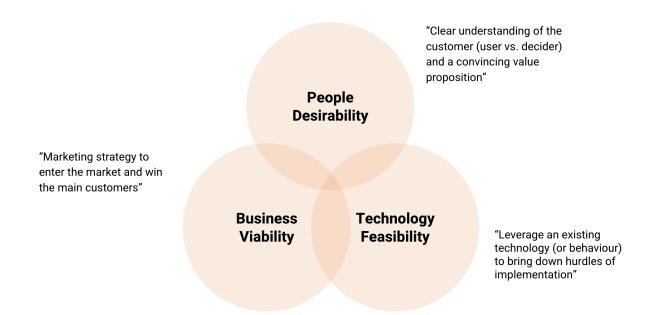
Many entrepreneurs I coach set too many goals and fill their calendars so thoroughly that there is no room for opportunistic thinking anymore. The best advice I ever got from a mentor was: "Stop planning so much." I had a five year plan and a monthly plan to get there, yet I didn't realise that my horizon shifts as I approach it. I limited myself unnecessarily by planning too long-term.

#### **Setting Explorative Goals**

Setting explorative goals should hence be only short-term and manage exploration-exploitation trade-offs. Your goal is to run experiments with meaningful sample sizes and hypotheses focused on your core needs. Those questions usually are:

- Will customers pay?
- Will customers retain?
- Will my technology work?
- Will my technology scale?
- Is my market big enough?
- Will my unit economics be promising (3:1 LTV/CAC ratio)?

In order for you to start scaling and move to post-PMF goal-setting, all of those questions should be answered. The following framework from IDEO visualises the three areas well.



Which of those questions have priority can only be answered by you. If you are a deep-tech venture, most of your questions will likely evolve around the question of technological feasibility and scalability. The experiments you need to design will all evolve around shedding more light on these questions.

If you are building a B2B SaaS company, you are likely not worried about technological feasibility as much. You probably want to find out whether customers actually pay for your product continuously. Your hypotheses will likely evolve around which customers particularly like your product, so you can shift two variables:

- The type of customers you address
- The product you present to them

You might have the right product but have not yet found your ideal customer, so giving up too early is not recommend. On the other hand, you might have found customers have a problem that can be solved by your skill-set as founders but is not yet addressed by your product. It usually makes sense to either lock the product or tech and try different customer groups that want it or lock the customer and build different products to solve their problem or provide a certain gain you have in mind for that customer. I call these two ways of addressing this the Levchin-way and the Andreessen-Horowitz-way.

Max Levchin was mostly excited about new technologies. He founded PayPal as he was excited about the cryptography behind the financial transactions the company provided. Afterwards, he founded Affirm out of the excitement of artificial intelligence, yet still looking for a meaningful use case for the technology. He had the technology in mind, but needed to test different customer groups and slight variations of the product in order to find his product-market fit. Affirms makes over \$500 millions in revenue today. He did not alter the technology and product much, but the customers.

On the other hand, the firm Andreessen-Horowitz has published many articles about how all that counts is the customer's problem and that technology is merely a way of solving a problem. From my personal experience and literature reviews, most founders are passionate about solving a broken problem and build technology to solve it in a scalable way. For example, Elon Musk founded SpaceX because he believed that the space industry needs to rapidly develop yet needs cheaper techniques (such as rockets being able to land after having been launched into space). He constantly talks about problems and most of his ventures are about solving them. When you have found such a problem, your hypothesis testing will mostly be about whether you can build the tech

to solve it in a profitable way. Hence you will lock in the customer group that has the problem and experiment with different solutions until you are sure you have the right one.

Your explorative goals will mostly be to find an answer to those questions. Most first-time founders, including those with initial revenue, do not have a clear answer to those questions and should accordingly not yet set a whole lot of quantitative goals.

#### **Actions and Habits**

**Action 1:** Create a set of hypotheses you need to answer with your business for it to move from pre-PMF to post-PMF. Note that every venture will have a slightly different set of questions given the nature of the customers you address, the technology you build, and the business model you have.

**Action 2:** Create your own definition of PMF for your specific use case. There is no perfect framework as building a nuclear test reactor couldn't be more different to building an online performance marketing automation tool. You will have to find your own definition.

**Habit 1:** Do not overplan and remain flexible. As James P. Carse's notion of "living horizonally", I believe that entrepreneurs need to run their ventures horizonally. When an opportunity arises, the worst thing that can happen to you is that you are so busy so that you don't even recognise it. The biggest opportunities in life will present themselves spontaneously and consequently completely shift your quarterly and yearly goal-setting.

**Habit 2:** Be opportunistic and set explorative goals. No matter whether you are pre-PMF or post-PMF, make sure that you are setting non-quantitative goals that allow you to explore and identify unique opportunities to outperform your competitors.

## Exploitative Goal Setting and Planning (e.g. After PMF)

Please keep in mind that after you have reached PMF, setting explorative goals is just as crucial as setting exploitative goals. There's two types of exploitative goal types you need to know about: SMART goals and stretch goals.

#### Theory

SMART goals serve as precision instruments in your entrepreneurial toolkit. Derived from an acronym, these goals are Specific, Measurable, Achievable, Relevant, and Time-bound. SMART goals are particularly effective when clarity and specificity are vital. Perhaps you're preparing a product launch, necessitating a defined action plan. A SMART goal in this context might be: "Increase sales of our new product by 15% over the next quarter by targeting our top three markets." It's precise, quantifiable, achievable (assuming past performance and market research), pertinent to the business objectives, and tied to a time frame. In the short-term, usually up to one month, SMART goals are the most effective type of goals.

In his book "Willpower", Baumeister shows two different studies. A study conducted with 7-10 year old children tested goal setting in three groups: Daily goal-setting, long-term goal-setting and no goal-setting. The first group outperformed both the long-term goal and no-goal group which did not differ from each other. Long-term goals,

as I will describe later, usually only work in combination with short-term goals. Moreover, in another experiment monthly plans were compared to daily plans. Compared to daily goals, it is much more beneficial to set a monthly plan. Even one year after the study was conducted, the group that planned monthly did outperform the group that planned daily. It hence makes sense to combine a monthly plan, maybe in the form of a set of SMART goals, with daily goals derived from these smart goals.

In contrast, stretch goals are the visionaries of the goal-setting domain. They embody

#### [LINK]

the audacity of aspirations like those of Elon Musk for SpaceX – quintessential examples of stretch goals. The SpaceX vision statement reads: "to make life multi-planetary by establishing a self-sustaining city on Mars". Stretch goals are advantageous in the long-term. For instance, in a fiercely competitive industry, a stretch goal might be: "Become the industry leader in sustainable practices within five years." It's lofty, possibly within reach, long-term, but by no means guaranteed. [LINK 1][LINK 2]

Tony Robbins once said: "Goals are dreams with a deadline". This is how stretch goals should feel: As ambitious as dreams, but with a terminable end point. Creating effective stretch goals requires a blend of audacity and pragmatic optimism. It involves challenging yourself (or your team) without leading them into a disheartening defeat. It also means creating an environment where risk-taking and potential failures are accepted, as they are inherent to the pursuit of stretch goals. You can also exchange a stretch goal with a company vision. What really matters is that your short-term goals are set well.

A nice way to combine both goals is the use of OKRs (Objectives and Key Results). 'Objectives', usually set quarterly, should be derived from a long-term stretch goal and resemble its audacity. The 'Key Results', conversely, are concrete, measurable, and time-bound – more akin to SMART goals. They act as detailed steps leading toward the realization of the stretch objective.

#### **How to Set OKRs**

Setting OKRs – Objectives and Key Results – is an art in itself, and John Doerr's book, "Measure What Matters" [LINK], offers a profound framework to master them. It lays down several fundamental principles that are worth considering:

- Focus on the essential: Each OKR cycle, which typically spans a quarter, should only involve three to five objectives. Each objective should have three to five Key Results. This promotes focus on the most critical initiatives and reduces distractions. Less truly is more in this context.
- Define clear objectives: Objectives should be explicit, inspiring, and tailored to ignite passion and action. They serve as the guideposts pointing yourself or your team towards your vision.
- Develop specific and measurable key results: Key Results should be specific, measurable, and time-bound. A well-defined Key Result is quantifiable and leaves no room for ambiguity.
- OKRs should Be aligned and linked: OKRs work best when they are aligned across different levels of an organization, linking the company's mission and

strategy down to individual contributors. This creates a unified drive towards shared objectives.

- Frequent monitoring and updating: OKRs aren't a set-and-forget instrument.
   Instead, they require regular check-ins and updates to monitor progress, identify obstacles, and make necessary adjustments.
- Maintain transparency: Everyone in the organization should be able to see what others are working on. This openness fosters collaboration, promotes accountability, and aligns efforts.
- Separate OKRs from performance evaluations: OKRs are about stretching and taking risks. When they are tied directly to evaluations and compensation, it may lead to sandbagging and discourage ambition.
- OKRs are goals and not tasks: If an objective or a key result can be reached in a day, you're setting them in the wrong way. Key Results should be key numbers whose input you can control and that drive the long-term success of your company. Objectives should be hard to reach quarterly goals that require a multitude of tasks and projects to be completed.

Example OKRs of a B2B SaaS software company for Q4 for a bigger start-up could be:

#### **Objective 1: Enhance Market Position**

- Key Result 1: Achieve 25% growth in market share by Q4.
- Key Result 2: Launch two new product features tailored to key customer feedback.

 Key Result 3: Increase brand recognition through a targeted digital marketing campaign, aiming for a 40% increase in website traffic.

#### **Objective 2: Improve Customer Satisfaction**

- Key Result 1: Attain a customer satisfaction score of at least 90%.
- Key Result 2: Reduce average customer service response time to under 2 hours.
- Key Result 3: Implement a quarterly customer feedback survey and achieve a 50% response rate.

#### **Objective 3: Optimize Operational Efficiency**

- Key Result 1: Decrease software downtime to less than 0.1%.
- Key Result 2: Increase team productivity by 20% through the implementation of new project management tools.
- Key Result 3: Reduce operational costs by 10% without compromising on product quality.

#### **Objective 4: Foster Employee Development and Satisfaction**

- Key Result 1: Achieve a 95% retention rate of key employees.
- Key Result 2: Implement a comprehensive training program for all departments,
   with 85% employee participation.
- Key Result 3: Improve employee satisfaction scores by 15% as measured in the annual survey.

I personally like OKRs because they are the simplest mechanism I have found to date that breaks down big visions into clear, measurable, yet ambitious sub-components. They promote focus, alignment, and meaningful results. Setting OKRs is a process of continual refinement, learning, and adaptation, as they are set quarterly and allow you to "live horizonally".

#### Goal alignment

One study demonstrates that unequivocal goals are reached far more often than goals that are formulated with ambiguity [Link].

Secondly, goals should be in line with each other as conflicting goals lead to worse results. One study that shows that setting conflicting goals leads to lower performance is "The Effect of Goal Conflict on Performance" by J. William Pfeiffer. The study examines the relationship between goal conflict and goal commitment in a sample of 120 undergraduate students. The participants were asked to complete a task that required them to allocate resources between two conflicting goals. The results showed that goal conflict was negatively associated with goal commitment, even when controlling for other antecedents. That means, your likelihood to actually work on your goals will decrease the more conflicting your goals are. Another study "The Effects of Intra-Individual Goal Conflict on Performance" by Locke et al. found that when individuals face conflicting goals, it can lead to a decline in performance. This decline is attributed to the pressure of competing expectations, which can result in poor communication, reduced cooperation, and decreased productivity. The paper suggests that the increase in total activity stemming from conflicting goals may become unsustainable due to resource constraints such as time, money, and people's capacity. The solution can be to put your goals into a natural hierarchy.

Thirdly, if other people set goals for you, the motivational effect will be much lower [LINK 1, LINK 2]. In an organizational context, for example when your boss, professor or teacher sets the goals, it is easy to draw the line between internally and externally set goals. But dig a bit deeper. Which of your goals are influenced by the beliefs of your parents, partners and (former) teachers? Are those goals truly yours? If you're unsure, ask the 'why-question' several times until you have your answer. Understanding what truly matters to you and how your goals interrelate with that will give you a great, lasting performance boost.

#### **Actions and Habits**

**Action 1**: Set a 1-10 year stretch goal or vision that feels immensely ambitious and uncomfortable but paints a picture of your grand vision for yourself or your company. Break it down into OKRs – this works both individually and on company level – for the next quarter that are both bold (Objectives) and measurable/SMART (Key Results).

**Action 2:** Set personal OKRs. Next to your venture, set a bunch of relationship and personal development goals that you review every quarter.

**Habit 1:** For long-term goals, set stretch goals, i.e. those that seem audacious, nebulous and hard to reach. At least if you apply them in the right context. Researchers from a famous Harvard Business Review article [LINK] suggest that stretch goals should only be applied in certain circumstances. The picture below describes the scenarios.

## Are Stretch Goals Right for You?

How would you describe your organization's recent performance?



FROM "THE STRETCH GOAL PARADOX," BY SIM B. SITKIN, C. CHET MILLER, AND KELLY E. SEE, JANUARY-FEBRUARY 2017

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**Habit 2:** Set your short-term goals unequivocally. When you set your goals, make sure they are SMART, that is specific, measurable, assignable, realistic and time-bound.

Habit 3: Set the goals yourself and let your employees set their own goals.

**Habit 4**: Set goals that are in line with each other.

## **Defining Your Starting Point**

Defining your starting point is all about reflection. The human mind is incredible, allowing us to be self-reflective and think about ourselves almost as if we were

something else. However, it is not that easy: We are immensely biased and use heuristics when making decisions, and are thus constantly making mistakes when trying to be metacognitive. In order to really understand where you are, I recommend looking at four layers: 1) Your constitution, 2) your unique strengths and weaknesses, 3) your skills, and 4) your resources.

### Theory

#### The Ikigai

The Japanese word for purpose – the Ikigai – comes with a much more sophisticated definition than the one of purpose in the Western world. As can be seen in the graphic below, the Ikigai combines four different areas that you need to combine for you to find your Ikigai.



Source: Bodetree, Adapted from Francesc Miralles

During a discussion with the "Global Shapers," an initiative of the World Economic Forum, I introduced the concept of Ikigai. This sparked a wave of laughter among the audience, who were skeptical about the feasibility of finding an activity that one loves, excels at, can be paid for, and fulfills a world need. This stemmed from their belief that success required working on unenjoyable tasks. I strongly disagree with this notion. My experiences and observations in startup investments reveal a pattern: many but not all entrepreneurs who sustain high performance over time genuinely enjoy their work, are good at what they do, build something the world needs, and get paid for it.

Over the time, I have found that whenever an element is lacking, the long-term performance of the venture is usually compromised. Those who don't do what they love,

despite being skilled, often exit prematurely, selling their ventures too soon and for less value. I've also noticed that numerous entrepreneurs engage in meaningful projects aligned with their passions and potential profitability, but they lack the necessary skills. Something I see fairly often is when two business people who are very passionate about the ideology behind blockchain want to launch the next revolutionary blockchain venture without knowing how to code. Without a competent co-founder, securing funding becomes a significant challenge yet is not fully impossible. Additionally, I've encountered entrepreneurs whose ventures are aligned with their passions, skills, and what the world needs, yet lack a viable business model. These often morph into non-profits, leading to the reluctant realization that impact is limited without a solid business foundation. Lastly, I've observed many entrepreneurs creating successful businesses that, while not primarily impact-driven, still fulfill a need in the world. Building something the world doesn't need rarely leads to a successful business.

#### **Problem-Founder Fit**

Problem-Founder Fit (PFF) occurs when founders have the necessary skills to solve a specific problem, *regardless* of their industry expertise. Numerous studies and data indicate that founders don't need to be industry experts to create a successful venture. [LINK] In my experience, it's essential for founders to have the skills required to develop their venture. This is often mistaken for needing industry expertise, which many consider a skill. However, industry expertise is primarily about knowledge, and in the 21st century, anyone can acquire knowledge very quickly. Paul Graham, founder of Y Combinator who worked with hundreds of startups, believes that you can gain

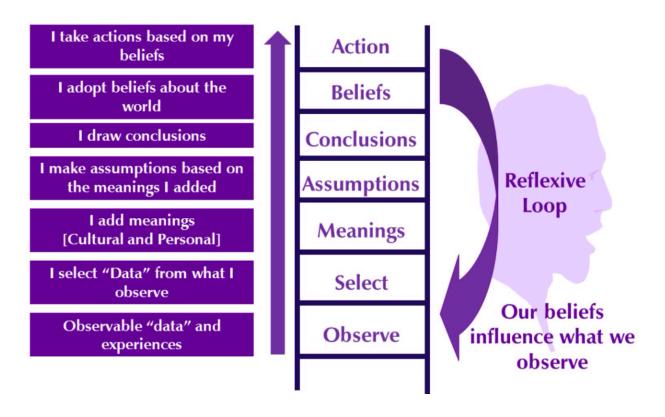
enough knowledge to build a unicorn company in almost any industry within a year [LINK].

What's fundamentally important is whether the co-founders have the necessary skill-set to build and sell the product. For first-time founders, my usual advice is to concentrate on products they can build and sell without relying on initial investors because investors often harbor skepticism towards first-time founders. On the other hand, second-time founders typically find it easier to raise funds. They then have the flexibility to recruit experts to construct and market the product, especially in areas outside their own expertise. While second-time founders should possess a solid understanding of the business and product, they need not be experts in every aspect especially if their successful background works magnetic for top-class talent.

#### The Ladder of Inference

Understanding your unique strengths, weaknesses, skills, and resources requires a high level of metacognition, i.e. awareness and understanding of one's own thought processes. It involves thinking about thinking or the ability to evaluate and regulate one's cognitive processes. Whenever we make an opinion, for example about who we are, it has traveled up a huge mental "ladder of inference" which biases the outcome.

# The Ladder of Inference



Source: From Theory in Practice: Increasing Professional Effectiveness (1992)

The important notion here is that all actions we take are based on immense biases that accumulate over the course of the ladder of inference being in action.

#### Single and Double Loop Learning

Single loop learning is akin to recalibrating our perspective of the world incrementally. It is a process where people modify their actions according to the difference between expected and obtained outcomes without questioning or altering the underlying beliefs and policies that govern those actions. Imagine a thermometer set to 68 or 70 degrees;

each new piece of information slightly shifts our existing beliefs, like nudging the temperature up or down, but we stay within the same framework of understanding. The question of whether the thermometer is broken given the temperature indication is not part of single loop learning.

Double loop learning, on the other hand, takes us to a higher level of thinking. It involves scrutinizing the very principles that underpin our judgments, including our biases and limitations. It's not just accepting that the thermometer reads 68 degrees, but also examining the reasons behind its readings and the possibility of error. It's a more profound reassessment of what we accept as true, which can radically alter our worldview.

As an entrepreneur, it's vital to engage in "double loop" self-assessment. I've noticed that almost every entrepreneur I met, including myself, think they are better in leadership, communication, fundraising, organizational management and many more than they actually are. This overestimation tends to be more pronounced with "softer" skills. The first time I received a 360-degree feedback assessment, it was a very humbling experience that deeply impacted my self-image. The stark contrast between how I perceived myself and how others saw my performance was eye-opening to me. That initial feedback was tough to accept, but it ultimately made me much more receptive to the concept of double loop self-reflection and the importance of ongoing feedback.

In "Teaching Smart People How to Learn," Chris Argyris (2009) [LINK] illuminates two fundamental issues with our conventional understanding of learning. Firstly, people

often perceive learning too narrowly, equating it merely with problem-solving. Secondly, our personal aversion to acknowledging our own failures hinders effective problem-solving.

A primary obstacle identified by Argyris is 'defensive reasoning' – the inability to see one's own contributions to problems. He points out the discrepancy between 'espoused' actions, what we say we do, and our actual actions, what we really do. The ladder of inference makes this distinction abundantly clear. It's crucial to recognize what truly motivates our actions and to understand the actual mechanics of how things work. Argyris explains that humans naturally align their actions with four basic values: maintaining unilateral control, maximizing wins and minimizing losses, suppressing negative feelings, and upholding rationality by setting clear goals and judging oneself based on the ability to achieve them.

He argues that professionals often unconsciously follow these rules to their detriment. For instance, they may present criticism in a way that they deem valid but which also prevents others from independently assessing its accuracy. They might withhold data that could allow others to validate their criticisms for themselves. Additionally, they tend to state conclusions in a manner that obscures their logical implications and, if challenged, deny those implications.

In my experience, entrepreneurs are even worse at receiving feedback. To navigate this better, Argyris suggests treating your own experiences as a case study. This approach entails examining not only the external aspects, that is what you said or intended to happen, but also the internal dynamics, such as your emotions, fears, and unspoken

thoughts. When assessing yourself, think about writing a case study about someone else, someone you genuinely want to help to set up a business and someone who will benefit from clear feedback now to avoid mistakes later.

#### Feedback-Seeking Behavior

Feedback-Seeking Behavior describes ones desire to receive feedback from the people around. It's been proven to increase people's output or performance, their adaptability, their speed of learning, and their ability to foster and maintain relationships. A study by Ashford and Tsui (1991) found that managers who actively sought feedback were rated higher in performance by their supervisors. Another study conducted by Renn and Fedor (2001) suggested that feedback-seeking behavior was associated with increased job satisfaction and organizational commitment. [LINK 1, LINK 2, LINK 3, LINK 4]

Entrepreneurs often look for mentors and while this is something I highly recommend, mentors usually do not know how one performs during daily business. For this reason, it is crucial to constantly ask your employees, partners, and customers for feedback.

#### **Actions and Habits**

**Action 1:** To discover your Ikigai, start by individually brainstorming and jotting down your passions, skills, potential income sources, and what you perceive the world needs. Tackling each category separately often sparks more ideas. Once you've compiled these lists, seek out the few activities that intersect across all four domains. Alternatively, reflect on your current venture. Ask yourself: how could this venture align more closely with your Ikigai? Frequently making small adjustments to your venture, its

products, or even your role within the organization can make the Ikigai a tangible reality for your everyday job.

**Action 2:** Get an assessment of your strengths, weaknesses, skills and resources by an independent assessor who consults your former and current coworkers, employees, bosses, investors, family members, and many more. In the best case, this is conducted by a professional who is used to doing such 360-degrees reviews. If you do not have these resources at the moment, ask a good friend.

**Habit 1:** Start reflecting on a regular basis. Reflection is the first step towards effective personal development and increased productivity. I recommend that you use the insights from the next chapter to start a reflection habit.

Habit 2: Seek continual feedback. One of the best ways to accomplish this is through the guidance of a coach and by consistently encouraging those around you to share their observations. Remember, soliciting feedback isn't about appeasing others or striving to become more likeable by adhering to their desires. Remember: "He who is everywhere, is nowhere" (Seneca). You can't please everyone and you need to make choices. Continual feedback serves as a tool that helps align your current situation with your objectives and discern any barriers that might impede progress towards those goals. For instance, a friend may notice that your controlling nature and tendency to insist on having the last word can be annoying. This could jeopardize your ability to grow a substantial, sustainable company. If similar feedback emerges from multiple sources, this is a strong indication that this area of yours needs improvement.

Lastly, balance your feedback-seeking behavior. Investors do want entrepreneurs to be

confident, so if your feedback-seeking behavior gives other people the feeling that you are doubtful, indecisive, and insecure, you've gone too far.

I can guarantee that by employing the right metacognitive processes and setting your goals in the right way, the impact on your venture will already be vast. My recommendation is to focus on establishing the aforementioned habits for at least two months until you work on other chapters. Reading on is of course encouraged and recommended, especially the later chapter on establishing habits.

## **Part 2: Managing Your Time**

"Time is the only possession we have" (Seneca).

Seneca is right with his observation that the only thing we can really decide on is our time. Anything, may it be money, social status, or fulfilling our most basic needs is a result of how we allocate our time. Allocating your time in the right way is the single most important thing you can do to reach your goals, once they and your starting point are clearly defined. This is why, in this chapter, we'll dig a little deeper into the most effective and efficient practices of allocating your time.

The difficulty of allocating time right is that there are so many options and you will always be confronted with trade-offs. Ray Dalio once said: "You can have anything, but not everything". By trying to achieve everything, you will not achieve anything. But when picking anything, and sticking to it resiliently for a long time, there is a very high chance of success. Therefore, the first step of good time management is to understand your

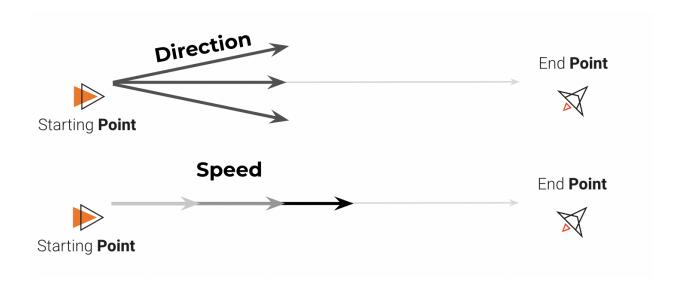
options and prioritise them accordingly. Time management is mainly about saying "no", given that options are abundant and time is limited.

Managing your own life and time – or more specifically: managing your company – is like running through a nebulous landscape.



When you're "on the ground", that is executing or being operational, it is tough to see the big picture. This is like being in the fog of the valley in the picture presented. In this picture, it is impossible to see the entire landscape. So, reflecting, planning, and thinking from time to time is useful in order to prioritise correctly and set your direction. This is the equivalent to standing on the hill and discovering where you need to go. After every thinking session, you'll have to go through the fog in order to arrive at your goal, so just standing on the hill isn't an option either.

I personally find this is a perfect metaphor explaining the difference between the two fundamental forces in time management: effectiveness (direction, prioritisation) and efficiency (speed, resource optimisation). In the following chapters, I want to outline the main strategies that will help you manage your time according to those two overarching themes.



#### Prioritisation / Direction

"If you don't prioritise your life, someone else will" (Greg McKeown).

I love this quote, because it has a fundamental truth about entrepreneurship: In life and in most traditional job settings, we're often set up to react. We wait for things to happen, for problems to arise, for tasks to be assigned, and then we respond. When we react we are conditioned to be players in a game defined by others. Others are prioritizing our life. In contrast, entrepreneurship requires stepping up as the game designer. As an entrepreneur, you must anticipate, plan, and initiate. You're not just responding to what's

happening in your immediate environment; you're looking ahead, envisioning possibilities, setting goals, and taking action to realize them. You're creating your own game.

However, with the complexity and unpredictability that come with entrepreneurship, it's easy to fall back into a reactive mode. As tasks pile up, problems multiply, and the noise gets louder, the temptation to respond to immediate demands and put out fires can become overwhelming. But here lies the challenge – and the key to entrepreneurial success.

Entrepreneurs must cultivate the discipline to remain proactive amidst the chaos. This means continuously setting clear priorities, keeping sight of the larger vision, and leading the charge forward, even when it feels like you're swimming against the tide. It's about not just weathering the storm but learning to dance in the rain.

This distinction between reactivity and proactivity isn't just a matter of personal productivity; it's at the heart of entrepreneurship. It's what allows entrepreneurs to break free from existing molds, forge new paths, and truly change the world.

## Theory

#### **Observing time**

Time tracking is one of the most powerful habits for several reasons. The first person who proposed tracking your time was Seneca. In his book, "On The Shortness of Life" [LINK], he emphasizes the intrinsic value of time and says it should be appreciated and tracked. He argued for time tracking not because he wanted us to be more productive in

the modern sense, but because he believed that an awareness of time's passage is critical to living a fulfilled life.

His words echo across centuries when he says, "People are frugal in guarding their personal property; but as soon as it comes to squandering time, they are most wasteful of the one thing in which it is right to be stingy." He thought that people got it all wrong. They see time as this never-ending resource, always there. But time is our biggest treasure. We can't get it back, make more, or stash it away. As Franklin put it: "One today is worth two tomorrows. Lost time is never found again."

For entrepreneurs, every second is a chance you can't get back. Every day wasted is 5% of your month. Every hour wasted is 12,5% of your working day. You can put in more hours, but the limit of any hour wasted is somewhere between 6-7% of your day. This lost time is never found again. This is a shout-out to mindful time management.

Today, there are tons of studies that argue the case for time tracking:

- Individuals who track their time are more aware of task-switching and interruptions, leading to better time management and increased productivity
   [LINK]
- Tracking time helps employees understand the impact of interruptions on work and allows them to better manage their time to minimize stress [LINK]
- Time tracking can provide valuable insights into job characteristics and help identify areas for improvement, leading to better job satisfaction and well-being [LINK]

To dive a little deeper into the first study: in the 2004 study conducted by Czerwinski, Horvitz, and Wilhite, they set up an experiment to examine how time tracking can affect productivity. They created two groups of people: one group that was asked to track their time meticulously (the test group) and another group that continued with their regular routine without specific time tracking (the control group).

The experimental design was straightforward. The test group was provided with tools and techniques to log their time usage accurately and was instructed on how to categorize their time into different tasks and activities. The control group was left to their usual time management habits, without any intervention.

The results were quite revealing. The group that tracked their time spent on various tasks showed a significant increase in productivity compared to the control group. They were more efficient, less likely to waste time on nonessential tasks, and had a better understanding of where their time went.

The researchers interpreted these results as evidence that keeping a close eye on time expenditure allows individuals to better understand their habits and prioritize tasks more effectively. Time tracking seemed to enhance self-awareness and prompted individuals to make better choices about their time. This study highlights that what Seneca argued millennia ago can be clearly measured in the social sciences today.

I have built an excel sheet to track my time and have shared it with one of the entrepreneurs I invested in. We did not only track how much time he spent on his company but also how much time went into tasks related to his OKRs. During the first week, we noticed that only 20 hours a week went into time that was related to his OKR.

Another 25 hours went into time that was productive but not necessarily related to the key goals of the company. The rest was spent on non-work related tasks. Over the course of one year, we managed to get his time spent on OKR-related tasks up to 70 hours a week. He got more productive overall as he put in more hours, focused much better on his key priorities and quadrupled his company valuation from 25 million (which took him 3.5 years to reach) to over 100 million in one year. This is the power of time management.

#### Time experienced differently

Imagine you are a professional skier during a national championship. As soon as you hear the shot, you speed down the mountain. You don't think, you just move. You are fully focussed, but it feels like you don't need to. Somehow, everything happens naturally. You forget both time and space around you. Only this second matters. You are in the moment.

That is flow. Many professional race car drivers, swimmers, bikers and marathon runners report having exactly those experiences. Yet, obviously, those experiences are not limited to professional sportsmen. You can learn to have these experiences too when working or studying. While I was studying, I dedicated a whole day from morning to night to flow: No distractions, no phone, pure focus. That allowed me to be free for the rest of the week, to focus on my own projects and build a business. And most interestingly, my grade point average remained perfect.

While flow experiences are described and interpreted since ages, only recently were researchers able to deconstruct the phenomenon and offer scientific explanations.

During flow, our brain reaches a certain frequency: It emits so called 'gamma-waves'. Interestingly, our brain works less during these phases. Researchers suggest that our brain reaches a state of maximum efficiency during that time, using only the parts of the brain that are important for that single task. Additionally, when researchers investigated the brains of Buddhist monks and professional race car drivers, they found that their brains sent generally more gamma waves than the brains of ordinary people. Gamma waves have a very low amplitude and the highest frequency. They are associated with higher intelligence, greater happiness, better self-control and stronger memory. They even occur during REM-phases — the periods of mental recovery during sleep [LINK 1][LINK 2][LINK 3][LINK 4].

In periods of flow, we can accomplish tasks in mere hours that would otherwise take days amid distractions and scattered focus. Numerous scientific studies have extolled the virtues of achieving flow and warned of the hazards posed by perpetual distractions. Yet, in today's world, people increasingly struggle to enter a state of flow and are constantly interrupted. Our smartphones and computers, coupled with our incessant yearning for some novel excitement, not only bar us from the flow state but also inflict significant harm on our cognitive functions. A multitude of research has documented these adverse impacts, including a diminished capacity to concentrate and detrimental effects on our working memory, among others. To limit distractions, most people focus on minor things, such as turning their phones to flight mode or not listening to music, yet run email programs on their laptops at the same time. You should rather practice actual distraction-free flow phases. Often, trying to reduce distractions on the surface makes room for hidden ones, i.e. those you do not consciously

recognise. This can be an odd noise or a flickering light in the background. Those hidden distractions in turn have a greater negative impact on your performance than obvious ones and can only be detected and eliminated with practice. [LINK][LINK]

The Zeigarnik Effect, named for Bluma Zeigarnik, uncovers an intriguing aspect of memory: we're better at recalling unfinished tasks. Zeigarnik noticed this when waitresses remembered complex orders but forgot them once customers left. A personal incident highlighted this: Zeigarnik once forgot her jacket at a restaurant. The waiter, who had memorized a large order, didn't recognize her when she returned. Through experiments, Zeigarnik deduced that our memory favors ongoing tasks, forgetting completed ones to make room for new, urgent matters. This reflects a remarkable efficiency and selectivity in how our brain processes tasks. [LINK].

Since uncompleted tasks pop up in our heads all the time, they distract us from what we want to do right now. Roy F. Baumeister, for example, has found that people performed much worse in solving puzzles when they had to remember a list with tasks they needed to complete after solving the puzzles [LINK].

Leveraging this concept can enhance your experience of flow. Researchers discovered that a reliable system of lists is all you need to aid focus. Simply jot down distracting tasks and thoughts, then refocus. This simple act helps your brain ease into a state of flow more readily.

This doesn't only apply to tasks. The ironic process theory posits that by suppressing a thought, it comes back later in higher frequency. Entering flow is very similar to mindfulness and meditation. When thoughts cross your mind, acknowledge them and

let them pass. This will need practice, but over time you will find your flow sessions as relaxing and focussed as a good meditation. I'll detail this as a prime method for achieving flow during work in the "actions and habits" section of this chapter.

#### Multitasking doesn't work

It's not only that single-tasking, especially when entering flow, is hyperproductive, multitasking on the other hand is also very detrimental: Not only to your productivity, but also to your brain. The individual of the 21st century is the born multi-tasker. She's used to instant massagers, podcasts and TV. She's listening to something while making her dishes, checking her emails while working on a presentation and texts on her smartphone while watching TV. She's in constant stress, but everything else drives her crazy. She's convinced that she can handle multiple things at the same time. Her reflexes and perception work much quicker and better. She's able to cope with several projects on one single day. She's a true 21st century workaholic. Or so she thinks.

The common belief is that multitasking makes you more productive, that multi-taskers are more talented and that women are the better multi-taskers, yet science suggests otherwise. Multitasking makes you unproductive [LINK]. It slows you down, increases the rate of your mistakes and reduces your ability to process information [LINK]. Moreover, it changes the structure of your brain, resulting in decreased cognitive control performance and less socio-emotional regulation [LINK].

One study in particular assesses students' perspectives on multitasking. Every student believed that they frequently multitask, that multitasking increases their productivity and that there are differences in gender. Only the first of those assumptions is true

[LINK] [LINK]. The study clearly demonstrated that students performed much worse when they multitasked. The book 'The One Thing' lists several more studies, one of them focusing on multi-taskers and single-taskers perception on productivity. Multi-taskers believe they are much more productive than single-taskers, but are indeed heavily outperformed by them. Single-taskers are on average twice as productive while multitaskers scored worse in almost every single aspect [LINK]! Gary Keller rights in his book: "It is not that there is not enough time for everything we want to do, but that we want to do too many things, which aren't even necessary!"

The idea is that you can do two things at once. But you cannot focus on two things at once. Daniel Kahneman describes in his book 'Thinking, Fast and Slow' that there are two systems in our brain, which he calls System 1 and System 2. System 2 is slow and logical and is used when we solve a difficult math task for example. System 1, on the other hand, is quick and intuitive and is used when we walk, talk or do any other automated task. While we can do several intuitive tasks at the same time, our System 2 requires full attention [LINK]. Think of driving a car: Both driving and talking is an intuitive task, so you can do both at the same time. But suddenly, something unexpected happens. Your System 2 requires your full attention. In the lucky case, you stop talking and handle the situation well. In the worst case, talking occupied so much of your brain power that your System 2 wasn't able to react quick enough. This is why multitasking fails: knowledge work as described by Peter Drucker, that is work that requires us to code, manage, organize or think in general, requires our System 2. It's neurologically impossible to multitask.

Well, almost: It's neurologically impossible to multitask with two System 2 tasks. That means: Never do your emails while creating a powerpoint presentation, even if your mail program just runs and informs you in the background. The productivity of seeing your emails immediately is lower than the productivity loss by being distracted. Never check your phone while doing deep work. Never switch between two tasks of cognitively stimulating work simultaneously. However, you can listen to an audiobook while doing the laundry. You can check your phone while walking on an empty street. You can fill in excel sheets while listening to music. That is because all of those involve at least one light-weight System 1 task.

Remember that your brain only has space for one of those tasks. If you have ever noticed that you have no idea where you put your keys because you listened to a podcast while coming home or had your thoughts somewhere else, this is because your System 2 was occupied with another task. If I tidy my room, for instance, I refrain from listening to an audio book. I did so in the past and had my room tidy eventually, but could never remember where I put the stuff I tidied up. On the other hand, if I had a system to put everything in one place exactly when tidying up, a place that would never change, I would be able to multitask while tidying up. The level of automation will determine whether you will be able to add another cognitively demanding task. The recipe is fairly simple: The moment you need conscious focus to do something, your System 2 is at work and multitasking is a bad idea.

#### Interruptions and distractions

The impact of distractions like phones and emails and multitasking habits are not just a productivity issue; it goes deeper, affecting brain structure and mental health. Frequent distractions lead to a cycle of reduced productivity and, over time, can even diminish brain performance and contribute to mental health challenges as lots of different studies show. This is a reminder that managing distractions is crucial not only for our work but for our overall well-being. [LINK 1, LINK 2, LINK 3, LINK 4]

A key study used the Continuous Number Task (CNT) to understand how distractions and interruptions impact our focus and work. The CNT tests how well we focus and remember under pressure. Participants quickly judge numbers (odd or even) in a non-stop sequence, demanding constant attention. To spice it up, researchers sometimes throw in different tasks, like reacting to letters, mimicking real-life distractions and interruptions. This variation helps understand how our brain handles unexpected info and how these curveballs affect our focus and memory. Essentially, the CNT reveals a lot about our brain's multitasking skills and how we deal with everyday distractions. The takeaway of the study was that our brains constantly shift gears when interrupted, impacting our ability to concentrate and hold onto important info. This affects how well our working memory functions, showing just how much these everyday interruptions can throw us off.[LINK]

#### Why tasks need to be in logical groups

In the digital world, speed is king. Computers are built for lightning-fast operations, yet they have their limitations. They're not infinitely fast and, ironically, can become overwhelmed by the very tasks they're designed to handle. This is why computer scientists have come up with the idea of "interrupt coalescing".

Every computer operation, whether loading a webpage or saving a document, generates interrupts – signals to the processor that an action needs to be taken or a task needs to be handled. These interrupts can bottleneck the processor, limiting the speed at which it can carry out tasks. The issue isn't just the sheer volume of interrupts but also the time and resources it takes to switch between them.

Imagine you're deeply engrossed in a graphic-intensive video game, with high-definition visuals and complex physics that push your computer's processor to its limits. The game is continuously asking the processor for time and resources, essentially acting as a ceaseless interrupt. Other applications and services running in the background are also vying for the processor's attention, but they're continually getting sidelined because of the game's constant demands.

After a while, these sidelined tasks start to pile up. Maybe it's your antivirus software needing to run a system scan or an automatic update trying to install. These tasks are critical for the system's overall health and functionality, but they're not getting the processor time they need. Over time, this pile-up can lead to significant issues. Essential system services might not get the resources they need to function properly. New interrupts may arise that require immediate attention, but they're unable to break through because the processor is too busy handling the game's demands.

Eventually, the system becomes so overwhelmed that it can't maintain its operations, leading to a crash. It's kind of like a traffic jam on a one-lane road. If a sports car (the

video game) hogs the road at high speed, other cars (system tasks and services) can't get through, causing a pile-up and eventual standstill. In this way, the processor's inability to effectively manage interrupts – partly because it's too occupied by one dominating program – can result in a system crash. This illustrates the need for proper interrupt handling, or interrupt coalescing, to ensure the computer can run smoothly and efficiently, balancing all its tasks.

Interrupt coalescing is a clever technique that reduces the strain on the system by grouping similar interrupts together. Instead of reacting to each individual signal as it comes, the system holds off until it has a bunch of similar tasks. Then, it deals with them all at once, reducing the overhead of constant task-switching and keeping the system humming along smoothly.

Now, you might be thinking, "Great, but I'm not a computer. How does this apply to me?" Well, the idea of interrupt coalescing has a beautiful translation into our productivity as entrepreneurs. Much like the computer, our brains can be slowed down by constant interruptions and task-switching.

Think about your workday. You're making headway on a project when an email comes in. You switch gears to handle it. Then a Slack message grabs your attention. Another switch. A team member has a quick question. Yet another switch. Each time, you're diverting mental resources, breaking your flow and taking time to refocus on the original task.

So, what if you treated these interruptions the same way a computer treats its signals? Group similar tasks together and tackle them in one go. Dedicate blocks of time to checking email, or set aside specific moments to handle team queries. By doing this, you reduce the cognitive load of constant task-switching and keep your productivity engine running smoothly. The key takeaway here? Like a computer, your brain needs to chunk work in order to work effectively.

Entrepreneurs need a balance between deep, focused work and staying reachable. It's not just about diving deep into tasks; you also need to tackle emails and smaller jobs regularly. This approach keeps the business flowing, avoids paralyzing the organization by being the bottleneck on certain answers, and prevents tasks from piling up. The key is planned, systematic breaks for these tasks, inspired by interrupt coalescing, rather than random interruptions. Otherwise, you risk a huge backlog, which can be mentally overwhelming - much like a computer crash.

#### **Triggers**

In an illuminating study, researchers explored the influence of cues on behavior by observing flight attendants who were habitual smokers. They were assigned to two distinct flights: one bound for New York, lasting ten hours, and another for Amsterdam, with a duration of three hours. Intriguingly, the intensity of the attendants' cravings for a cigarette, evidenced by both their self-reported urges and physiological signs, did not correlate with the flight's duration. Everyone did assume that the cravings to smoke appear after a fixed amount of time, but they don't! Instead, the cravings peaked post-landing in both scenarios. The researchers concluded that cravings, such as the urge for a cigarette, do not inherently intensify over time; they are, rather, sparked by specific triggers. This phenomenon is not confined to smoking. Our daily lives are

riddled with numerous, diverse triggers. For example, the sound of a new message on one's phone can ignite a desire for excitement, while the visual appeal of a YouTube video thumbnail may stir curiosity. The architecture of modern digital platforms, from websites to applications, is often psychologically fine-tuned to leverage these triggers.

Understanding the triggers that influence your behavior is a crucial step towards a life less encumbered by distractions. This knowledge empowers you to navigate your environment more mindfully, aware of the subtle cues that shape your actions and desires.

To combat distractions and triggers, researcher and best-selling author Nir Yeal suggests the following:

- Look for the discomfort that precedes the distraction, focusing on the internal trigger
- 2. Write down the trigger
- 3. Explore your sensations. Get curious about them. Notice your Body and your physical reaction.
- 4. Beware of luminal moments (transitions from one thing to another).

#### Biofeedback for more deep work

Biofeedback is about providing an individual with feedback about a biological process in their body, such as flow. As a consequence, the individual is enabled to increase awareness and gain conscious control. Usually, biofeedback involves electrical, scientific gear. Without it, it's much more difficult, but not less practical. Pay attention to when your mind wanders off and when you have difficulties concentrating in particular.

Keep in mind that your mind influences your body and that your conscious brain, if trained well-enough can conquer the body's intuitive and subconscious demerits. This act of meta-cognition will help you greatly in mastering flow. And as sophisticated as this sounds, it is actually really easy: Notice when your mind wanders off. This can be done by using a tally to track every single time your mind got off track. Make sure that you create a sense of metacognition when you work so as to provide yourself with biofeedback. As odd as it sounds, this technique is hyper-effective in increasing your productivity and will help you to eventually not become distracted at all. [LINK] [LINK]

Other scientifically proven ways to increase your deep work muscles are: meditation, breathing exercises, sports without any music or interruptions, and daily mindfulness.

[LINK]

#### **Three Modes of Working**

There are three useful mental models that help you categorize your time spent:

- 1. Deep work vs shallow work
- 2. Event-based vs clock-based work
- 3. Generative vs executive work

Finding a good mix between deep work and shallow work is one way to optimise your time, but there are two further categories that help you understand your time more intricately.

The notion of clock-based vs event-based timing stems from Levin's 'A Geography of Time', and Paul Graham's (the founder of Y Combinator) article on maker versus

manager schedules. Levein found that there are two types of people, those who follow a clock-based approach and those who follow an event-based approach. The clock-based people set clear deadlines. In reality, this might be a farmer calling it a day at exactly 6pm. If all cows get milked, great. If not, not his problem. On the other hand, there are people who think event-based who only quit when a certain goal or event has been reached. This might be a farmer who only calls it a day once all cows have been milked – or a proofreader who only quits once he's finished correcting the essay.

In general, event-based people tend to be more successful and get more done. Yet, Paul Graham dissects this further. He finds that in certain circumstances clock-based timing is indeed better. For example, when you are planning and managing things. You may plan things for hours, days or even months, but at the end of the day you need to get things done. That's why there should always be a cap to your planning tasks, e.g. by setting a clear deadline. Ultimately, you'll have to establish your own feeling for which of your tasks belong to which category and how you set these deadlines. You'll get better every week by consistently reflecting on your tasks.

This will be especially important for your daily and weekly (p)reviews, which I will introduce later. You might want to set certain deadlines to planning tasks but at the same time keep flexible with other tasks. This is also why David Allen, the author of "Getting Things Done", recommends not to schedule tasks in your calendar. An event-based view on tasks is much more productive. If one task is objectively your clear priority, you will have to finish this task before all others. Doing any other task before just because you have set a deadline is unadvisable. Priorities always come first.

I therefore recommend that you use time-bucketing and close deadlines for your planning tasks while sticking to longer periods of blocked time when working on event-based work.

The distinction between generative work and executive work is my own creation. You can generally apply another binary function to split your time: Time that goes into creating systems but does not get you closer to your goals and time that goes into tasks that directly move you closer to reaching your goals.

In my experience, the proportion of generative to executive work highly depends on the personality and education of a person. People with technical backgrounds, e.g. computer science and engineering, are usually people who like to invest a significant amount of their time in generative work. People with backgrounds in business and social sciences tend to focus more of their time on executive work. Generative workers usually outperform executive workers in environments where tasks are highly repetitive and scalable. Executive workers tend to outperform generative workers in environments that are chaotic and unpredictable.

Of course, all of us manage this trade-off individually. The best people are aware of generative and executive work and their ability to do both well. They invest time into generative work in one scenario and do executive tasks in another one depending on the level of generative work needed.

Generative work ranges from writing code to establishing checklists. A beautiful book from <a href="Atul Gawande">Atul Gawande</a> 'The Checklist Manifesto' tells many stories of how checklists drastically reduce the amount of mistakes (and thus save lives and time) and increase

productivity by reducing the amount of thinking time invested. The more expertise an individual possesses, the less they tend to believe in checklists. However, especially doctors, lawyers and pilots benefit significantly from the use of checklists, sometimes reducing their amount of errors by up to ninety percent.

One striking example from "The Checklist Manifesto" is that of the World Health Organization's surgery checklist. When implemented in eight hospitals worldwide, a simple checklist reduced major surgical complications by more than a third. Another memorable instance from the book centers on aviation. Pilots regularly use pre-flight checklists, even if they've flown the same aircraft hundreds of times. The origin of this practice traces back to the 1935 crash of the Model 299, a prototype of the Boeing B-17. After the crash, which was due to human error, checklists were introduced, resulting in the B-17 acquiring an impressive safety record. It underscored the fact that, even for experts, memory and judgment can be fallible, and a systematic approach can help prevent potentially catastrophic oversights. In many entrepreneurial ventures, mistakes are not as fatal as crashing an airplane, but they can have detrimental effects on the future of the business. Something as simple as a checklist can prevent this and allow you to reduce the number of mistakes to a failure rate similar to airlines. This is, in my opinion, what founders should aim for.

More importantly, for entrepreneurs, time is a precious commodity. A missed step or oversight can not only be costly but can also divert valuable time from focusing on growth to addressing avoidable mistakes. Checklists help streamline operations, ensure consistency, and maintain quality, especially when delegating tasks. Think of them as a

safety net, a tool to ensure that amid the hustle and chaos of entrepreneurship, nothing critical falls through the cracks.

Lastly, I noticed that most people working in startups invest less time in generative work than they should. If generative work is done well, it creates compound effects which increase the productivity of an organization exponentially. By improving your productivity 1% every day, you will have 37Xed your productivity by the end of the year. This is indeed achievable but only by people who create systems instead of doing executive work only. Therefore, ask yourself as often as possible, especially when planning your week: Which tasks are repetitive and can be automated? Which chunks of my work could be replaced by such a system?

#### **Mental Models**

Besides making decisions about types of work, whether something is worth your time can also be determined by deploying powerful mental models. I want to describe my top three for entrepreneurship in the following paragraphs.

Probabilistic thinking refers to the ability to analyze and interpret a range of potential outcomes, often factoring in uncertainty and risk. It's about grasping the array of potential scenarios and understanding the likelihood of each. This mental model is particularly useful for entrepreneurs because the world of startups is laden with uncertainty. Instead of banking on a single outcome, it is more beneficial to anticipate a range of possibilities and devise strategies to deal with each. Probabilistic thinking aids in efficient decision-making and resource allocation by providing a more comprehensive picture of the situation. It's a way to prioritize actions based on the likelihood of

success or the degree of impact, allowing entrepreneurs to focus their resources on the areas that are likely to deliver the best returns. When unsure how to prioritize, try to fill an excel sheet with an array of outcomes and one of probabilities, and multiply them to see what is best.

Naval Ravikant's time-value function is about quantifying the worth of your time and offloading any tasks that cost less than that worth. It's the art of delegating effectively. At one point, Naval decided that one of his hours is worth \$3,000 and decided to not do anything that is not worth that money. This led him to prioritise incredibly well and, according to him, helped him build the successful ventures that he is famous for. As an entrepreneur, your time is one of your most valuable assets, and every task you take on has an opportunity cost. By determining the financial value of your time, you can make decisions about what tasks are worth your personal attention and which ones could be delegated or outsourced. This approach is about effectiveness in achieving your goals. It's about focusing your time on high-value tasks that can propel your business forward. It is eventually a test of how hardcore you are when it comes to prioritisation and delegation.

The trick of this mental model is not come up with a number, but to make you aware of this number and cherish it in your everyday decision making. Even though it is tempting to take a consulting task for €500 an hour, my calculation for 2024 when writing this book is that adjusted for a success likelihood of my venture of 20%, my average value creation per hour was roughly €9000. The value one can create with a scalable venture is incomparable to the hourly pay one could possibly receive. Therefore, I am saying no to all non-strategic offers in 2024 that pay per unit of time.

Occam's Razor: The principle of Occam's Razor, named after the 14th-century logician

William of Ockham, suggests that the simplest explanation or solution is often the

correct one. In the context of entrepreneurship, it serves as a reminder to avoid

unnecessary complexity. This doesn't mean choosing the easy path, but rather

preferring simplicity and clarity over complexity when equal solutions are presented.

Occam's Razor can guide you in making strategic decisions, prioritizing tasks, and

solving problems. By favoring simplicity, they can avoid wasting time and resources on

overly complex plans and focus on actions that directly contribute to their goals. This

mental model is a testament to the power of simplicity and a guide to clear-headed,

straightforward thinking.

The Weekly (P)review

To bring this all into practice your key tool will be what I call the weekly (p)review: A

checklist for reviewing your previous week and planning your next one. The weekly

(p)review is the event that will help you understand where you prioritized wrongly and

how you can improve next week. 50 times a year you get the opportunity to improve

your system and make your next week slightly better. If you make your next week 3%

better every week, you'll have more than 4Xed your productivity by the end of the year. I

have listed the checklist in full detail when discussing Actions and Habits in the next

sub-chapter.

**Actions and Habits** 

**Action 1:** Create a pre-deep work checklist. I recommend to prepare your

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- Physical environment. It is shown that you are more likely to concentrate and get into a flow state when having a clean office environment. Make sure that you have a clean desk and that you feel ready. Moreover, natural daylight is very critical. If you cannot have natural light in your room, consider a daylight lamp. And finally, consider having it quiet. If your location does not allow that, get some noise cancelling headphones or earplugs.
- Mental environment. Make sure that your mind is organised. As my explanations about the Zeigarnik effect described, have a to do list next to you in which you write any to do that comes to mind. Don't get distracted leverage the Zeigarnik effect. Listen to nice music or beta/gamma beats and make sure that you are mentally looking forward to the deep work, free of distractions, that is following now.
- Digital environment. Make sure that you are free from distractions. Turn all
  notifications off, go into flight mode, and, in the best case, make sure you are
  using software that does not distract you itself (e.g. Google Chrome has its own
  notifications).

My flow checklist that I use before deep work sessions reads as follows:

#### 1. General

- a. Flight mode on
- b. Desktop notifications turned off (especially Slack)
- c. Phone locked somewhere
- d. Clocks away and turned off
- e. Water / Coffee ready

- f. To-do list ready
- g. Materials & Tasks prepared
- h. Gamma beats / flow music on
- i. Sitting position corrected

# 2. Pre-Flow task preparation

- a. Tasks, goals and default tasks defined?
- b. Limited field targeted?
- c. Goal challenging enough?
- d. Personal control over the task?

# 3. During Flow

- a. Begin with 2-5 minutes of controlled, relaxed breathing
- b. Supplement with L-Theanin / Magnesium Threonate if stressed
- c. Once distracted, -> write down task on to do list and refocus

### 4. After Flow

- a. Task completed?
  - i. Yes: document time needed for optimisation
  - ii. No: Schedule time for additional flow phase

#### b. Reflect

- i. Can I improve my system?
- ii. Which steps can be amended?

# Action 2: Create a checklist for your weekly (p)review

Additional to your daily (p)review, your weekly review allows you to go more in depth.

There are certain tasks that do not need to be done on a daily frequency but should be done on a weekly one. This makes sense for all of the below:

- **1 Do your daily (p)review.** For your daily preview: Look ahead into Monday instead of Saturday. Weekends should be free.
- **2 Organisation admin.** I use the following checklist, which may function as an inspiration for your own one. It includes many admin tasks and whether those will be relevant for you is up to you.
  - Open all the letters, derive to-dos, and apply focus funnel
  - Travel: Do I need to book any flights, trains, or similar?
  - Reports & Boards: Do I need to update any boards / bosses I'm working for?
  - Taxes & accounting: Saving and gathering all invoices and mailing them to the accountant
  - Financial review: Looking at my spendings and finances
- **3 Review of top 5 prios** did I reach my top 5? Was it too easy (→ be more ambitious) or was it too hard (→ prioritise and plan better). What was standing in my way of reaching them? Was I focussed enough or did I plan too unrealistically (i.e. could I have achieved them or were they impossible to reach in the first place)? If the former is the case, what can I change next week to reach my prios? Lastly, move all of your

unfinished priorities to the next week or delete them if they are no longer relevant. Note that the latter case is likely a sign of poor prioritisation.

**4 Review of OKRs** – what are your OKRs and what did you do this week to move closer towards them? What are your top 5 priorities next week to move closer to those OKRs?

**5 Review of current projects** – look into all relevant project boards on clickup and check whether you are on or ahead of the plan.

**5 Organisation – lists.** Go through your not-yet list, apply the focus funnel, prioritise all tasks and move all important tasks to my to do list for the next week. Go through your pending list and send reminders to all of those tasks you are waiting for. If there are deadlines for pending tasks, schedule those deadlines and reminders for those deadlines in your calendar. If you should remind the respective person right now, do so right away.

Next, look at your 'this week' email list if you have one already (discussed in Chapter 2) and make sure to answer all emails that are due for this week. Do this all at once and as quickly as possible while keeping high quality.

6 Preparation – plan and prepare for your next week. Check your calendar next week.

- 1. Schedule enough deep work time to work on your top 5 prios
- 2. Schedule reminders and deadlines relevant for your top 5 prios
- 3. Write your updates for this week to your co-founders and team
- 4. Schedule important buffer and leisure elements

**7 Learning – review your systems, energy, and mental health.** Ask yourself what you're grateful for and review how your productivity system is working. Are you sticking to your daily and weekly reviews? Are you planning too much and executing not enough or is it the other way round? Did you have enough energy and willpower every single day? The following chapters will provide you with much more inspiration for weekly reflection questions that you might ask yourself to maximise your learning and productivity. It is important to be honest with yourself and to slow down if you are currently not delivering on your expectations.

## Action 3: Set up your time tracking tool

I have prepared this <u>time and habit tracking template</u> that allows you to track all of your time in 30 minute slots. It is a manifestation of most of the principles discussed in this guide and will, when used consistently and correctly, give you an objective view on where your time goes.

Get a feeling for which of your time is 'wasted' and which isn't. Categorise all your calls, meetings, and work slots into whether they are relevant for the quarterly OKRs and health of the organisation. You never want to get to 100%, but investing only 10% of your time into meaningful work will also reflect poor time management. Moreover, irrelevant tasks at work are especially bad. They are neither relevant for the company nor you. Try to avoid these at all costs and rather end the day earlier. Meet your friends or read a book before you do tasks that are irrelevant. This will leave you with more energy and mental peace for the important work the next day. However, understanding which task is irrelevant and distinguishing irrelevant (often seemingly important) tasks from truly important tasks is more difficult than most people think. When analysing your time on a

weekly, monthly, quarterly, or yearly basis, ask yourself 'why' you spend time on unnecessary things and try to come up with solutions that improve your ability to avoid wasting your time. Moreover, think of systems that can be created to avoid repetitive work in the future.

Habit 1: Track your time – I recommend you use this template. To start your journey to perfect time management, start tracking your time and get a feeling for where your time actually goes. I recommend that you categorise your time in terms of goal proximity. I personally track anything that belongs to my top 5 goals for the week, which are derived from quarterly OKRs, which are derived from my stretch goal. Anything that is not top 5 related gets a different tag, and at the end of every week I want to understand how much time went into top 5 priorities. My golden rule is 70/20/10. 70% should be top 5, 20% should be important surprises due to the chaos of everyday entrepreneurship, and 10% can be anything I want to. I also track my overall productivity and want to see how many hours in total I spend on meaningful work.

**Habit 2:** Review your week at the end of every single week and reflect on your top 5. Make sure you have a review slot at the end of each week, looking where your time went and take at least ten minutes to one hour to decide what you want to do differently next week in order to 1) improve your tracking framework, 2) increase the share of top 5 priority work, and 3) increase your overall productivity.

**Habit 3:** Plan your week ahead and make sure there is ample time for 1) deep work and 2) generative work. Make sure there is enough buffer to account for event-based timing and unforeseen events. Getting into a weekly planning habit will help you allow you to

set realistic goals and this, in turn, will help you build an organisation that scales as deadlines are kept reliably. Note that there are certain things that work especially well for deep work. Those include:

- Creative work
- Strategic work
- Writing work (for longer than 10 minutes)
- Analysis
- Reading (for longer than 10 minutes)
- Planning

**Habit 4:** Do a no phone day. Pick one day a week that is to be spent without your phone. Be disciplined — doing things by halves does not add any value. Your phone day should be devoted to reflection, learning and distraction-free working. It is the ultimate practice of entering flow states.

**Habit 5:** Train your deep work muscles. The best, scientifically proven techniques are: Meditation, breathing exercises, sports without any music or interruptions, and daily mindfulness.

**Habit 6:** Get used to, when tempted, applying the 10-minute rule. Give yourself 10 minutes without giving away to temptation. You can tell yourself: I will wait only ten more minutes and then re-evaluate whether I want to indulge in this again.

**Habit 7:** Add interrupt coalescent breaks to your everyday work routine. I recommend to have at least 3 times a day to answer your emails and 2 times a day to work through

fast tasks that need between 5-15 minutes. Keep in mind that you don't need to answer all emails. You can focus on those 10-20 that can be answered within a minute. Being in touch with your team via Slack or WhatsApp might be non-negotiable, but you'll be able to limit other distractions.

**Habit 8**: Focus and single-tasking. Get used to taking distraction-free action during both deep work and interrupt coalescent phases. Make sure to do only one thing and that as fast as possible, but not faster than that (to paraphrase Einstein here).

Follow these principles when working through your to-do list:

- Do one task at a time
- Avoid distractions that trigger multitasking / <u>context switches</u>

Also, do the following during your weekly planning:

- Plan for distraction-free deep work time
- Plan for available time where you will be responsive on Slack and not block other people's productivity by being unavailable

**Habit 9**: Fast Decision-Making. Remember that 99% of your decisions don't matter. What matters is that you make a decision as stalling will prevent you from making progress, but their outcome usually doesn't. In this spirit, get used to quickly deciding on whether a decision is a 1% high-importance decision and – if not – make a quick decision and move on.

**Habit 10:** Become a realistic goal-setter. Through weekly and monthly reviews, you will be able to observe the delta in your goal-setting. Try to minimise your monthly goal delta (plan vs actual) to such an extent so that you still set ambitious goals. Ideally, you'll get your delta down to +/- 20%.

# **Getting Organised**

The art of getting organised means not missing any deadlines nor any idea that comes to your mind; it means sticking to your promises and having a feel of control for your daily life; it means to plan realistically and communicate accordingly. David Allen, one of the world's best time management coaches and authors has created the perfect system for exactly that. His books have greatly influenced me and to a great extent the following chapter, too. Since I devote this book to entrepreneurs, some of my tips will be entirely the opposite to what David Allen suggests and others will slightly diverge. Over the past 10 years, I have experimented a lot with his ideas and tried to update many in a way that works for myself and other entrepreneurs.

# Theory

#### Calendars

Your calendar is not your to-do list. Clearly separating tasks that can be executed right now and appointments that can only be executed at a certain point in time (such as a scheduled Zoom call), will help you manage your time in a much more efficient manner. While your to do list is for anything that can be done right now, your calendar should only entail three things:

- 1. Appointments (e.g. calls and meetings)
- 2. Reminders (e.g. "remind Mark about X" or "application opens today")
- 3. Deadlines (e.g. "application cycle opens" or "submit document X to Y")

The reason for this is that you want to turn your calendar into a source of trust for anything you cannot postpone. Deadlines, reminders, and appointments are based on coordination with other people. Those are the only tasks you cannot postpone and therefore, having them in a time-bound organization system, such as your calendar makes natural sense. People who add tasks to their calendar usually develop a somewhat sloppy relationship with it, as some of those tasks can also be done at other points in time. Therefore, it is more likely that calls are missed and, more importantly, less likely that priorities are done first.

Try to avoid call overload. Most organizations do too many unnecessary calls. Whenever things get uncomfortable, scheduling a call and moving them out of your way for now seems like a good short-term optimization. Many things, including many forms of brainstorming, are provenly much more efficient when done asynchronously. Freeing up your time from calls to do meaningful work is essential to your output. You can use the following list of questions to figure out whether a call is needed or not:

- 1. Does the call have a clear goal and agenda? If so, is the goal better reached through a call? Only if you answer yes to both questions, a call will make sense.
- 2. Do I only need to communicate information or will an active discussion follow? In the latter case, if there will be an active discussion, will this discussion improve the quality of a decision or work that I or another person will do? Only if the latter

is the case again, should you schedule a call. In all other cases, do an audio note or provide a written summary.

3. Will the call help me enforce a deadline or get someone else to do something quicker? In this case, a call might be helpful. Note that you can use calls to actively manage people that are not part of your team.

# Getting to "actionable"

Before we dig into to-do lists, I want to spend a couple of paragraphs on what a "to do" actually is. David Allen introduced this concept in "Getting Things Done". It is about distilling your tasks, projects, and goals down to the next physical, tangible action you can take. No grand plans or vague aspirations here; just a clear, straightforward step you can act on immediately. In my experience, most entrepreneurs write down to dos in multiple fashions:

- 1. Entire projects, such as: "Integrate headless CRM feature"
- 2. Ideas, such as: "Focus more on B2B"
- 3. Deadlines, such as: "Martin will send me presentation on Sunday"
- 4. And many more

The problem with all of those is that if you sit in front of your to do list and want to actually start executing, but then you will be overwhelmed by a bunch of unexpected intermediate tasks, such as breaking the project down into multiple smaller tasks, evaluating whether your idea actually makes sense and should be brought to reality in the first place, and keeping your deadline in your to do list but not being able to tick it off as it is somewhen in the future. This can make your to do list a very messy place and

our goal is to avoid that at all costs. While it makes absolute sense to "capture" all of those initially, there needs to be a process that makes all of your to dos "actionable".

"Getting to Actionable" is like having a trusty compass that always points to your immediate next step. It removes the guesswork and ensures you're always moving, even if it's just baby steps. For an entrepreneur, momentum is vital. Therefore, your goal is to turn any task into something "actionable". Whenever you look at your to-do list, ask this question: "Can I immediately get this task done if time wouldn't be a limiting factor?" If this is not true, you might be looking at an entire project, a dependency or a list of tasks. The next section aims to make this clearer.

# Navigating tasks, projects, and dependencies

In the realm of work and productivity, it's essential to understand the nature of tasks, projects, and dependencies, and how they intertwine. Imagine you're making a sandwich. The specific steps, like spreading the mayo or stacking the lettuce, are individual tasks. They are clear, straightforward actions that you can execute without needing someone else's input. You don't need a committee to help you decide how to place your cheese slice. Making a sandwich, a bread, and getting the plates out are a list of tasks. In our terminology here, they are not a project, since you can do everything yourself.

Now, think about hosting a dinner party. You can't do everything by yourself – you need a friend to bring the drinks, someone else to come with the dessert, and maybe a cousin to handle the music. All these steps together create a project. It's a bigger endeavor that involves multiple people and requires coordination. Each individual's contribution, like

your friend's drink or your cousin's playlist, is a task on its own, but they all come together under the umbrella of the 'dinner party' project.



Sometimes, in our work or daily life, we might find ourselves at a standstill because we're waiting on just one piece of the puzzle to progress. Let's say you can't finalize the dinner party's date until your best friend confirms her availability. This scenario is what we call a dependency. You're dependent on your friend's response before you can move forward. Dependencies can be a part of big projects, but they can also exist in isolation, linking your task with just one other person's action.

Clarity in defining tasks is the bedrock of efficient work. When tasks are vaguely defined within a project, the ripple effect is evident. Poorly defined tasks can lead to increased dependencies, causing delays, rework, or even the dreaded "do-over." The more intricate the project web, the more crucial communication becomes. Effective communication ensures everyone understands their roles, reduces the chances of overlapping tasks or missing out on key steps, and keeps the workflow smooth. Remember, clear tasks and open communication are the duo that will guide you through even the most complex

projects. Whether you're pulling insights from "Getting Things Done" or diving deep into project management books, this theme remains consistent: clarity and communication reign supreme.

When you fill your to-do list, make sure that you capture everything and spend time everyday cleaning it up. We will look at this process in a later chapter as there are three different processes:

- 1. Filling your to-do list
- 2. Organizing your to-do list
- 3. Working through your to-do list

## **Capture Everything**

Your ability to organize yourself stands and falls with your ability to capture everything important in the first place. This is the very first habit upon which all other useful organization habits build up on. If you do not catch important to dos that you promise to others, you will not be able to act reliably in front of your employees and stakeholders. The following are useful triggers to help you get into the habit of capturing everything:

- 1. Whenever you commit to a task, list of tasks, or project
- 2. Whenever someone else commits to a task
- 3. Whenever you have an idea
- 4. Whenever you agree with someone on a deadline
- 5. Whenever someone sends you a message about wanting something from you

# **Navigating Your To Do List**

Your actionable tasks are like the everyday clothes you reach out for, ready to wear. These belong in your primary drawer, easy to access and ready to be tackled right away. The first folder of your to do list should thus be called "actionable tasks". You might want to distinguish between Prio 1 and Prio 2 actionable tasks. I personally use two lists: "Actionable - Prio 1" and "Actionable - Prio 2". On another shelf, you've got items that you're waiting for, say, clothes at the tailor or shoes you've given for repair. These are tasks on standby, dependent on an external factor or person before they can be completed. These tasks cannot be immediately executed. Therefore, you shouldn't look at them on a daily basis. David Allen recommends that you put them in a separate folder called "waiting for" which you check slightly less regularly, for example once a day or once a week depending on the nature of your job. Lastly, organizing an entire event or a big trip isn't just about one shirt or shoe; it's about coordinating various items together. Such large-scale efforts, or projects, need their own dedicated space for management. So, in short: actionable tasks in your primary drawer, waiting tasks on the side shelf, and projects managed with special tools to keep everything streamlined.

### **Organizing Your To Do List**

Once you've captured everything, you need to organize your to dos. Some of them, such as deadlines, will end up in your calendar. Others will have to be broken down into smaller tasks to get actionable, and yet others will have to moved to different lists. I recommend the following procedure:

Move everything that is time-bound to your calendar

- Move all projects to Asana / Clickup or a different list in which you manage your projects
- 3. Move all tasks that are not for you to "waiting for"
- 4. Make all other tasks "actionable" so that they can immediately be done

# **Working Through Your To Do List - The Focus Funnel**

Once all tasks are actionable, working through your to do list is best done by applying David Allen's 'focus funnel':



For every task, you ask yourself: Can I eliminate it? Many of the ideas you have collected throughout the day are nice ideas, but not relevant for you to reach your ultimate goals or OKRs. If tasks are 'nice-to-haves' but not immediately relevant, delete them and focus on the relevant ones instead. If you can automate the task, either through an external tool or a system that you can build, always choose the system and automation over the tasks: This includes automatic accounting, automatic email sending, etc. Multiple

research papers show that people who think about building systems before executing on a task are much more productive. [LINK]

Moreover, do not have to be in a leadership position to delegate a task. You can delegate a task to your boss or your boss's boss if it makes sense. Ask yourself: Does the other person have a comparative advantage in doing the job at hand? This usually means that they can do it way quicker or in higher quality than you while not having other even more relevant tasks that they could do at the same time. Having a comparative advantage also doesn't mean that someone is *objectively better* but rather that it makes more sense for that person to do the task. For example, if the CEO of the company creates most of the value with sales instead of programming (even though he or she is the best programmer in the company), the other programmers have a comparative advantage in programming, as it is objectively best for the CEO to invest their time in sales. This means the CEO has a comparative advantage in sales and the other programmers a comparative advantage in programming.

Procrastination is also a useful option: Many tasks shouldn't be done now or tomorrow. In those cases, put them in a 'project' (we will learn about projects later) or move them to your 'not yet' list. Finally, apply the two-minute rule. If you can do it in less than two minutes, finish the task before you end your day.

I personally recommend that you add one more thing: Prioritise all tasks that are left in your list in terms of importance and begin with the most important task unless there is not enough time to finish it today. In this case, make sure you have enough time blocked tomorrow. If you feel you can't free up time, ask yourself what is more

important: Everything you already filled your calendar up with or the task you deem most important of all tasks currently in your to-do list?

### **Automation: The best tools**

In this paragraph, I want to list the best tools and comment on the following dimensions:

- Usage
- Benefits
- Recommendations
- Comparison
- Time Savings

# 1. Superhuman

- Usage: An email client designed for speed.
- Benefits: Super-speedy search, keyboard shortcuts, and split inboxes.
- Recommendations: Use the scheduling function to book meetings without the back-and-forth. Utilize shortcuts to manage emails efficiently.
- Comparison: Faster and more feature-rich than Gmail. It's like Gmail on steroids.
- Time Savings: An average entrepreneur could save 1–2 hours weekly with faster email handling.

### 2. Airtable

Usage: A spreadsheet-database hybrid.

- Benefits: Offers the simplicity of a spreadsheet with the complexity of a robust database.
- Recommendations: Use for content calendars, CRM, or project management.
   Automate workflows.
- Comparison: More flexible than Excel, less complex than full-scale databases.
- Time Savings: About 3 hours weekly through streamlined project management.

# 3. ClickUp

- Usage: Project management and productivity platform.
- Benefits: Task assignments, time tracking, and goal setting.
- Recommendations: Set up tasks, assign team members, set deadlines, and prioritize projects.
- Comparison: More customizable than Trello, less overwhelming than JIRA.
- Time Savings: Around 4 hours weekly by optimizing team coordination.

#### 4. Alfred

- Usage: Productivity application for macOS.
- Benefits: Boosts efficiency with hotkeys, keywords, and text expansion.
- Recommendations: Use for quick web searches, system commands, and workflows.
- Comparison: It's like macOS Spotlight, but supercharged.
- Time Savings: About 1 hour weekly from quicker searches and operations.

### 5. Zapier

- Usage: Connects different apps and automates workflows.
- Benefits: Streamlines tasks across multiple platforms.
- Recommendations: Automate data transfer between Google Sheets and CRM, or connect email sign-ups to a database.
- Comparison: More user-friendly than Integromat, supports more apps.
- Time Savings: Approximately 2-3 hours weekly by reducing manual data transfers.

### 6. Loom

- Usage: Video messaging tool.
- Benefits: Quicker than typing out messages or scheduling meetings.
- Recommendations: Use for team updates, feedback sessions, or quick tutorials.
- Comparison: More personal than traditional screencasting tools.
- Time Savings: About 2 hours weekly saved from avoiding lengthy typed-out communications.

#### 7. Slack

- Usage: Team communication platform.
- Benefits: Real-time messaging, archiving, and search for teams.
- Recommendations: Use channels for specific projects, integrate with other tools for notifications.
- Comparison: More informal and integrative than email.
- Time Savings: Approximately 2 hours weekly by centralizing communication.

#### 8. GPT-4

- Usage: Advanced Al language model.
- Benefits: Text generation, automation, problem-solving.
- Recommendations: Use for content creation, coding assistance, or data processing.
- Comparison: More advanced and versatile than earlier models.
- Time Savings: Around 3 hours weekly, especially in content creation and data tasks.

### 9. ToDoist

- Usage: Task management application.
- Benefits: Organize, prioritize, and delegate tasks.
- Recommendations: Use shortcuts to quickly add tasks, set up project-based task lists.
- Comparison: More intuitive than Asana for individual use.
- Time Savings: About 1–2 hours weekly in optimized task management.

#### 10. Mailmeteor

- Usage: Email campaign tool within Google Workspace.
- Benefits: Personalized mass emails.
- Recommendations: Use for newsletters, outreach, or updates. Looks like you've sent the email individually.
- Comparison: Easier to use within Google Workspace than tools like Mailchimp.
- Time Savings: Around 2 hours weekly, especially in large-scale email campaigns.

### 11. Calendly

Usage: Scheduling application.

Benefits: Eliminates the back-and-forth of meeting scheduling.

Recommendations: Integrate with Google Calendar, set up time slots for specific

types of meetings.

Comparison: More user-friendly than Doodle for one-on-one scheduling.

Time Savings: Saves about 1-2 hours weekly by avoiding scheduling hassles.

**Delegation: The best options** 

Get used to delegating everything that is not worth your time. If you're not sure, start

with €50 or, depending on your skill level, go as high as €3,000 (e.g. what Naval

Ravikant, the founder of angel list, did). Once you're clear on what you're worth, delegate

everything else. I highly recommend that before you hire anyone, focus on delegation

through Fiverr, Upwork, and virtual assistant. Anything dull such as sending mass

emails, copy & pasting stuff, and so on can and should be delegated. Anything you're

not strong at, for example design, writing, or excel can also be delegated to freelancers.

Focus on your core strengths only.

**Actions and Habits** 

Action 1: Download a to-do list tool that you can use on both your laptop and your

phone. I recommend Todoist as it comes with the most convenient shortcuts to to dos

fast to your list during calls and other activities.

Action 2: Download a powerful calendar tool. I recommend Cron if you only use Gmail

as a provider. Alternatively, Fantastical is a good calendar.

# **Action 3:** Create a daily (p)review checklist

A good daily (p)review promotes four things: Organisation, communication, preparation, and learning. It helps you look back at your day and compensate for your imperfections (which we all have) by making yourself aware of missed tasks. It helps you structure your communication towards your team in terms of what they can expect from you and it helps you prepare for the next day. Moreover, it helps you reflect and learn from your mistakes. A structured reflection and documentation of your learnings helps you become much more productive in the long-term. Lastly, a daily review can do even more: it can make you happier and program your subconscious mind. The final paragraph of this sub-chapter will discuss happiness and autosuggestions but those are not as essential as organisation, communication, preparation, and learning for our business.

- **1 Organisation -- review your calendar**. Review your calendar and ask yourself the following questions:
  - Did I do all the follow ups for all the calls I had? If not, add the follow ups to your to-do list.
  - 2. Did I meet all the important deadlines? If not, immediately do the task to finish your deadline.

If you have a clean calendar with only appointments and deadlines in it, there should not be much more to review right now. Continue with step two.

**2 Organisation -- review your top 5.** Review the top 5 priorities you have for the week. Do you need to add any to dos to your list that are relevant for finishing your top 5

priorities by the end of the week? We will cover how to set the top 5 priorities in the weekly review and later when we discuss 'prioritisation'.

- **3 Organisation -- apply the focus funnel to your to-do list.** Ask yourself these questions (see focus funnel above) for every single task and only if you answer 'no' for a task to all of these questions, leave them in your todo list for tomorrow or the following days.
- 4 Organisation apply the focus funnel to your project lists. There might be multiple tasks in your Clickup board that require action today. If there are any new tasks, apply the focus funnel again. Be especially careful with the question: Can I do it later? You might think that you can do the task later, but will you create a blocker for another person in your or in another team thus impeding their productivity instead? If this is the case, have the discipline to finish the task.
- **5 Organisation -- clean your desktop.** As we will learn later, a clean desktop is crucial to your productivity. Move all the files that you have accumulated over the day into their respective folders either on your computerPC or on the EWOR drive. If these files could be relevant for someone else, always choose the company drive over your local computerPC.
- **6 Communication check Slack.** Check if there are any unanswered messages on Slack and ask yourself whether this will result in a to-do –- if so, apply the focus funnel and potentially move them to your to-do list and make sure to respond to any open points.

**7 Communication** — check email. Check if there are any unanswered messages in your email inbox and ask yourself whether this will result in a to-do — if so, apply the focus funnel — if typing a response takes less than two minutes, do it immediately. If you can eliminate, automate, delegate or procrastinate the task, don't do it. Don't be afraid to delete emails that do not cause any harm when being deleted. I recommend that you have only three email folders: Your inbox, a 'this week' and a 'pending' folder. If I do not need to answer an email before the week ends, I will immediately move them to my 'this week' folder and bulk-answer all of those emails at the end of the week. If I do need to answer earlier, I try to answer all emails that require an immediate response today and finish the day with an empty inbox. I will pick this up later in the guide again when talking about productivity habits.

**8 Communication -- check WhatsApp**. If a significant junk of your work communication is on WhatsApp, check WhatsApp and answer all work related messages. However, I do not recommend discussing anything work-related on WhatsApp. Using Slack is the better option.

**9 Preparation -- prepare for calls, deadlines and appointments.** Open your calendar again and get prepared for tomorrow. Apply the focus funnel and pay special attention to the question of whether you have to do it *now*. Make sure every call is prepared and agenda is sent to all of the participants of the calls that you organise.

**10 Preparation –- check your week**. Have a quick glimpse into the appointments that happen the week ahead and your top 5 priorities for the week to get a feeling for the next step: Prioritisation.

- 11 Preparation prioritise. Look through your entire to-do list and decide what the top three most important tasks for your next day are. Note that a priority is not necessarily a to-do. Your 5 weekly priorities can be entire chunks of to-dos or projects with dependencies on other people, but your prioritised to-do list should only consist of executable tasks. Make sure to keep those two (weekly priorities versus to-do list) separate. Then, make sure that your top three tasks are on top of your to-do list. Order all tasks in terms of their importance and move them to the 'not yet' list in case they are not important until the end of the week.
- **12 Preparation -- block yourself.** Insert 'deep work' blockers where you will work on your top priority tasks for the next day. We will discuss the principles of deep work later in this guide.
- **13 Learn –- reflect on your day.** Reflect on your current learning goals and how well you met them. Those might include: "Communicating more actively", "not being late for calls", "focussing on big problems first" or even personal habits such as "drinking enough water", "drinking no coffee after 2pm", or "working out". Did you adhere to all your goals and principles? If not, what did you learn and what can you do better the next day to comply with your principles and learning goals?
- **14 Optional -- gratitude & autosuggestions**. Research shows that you will be happier by asking yourself these questions at the end of each day:
  - Monday: Write down five things you're grateful for (three of which happened last week). Explain how you feel because of these 5 things.

- Tuesday: Write a reflection on your most wonderful moments in life. Describe them in as much detail as possible.
- Wednesday: Brainstorm realistic and optimistic future scenarios. Write them down in detail.
- Thursday: Write a letter to a person you deeply care about.
- Friday: List three things in the last seven days that were great and describe why you think they turned out to be that well.

This is a scientifically proven way, populated by *Richard Wiseman*, that makes you more happy. Keep in mind that 40% of your happiness is within your option space.

Lastly, you can use autosuggestion or visualisations of future scenarios that you tell yourself (or visualise) multiple times a day. This is also a scientifically proven way of making it more likely for you to achieve your goals even though scientists are disagreeing on why this exactly helps you. It also works for OKRs.

**Habit 1:** Get used to using a daily end of day checklist. Get used to looking at the same list times every single day and cross-check them every day. You can use our template by going to our website. Action 1 focuses on helping you create your checklist.

**Habit 2:** Start capturing everything. All your ideas and thoughts that need to be kept should be immediately added to your to do list.

**Habit 3:** Re-organise your to-do list and apply the focus funnel every day.

**Habit 4:** If you tend to overwork yourself, reserve a weekly blocker for deep work and generative work. Especially focus on what you can automate.

**Part 3: Managing Your Energy** 

Physical Energy: Sleep

The paramount source of energy for any individual is sleep and therefore I want to make

sure to spend enough time explaining in detail how sleep works and how we can

optimize it. My goal is to not just overwhelm you with a million rules to follow, but to

explain the key concepts behind good sleep so that you can use them as your own

decision making compass when designing your optimal day.

Theory

How we sleep

Our brain emits different frequencies of waves. While delta waves — the lowest

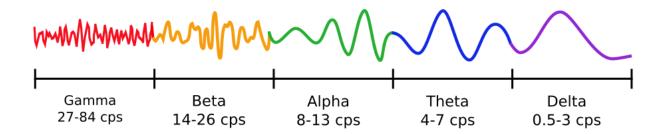
frequency — indicate very deep sleep, beta waves — one of the highest frequencies —

indicate alertness. During flow or certain forms of meditation, our brain can emit

gamma waves. When we are alert and highly focused, for example when writing or

memorizing something, our brain is emitting beta waves. During sleep, our brain

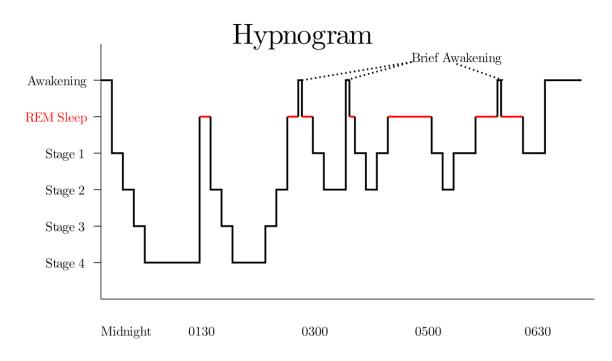
oscillates between beta and delta waves.



Source:

https://www.petegakos.com/single-post/2017/03/20/Beta-to-Theta-The-Science-Behind-Meditation

Most of us believe sleep is a process of our body calming down to a maximum level until we have achieved a delta-wave-like frequency, remain there for most of the time and finally become more alert and wake up. Well, that's not true. The truth is quite the opposite: We go through all of the phases, from light to deep sleep — up to six times. Hence, we sleep in cycles, each lasting approximately 90 minutes. Understanding these sleep cycles and phases of deep sleep and light sleep is the key to managing your sleep better. To make this veiled phenomenon a bit clearer, let us visualize it. Researchers map sleeping behavior in so-called hypnograms:



Source: https://upload.wikimedia.org/wikipedia/commons/3/3e/Sleep\_Hypnogram.svg

A cycle or phase means you go from REM sleep to stage 4 and all the way 'up' to REM or wake again. While the different phases are often highly over-interpreted, there are two major things to take away from thousands of empirical hypnograms:

## The spectrum between two extremes: REM vs. (deep) Non-REM stage 3 and 4 sleep

Understanding the polarizing relationship, between REM and stage 3 / 4 sleep allows you to infer the rest logically. Many people regard REM sleep as the 'deepest' sleep, even though the truth could not be farther from that. Our brain is very active during REM-phases and emits a frequency which is usually between alpha and beta. We dream during REM-phases and the increased cognitive activity is indicated by our eyes moving very quickly — thus the name Rapid Eye Movement (REM). While REM sleep still

remains an arcane phenomenon [LINK], it is said that mental recovery is highest during this stage [LINK].

During deep sleep on the other hand, our brain goes down to a delta brain wave frequency and our breathing as well as our heartbeat slow down to a minimum level. Muscle relaxation also peaks during deep sleep and important hormones, such as growth hormones, are released during that time [LINK]. Therefore, it is often stated that deep sleep is for physical recovery.

It is much easier to get up in the morning during stage 1 or REM sleep, not when your body is in deep sleep. If your brain is on delta waves, waking up and directly being able to think sharply is impossible. Moreover, your REM phases extend during later cycles of sleep, while your stage 4 phases usually disappear after the first two sleep cycles. Look at the hypnogram again and observe how deep sleep primarily happens at the beginning of the night while REM sleep primarily happens in the second part of the night. This implies that to recover mentally, you need to sleep longer. Short sleep might give you enough time to recover physically, but will fail to provide you with enough mental recovery, especially if you just had a difficult day. While I haven't found a study to prove this yet, my personal feeling is that extended periods of little sleep, for example sleeping for 4-5 hours every night for 2 weeks, are a key reason for founder burnout. I believe that the lack of REM sleep is responsible for this.

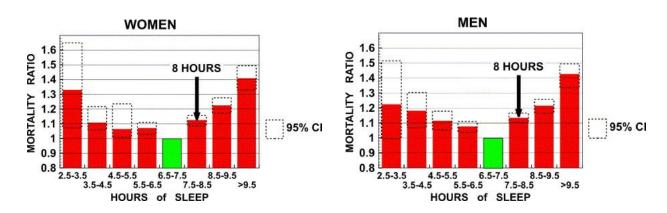
# **Sleep Cycles**

Sleep happens in cycles of approximately 90 minutes. Note that deep sleep typically happens only in the first two cycles as indicated in the hypnogram, while REM stages are often followed by periods of being awake — especially after the first two cycles. Waking up during the night is completely normal, and if it is below 2–3 minutes, we usually do not remember it [LINK]. Moreover, while those 90 minute cycles vary between people and tend to get shorter for each cycle, they usually stay the same for individual probands. Therefore, knowing how long your cycles are matters. This will help you to get up during stage 1 sleep or REM sleep. That implies that you should time your sleep and only get up after a 1.5h cycle. If you notice that you still feel dizzy or tired, you might want to experiment with cycles of 1h 25m or 1h 35m as lengths of sleep cycles differ between individuals. You can also use an Oura ring or a whoop wristband to track your sleep and make sure you get up when actually awake.

### **Sleep Duration**

The amount of sleep you need is influenced by your genetics and is highly individual. Some people can sleep 4 hours and feel fit. Donald Trump, Angela Merkel, and Bill Clinton are famous examples. But this is rather the exception than the rule. If you wake up naturally or feel alert and fit during the day, your current sleeping duration is fine. Sleeping less than you need to, though, can have severe effects on your overall health, such as higher risk of depression, cancer and Alzheimer's. [LINK 1, LINK 2] Sleeping longer can also have negative consequences. While researchers are still not entirely certain on the causal direction, for example by wondering whether depression

causes long sleep or long sleep facilitates depression, they are generally convinced that sleeping too long is not good for one's body. There are a couple of superbly interesting research papers on the duration of sleep and mortality rates suggesting that longer sleep rates are connected to higher mortality. A valid meta-analysis comprises the results of analyzing a million probands for up to 50 years [LINK]. The two most interesting graphs are included below:



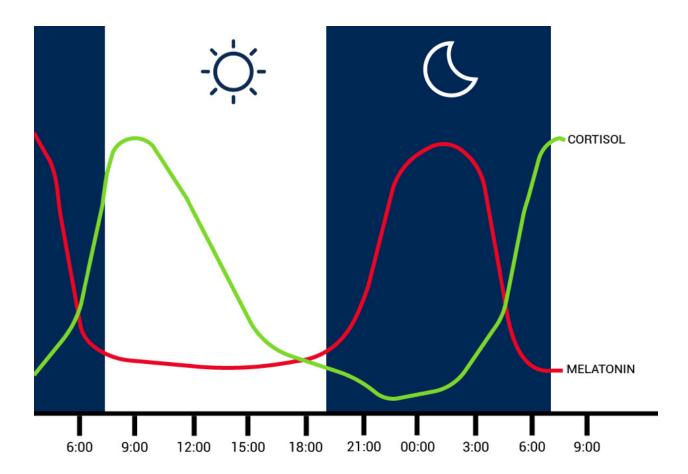
Source: https://www.sciencedirect.com/science/article/pii/S1087079203000844#FIG2

#### Your Hormones

After a couple of paragraphs on how sleep manifests itself in sleep cycles and brain waves, let's continue with what happens within our body while being awake and sleeping, most importantly our hormonal cycles.

The sleep hormone melatonin affects your sleep quality to a great extent: It makes you feel tired and helps you to fall asleep quicker and deeper — which is essential for high quality sleep. One of its counterparts is cortisol which is a much more sophisticated and well-known hormone. Cortisol is often referred to as the stress hormone as it is

released during periods of stress, but it is also essential for waking you up. High cortisol levels in the morning do your body more good than harm. For you to get a better understanding of how both of these hormones work and interact, have a look at the following graph:



Source: http://www.biochronoss.com/en/about

An initial point to note is the inverse relationship between cortisol and melatonin levels: typically, an increase in cortisol corresponds with a decrease in melatonin, and vice versa. This is known as the anti-cyclical behavior of hormones, highlighting how

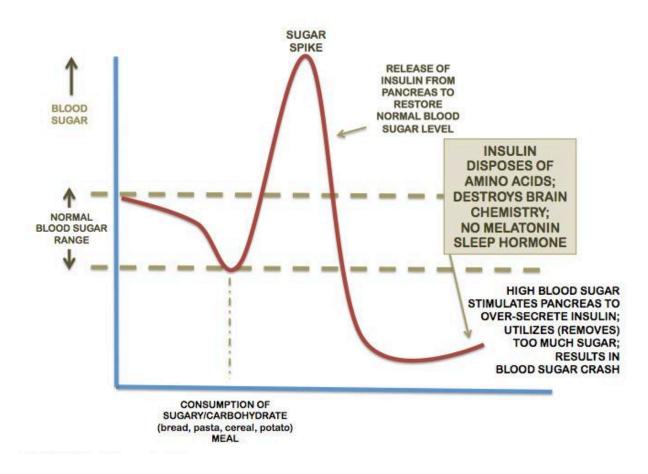
hormones can suppress or influence others, as exemplified by the interaction between melatonin and cortisol.

We can see that cortisol levels reach their zenith in the morning, whereas melatonin peaks during the middle of the night. The onset of melatonin occurs prior to bedtime, gradually declining to its baseline by the time we awaken in the morning.

To enhance our understanding of sleep improvement, it is pivotal to recognize the role of melatonin in inducing drowsiness and augmenting sleep quality and the initiation of sleep. This knowledge directs us towards a logical course of action: to optimize sleep, one should aim to elevate melatonin levels and reduce cortisol levels during the evening hours preceding bedtime. Consequently, I want to explore more deeply the interplay between behavior, dietary choices and sleep, particularly in relation to their impact on our hormonal balances.

# **Carbs and Sleep**

When we enjoy carbohydrates, especially simple carbs found in sugary treats, pizza, bread, and the like, we initiate a cascade of effects in our body. These foods cause our blood sugar levels to rise sharply. To counter this, our pancreas kicks into high gear, increasing insulin production to bring those sugar levels back down. In doing so, the pancreas also reduces the availability of certain amino acids that are essential for producing melatonin. Consequently, a deficit of melatonin can lead to poorer sleep quality. The graph below illustrates this.



Source: http://www.resveratrolnews.com/resveratrol-biological-rhvthm-reset-button/1599/

### **Caffeine and Sleep**

Opposed to what many believe, drinking coffee in general does not have significant negative effects on your overall health [LINK]. Drinking up to four cups of coffee daily can actually be quite beneficial for your health. It enhances your physical performance and helps in fat burning. Moreover, it can decrease the likelihood of experiencing strokes and heart diseases. Interestingly, it may also lower the risk of suicide, possibly because it increases serotonin levels in the brain [LINK]. In a lengthy meta-analysis of

current findings however, it became apparent that drinking coffee up to 10 hours before going to bed increases the time you need to fall asleep, decreases sleep efficiency and worsens perceived sleep quality [LINK]. In scientific terms, the half-life period of coffee is on average 5 hours [LINK]. This means that in about five hours, our body eliminates half of the caffeine we ingest. It's only after about ten hours, when 75% of the caffeine has been processed, that its impact on sleep becomes minimal. Additional research supports this, showing that melatonin production is disrupted by coffee consumption [LINK]. This is our aim in drinking coffee: to remain alert. But this often overlooks a key downside. For instance, enjoying a cup at 4 pm to overcome an afternoon slump can significantly disturb the initial sleep cycles that night. This results in reduced physical energy the following day, increasing the likelihood of reaching for another afternoon coffee thus triggering a viscous cycle.

It's essential to highlight the benefits of coffee, especially considering the latest research findings. Nevertheless, if you aim to enhance their sleep, it's advisable to refrain from consuming coffee after 1 pm if your bedtime is around 11 pm. In cases of severe sleep issues, it might be wise to replace coffee entirely with green tea. The tannins in green tea can counteract caffeine's effects, making it a healthier choice for those sensitive to stress. Coffee can strain your adrenal glands, which are crucial in managing stress. Overburdening these glands with coffee when they're already working hard can be counterproductive.

Let's also bust a last myth: the belief that drinking multiple cups of coffee in the evening doesn't affect sleep. I can't count how often I have heard someone say: "I can drink an espresso after dinner and sleep just fine." While it's great if you can fall asleep easily, this doesn't necessarily mean you're getting quality rest. Consuming three cups of coffee before bed is likely to diminish your sleep quality, even if falling asleep isn't a problem. Interestingly, being able to fall asleep quickly after drinking coffee can often indicate sleep deprivation. Think about alcohol as an analogy: Most people find it easier to fall asleep after drinking alcohol, but their sleep quality surely suffers from it.

Do not drink coffee if you're experiencing a lot of stress and pressure — coffee stresses your adrenal glands [LINK].

# Other activities influencing your sleep

The pattern should be clear now: Whatever elevates anticyclical hormones close to sleep should be avoided and whatever facilitates melatonin secretion is advisable to promote good sleep. I want to spend a little more time to comment on a few other activities that have such an influence.

Heavy workouts produce adrenaline, testosterone, and other growth hormones almost all of which suppress melatonin.

The intake of alcohol, especially when consumed shortly before sleeping, has a notable impact on disrupting normal sleep patterns and influencing melatonin production.

Alcohol can result in increased deep sleep, but usually leads to an overall decline in sleep quality and alterations in circadian rhythms, often manifesting as interrupted sleep and a reduction in REM (rapid eye movement) sleep phases. Even a moderate consumption of alcohol can interfere with the natural sleep process. [LINK 1] [LINK 2] Moreover, stress in the evening leads to higher cortisol levels which again influences your melatonin secretion negatively. A study assessing stress among healthcare students found a significant link between poor sleep quality and high levels of stress, anxiety, and depression. It highlighted that students with higher stress and anxiety are more likely to experience poor sleep quality. [LINK] Another study examined the impact of insomnia on entrepreneurs, who are especially known for long working hours. The findings indicate that entrepreneurs suffering from insomnia are more likely to experience elevated stress levels, negative emotions, and, as a consequence, deteriorating health. Specifically, chronic insomnia was found to exacerbate stress and negative feelings, negatively impacting overall health. The research involved a sample of 152 Iranian entrepreneurs and accounted for various factors, including age, marital status, education, and religiosity. The core conclusion of this study is the clear correlation between insomnia and increased stress, negative emotions, and poorer health in entrepreneurs. To combat these issues, the study recommends practical measures such as avoiding exposure to work and other stress-triggers, exposure to blue light before bedtime and incorporating physical activity into the evening routine to enhance sleep quality. [LINK]

The term "circadian rhythm" can be more simply understood as our body's internal or biological clock. Grasping and effectively applying this concept is crucial for maintaining good health, promoting longevity, and boosting productivity. When our circadian rhythm aligns properly, it harmonizes our hormone cycles, leading to increased alertness and energy during the day, and making it easier to fall asleep at night. This rhythm is the culmination of millions of years of evolutionary development. However, the advent of artificial lighting and the tendency to work late into the night in stressful environments have increasingly disrupted our natural circadian rhythms. Addressing this disruption is a vital step towards ensuring healthy sleep patterns and enhancing overall productivity.

There are two interesting implications of understanding your circadian rhythm. Firstly, we can use our understanding of it to reactivate it — that is curing it in case it was impaired. All we need to do is to control external stimuli affecting our body. Secondly, once it is in sync, we can use knowledge about healthy circadian rhythms to optimize the timing of our daily activities.

### Getting your circadian rhythm in sync

First of all, you should look at indicators as to whether your circadian rhythm is in sync or not.

- Do you have trouble falling asleep or getting up in the morning?
- Do you get very tired in the afternoon?
- Do you experience sudden productivity rushes during the late evening/night?
- Do you have disturbed sleep?
- Is your stool and are your hunger cravings inconsistent?

If you answered yes to any of these questions, there is eligible apprehension that your circadian rhythm might not be in sync. This is definitely not the end of the world. It's veritably great news: There is room for optimization. Fortunately, science has to say a whole lot about our circadian rhythm and there are easy ways of 'manipulating' our hormones to get it back on track.

## **Routinize your life**

Get up at the same time, always. Go to bed at the same time, too, if possible.

Consistency is very important and highly increases sleep quality [LINK]. If you go to bed later or earlier than expected, your hormones will not have adjusted quick enough.

Going to bed too early leads to melatonin not yet being secreted and you having trouble to fall asleep as a consequence. Going to bed too late may result in growth hormone release being deferred and cortisol kicking in too early [LINK]. There are certain hormones that help us sleep and certain hormones that help us be awake. Confusing our body unnecessarily by staying awake when our body wants us to sleep and the other way round is not helpful. As complicated as this sounds, it can be summarized in one easy lesson: More regularity in your daily schedule translates into better sleep and feeling more alert.

Therefore, if possible: Eat meals at the same time throughout the week. Especially regularity in the timing of evening meals is associated with better sleep onset [LINK]. Meals provide you with energy and hence trigger positive physiological effects. The more you stick to a schedule, the better your sleep becomes. Moreover, many of your organs have internal 'clocks' that adjust to your rhythm. Your liver clock may re-adjust in three days, but your heart clock, for instance, needs a longer period of up to seven days [LINK]. By adding irregularity to your day, especially when it comes to sleep and eating, all you do is confuse your organs. Don't do that if you want to feel more alert and sleep better.

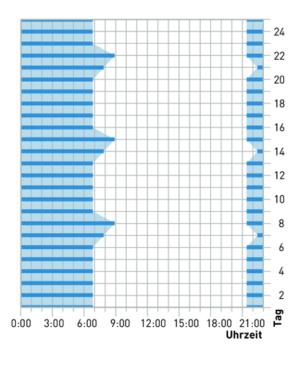
If you are even more disciplined, stick to a rhythm as rigid as possible concerning all of your daily activities. Studies show that people who leave their house at approximately the same time every day do have healthier sleep [LINK]. Moreover, starting work at the same time was also associated with healthier sleep. Just as interestingly, this holds only true for younger adults, while older adults (60+) benefited from greater variability in their daily activities.

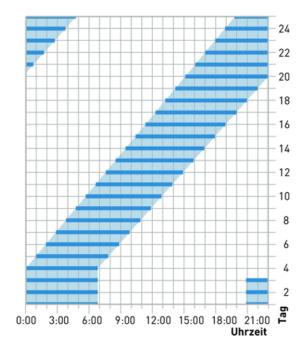
Note that there are psychological effects, i.e. those affecting your mind, feelings and thoughts, and physiological effects, i.e. those affecting your inner body and biology. Firstly, psychological effects associated with more regularity are usually negative, including increased boredom, burn-out and inability to adapt to external changes [LINK]. This makes intuitive sense: It can be very boring and unexciting to do the same things

day after day after day. A healthy mixture is always important. Nothing is worse than not wanting to start the day. Secondly, physiological effects associated with more regularity are usually positive, including better functioning of your body, better health in general [LINK] and less depression [LINK]. The physiological effects do usually outweigh the negative psychological ones, yet I recommend: Know thyself. Pay attention to your individuality. If you get bored quickly and need excitement, try to eat and sleep at the same time, but make sure that the rest of your day stays exciting and unpredictable. If you love routines and structure, there might be fundamental gains, such as needing less sleep to feel alert, to adding more structure to your day.

# Sleep and light

Much of our daily rhythm is influenced by light and darkness. I established earlier how our hormones affect our rhythm. One key contributing factor to what our hormone levels do during the day is the light that our skin and retinas are exposed to. One study compares two groups of people, one which is exposed to light and one which isn't.





This image shows sleep times of two groups of participants. The left group was exposed to a normal light-darkness cycle with daylight, while the other group lived under isolated conditions. This group did not see any sunlight at all. The left group, as can be seen in the image, goes to bed quite regularly and wakes up at similar times. The peaks that you see on the right and left are solely because people went to bed later on weekends and, accordingly, woke up later. The right group, on the other hand, shifts their sleep rhythm by a few minutes every day. After 14 days, they live almost completely opposite to the sleep-wake rhythm. Their biological clock is not working anymore – and some studies already prove the increased risk of disease under such conditions. [LINK] Especially for shift workers, the biological clock is missing due to the artificial light and the lack of daylight during waking hours. This even leads to shift

workers being more likely to have a heart attack and up to 28% more likely to get cancer [LINK].

Blue light has a special significance and is used for the synchronization of the internal clock via the so-called ganglion cells. You can naturally use this trick for yourself and get a so-called blue light lamp. This can then help you, for example, to prevent your afternoon tiredness in the midday hours and increase your concentration.

The timing of your very first exposure to light also matters. According to Andrew Huberman, a well-renowned Stanford professor, morning sunlight exposure triggers a series of biochemical reactions in the body that are crucial for regulating sleep-wake cycles. This process is primarily mediated through the eyes' exposure to sunlight, which directly influences the brain's suprachiasmatic nucleus (SCN) — the region responsible for controlling circadian rhythms.

When sunlight enters the eyes, it signals the SCN to initiate the production of serotonin, a neurotransmitter associated with mood elevation and alertness. This serotonin production sets off a cascade that impacts the regulation of melatonin, the hormone that induces sleep, later in the day. Essentially, the exposure to natural light in the morning increases serotonin levels, which helps regulate the body's internal clock and prepares it for melatonin production in the evening. As a result, about 16 hours after this initial exposure to sunlight, the body naturally begins to prepare for sleep, making it easier to fall asleep and maintain a healthy sleep cycle. A study by Cajochen et al. investigating artificial dawn and blue light, reinforces the concept that light exposure in

the morning can influence melatonin levels and, consequently, sleep and alertness cycles.

#### Vitamin D3

While many believe we can obtain sufficient vitamin D3 from our diet, the reality is not so straightforward. To achieve the minimum recommended levels, one would have to consume approximately 22 liters of milk or 5 kilograms of fish every day. This is obviously impractical, not to mention that attempting such a feat would likely cause our stomachs to burst. Therefore, a more viable alternative is to naturally produce vitamin D3 through exposure to sunlight. Let's explore the most critical facts about vitamin D3 production:

- Vitamin D3 is secreted by our skin if it is exposed to enough sunlight. We should hence expose as much of our skin to sunlight as possible if we want to maximize vitamin D3 secretion. We want to be aware, though, that too much exposure to sun can have negative effects on your health. [LINK] Vitamin D3 can only be secreted if sunlight is strong enough. North of the latitude of Barcelona (approximately 42nd), vitamin D3 can only be secreted during summer. We can use our shadow to test whether vitamin D3 secretion is possible: If our shadow is as long as us or even longer, vitamin D3 secretion is not possible. [LINK]
- Vitamin D3 is stored in our body up to 6 months. We can thus 'charge' up in the summer to 'save' for the winter. [LINK]
- Vitamin D3 has significant influence on our inner clock and can be a fantastic means of inhibiting jet-lag. [LINK]

Vitamin D3 inhibits melatonin secretion. [LINK]

Below is a table that adds clarity on vitamin D-Synthesis during a sunny summer day.

Vitamin D-Synthesis During a Sunny Summer Day*	
Work and activities inside:	0 micrograms
Women (veiled, but with bare hands):	2 micrograms
Lunch break (outside):	45 micrograms
Two hours outside in T-shirt:	250 micrograms
Two hours outside in swimming pants:	500 micrograms
*All of those numbers are merely benchmarks and vary based on age, skin type and time of the day.	

Leading scientists confirm that we need up to 100 micrograms a day [LINK], implying that a sunny two-week holiday at the beach could potentially provide enough vitamin D for an entire year. However, for those who do not get ample sun exposure during their holidays, it's advisable to spend sufficient time in the sun daily or consider supplementing with vitamin D3. It's important to note, though, that this recommendation is a subject of considerable debate among researchers. Based on extensive research, a daily intake of 100 micrograms is the amount I feel confident recommending.

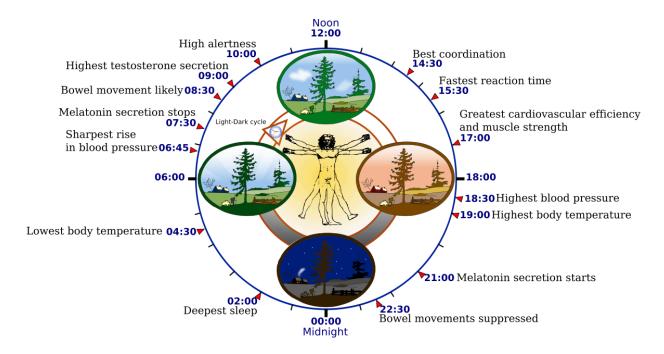
When taking vitamin D3 supplements, it's best to do so in the morning. This is because vitamin D3 can inhibit the production of melatonin, potentially disrupting your sleep. To maximize vitamin D3 absorption, try to minimize the use of inhibitors like sunscreen when you are sure there is no risk of getting a sunburn.

Sunlight and standard 'white' office lighting contain a higher proportion of 'blue light,' which naturally suppresses melatonin production. This will keep us awake and alert, which was ideal in the past when strong light sources did not exist post-sunset.

However, with the advent of electricity, we have created intense artificial light sources that significantly inhibit melatonin production. The screens of our phones, TVs, and computers emit light with a high blue light content, further hindering melatonin production. A practical tip for you is to reduce blue light exposure and dim the lights at least two hours before bedtime. Ideally, blue light sources should be eliminated entirely one hour before sleep.

# **Establish Circadian Rhythm**

Leverage your circadian rhythm for ever more productivity. Look at the graph below to see how your circadian rhythm works. Yes, there are times when your coordination is best, your reaction time fastest and your cardiovascular efficiency greatest. These are general patterns rather than immutable truths. Especially when your circadian rhythm is not in sync, you might not follow the patterns in the image below. When you stick to these principles, however, there is a lot we can infer from the picture below.



Source: https://en.wikipedia.org/wiki/Circadian\_rhythm

Do your work-outs between 3 to 5 pm when your cardiovascular efficiency and muscle strength peak. Studies show that working out at that time results in better sleep and yields higher performance [LINK]. Do not work out later as the released testosterone and adrenaline as a corollary might suppress your melatonin secretion [LINK].

Track when your alertness is highest. If your circadian rhythm is healthy, it is most likely going to be three to four hours after you get up. This should be the time you do your most challenging tasks, such as working on a project that requires your greatest attention or memorizing if you are at university. The correct timing can boost your productivity greatly; you might be up to twice as productive.

Help warming your body up in the evening, for instance with a cup of tea and help cooling it down during night, f.i. by sleeping without thick clothes. Many studies indicate that you should have it rather cold (16–18 degrees Celsius if you sleep with a sheet) for your body to cool down during night to recover more quickly [LINK]. If you want to have a healthy sleep and master productivity, pay attention to your circadian rhythm daily. Track when you eat, when you start working and when you leave the house. Then, try to add regularity to help your body regulate its inner hormone cycles.

Paying attention to your circadian rhythm is the simplest and at the same time most effective principle to improve quality of life. Yet, however simple this concept is, most people violate it within the chaos of their hectic life. This leads to more stress, which leads to more chaos, which leads to more stress, and so on and so forth. I encourage you to put an end to this vicious cycle. In most cases, simply realizing that it exists and witnessing its benefits first hand is enough.

### **Actions and Habits**

**Habit 1:** Establish circadian regularity. Stay up at the same time. Go to bed at the same time. Eat at the same time. Do sports at the same time. These are ordered by importance. It is most crucial to stay up at the same time, aiming for precision down to the exact minute if possible.

**Habit 2:** Establish a morning routine which contains immediate sunlight exposure and drinking 200 ml of water. Morning sunlight exposure can significantly affect your sleep

quality and mood and makes you tired roughly 15-16 hours after first exposure. Drinking water has a similar effect and improves cognitive function just after waking up [LINK].

Habit 3: De-stress before going to bed. This is crucial and cannot be emphasized enough. We are constantly under stress, whether we realize it or not, from social media, work, and even entertainment. Surprisingly, entertainment can stress our bodies. This stress triggers the release of cortisol, which, in turn, lowers the blood level of melatonin, crucial for sleep regulation. Therefore, the last hour before bedtime should be dedicated to calming down. Consider taking a warm shower if it relaxes you, switch your phone to airplane mode, dim the lights, and allow yourself to unwind. These practices help your body produce melatonin, leading to faster sleep onset and improved sleep quality. As a result, you'll wake up feeling fit, alert, and fantastic the next day. For those experiencing severe stress, taking GABA as a natural supplement can help mitigate mental stress. We will also explore supplements later in this quide.

Habit 4: Do not work out three hours before going to bed. If you do a work-out, do it between 3 to 5 pm. Testosterone and adrenaline are hormones that suppress melatonin. After a heavy workout, your testosterone levels and adrenaline levels will be up [LINK] and subsequently inhibit your melatonin secretion. Although workouts during the day are a fantastic means of regulating your melatonin and improving its secretion [LINK], be careful with working out in the later evening or even at night. Doing so will disturb your hormone cycle and negatively impact your sleep quality.

**Habit 5:** Do not eat carbs before going to bed — in the best case even try to eat nothing three hours before winding down.

Habit 6: Do not take caffeine 10 hours before going to bed.

**Habit 7:** Expose yourself to blue light in the morning to regulate your hormone cycle. Make sure you do not spend too much of your morning in darkness. This does not only make you feel more tired, it also interferes with your natural light-dark-cycle. That can have consequences that reach far beyond mere tiredness. You might have trouble falling asleep in the evening or even feel less hungry and energetic during the day.

**Habit 8:** Apply blue light to boost your concentration for specific activities. Blue light stimulates you. While that is bad when winding down in the evening, those stimulating effects can be just as useful as a coffee to boost your performance when needed. It can also be combined with coffee as bluelight triggers different physiological effects. My recommendation is: Get a daylight lamp for those occasions, especially during winter.

Habit 9: Dim lights one hour before you go to bed. We established how important it is to de-stress in the evening, especially right before going to bed. Dimming lights strongly contributes to that. Bluelight (over)stimulates your body and decreases melatonin secretion. Again, those effects can reach far beyond just diminishing your sleep quality. When your hormone cycles are disrupted and your sleep quality is low, it is much more likely for you to get ill and develop diseases such as dementia and cancer. You may even want to reduce exposure during the day gradually if possible. A study showed that sudden changes of light, both when going to bed and waking up, led to worse results than gradual changes [LINK]. Even though we dim lights in the evening and want to reduce exposure to sources of bluelight, it is very unrealistic to not use our laptops and phones when going to bed. Thankfully, apps such as f.lux are free and simulate sunrise

and sunset on our phones by filtering bluelight off our screen. I recommend setting the reduction of blue light in your preferences to a maximum level when using f.lux.

**Habit 10:** Leverage Vitamin D3 to sleep better and feel more alert. It doesn't just lead to better sleep; it also makes you feel more alert, reduces your risk of illness, and significantly improves your mood. Hence, it's sometimes dubbed the "happiness vitamin." I strongly recommend making an effort to get outside at lunchtime and ensure you're exposed to natural sunlight. Aiming for one hour a day during the summer is a good guideline. As mentioned earlier, the benefits of doing so are substantial. If you decide to supplement with Vitamin D3, it's advisable to do so in the morning, with doses up to 5,000 IU / 100 mg for at least one week.

**Habit 11:** Warm your body up in the evening, for instance by drinking a cup of tea or taking a hot shower, and keep it cool during the night.

**Habit 12:** Wake up when you're truly awake by tracking your sleep cycles and experimenting with different wake-up times. Although there are numerous apps available for this purpose, I recommend against using a sleep tracking app for two reasons. First, sleeping with your phone next to you isn't healthy. Second, these apps aren't entirely accurate yet. Instead, you can track your sleep in a simpler way:

- 1. Note the time you go to bed.
- 2. Record when you wake up in the morning.
- 3. Estimate how long it takes for you to fall asleep.
- 4. Observe how you feel during the day and how easy it was to wake up.

For example, you might decide to go to bed at 10:45 PM and wake up at 6:30 AM. If it takes you about 15 minutes to fall asleep, you'll have slept for 7 hours and 30 minutes. Dividing this duration by 5 (assuming an average of 5 sleep cycles per night), you find that each cycle is approximately 1 hour and 30 minutes long. This method is surprisingly effective for many. If you don't feel rested after sleeping exactly 7 hours and 30 minutes, try adjusting your sleep by 10-minute increments (e.g., 7 hours and 40 minutes, 7 hours and 50 minutes) until you wake feeling refreshed. Once you find the right duration, repeat it to confirm that this sleep length suits you. Adjusting the length and dividing by 5 can help you determine your sleep cycle length, which could be around 96 minutes for an 8-hour sleep. Alternatively, you can buy an Oura ring and observe your sleep cycles. From my personal experience, Oura's tracking is not yet accurate enough to perfectly track your cycles. Waking up during a deep sleep phase can disrupt your hormone cycles for the morning, decreasing your energy and alertness. Therefore, waking up slightly earlier to avoid entering another deep sleep phase can often make you feel more alert.

**Habit 13:** If you need to mentally perform during the next day, make sure to sleep as long as possible. Especially when there is an important presentation the next day, a difficult task or anything that requires mental preparation, we tend to pull all nighters and not sleep at all. Yet, aiming for 8 hours — factoring in some time to fall asleep — usually allows for 5 cycles. As your mental recovery tends to be highest during the later stages of your sleep, sacrificing on those can come with a high price.

If physical recovery is important during the next day, because of a work out for example,

make sure to wind down properly and go to bed early. If you go to bed later than you usually do, your melatonin secretion will kick-in too late and your growth hormone release might be deferred [LINK], which leads to even more disturbed sleep. You want to prevent that especially after heavy work-outs. Interestingly though, to recover physically you will not need to sleep that long.

**Habit 14:** Sleep at least 6 hours and not more than 8 hours.

**Action 1:** Create your own sleep checklist. Focus on what you believe you can actually do rather than a desirable live to which expectations you can't live up to. Do the following things to improve your sleep to such a drastic level that you might need up to one hour less of sleep.

### Regularity

- Regular Wake Up Time ( $\Delta$  15 mins)
- Regular Bedtime ( $\Delta$  1h)
- Regular breakfast, lunch, and dinner time ( $\Delta$  30 mins)
- Regular workout time (∆ 30 mins)

# - Supplementation

- Vitamin D3 in the morning
- Vitamin B12 in the morning
- GABA after dinner
- Omega 3 after dinner
- Magnesium after dinner
- L-Threonate one hour before sleep (check if this works for you)

- Apigenin one hour before sleep (check if this works for you)
- Ashwaghanda one h before sleep (check if this works for you)

## - Timing

- From 13.00 on: No more caffeine
- From 19.00 on: No more food
- From 19.00 on: No more heavy workouts
- From 20:00 on: No more cardio
- Wake Up Routine
  - Get immediate sun / bluelight exposure
  - Drink 200 ml of water
  - 5 min sports
  - Meditation / visualisation
  - Fluid, protein-rich breakfast
- Winding Down Routine (starts 2h before going to bed)
  - No stressful activities
  - No blue light
  - No calls
  - Drink (to achieve a total of 2-3L)
  - Prepare environment (30-60 mins before sleep)
    - Phones on flight mode and away from bed
    - Computer out of room
    - Open window: 16-19 degrees celsius
    - Make room dark / use sleeping mask

Reduce noise levels / earplugs

Sleep Ritual (always do in same order; 10-30 mins before sleep)

Turn on meditation music

Do quick yoga / stretching session (5-20 mins)

Go to bed and start audio book / physical book

Brush teeth

Sleeping mask

**Action 2:** Buy a sleeping mask. Buying a sleeping mask will help you maintain a dark

sleep environment when sleeping. Especially when combined with a stable circadian

rhythm, you'll be surprised by how positively your sleep will be affected.

Action 3: Buy blue-light filtering glasses. While dimming lights is a good strategy,

blue-light filters are, as described above, an even more effective filter. Similar to

dimming light everyday, I recommend you get used to wearing your glasses 1 hour

before going to bed.

Action 4: Buy your sleep-enhancing natural supplement stack. L-Theanine, Gaba, and

Omega 3 should be on your list.

Physical Energy: Nutrition

Theory

In this chapter, I aim to simplify the overwhelming world of nutrition by focusing on a

select few principles that are solidly backed by evidence to enhance your energy levels.

Committing to these guidelines for at least 30 days, I assure you, will significantly boost your energy. However, should adhering to these principles detract from your quality of life, don't hesitate to set them aside. There are numerous other effective strategies for managing your energy levels.

Don't overeat. A calorie deficit is a proven way of making you more intelligent (better cognitive performance) and increasing your energy levels (having more willpower). This is supported by research that indicates a direct correlation between moderate caloric restriction and improved brain function. For instance, a study published in the National Academy of Sciences found that caloric restriction can improve memory in elderly individuals [LINK]. Evidence from research conducted by the American Journal of Clinical Nutrition suggests that a lower calorie intake is associated with better cognitive performance, potentially due to reduced oxidative stress and improved insulin sensitivity, which are beneficial for brain health [LINK]. Additionally, the concept of increased energy levels and willpower in the context of a calorie deficit is explored through the lens of improved metabolic health. Studies indicate that calorie restriction can enhance energy metabolism, leading to higher levels of adiponectin [LINK], a hormone associated with increased insulin sensitivity and energy regulation. This hormonal adjustment could contribute to the feeling of having more willpower, as your body becomes more efficient at utilizing energy.

Do regular (intermittent) fasting. Fasting in general increases brain derived neurotrophic factor (BDNF) - which improves cognitive performance and triggers neuroplasticity (i.e. it enhances your brain). Limiting your calories to 600 every other day boosts your BDNF

by up to 400% as studies show [LINK 1, LINK 2]. The most effective way of fasting, however, is intermittent fasting. The goal of intermittent fasting is to not fast straight for a certain period of days. Rather, you fast for a certain period of time every day. My recommendation is to eat within a 6 hour window, i.e. to fast for 18 hours every day. This appears to offer maximum benefit, but positive effects in general begin from any period longer than 12 hours. If 18 hours are too brutal for you, try to start with less.

Fasting, the act of intentionally refraining from eating for a specific period, has been practiced for centuries across cultures and religions. Beyond the spiritual and health benefits often associated with fasting, there's a growing body of scientific evidence pointing towards its positive impacts on cognitive functions and concentration. When we fast, our bodies switch from using glucose as the primary source of energy to using ketones. Ketones are a type of fuel that the liver produces from stored fat. This switch is believed to trigger several beneficial changes in the brain.

A key molecule produced during fasting is BDNF. BDNF plays a pivotal role in neural health, promotes the survival of neurons, and encourages the growth of new neurons and synapses. Elevated BDNF levels are linked to improved memory, learning, and higher cognitive function.

Fasting has also been found to have neuroprotective effects. It increases the resistance of neurons to stress and is associated with a lower risk of neurodegenerative diseases. Moreover, fasting stimulates autophagy, a process where cells break down and remove damaged molecules and dysfunctional mitochondria. This cellular "clean-up" process can help maintain optimal brain function and resilience.

There's a theory, rooted in evolutionary biology, which suggests that short-term fasting can enhance alertness and cognitive performance. Our ancestors, when deprived of food, would need heightened cognitive abilities to source and hunt for food effectively. Thus, a mild hunger might act as a signal to the brain to enter a state of heightened alertness and capability. While we are not entirely sure of how valid this evolutionary origin is, the validity of intermittent fasting on cognitive function and concentration has been shown in a myriad of studies [LINK].

The potential benefits of improved focus, memory, and learning can be invaluable in the fast-paced world of entrepreneurship. However, it's essential to approach fasting mindfully. Not every fasting method suits everyone, and individual responses can vary. If considering fasting, it's wise that you start slowly, listen to your body, and possibly consult a healthcare professional. While fasting has its merits, a balanced and nutrient-rich diet also plays a crucial role in brain health and concentration. Essential fatty acids, antioxidants, and specific vitamins and minerals contribute to optimal brain function. Therefore, when not fasting, ensuring a diet rich in these nutrients can complement the cognitive benefits gained during fasting periods.

#### Caffeine

In a study called "The Cognitive and Physical Performance Enhancing Effects of Caffeine", researchers aimed to assess the direct effects of caffeine on cognitive tasks and physical performance. Participants were given a range of cognitive tasks and physical tests after consuming varying amounts of caffeine. The study indicated that participants in the test group showcased improved performance in cognitive tasks,

particularly those that required sustained attention and fast reaction times. Physical tests also showed a slight improvement in stamina and reduced perceived exertion.

Caffeine's psychoactive effects have been the subject of research for decades. The theory goes as follows: At the cellular level, caffeine functions as an antagonist for the neurotransmitter adenosine. Adenosine promotes relaxation and sleepiness by slowing down nerve cell activity. When caffeine is consumed, it blocks adenosine receptors. By doing so, it effectively prevents this slowdown in the brain's nerve cell activity, leading to heightened alertness and wakefulness.

Given its stimulating effects on the brain, caffeine can enhance several cognitive functions:

- Improved Focus: Caffeine can increase alertness, helping individuals concentrate on tasks for extended periods.
- Enhanced Cognitive Functions: Studies have shown that moderate caffeine intake can boost memory, mood, and other cognitive functions.
- Reduced Perceived Effort: By increasing dopamine production (the "feel good" neurotransmitter), caffeine can make tasks seem less challenging than they actually are, potentially boosting motivation.

Used judiciously, caffeine is probably the most powerful natural drug you can consume to increase concentration and improved performance. However, it's essential to strike a balance. Overconsumption can lead to diminished returns and potential health risks. As

with any substance affecting the brain and body, moderation and self-awareness are key.

If you experience stress and jitters, it can be especially beneficial to pair caffeine with green tea. While caffeine acts as a stimulant, enhancing alertness, wakefulness, and cognitive performance, L-theanine, an amino acid found in green tea, promotes relaxation without causing drowsiness. It's believed to work by increasing the levels of certain neurotransmitters in the brain, such as serotonin, dopamine, and GABA, which promote feelings of calm and well-being.

When caffeine is paired with L-theanine, there's a synergistic effect that's been observed in multiple studies. L-theanine seems to moderate some of the stimulatory effects of caffeine, such as jitters, increased heart rate, and heightened stress levels. Instead, consumers report a more 'smooth' experience, describing it as "alert calmness." The combination offers a balanced and focused energy. While caffeine sharpens alertness, L-theanine helps in maintaining a calm focus. This blend allows for sustained concentration without the anxiety or restlessness that can sometimes accompany caffeine intake.

If you look for sustained energy and focus without the side effects of coffee jitters or the subsequent crash, combining caffeine with L-theanine can be an excellent option. It allows you to remain attentive to tasks while also maintaining a calm demeanor, which can be particularly useful in high-pressure situations.

Another important thing to keep in mind is timing of caffeine consumption. Upon waking, our bodies produce a higher amount of cortisol, which I explained earlier during our chapter on sleep. It's part of our circadian rhythm, making us feel alert and awake. Consuming caffeine during this natural cortisol surge can lead to two main issues: Since cortisol serves to make us feel alert, adding caffeine to the mix might not have as pronounced an effect as one might hope. You're essentially trying to boost an already peaked alertness level. Moreover, regular consumption of caffeine during peak cortisol hours can lead to increased caffeine tolerance, meaning over time, you'd need more caffeine to achieve the same wakefulness effect. Lastly, adenosine is a neurotransmitter that promotes sleep and relaxation. Throughout the day, as adenosine levels rise, we begin to feel more tired. Caffeine's primary mechanism of action is blocking adenosine receptors, preventing us from feeling sleepy. In the early morning, because the body has been at rest, adenosine levels are naturally lower. Consuming caffeine when there's not enough adenosine to block might diminish its overall wakefulness effect.

Given that exercise increases adenosine production, consuming caffeine after exercising might produce a more pronounced effect on alertness and wakefulness than consuming it at rest. This is because there's more adenosine present for caffeine to compete with, making its effects potentially more noticeable. Considering the positive effects that come from e.g. jogging, such as increased blood flow, release of neurotransmitters, reduction of stress, and enhanced executive functions, pairing caffeine with regular exercise seems especially effective.

By waiting to consume caffeine until after the morning cortisol surge, typically 1-2 hours after waking, you can harness the full power of caffeine without building unnecessary tolerance or wasting the boost during an already naturally alert period.

### Omega 3

Omega-3 fatty acids, commonly found in fish oils and some plant sources, are widely recognized for their health benefits, especially concerning cognitive function and concentration. Let's delve into this topic.

Omega-3 fatty acids are essential for brain health. About 60% of the brain is made up of fats, and a significant portion of these are omega-3 fatty acids, specifically the types known as EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid). DHA, in particular, is a major structural component of the brain and retina of the eye. Adequate DHA levels are essential for proper brain development in infants and cognitive function throughout life.

Research has consistently shown the positive effects of omega-3 intake on cognitive functions. A study found that regular consumption of omega-3 fatty acids was associated with slower cognitive decline in older adults. The benefits are not just limited to the elderly [LINK]. Omega-3 supplements have also been found to improve attention and cognitive function in children and young adults with attention deficit hyperactivity disorder (ADHD) [LINK]. Drawing from the studies above, Omega-3s have strong anti-inflammatory properties. Chronic inflammation is believed to be a significant factor in cognitive decline, depression, and a variety of other mental health issues. By

reducing inflammation, omega-3s can potentially help protect the brain from damage and improve overall cognitive function.

Omega-3s also play a crucial role in mood regulation. Lower levels of omega-3s have been linked to increased rates of depression and anxiety. Proper intake of these fatty acids can help stabilize mood, making it easier to concentrate and stay focused on tasks. A meta-analysis in the journal "Translational Psychiatry" found that omega-3 supplementation had a beneficial effect on major depressive disorder and other psychiatric conditions [LINK].

While many supplements tout cognitive benefits, omega-3s have a substantial body of research behind them. They are not a quick-fix solution like caffeine, but their consistent intake can lead to long-term cognitive benefits.

When your work demands optimal cognitive function, attention to detail, and the ability to process vast amounts of information, maintaining optimal brain health is crucial. Incorporating omega-3 supplements or increasing the intake of omega-3-rich foods like fatty fish can be a strategic decision.

#### Creatine

Creatine, a molecule produced in the body and found in various foods, is most commonly associated with sports and muscle development. However, its effects extend beyond just muscular enhancement. Creatine plays a role in brain health and cognitive function, offering potential benefits for concentration and mental clarity.

The brain, while accounting for only about 2% of the body's weight, consumes approximately 20% of the body's energy. Creatine's primary role is to provide energy to cells, especially muscle cells. It does so by increasing the formation of adenosine triphosphate (ATP), the cell's energy currency. In the brain, maintaining ATP levels is crucial for optimal function and cognitive tasks. Creatine supplements can aid in replenishing ATP, providing the brain with the energy it requires.

A study found that creatine supplementation could help improve cognitive performance, especially in tasks that require short-term memory and quick thinking [LINK]. Additionally, creatine might reduce mental fatigue. In a study involving sleep deprivation, subjects supplemented with creatine showed better performance on cognitive tasks than those who did not take creatine.

Emerging research suggests that creatine may offer protective benefits against certain neurological conditions, including Parkinson's and Huntington's disease. While the research is still in its early stages, these findings underscore creatine's potential role in maintaining brain health.

Unlike omega-3s, which offer long-term benefits for brain health, creatine provides more immediate and short-term effects on cognitive function. While its primary association is with muscle energy, its role in brain energy metabolism makes it unique among cognitive enhancers.

Especially if your days are long, demanding, and mentally taxing and you need to make quick decisions, or endure long hours, maintaining optimal brain function becomes paramount. Creatine supplementation might provide that extra boost in mental clarity and energy for you. However, as with all supplements, it's essential to consult with a healthcare professional before starting a regimen.

### What to eat for maximum productivity.

- Eat or supplement omega-3 fats as found in nuts, avocados and fish and supplement magnesium. Those are the only supplements known to be associated with higher BDNF-release
- Get enough protein by eating beans, non-fatty meat, nuts, eggs, fish and other seafood. There is ample scientific evidence that a protein-rich breakfast boosts your energy throughout the day [LINK].
- Eat enough vegetables to get relevant antioxidants and other micronutrients
- Eat long carb foods such as brown bread, brown noodles, rice or vegetables
- Drink water and fresh juice (fructose affects your body differently than glucose or dextrose)
- Drink or supplement coffee, black tea, matcha tea, or guarana in the morning to boost your energy. These supplements are the healthiest and most effective known energy boosters.

### What to avoid eating for maximum productivity

- Avoid trans- and saturated fats as found in meat and oil
- Avoid sugary drinks
- Avoid white bread

- Avoid sweats
- Avoid alcohol. Not only does alcohol affect your brain negatively, it also worsens your sleep and reduces the energy you have the next day

#### **Actions and Habits**

**Habit 1:** Don't overeat. As should be abundantly clear by now, short-term cognitive performance boosts, long-term enhanced brain function, reduced risk of disease, and so many more positive effects come from calorie restrictions.

**Habit 2:** Eat regularly and intermittently. Your meal timing affects your circadian rhythm, so try to eat at the same time. Restricting your body from any food over periods longer than 12 hours has lots of positive effects on your short-term performance and long-term health.

**Habit 3:** Start with a protein-rich breakfast. A protein-rich breakfast provides you with more energy and higher cognitive performance during the day.

**Habit 4:** Avoid sugar, sweets and cheap carbs. Those lead to a quick boost in energy and a long-term dip. Eating sugar is a net negative on your daily productivity, so try to avoid it.

**Habit 5:** Avoid low-quality meat. Low quality meat is intoxicated with tons of hormones and antibiotics. Try to avoid it if you want to live long.

**Habit 6:** Avoid alcohol during the week. Alcohol inhibits your performance during and 24 hours after consumption. In the best case, not have it at all.

Habit 7: Drink regularly. It is important to not only drink enough but also regularly. The

body usually cannot process more than 100 ml of water at once, so try to drink a little

every 30 minutes.

**Habit 8:** Drink caffeine 2 hours after waking up. Your body should have produced some

adenosine and have had its natural release of cortisol and other growth hormones in the

morning before you have your first coffee.

Habit 9: Mix caffeine with L-Theanine. Take L-Theanine 40 minutes before you want the

boost and caffeine 20 minutes before you want it. This will extend the time you will stay

concentrated and flatten the effect.

Action 1: Put your eating blockers into your calendar and make sure no one can

schedule a call or appointment with you during that time. Then, try to always eat at the

same times.

Action 2: Buy a supplement stack that works well for you. I highly recommend GABA

and Magnesium for sleep as well as Omega 3, creatine, and L-Theanine for during the

day.

Physical Energy: Behavior

Theory

The power of dopamine

When we were still hunters and gatherers, distractions were less frequent, and the rhythm of life permitted a gradual rise and fall of dopamine, the chemical messenger behind feelings of pleasure and reward. Today, a simple screen tap can unleash a dopamine flood. For entrepreneurs, emails, Slack messages, and physical distractions in the office can instill a perpetual sense of playing catch-up, scattering focus and heightening stress. Moreover, modern social media platforms are engineered to captivate our brain's reward circuit, rendering focused, deep work a rarity.

This is a problem because of the pleasure-pain balance, a compelling concept that delves into the dance between the experiences of joy and discomfort. Pleasure and pain are not separate entities but are interconnected. Their respective areas in the brain overlap. When we indulge in activities that bring us immediate gratification, our brains release dopamine, leading to feelings of pleasure. However, this is often followed by a compensatory mechanism where the brain adjusts, tipping the scales towards a state of decreased sensitivity to pleasure or an increase in discomfort, striving to return to a baseline of neutrality. This adjustment can manifest as a reduced impact of the same pleasure over time or an increased threshold for experiencing it, compelling us to crave even more. The release in dopamine of a rat is increased by 55% when they eat chocolate, 100% when they have sex, 150% when they receive nicotine, 200% when they have cocaine and around 1000% when they receive heroin [LINK]. The bigger the rise, i.e. the dopamine release, the bigger the fall, i.e. the pain that is experienced afterwards. Hence, learning how to regulate the rise and fall in your dopamine levels, automatically means you learn to regulate your pain and motivation.

This is further and broader cemented by a study that investigated how regularly nations felt pain. Regular pain is felt by 33% of Americans, 18% of Asians, and 11% of Africans [LINK]. The poorer a nation, the less overexposure to dopamine-inducing activities and hence the less pain. Our evolutionary cells are not made for constant pleasure. They are optimised for environments of scarcity. The more pleasure-inducing an environment generally is, the more unnatural our bodily reactions. We are like cacti in a rainforest. We are made for a different environment compared to the one society has designed for us today. This is a crucial insight for entrepreneurs. Among all people, I argue that entrepreneurs are most exposed to constant dopamin triggers: LinkedIn and Instagram posts, emails, trouble at the company, and so on and so forth. This skill of managing your dopamine levels wasn't needed in ancient times but has become paramount for entrepreneurs in the digital age. Acknowledging and controlling these triggers has become a core skill; it isn't merely advantageous; it's a key to managing your physical energy.

The practice of dopamine fasting is a concept brought into the limelight by Anna Lembke, the author of "Dopamine Nation." She recommends temporarily stepping back from "dopamine triggers" such as social media, unhealthy snacks, and excessive work to recalibrate the brain's reward mechanism. By minimizing exposure to high-dopamine activities, we can lower our dopamine baseline, thereby diminishing our constant yearning for stimulation. Dopamine fasting isn't about forsaking pleasure but about recalibrating our capacity to enjoy simple and meaningful experiences without constant overstimulation.

A dopamine fast means to avoid activities that spike dopamine. Set boundaries around social media use, email checks, snacking, or any other habitually compelling activities sought for instant satisfaction. Instead, focus on low dopamine pursuits such as reading, meditation, walking, and engaging in direct conversations. These activities may not provide the immediate "rush" of pleasure, yet they contribute to a lasting and richer sense of contentment. Lembke refers to research that if we are used to certain dopamine triggers, sitting through the pain long enough reinitiates homeostasis in our brain and thus restores our pleasure-pain balance. Whenever you are below the baseline that your dopamine levels are used to, you crave a trigger of higher dopamine release. By purposefully avoiding social media, constant exposure to emails and Slack messages, and other dopamine triggers that are harmful to your concentration for long enough, you will lower your dopamine baseline and find it much easier to experience levels of high energy.

Next to dopamine fasts, there are multiple things you can do to increase your dopamine levels long-term instead of a short, momentary spike. One of my favorite ones is ice bathing: An ice bath might increase your dopamine levels between 250-500% [LINK] including a longer-lasting positive effect. The effect is different to drugs. Cocaine triggers a rapid, unsustainable release of dopamine, leading to dependency and a myriad of health issues, whereas ice bathing stimulates the body's own natural mechanisms to enhance mood and resilience without the adverse effects.

Recognizing ice bathing's potential, some experts even suggest its use as a supplementary treatment for cocaine addiction. Integrating ice baths into one's routine

could not only aid those battling addiction but also enhance productivity at work. It has been proven that cold exposure initiates a stress response that, interestingly, leads to better mood and energy [LINK]. By starting the day with an ice bath, you might harness this natural dopamine boost to improve focus, elevate mood, and increase overall work performance, tapping into a profound way to kickstart the day with high physical energy.

The same has been shown for intermittent fasting and exercise. A study titled "The Effects of Fasting During Ramadan on the Concentration of Serotonin, Dopamine, Brain-Derived Neurotrophic Factor and Nerve Growth Factor" investigates the impact of fasting on the concentration of neurotransmitters, including dopamine, and suggests an increase in dopamine levels after a period of fasting [LINK]. Other studies show that dopamine levels increase between 150-250% when exercising, especially after heavy cardio such as bicycle exercises to maximum heart rate [LINK 1, LINK 2].

Endurance exercises are much more than a dopamine booster, though. They increase the heart rate, which pumps more oxygen to the brain. This increased blood flow has been associated with better cognitive function. A study found that aerobic exercise can improve cerebral blood flow and, as a result, cognitive functions [LINK].

Endurance sports have even been linked to the production of new neurons, especially in the hippocampus, a region critical for learning and memory. A study, published in the Journal of Cerebral Blood Flow & Metabolism, demonstrates that aerobic exercise training increases the size of the anterior hippocampus, leading to improvements in memory. The research was conducted in a randomized controlled trial with 120 older adults and showed that aerobic exercise selectively increased the volume of the

anterior hippocampus, which is associated with spatial memory acquisition. The study also found that increased hippocampal volume after the exercise intervention translated to improvements in memory performance. [LINK] Another study published in the Journal of Alzheimer's Disease, investigated the effects of aerobic exercise on cognitive function in healthy older adults. The research involved a randomized controlled trial with 206 participants, who were assigned to either an aerobic exercise group or a stretching and toning control group. The study found that the aerobic exercise group showed significant improvements in cognitive function, including attention, processing speed, and executive function, compared to the control group. The results suggest that aerobic exercise can be beneficial for healthy aging of the brain and may help to prevent cognitive decline. [LINK]

Endurance exercises can furthermore lead to better sleep patterns, which can subsequently lead to better cognitive functions and concentration. A study found that 150 minutes of moderate to vigorous activity a week provides a 65% improvement in sleep quality. [LINK] They are one of the most powerful tools in boosting your overall health and energy levels.

Lastly, oxytocin, the "love hormone," is pivotal in boosting dopamine levels. Acts of kindness, sexuality, physical contact, and meaningful social engagements elevate oxytocin, which, in turn, can naturally enhance dopamine levels. By investing in meaningful relationships, both platonically and romantically, you will boost your dopamine levels, too.

In the 21st century, mastering dopamine control transcends being a mere productivity technique; it's a critical skill for flourishing amidst constant distractions. By adopting practices like dopamine fasting and seeking natural ways to boost dopamine, we can regain our concentration, improve our well-being, and deepen our relationships.

## **Drugs and addiction**

Try to avoid addictive drugs, even for temporary performance boosts. A study shows that rats exposed to cocaine for 10 days showed very different behavior on the tenth day compared to the first one. Every dose of cocaine the next day triggers a slightly different result depending on how long rats already received cocaine. After 10 days, the researchers waited 1 year, which is much longer relative to a rats lifespan compared to a human lifespan, until they gave the rats another dose of cocaine. The rats didn't experience a reset. They experienced the same behavior when exposed to cocaine the 10th day in the initial part of the experiment. A further neurological study showed that their brains haven't changed. These effects are often irreversible, so try to avoid unnatural substances such as cocaine in the first place [see LINK 1, LINK 2, LINK 3]

#### The power of serotonin

Serotonin, often referred to as the "feel-good" neurotransmitter, plays a pivotal role in regulating mood, energy levels, and self-esteem. Its impact on these aspects of our well-being is well-documented in numerous scientific studies. Higher levels of serotonin are associated with improved mood and a sense of calm and happiness. This is

supported by research that shows a direct correlation between serotonin levels and the mitigation of depression and anxiety symptoms. For instance, a landmark study published in the "Archives of General Psychiatry" found that individuals with higher serotonin levels exhibit fewer signs of depression and anxiety. The study, which analyzed cerebral spinal fluid levels of 5-HIAA, a serotonin metabolite, found that higher 5-HIAA levels were consistently linked with reduced depression scores. [LINK]

Similar to dopamine, our ancestors had a much better lifestyle promoting serotonin. Serotonin is a key neurotransmitter responsible for mood regulation and is influenced by direct, tangible experiences. Today's environment promotes isolation and indoor lifestyles, diminishing our connection to those very sources that naturally elevate our mood. A barrage of digital notifications and the constant glow of screens disrupt our internal equilibrium. However, our ancestors found serotonin levels modulated by the simplicity of their environment – sunlight exposure, physical activity, and community engagement.

Serotonin depletion manifests as mood disorders, anxiety, and a general sense of malaise. Understanding and actively managing your serotonin levels is not just beneficial for your mental health but also essential for sustaining productivity, creativity, and overall well-being.

Similarly to dopamine fasting, you can reduce exposure to activities that can lead to serotonin depletion, such as excessive screen time, poor diet, and lack of physical activity, and focus on engaging in behaviors known to naturally boost serotonin levels, such as spending time in nature, exercising, and fostering meaningful social

connections. While not fasting in the traditional sense, this approach advocates for a deliberate modulation of our lifestyle choices to optimize serotonin levels, thereby enhancing our mood and cognitive functions.

This includes exposure to sunlight, which directly influences serotonin synthesis; physical exercise, which boosts serotonin and its precursor tryptophan; and engaging in meaningful social interactions, which have been shown to elevate serotonin levels. The goal is to create a lifestyle that supports serotonin balance, contributing to a more stable mood and improved focus, particularly important for entrepreneurs navigating the stresses of building and managing a business.

The science behind natural serotonin boosts is compelling, highlighting the benefits of practices such as mindfulness meditation, a balanced diet rich in tryptophan, and regular exercise. Mindfulness meditation has been shown to increase serotonin levels, contributing to a sense of calm and well-being. A diet that includes tryptophan-rich foods, such as eggs, cheese, turkey, and nuts, provides the building blocks for serotonin synthesis [LINK]. Exercise, particularly aerobic activity, increases both the production and release of serotonin, enhancing mood and energy levels. [LINK] Furthermore, serotonin's role in regulating sleep and circadian rhythms indirectly contributes to increased energy and mood. Adequate sleep, regulated by serotonin, is crucial for cognitive function, emotional regulation, and overall physical health. A review in "Nature Reviews Neuroscience" highlighted the importance of serotonin in sleep regulation and its implications for mood and mental health, stating that disruptions in

serotonin-mediated sleep patterns can have profound effects on mood and energy

levels [LINK].

**Actions and Habits** 

Habit 1: Dopamine fasting. Try to avoid constant exposure to activities that trigger

short-term dopamine spikes such as social media, watching series, and email

notifications.

Habit 2: Icebathing. Do an ice bath or a cold shower every day. The effects on your

energy levels during the day and your immune system are undeniable.

Habit 3: Exercise to maximum heart rate. Try to get between two to three hours of

exercise every week to boost those hormones that correlate with high energy levels.

Habit 4: Get regular exposure to social relationships no matter how busy you are. Social

contact does boost oxytocin, dopamine, and serotonin levels.

Mental Energy: Motivation

Theory

**Introducing Willpower** 

Some individuals seem to 'just have it,' while others do not. However, modern science

has carefully dissected the phenomenon of willpower. At its core, willpower functions

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like a muscle that can be both trained and depleted. There are specific factors that determine the amount of willpower you have, factors which you can understand and leverage.

The importance of willpower is frequently highlighted by the Stanford Marshmallow Experiment [LINK], which I highly recommend you watch before continuing reading this eBook. In the video, little children are confronted with a choice: They either get one marshmallow now, or two marshmallows later. Yet, the task comes with a difficulty: The children had the marshmallow placed on a plate in front of them during the entire waiting time. Only if they did not eat that marshmallow within the first ten minutes did they get the second one. [LINK]

Interestingly, this experiment was part of a long-term study. The children who managed to wait the entire 10 minutes were not only adorable to watch, but also became much more accomplished individuals in their later lives. Specifically, those who were able to delay gratification were described by their parents as much more competent individuals. Furthermore, a subsequent follow-up study revealed a correlation between SAT scores (an intelligence test for college entry in the US) and the ability to delay gratification. Another study identified differences in the brains of individuals who delayed gratification. High delayers exhibited more active prefrontal cortexes, which orchestrate goals, thoughts, and actions, essentially defining a person's ability to plan and be disciplined. Studies have even found correlations between delaying gratification and body mass index (BMI). [LINK]. Many people have attacked this study since, but the

link between being able to delay gratification and success in life is so evident among dozens of studies I have read so that I feel compelled to leave them in here.

As you could see in the video, many of the children that made it used tricks that helped them to distract themselves. These tricks allowed them to circumvent the usage and thus the depletion of willpower. Many more studies afterwards, which focused on self-control, demonstrated this effect further, for instance by applying tricks to dieting. Tricking yourself into dieting is much more effective than doing it wilfully.

Next to this, there is a controversial theory that suggests that willpower can be trained. Baumeister's book "Willpower" introduces the concept of trained willpower even though his concept of ego depletion and sugar-induced willpower gains have been largely disproven by now. [LINK 1] [LINK 2]

A study conducted by two Australian psychologists Oaten and Cheng demonstrated that when students had to exercise more willpower, i.e. during exam period, they performed worse in laboratory willpower tests. Most interestingly, though, the consequences reached far beyond ordinary laboratory experiments. Students started wearing dirtier clothes, stopped exercising, and smoked more cigarettes [LINK]. Even junk food was consumed up to 50% more times. These students weren't doing all of this to save time. In fact, they reported they felt more eager to go out with friends. Some students even reported worse studying habits during the exam period — exactly the opposite of what one would expect. Moreover, students overslept and spent money more impulsively.

There are more and more studies that show that people believing that willpower exists and is beyond one's control are much more prone to the concept and much less productive in general. People who have a tendency to justify their shortcomings through external circumstances that are seemingly without their control tend to also blame willpower for their own laziness. Don't be that kind of person. Note that a muscle can also be trained and that once a task has become a habit, no more willpower is required. There are people who can be productive for 16 hours a day, six days a week, and those individuals are not genetically predisposed for high levels of willpower. They are so productive because they have found a system that works for them, have installed the right habits, and usually have a high locus of control. [LINK]

Moreover, there are certain "boosters" of willpower that generally increase motivation. Muraven, for example, found out that money does the trick: Subjects performed badly in his perseverance exercises. However, when people could win money, willpower suddenly seemed to spark again. More generally, incentives work wonders, even if they are set by ourselves. [LINK] You can therefore improve your motivation by being clear about your reward and artificially creating a reward.

Other studies show that you should focus on one project at a time. Focussing on multiple projects reduces willpower quicker and additionally makes you less productive. Focussing on one goal at a time may helps you to preserve willpower longer. And enjoying making decisions does so, too. However, only in the short term a study finds. People who enjoyed making decisions didn't deplete their egos as fast in the short term

for approximately 4 minutes – but just as much in the long term – after approximately 12 minutes. [LINK]

The last trick stems from one of the most famous and thought provoking experiments around willpower. In a striking study, judges were investigated on their likeliness to make courageous decisions, such as acquitting former prisoners. In the morning, they made courageous decisions in approximately 65% of cases. The number dropped to 0 until lunch and averaged 65% afterwards. Why the sudden change? Their willpower was exhausted after making several hard decisions. Interestingly, they restored their willpower after having made a break. After one to two hours of having a break, your willpower should be restored. [LINK]

#### How to manage your willpower.

Rethink your daily structure. Are you performing tasks that require lots of motivation? Are you performing tasks in the evening that require lots of willpower and should instead be done in the morning? Adjust your day so that it makes sense considering that willpower might behave like a muscle. A good rule of thumb is: Start with the most challenging task in the morning. And: If it's late in the evening, or you know your willpower is depleted, don't start any challenging task at all. The effects might be much more detrimental than simply postponing it. This is also how Google X operates and identifies the most important tasks to start with. Usually, but not always, the tasks that cost you more willpower are also more essential. Postponing them until later during the day weakens the quality of your delivery. You do not want to do this with your most important tasks. [LINK]

Motivate yourself by setting yourself goals and giving yourself proper rewards in case you reach those goals. Those can reach from you allowing yourself to take the evening off with your partner to allowing yourself to eat some tasty ice cream. Reaching goals has another great advantage on the side: It triggers dopamine which helps your brain form neurons ten times as fast and thus considerably amplifies your learning output.

[LINK]

Enjoy what you are doing. There is fun to be found in everything, as daunting or irrelevant as the task might seem. Mihály Csíkszentmihályi describes in his book how people found enjoyment in assembly line work, gardening and intellectually stimulating tasks. It's about the story you tell yourself, the lens through which you look at things and the attitude with which you tackle your tasks. We will look deeper at flow in the next chapter. [LINK]

# Visualisation and autosuggestions boost your willpower

The human mind is so powerful that the mere act of visualization can influence physical skills and even muscle growth. Numerous studies across various disciplines have delved into the impact of visualization, and the results are often staggering.

In a compelling experiment involving piano players, researchers divided participants into two groups. One group practiced a particular piece of music on the piano for a set duration daily. The other group, however, was instructed not to touch the piano but to sit quietly and just visualize playing the piece. When the results were analyzed in the fantastic paper "The plastic human brain cortex", both groups displayed almost

equivalent levels of skill improvement. The mere act of mental rehearsal had, astoundingly, closely mirrored the benefits of actual practice. [LINK] A similar study was conducted with basketball players. Participants were divided into groups, with one group practicing free throws, another only visualizing the act, and a control group doing neither. The group that physically practiced improved their shooting by 24%, but intriguingly, the visualization-only group improved by an impressive 23%, nearly matching the physical practice group. [LINK] In an even more astonishing set of studies named "From mental power to muscle power—gaining strength by using the mind", it was found that simple visualization can lead to muscle growth. Participants who merely visualized exercises not only maintained their muscle strength but, in some cases, even witnessed muscle growth, albeit not as pronounced as those who physically engaged in the exercises. [LINK]

Next to visualising activities, focusing on end results might be just as powerful. A study by Oettingen and colleagues explored a technique called "mental contrasting." Participants visualized a desired future outcome and then contemplated the potential obstacles that stood in their way. This method not only increased motivation but also improved the chances of taking action toward achieving that outcome. In the realm of career planning, this means that merely visualizing success is not enough. Acknowledging and preparing for potential challenges makes individuals more proactive and determined in their career paths. [LINK] A research piece by Latham and Seijts delved into the high-performance cycle. Their findings suggest that visualizing successful task performance significantly boosts subsequent task performance. In an

entrepreneurial setting, this implies that founders who regularly visualize themselves excelling with their venture are more likely to exhibit enhanced performance. [LINK]

If the mere act of visualization can mirror real-life results in music, sports, corporate environments and physical health, then the process of mentally rehearsing hiring conversations, speeches, or product launches can have tangible benefits too. I recommend you especially focus on:

- Preparing for Challenges: Just as a pianist visualizes their performance, an entrepreneur can mentally rehearse confronting potential hurdles, refining strategies and decision-making processes in their mind before implementing them.
- Boosting Confidence: Visualizing successful pitches, product launches, or any other pivotal moments can cultivate a positive mindset, anchoring confidence in actual scenarios.
- Aligning on Goals: Visualising your goals and remembering them

Furthermore, this ties into the concept of autosuggestion. As coined by Napoleon Hill in "Think and Grow Rich", autosuggestion is the technique of feeding one's subconscious positive thoughts and affirmations. When entrepreneurs combine visualization with positive affirmations, they essentially program their minds to believe in the possibilities of their goals, thus manifesting a reality where those goals are achievable.

In conclusion, visualization and autosuggestion aren't just abstract concepts or reserved for the domains of sports and music. They are proven tools that can be wielded by entrepreneurs effectively. While we don't know why they work exactly, there is profound empirical evidence of them having a positive effect on performance and success.

These studies underscore the significance of visualization in career advancement. When individuals visualize their professional goals and the steps needed to achieve them, they align their subconscious thoughts with actionable steps in the real world. For entrepreneurs, this means that consistent visualization can not only enhance individual performance but also positively influence the culture and ethos of their entire organization. Encouraging team members to visualize their contributions and outcomes can lead to an overall more motivated, proactive, and high-performing team.

# Willpower drainers

Conflicting goals make willpower dry up faster [LINK]. If you set your goals, make sure that they are in line with each other. As easy as this sounds, most of us fail at this task simply because of trying to avoid to say no. Promising your girlfriend to be home early and committing to extra work at the same time is a classic example. This creates worry, worry creates stress, and stress depletes your willpower. A study shows that merely perceiving your life as stressful makes you less disciplined and pertinacious. [LINK] Mindset is indeed king. How we think about ourselves plays an important role for self-regulation.

Moreover, another factor that hinders you from reaching your goals is: Reaching your goals [LINK]. As ironic as this finding sounds, it makes intuitive sense. The further you

think you've made it towards your goal, the higher is your urge to reward yourself. This is known as goal liberation. The aforementioned study found that dieters that were reminded of their progress in terms of losing weight chose a chocolate bar over an apple in 85% of cases — compared to 58% when not reminded about their progress. A similar study found that once students were encouraged to feel good about the time studied so far, were much more likely to play beer pong. The finding also has another implication: Don't set too many sub-goals. Reaching those might give you the feeling of doing well, but it's nothing more than a cheap trick of your mind seducing you into less productive behavior.

Thirdly, simply the illusion of productivity makes you more unproductive. This is especially true for to-do lists. Studies show that the mere fact of creating a to-do list makes people more likely to spend time on leisure activities. You might know this very well. Do you remember the last YouTube video you watched about productivity, which made you instantly feel more productive? Even if you haven't produced any practical results yet? Or do you remember the last time you felt good about a canceled call because suddenly extra time opens up? Yet the call is still to be made on another day, and if not, the call wasn't necessary in the first place. [LINK]

## **The Progress Principle**

In reality, true motivation comes much more from making genuine progress. In the insightful book "The Progress Principle," Teresa Amabile and Steven Kramer lift the curtain on a compelling idea: the sensation of making meaningful progress is the most potent morale booster in the workplace. After sifting through nearly 12,000 diary entries

from different employees, a pattern emerged: on days filled with progress, even if minor, individuals felt a deeper sense of motivation and satisfaction. On the flip side, encountering hurdles or feeling stagnated led to a significant dip in spirits. The takeaway? For those in managerial positions, ensuring a daily rhythm of progress and clearing potential roadblocks becomes the key to cultivating a motivated workforce.

If progress were a song, willpower would be its rhythm. Several studies cement the intimate relationship between the two. Oettingen's research cited before delved into how visualizing a successful outcome, coupled with recognizing the path to get there, amplifies an individual's willpower. It's akin to mentally rehearsing for success. Baumeister's 1998 study painted a similar picture. Participants who tasted success, even in small measures early in a task, displayed a heightened sense of resilience in later, unrelated challenges. It's as if one victory fuels the spirit for subsequent challenges.

It is my personal experience that progress works as well as a self-motivator as it does motivate a team. By acknowledging even the smallest of wins for yourself, you can keep yourself motivated. Mapping out short-term, achievable goals can serve as the stepping stones in the larger journey of entrepreneurship. During my weekly and daily reviews, I try to see progress compared to last week and yesterday. Seeing constant progress in my personal development and the outcomes I achieve motivates me to push even harder the next week and day.

In the world of entrepreneurship it's often the small, consistent steps forward, underscored by progress, that lead to groundbreaking leaps. Your ability to make

yourself aware of those little wins and baby steps towards your goal directly correlates with your motivation and willpower.

#### **Habits**

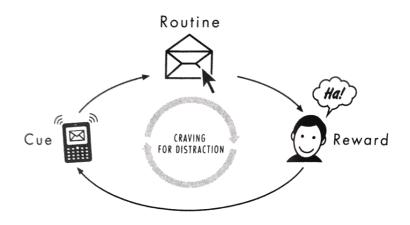
Instead of exercising willpower, you can repeat things so often that they become routineised to such an extent that no willpower is needed anymore. A fantastic analogy introduced by Norman Doidge in his book 'The Brain that Changes Itself' [LINK] goes as follows: Imagine you are on the top of a snowy mountain and about to slide down. The first trail you start to slide down is absolutely random. After you have pioneered through a couple of new trails, the existing trails become deeper and broader. You will likely slip into an existing trail and stick to it, as the snow at its sides prevents you from slipping off course. At the same time, running down the trails becomes easier and quicker.

This is roughly what happens in your brain when learning new behavior. The more often you do a certain task, the less effort you need to perform it. The neuronal pathways get stronger and stronger. However, at the same time, it is more likely to slip into already adopted behavior instead of acquiring new skills. In short: Neurons that fire together, wire together. This is often known as Hebb's postulate and was introduced in 1948 in his book 'The Organisation of Behavior' [LINK]. The theory has been widely confirmed, adapted and greatly glorified. [LINK 1, LINK 2, LINK 3, LINK 4, LINK 5, LINK 6] There are exceptions, such as "neural eavesdropping" which are not connected to the content of the next paragraphs [LINK 1, LINK 2].

The concept is simple but carries profound implications. First, it elucidates why habits are so challenging to break. This principle in neurology, known as "use it or lose it," was coined by Dr. Kopp-Scheinflug from LMU in Munich. Each time you refrain from engaging in a certain habit, you weaken the neural connection in your brain, gradually making it easier to stop. According to learning theory, simply being aware of the "use it or lose it" principle can facilitate the unlearning of bad habits. Second, establishing a habit requires less willpower than it does repetition. The mere act of doing something repeatedly renders it effortless. Concurrently, a minor change in one area can catalyze numerous positive changes elsewhere. James Clear refers to this as 'atomic habits' in his recently published book of the same title [LINK]. He discusses the notion that a small daily adjustment can culminate in remarkable long-term results—a 1% change daily equates to a 3780% change over a year. The concept that such habits can 'spill over' and ignite many other unrelated positive habits is derived from Charles Duhigg [LINK]. He points out that a study found regular gym attendance can lead to various other positive behaviors, such as studying more often and increased reliability. The principle 'neurons that fire together, wire together' implies that it's up to you to forge these connections in beneficial or harmful ways.

After repeating something multiple times, you foster what Duhigg calls a habit loop which is visualised below. Every habit is triggered by a cue, which initiates a routine that fosters a certain reward. For example, you get up in the morning (cue) which triggers you to do an ice bath (routine). Afterwards, you feel energised, awake and excited for the day (reward). This is an example of a good habit. A bad one might be you feeling

stressed (cue) which leads you to smoke a cigarette (routine) which makes you feel calmer (reward). There are probably dozens of little cue-routine-reward habits that you already established. Whenever there is a cue, you crave the award. It will be hard to withstand not doing the routine and you will have to exercise lots of willpower.



Source: https://www.sandordargo.com/blog/2020/05/06/the-power-of-habit

It is therefore very hard to break existing habits. The release of BDNF and dopamine is actually one of the best starting points, so overwriting cues with new routines and rewards you are excited about is a strong first strategy. Doing sports, meditating, and many of the other routines described in the previous chapter foster a neurological foundation making you more conducive to habit change. [LINK 1, LINK 2]

# Going further than mere repetition - A note on identity

In Latin, identity means repeatedly doing something. It is hence a derivation of habits. What you repeatedly do is who you are. Your habits define you more than your deliberate actions. Yet, the relationship between identity and routines is bidirectional.

James Clear invented three layers of habitual change. The first one is changing your outcomes, the second one is to change your processes and the last one, the very core, is to change your identity. If you are 'a person of discipline', you act in a different manner. That identity change can help you go to the gym more regularly, but the general principle behind is much broader than this. Seeing yourself as a disciplined person will help you get your sleeping habits right, lose weight, and much more. Proctor even argues that seeing yourself as a wealthy person, someone who is confident in expressing his interest in accumulating wealth, makes you richer in the long term. [LINK 1, LINK 2]

Experience often serves as inspiration for scientific work. It is the root that gives direction to science, not its counterpart. Therefore, I cannot resist to include a quick passage on the practical lessons I have learned from years of coaching experience. In particular, I would like to introduce a framework that I have used to initiate new habits in people.

#### **Practical Notes on Habits**

First, a habit should not be a loose thing in itself, as in one particular thing you would like to do. It is part of a bigger system, usually a goal that you have set yourself. The habit of not eating carbs after 6pm could be tied to you trying to lose weight ultimately, but just as well to you trying to sleep better. The habit of studying Mandarin for an hour every day might be tied to your career aspirations, but just as well to you trying to connect with your girlfriend. The habit of writing an hour every day might be tied to you trying to finish a book, but just as well to you becoming a good writer in general. What I

want to say with this is that our goals motivate our habits, and they are usually a means to an end.

Second, once you have made the above realisation, you can map your goal hierarchy. That could be a stretch goal and a bunch of smart goals. For most people, the the stretch goal is too far off to be motivating, such as winning a nobel price — and the actions that lead to this are unknown. I hence usually recommend to start with your SMART goals. Be clear on your goals, but don't plan them too meticulously. As you learn more about yourself and the world out there, your goals are going to change. They should change frequently on a micro-level and less frequently on a macro-level. Also, if you have many goals, give them a hierarchy. It will be impossible at one point to chase two goals at the same time, and it will paralyze your decision making.

Third, once you are clear on your goal system, make a list with all the habits (at least 10) that will help you achieve your goals. In the best case, you do that in excel and rank them by importance and ease of implementation, i.e. how easy it is to implement that habit into your routine. The first thing I recommend you do is to filter the habits by importance and delete any habit that doesn't score top 5. Afterwards, maybe to your surprise, you start with the easiest one — and you do that for the next two months as the average of adapting a new habit is 66 days. [LINK] In my own experience, though, if you are very focussed on a personal development regime, it goes much faster. Afterwards, you will move on to the next habit. If you struggle particularly with one habit, add one extra month of focussing on your implementation.

After roughly a year, you will have rewired your brain completely. Neurons that fire together, wire together. And believe me: You're going to be a completely different person. Within one year, and I have seen this time and time again, you can make the changes necessary that lead you to becoming the person you always wanted to be, because the moment you start doing so, you already are that person.

#### **Actions and Habits**

**Habit 1:** Eat the frog. Assuming you have perfected time management and vision, start with the most important task every day, no matter how bad you want to focus on something else first.

**Habit 2:** Turn repeating energy drainers into habits. Whatever requires lots of willpower from you on a regular basis can be turned into a habit. Make sure the cues and rewards are consistent and a new habit will form in 1-2 months.

**Habit 3:** Do willpower breaks. NSDR (non-sleep deep rest) is a very effective way of doing breaks. However, any break is useful. If you are noticing you can no longer motivate yourself, an NSDR break or going for a walk can work wonders.

**Habit 4:** Limit willpower drainers. Many things that cost you energy can simply be avoided. For example, I noticed that I found it immensely draining to make food for dinner when I was studying, so I started preparing my food for the entire week and froze it at the beginning of every week.

**Habit 5:** Beware of goal liberation. Do not remind yourself of how far you already made it, rather try to do the opposite. Think about how far you still need to go. Think even about times you resisted short-term urges last time and why you did so. One study finds that 70% of people reflecting on resisting past temptations indulged subsequently. That number dropped to 31% when they also had to recall why they resisted. [LINK]

**Habit 6:** Focus on one thing at a time. Singletasking makes you more motivated and productive.

**Habit 7:** Focus on and visualise progress. I recommend you do this at the beginning and end of every day as well as on a weekly basis reviewing the progress of an entire week.

**Habit 8:** Visualise your goals and formulate 3 autosuggestions about your identity and the person you would like to become.

**Habit 9:** List daily wins and reflect on how your daily habits get you closer to where you need to be.

**Habit 10:** Reward yourself for little wins. Whenever you reach something that is clearly related to an outcome or goal of yours, reward yourself. This will strengthen your habit loop.

**Action 1:** Understand which actions repeatedly lead to success and create a list of habits you consider useful. As James Clear posits: Winners and losers have the same goals. Your systems define what you achieve.

Mental Energy: Concentration

Theory

**Modulation vs Mediation** 

Two of the key ways the brain interacts with its environment are through modulation

and mediation. Let's break these concepts down into simpler terms and explore what

they really mean.

Modulation is fine-tuning our responses. Imagine you're at a bustling café. Background

chatter, the hiss of the espresso machine, a baby crying - these are all stimuli your

brain is receiving. Modulation is like the brain's built-in volume knob. It allows us to "turn

up" or "turn down" our response to these stimuli. If you're engrossed in a good book,

your brain might turn down the volume of the baby's cries, so you barely notice it. On

another day, if you're tired or irritable, that same cry might seem overwhelmingly loud.

That's modulation in action: adjusting how intensely we process and react to

information from our surroundings. Being perfectly concentrated therefore means

turning down all other stimuli.

Mediation is actively engaging with stimuli. Now, while modulation is about adjusting

our brain's "volume levels", mediation is more about direction. Let's return to the café.

As you're reading your book, you suddenly smell the aroma of a freshly baked croissant.

Mediation is the brain's way of actively directing its attention to that particular stimulus.

It's like a spotlight, shifting focus from the book to the croissant, making you think,

"Maybe I'd like to order one." Mediation is about actively processing specific pieces of information and guiding our responses to them.

In simple terms, while modulation is about how much of our attention we give to stimuli, mediation is about where we direct that attention. Both processes work hand in hand, allowing us to navigate a world overloaded with information, ensuring we respond appropriately and effectively. By being conscious of how your brain modulates and mediates information, you can craft strategies to stay focused, make better decisions, and navigate the tumultuous waters of the business world with grace.

# **Ultradian Cycles**

You might remember our passage on the circadian rhythm. Every human has internal biological rhythms, and, next to the circadian rhythm, one of the most influential when it comes to productivity and concentration is the ultradian rhythm. It refers to recurrent periods or cycles repeated throughout a 24-hour day. The most commonly discussed is the one related to the basic rest-activity cycle.

Our bodies function on several different cycles every day. While the circadian rhythm, spanning over roughly 24 hours and governing our sleep-wake cycle, is the most well-known, ultradian rhythms operate within this daily cycle. Each of these cycles lasts between 90 and 120 minutes. One notable study regarding ultradian rhythms and its implications on productivity and cognitive function is by Nathaniel Kleitman, often known as the "father of sleep research". Though his most prominent work is on sleep, Kleitman and his student, Eugene Aserinsky, also explored these shorter cycles in

wakefulness. Let's look at the study called "Basic Rest-Activity Cycle — 24 hours of the Continuous Behavior of a Human Subject". [LINK]

Kleitman conducted an intensive study where he observed a human subject over a continuous 24-hour period. The subject's cognitive tasks, physical activity, and rest were all carefully monitored and recorded in a controlled environment. This study aimed to uncover the patterns of activity and rest in humans during both wakefulness and sleep. Kleitman identified that during the wakeful period of the 24-hour cycle, there were consistent fluctuations in alertness, concentration, and mood every 90 to 120 minutes. These peaks and troughs were labeled as the Basic Rest-Activity Cycle (BRAC). Specifically: Periods of highest cognitive function and alertness were typically around 90 minutes. Following these peaks, there was a noticeable decline in cognitive abilities and energy, culminating in a trough, suggesting the need for rest. Kleitman's findings suggest that individuals could optimize their productivity by aligning their tasks with their ultradian rhythms. Working intensively for 90 minutes and then taking a short break can align with the body's natural cycles of activity and rest, leading to sustained levels of high productivity and concentration.

Kleitman's research was foundational in understanding the ultradian rhythms in humans. By recognizing the cyclical nature of our alertness and cognitive function, we can better schedule our work and rest periods, leading to enhanced productivity and well-being. For entrepreneurs or anyone striving for efficiency, understanding and utilizing these findings can be transformative. So work in sync with the cycle- Just as people have begun to understand the benefits of aligning work patterns with our

circadian rhythms (like being most analytical in the late morning and most creative in the afternoon), there's value in aligning work tasks with our ultradian rhythms. One can harness high-energy periods for tasks requiring deep concentration and utilize the lower-energy periods for routine or restful activities.

We also talked about how important rest is during multiple other chapters. After 90-120 minutes of focused work, our brain sends signals that it needs to rest. This might manifest as restlessness, yawning, hunger, or a drop in concentration. It's essential to listen to these cues. Taking a 20-minute break can rejuvenate the mind and prepare it for the next focus period. Moreover, research on ultradian rhythms show that pushing past these natural rhythms, especially consistently, can lead to burnout, reduced productivity, and increased susceptibility to distractions.

Ultradian cycles offer a scientific backing to the age-old adage: "It's a marathon, not a sprint." By respecting the natural ebbs and flows of energy throughout the day, you can optimize your productivity and maintain a healthier mental state.

#### Flow

The most famous researcher on flow, Mihaly Csikszentmihalyi, has studied flow for more than 40 years investigating hundreds of research subjects. He believes that flow is not only a secret to productivity, but also to happiness. He reckons that flow is a state of pure absorption in the task. You will forget both time and your surroundings — and nothing but bliss will fill your body. You might experience this when playing an

instrument or doing sports. But they are everywhere, hidden, yet to be discovered by you.

Flow is so powerful because when you are in flow, there are no ultradian rhythms, no drainage of willpower, and no habitual behaviour. It describes a very specific state of mind, that is very close to meditation, when working on a set of tasks. During the next couple of paragraphs, I plan to deconstruct Csikszentmihalyi's abstract principles and add practical recommendations to help you reach flow whenever possible. Especially during work, people tend to feel unhappy, bored and unfulfilled.

# 1. Clarity of goals and immediate feedback

Be sure that you know exactly what the outcome of your focus session should be. You shouldn't aim for a certain number of lines of code or a certain number of words. You should rather aim to solve a certain problem or to finish an article. This helps you to not 'overfit' by just trying to write as much as possible. Keep the big picture in mind and let your curiosity guide you.

Moreover, it must be apparent that you're getting closer to the goal. Don't try to solve vague tasks without a clear goal. You must know that you're truly getting closer to some end and be able to gamify the activity of getting closer to it. For instance, when I do research for our articles, my goal is to have a full picture of a certain phenomenon. I won't stop until I have the feeling I fully grasp a topic. Until then, I read research papers, google, draw, write and think. Every moment, it feels like I'm solving one piece more of the puzzle — an essential requisite of flow.

# 2. A high level of concentration on a limited field

Whenever a distracting thought pops up, write it on your to-do list. When you're bored, there might be two reasons. If your goals aren't bold enough, try to adjust them so that the task gets challenging. If the task itself is way too boring, do another task. It is crucial to do something you're excited and curious about. It is also vital to have one single task and one goal to complete. If there is more than one field, spending more time on the problem will not get you closer to that specific, targeted goal.

Indeed, there is a lot of research on why you should be excited during problem-solving sessions. For instance, during excitement, your brain releases dopamine, which as we established earlier drastically helps your brain to build new neurons and synapses, thus improving your learning ability [LINK]. In those cases, less can be more. People who are excited build significantly more connections in their brain in shorter amounts of time due to higher dopamine release. Designing your life in a way that most tasks excite you does not only make life more fun, it makes you smarter and more productive. No matter how boring the task is, there is always something exciting you can find. Even if that makes the task longer, it helps you concentrate and learn more.

# 3. Balance between skills and challenge

You shouldn't aim for a goal that is out of your reach. Think of playing the piano or any other instrument. Imagine you're playing a new piece. If the piece is too difficult, you'll give up quickly and won't get into a flow state. If it's too easy, you can play it without having to focus much; and you will get bored. However, if it's in that sweet spot, where

you are highly challenged, but just skilled enough to succeed, you will experience an 'edge-situation' that will keep you focussed and will help you to maintain flow. Look for that balance when you are planning your work. For instance, set yourself a bold time limit that can only be achieved when you're highly focussed. Working against time can be fun, especially if it's a made-up deadline.

4. Feelings of personal control over the situation and the outcome.

If the task is challenging but out of your control, like gambling, it will be more difficult to get into a flow-state. When you gamble, you're playing with luck; your skill has nothing to do with the outcome. It should be clear to you that what you are doing is getting you closer to the goal and you're not relying on something else beyond your control.

## 5. Feelings of serenity

This is what we would already call flow, even though there are much more intense states of it. You will notice clear contentment after a while, which is a very good sign and should keep you going. Try not to reflect on that feeling. Appreciate it and maintain the focus. It is a signal that what you're doing is right. When I feel flow, I feel exhilarated, but calm. This is how work should feel in general. It is within your freedom to design, choose and plan your tasks in a way that maximises serenity.

#### 6. Timelessness; a distorted sense of time

Try to eliminate any time indicators around you. You can hide the clock on both Windows PCs and Macs. During this state, you are far from noticing what actually happens with you. In retrospect, hours might appear like minutes or minutes like hours.

To some people, time feels condensed, to others it feels expanded. In any case, time will be distorted during flow. You will have no idea when you are actually experiencing flow, but you will strongly notice it afterwards. This is a good sign. It means that your practice of flow pays off. I can highly recommend to try to work on flow-inducing tasks after you have done all your calls and reached all your deadlines for the day. There is no need anymore to check the time. Let flow carry you wherever you need to go. When the next time you check the time is way past midnight and you wonder how time could have passed so fast, you've felt flow.

## 7. The melting together of action and consciousness

After a couple of focus-phases you should truly feel how rewarding and joyful those sessions are. Distraction, fear or worry will be completely eliminated and you will have a feeling of 'becoming one with your actions'. This is a truly joyful experience and defines the perfect flow phase. Once you're having such a feeling you are experiencing flow on a deep level. During the task, you won't be able to reflect on it on a meta-level, since you are eaten up by the activity itself.

# 8. The autotelic quality of flow experiences

'Auto' is Greek for 'self' (random fact: And German for 'car) and 'telos' is Greek for 'goal'. Autotelic means that the activity itself is just as important as the goal, i.e. goal and activity will merge naturally. Interestingly, Ludwig von Mises describes this phenomenon in his book 'Human Action' as activities with instant gratification in the positive sense [LINK]. He notes that this has to be distinguished from work, since real

work only offers mediate gratification. Hence, flow helps you to turn your work, whatever it is, into leisure.

This is what makes flow such a beautiful phenomenon. It feeds our ego as well as our rational mind as it allows us to reach our goals with greater pace. Because of its autotelic character, flow is instantly rewarding by its very nature. Many people trade short-term for long-term happiness. How much should we suffer now in order to have a better life in the future? Thanks to flow, we don't have to answer this question. [LINK]

#### **Binaural Beats**

The concept of binaural beats is a fascinating intertwining of auditory perception and neuroscience. Binaural beats are believed to influence brainwave activity, offering potential benefits for focus, relaxation, meditation, and even sleep.

Binaural beats are a perceptual auditory illusion that occurs when two slightly different frequencies are played into each ear separately. The brain perceives a third tone that is the mathematical difference between the two. For instance, if one ear hears a 300 Hz frequency and the other hears a 310 Hz frequency, the brain will "detect" a 10 Hz binaural beat. Different frequencies of binaural beats are believed to align with and influence the brain's main frequency bands – delta, theta, alpha, beta, and gamma. For concentration and alertness, beta frequency binaural beats (around 14-30Hz) are commonly recommended. Several studies suggest that listening to these beats can enhance focus, memory, and overall cognitive performance. The underlying theory is

that these beats can entrain brainwave patterns, synchronizing them to a desired

frequency. [LINK 1, LINK 2, LINK 3]

Maintaining consistent focus and mental clarity can be challenging. Binaural beats can

offer a non-invasive tool to help. By listening to beta-frequency binaural beats during

tasks that require deep concentration, entrepreneurs may find it easier to stay engaged

and reduce susceptibility to distractions. Moreover, different frequency beats can aid in

relaxation or brainstorming sessions. While there are various methods and tools like

meditation, nootropics, or even simple breaks to aid concentration, binaural beats offer

a unique, passive approach. They don't require active effort from you apart from playing

the track, making them an easy tool to integrate into your routine.

While individual responses to binaural beats can vary, consistent use might lead to

better task efficiency. If you find that you can complete tasks more rapidly or with

higher quality when using binaural beats, the cumulative time savings over weeks or

months can be significant.

**Actions and Habits** 

**Habit 1:** Optimise your environment

• Modulation Tactic: An entrepreneur can optimize their workspace to reduce

distracting stimuli. This means creating a workspace that's quiet, organized, and

free from unnecessary interruptions. By reducing the "volume" of distractions,

one can focus more effectively on tasks at hand.

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- Modulation Tactic: Using noise-canceling headphones can reduce auditory distractions, allowing for better modulation in noisy environments.
- Mediation Tactic: On the flip side, placing important tasks or reminders in plain sight can help direct the brain's "spotlight" towards them. For instance, a visual board outlining the week's top priorities can guide attention towards crucial tasks.
- Mediation Tactic: Apps that block distracting websites for set periods can help mediate the attention towards more productive tasks.

**Habit 2**: Modulation and mediation focused task prioritisation.

- Modulation Tactic: Entrepreneurs can allocate high-concentration tasks to times
  of the day when their modulation capabilities are at their peak—often during the
  morning hours for many people.
- Mediation Tactic: Using techniques like the "Pomodoro Technique" can help in mediating focus. By working in short, intense bursts and then taking a break, the brain's attention is continually redirected and refreshed towards the task.

**Habit 3:** Hack your deep work muscles by using binaural beats and biofeedback. Let us assume we are wearing headphones and are listening to different frequencies on our left and right ear — for example 400 Hz and 440 Hz. For some reason nobody can yet fully explain, our brain seems to adjusts to the difference: 440 Hz — 400 Hz = 40 Hz, which is a gamma-wave brain frequency (learn about brain waves here [LINK]). We can use this trick to induce flow states. There are many free tones on YouTube. Just make sure you are listening to pure binaural gamma beats without any additives — we

especially recommend the channel HQ Binaural Beats. Make sure you have good

headphones. They should be at least capable of sending different sounds on the left

and the right side respectively.

Habit 4: Practice flow weekly and work flow sessions into your calendar. Minimise all

distractions for multiple hours to allow your brain to fully lose the sense of time.

Mental Energy: Mental wellbeing

Theory

The science of happiness

Real happiness is far beyond the reach of current scientific discoveries, but there are

some profound things science has discovered about happiness. For instance, we know

that it is possible to increase our happiness — and we know that there are things that

make us happier than others.

A paper from 2009 found out that happiness has indeed genetic roots, yet is definitely

not entirely defined by genetics [LINK]. Obese people tend to be unhappier and changes

in body-mass-index (BMI) resulted in greater reported happiness and well-being.

Another study found out that long-term happiness can indeed be increased [LINK].

Moreover, the study suggests that, next to genetics, there are two relevant factors that

determine happiness: circumstantial factors and intentional activities. The study

suggests that 50% of our happiness is defined by our genetics, while 40% rely on

intentional activity and only 10% on circumstances. The claim that one is unfortunate in

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life, victim of its circumstances, seems hence to be much more subjective than an actual truth [LINK 1, LINK 2, and LINK 3].

Yet, a question that remains is still: Can happiness be bought? Science says: Yes. [LINK] Especially if you buy experiences, not products. Scientific studies clearly back that spending money on life events and activities is much smarter invested — in terms of increasing happiness — than money spent on material things [LINK]. Furthermore, extraordinary experiences tend to increase happiness more than ordinary experiences. This tends to reverse with age however. The older people get, the more pleasure they derive from ordinary experiences [LINK]. The study suggests that this is because of self-identification. Younger people greatly define themselves by the list of extraordinary events they've been experiencing, while older people strongly define themselves by looking at what they've done regularly and repetitively.

Another interesting study demonstrated that happiness doesn't only make you smile, but that smiling also makes you happy [LINK]. During the study, research subjects had to hold a pencil in their mouth while watching a cartoon. Those that held the pencil in their mouth had to form mimics close to those of smiling. They rated the cartoon much funnier as the control group which was not forced to hold the pencil in their mouths. This finding has quite heavy implications, especially since happiness helps with problem solving [LINK]. Humor is moreover connected to creativity and intelligence [LINK].

Lastly, Epicurus has found already that our happiness is relative, that is it adapts to certain circumstances. Eating chocolate when you're not used to eating sweets is

making you much happier than eating it every day. In fact, if you eat chocolate every day, at one point eating it won't make you happy at all. This is called hedonistic habituation. However, intentional changes, such as changing your career or joining a club are not prone to hedonistic habituation. Hence, choose intentional changes over circumstantial ones.

#### **Social Interaction and Mental Wellbeing**

In a beautiful village situated around rolling hills and green meadows, life seemed to move at its own unhurried pace. The villagers had an extraordinary secret; many of them lived well into their nineties, and even crossed a century, with their minds sharp and spirits high. Laughter echoed from every corner, and every evening, regardless of age, villagers would gather in the town square to share stories, dance, and celebrate life. The village I'm speaking of is Roseto in Pennsylvania. Statistically, the town's heart attack rate for men aged 55 to 64 was half the national average. For those over 65, the rate was 40% lower. What made Roseto special wasn't diet or exercise; it was the cohesive community and rich social fabric.

As word of this village reached the outer world, it piqued the curiosity of researchers and storytellers alike. Malcolm Gladwell, in his book "Outliers," [LINK] highlights a phenomenon quite like this, emphasizing that such pockets of longevity aren't just a result of genetics or even diet, but the strong communal bonds these people share. He speaks of places where everyone knows your name, where the well-being of one is the concern of all, and where a sense of belonging permeates every interaction.

This correlation between social connection and longevity isn't isolated to a few studies. The Blue Zones research, which looked into regions globally where people live much longer than average, found consistent patterns. In Sardinia, for instance, men in mountain villages reached the age of 100 at an astonishing rate. The data revealed a significant trend: these centenarians maintained close-knit family structures, often living with multiple generations under one roof.

The significance of social connections isn't limited to longevity alone. A meta-analysis of multiple studies, representing 308,000 participants, found that a lack of strong relationships increased the risk of premature mortality by 50% [LINK]. To put it in perspective, this effect size is comparable to smoking up to 15 cigarettes a day and is even greater than well-known risk factors such as obesity and physical inactivity.

Parallelly, a renowned study (link?) from Harvard echoed a similar sentiment. Spanning over 80 years and observing thousands of individuals, this research unearthed a profound truth – the key to happiness, mental well-being, and even longevity wasn't wealth, fame, or success. It was the quality of social interactions and the depth of relationships. Those with strong interpersonal relationships were 50% more likely to live longer than those without such ties. The absence of loneliness, it appears, is a significant ingredient in the elixir of a fulfilling life. [LINK]

The intimate connection between social bonds and mental health is consistently demonstrated across research. Another comprehensive study followed the mental health trajectory of individuals over a ten-year span. The researchers, drawing from a nationally representative sample, found that individuals with limited social connections

experienced significantly higher levels of depression. Moreover, the risk of persistent depressive symptoms was roughly doubled for those lacking social support, compared to their socially integrated counterparts. Notably, this extended duration of depressive symptoms can exacerbate other health risks, reinforcing the importance of maintaining strong social ties. This study illuminates the intertwined nature of our social networks and mental well-being, advocating for proactive efforts in fostering connections as a preventive mental health measure. [LINK]

The link between our social bonds and our well-being is undeniable. It reminds us that while modernity offers countless conveniences, it often isolates us, pulling us away from the essence of true human connection. The village with its evening gatherings isn't just a beacon of longevity; it's a testament to the power of community, showing us that the heartbeats of many, in harmony, can create a melody that defies time.

So, as the world spins faster, maybe it's worth taking a leaf from the book of these villagers or the insights of Gladwell and Harvard researchers. It might just be time to pause, reconnect, and cherish the relationships we have, for they are the threads that weave the tapestry of a long, happy life. Especially for entrepreneurs, with all their quirks – speaking from experience – it makes sense to find a community of peers with similar interests, bold ambitions, and find enough time to regularly meet and bond on a personal level. The less you can relate these communities to work, the better.

#### Language

Sarah, a middle-aged school teacher, spent years battling an invisible enemy: her own thoughts. Every morning she'd wake up with a mental script that whispered, "You're not good enough," "Today will be just as bad as yesterday," and "Nobody really cares about you." This negative self-talk, born out of past traumas and rejections, led to frequent bouts of depression, anxiety, and self-doubt. "The Body Keeps the Score" by Dr. Bessel van der Kolk, explains this powerful relationship between language and mental health. Realizing she held the pen to her narrative, Sarah and you can rewrite their mental script. [LINK]

Instead of being trapped by past narratives, she incorporated daily affirmations: "I am resilient," "Today is a new opportunity," "I am loved." Over time, this reframing began to reshape her neurology and psychology. By choosing empowering language and reframing her perspective, Sarah transformed her mental state and thus her life. But this isn't just Sarah's story; science backs the profound influence of language on our mental health.

A study in the Journal of Abnormal Psychology found that individuals who engage in negative self-talk, especially rumination, are more likely to develop symptoms of depression and anxiety. [LINK] This self-criticism activates the brain's amygdala, the fear center, increasing levels of the stress hormone cortisol. Especially when you apply for awards or take part in pitching contests – which is unavoidable for many entrepreneurs – you are constantly being compared. This can trigger thoughts like "I'm not good enough". It is your job to manage and reframe these inner conversations.

Affirmations and Brain Activity: Research conducted at the University of Michigan found that when participants practiced self-affirmations, there was increased activity in key regions of the brain responsible for positive valuation and self-processing. They further indicated that individuals using positive affirmations were more resilient to stressors. This study used fMRI to investigate the neural mechanisms underlying the effects of self-affirmation. The results demonstrated that practicing self-affirmations led to increased activity in certain parts of the brain related to self-worth and valuation. [LINK] Another groundbreaking study in Clinical Psychological Science analyzed the word patterns of individuals and found that the use of first-person singular pronouns (e.g., "I," "me") was linked to higher levels of depression and anxiety. In contrast, using more first-person plural pronouns (e.g., "we," "us") and positive emotion words correlated with better mental health. [LINK]

In addition to the specific language you use, you can reframe: Use Cognitive Behavioral Therapy (CBT), a widely used therapeutic approach, which incorporates a technique of cognitive restructuring – changing negative thought patterns. Research published in the Journal of Consulting and Clinical Psychology reported that patients undergoing CBT saw a 60% reduction in their depression symptoms, highlighting the powerful effect of altering one's language patterns. [LINK]

The profound connection between language and mental health isn't merely anecdotal; it's scientifically substantiated. The words we choose to describe our experiences, the narratives we adopt, and the stories we tell ourselves play a pivotal role in shaping our mental landscape. How you talk to yourself does matter. As Sarah's story and numerous

studies reveal, taking command of our language can be a transformative tool in achieving mental well-being.

## A case for breathing

Growing up in a quaint village in Bavaria, my days were painted with expansive meadows, beautiful forest vistas, and the melodic chimes of church bells echoing across the valley. The simplicity of life there was its own unique rhythm, one that was soothing and predictable. As years turned pages, ambitions began to stir within me. Drawn by the lure of urban opportunities and the promise of a broader horizon, I left the beauty of Bavaria behind and ventured into bigger cities. Within the last decade, I lived in Zurich, Berlin, New York, San Francisco, Shanghai, London, and a bunch of other "hectic" cities. The stark contrast was palpable: from open fields to structured skyscrapers, and from the familiar faces of villagers to an ocean of strangers.

My days quickly morphed into a montage of Zoom meetings, instant Slack messages, and demanding deadlines that, very often, I set for myself. The cathartic Bavarian mornings I once knew, marked by the rising sun and singing birds, were now replaced by jarring alarms and the persistent glare of screens. In this whirlwind, each day ended with me feeling like a jigsaw puzzle with scattered pieces, never entirely whole.

I got really upset with this. My two hours of deep sleep per night quickly decreased to half an hour. Even worse, often my mind was still so active that I couldn't even fall asleep for the first 30 minutes. I was once immensely focussed, but now the first thing I did when getting up was checking my WhatsApp and reading my emails. Consequently,

I was always distracted during the day, answering messages while in calls and so on. The big cities turned my hyper-focused brain into a goldfish brain within a matter of days. I suddenly also noticed feelings of negativity and being unmotivated – something I barely experienced during my village days. This is when I realised that I can't live my life in a city the way I lived in the village. I need to make a conscious effort to calm my mind down.

This is what got me into the gentle art of mindful breathing. Initially, I approached it with the skepticism of someone who missed the tangible nature of Bavaria's landscapes. Yet, the chaos within urged me to give it a shot. At first, every time I tried to center myself, my thoughts would wander to the problems I needed to fix today, to pending tasks, or to the anticipations of tomorrow. But I persevered. With each deep, conscious breath, a semblance of peace began to anchor itself within me. The practice gradually became my grounding force, an inner sanctuary amidst the city's noise.

This transformative journey rekindled a serenity reminiscent of my Bavarian upbringing. Through deep breaths and centered mindfulness, I bridged the worlds of my past and present, realizing that even in the heart of urban chaos, one can find a rhythm reminiscent of the gentle ebb and flow of life back home in Bavaria.

My experiences aren't just anecdotal. Scientifically, the connection between breathing and mental health is significant. A study published in the Journal of Psychiatric Research (link?) found that controlled breathing can reduce symptoms of depression. In this randomized controlled trial, participants diagnosed with major depressive disorder

(MDD) who underwent breathing-based meditation showed a whopping 50% reduction in their depressive symptoms. [LINK]

Scientists identified a tiny cluster of neurons in the brainstem that links breathing to relaxation, attention, and alertness. When they tweaked the function of these neurons in mice, the animals became incredibly calm. This revealed a direct neurochemical link between breathing patterns and mood. [LINK]

Beyond that, the National Institute of Mental Health recognized that slow, controlled breathing decreases the production of stress hormones and shifts the balance of brain chemistry toward a state of calmness. When individuals focus on their breath and take deep and prolonged inhalations and exhalations, the body's response is to decrease the production of cortisol, a primary stress hormone. [LINK]

For centuries, practices like pranayama in yogic traditions and meditation in various cultures have emphasized the importance of breathwork. Today, these practices are more than just spiritual or cultural rituals; they're backed by a growing body of scientific evidence that emphasizes their significance. In essence, each breath we take can be a step towards better mental health, offering a respite from the storms that occasionally rage within.

While breathing might seem rudimentary, its profound impact on our mental well-being cannot be understated. Just as Maya discovered, sometimes the simplest of acts can lead to the most profound transformations.

## A case for stretching, yoga, and Tai Chi

Another study that looked into the impact of yoga on mental health is the one titled "Yoga for depression: The research evidence" published in the Journal of Affective Disorders. In this study, the researchers conducted a systematic review of the research evidence on the effectiveness of yoga for the treatment of depression. They concluded that yoga seems to be a promising treatment for depression and that it is comparable to exercise in its effects. Participants across different studies reported reductions in depressive symptoms, indicating the potential for yoga to serve as a beneficial practice for managing mental health. [LINK]

The impact of Tai Chi on anxiety has been well documented. A meta-analysis by Wang et al. (2010), published in the Journal of Alternative and Complementary Medicine, titled "The Effects of Tai Chi on Depression, Anxiety, and Psychological Well-being: A Systematic Review and Meta-Analysis," analyzed results from randomized controlled trials. They found that practicing Tai Chi significantly reduced anxiety symptoms compared to non-exercise controls. The studies included various Tai Chi styles and sessions ranging from 30 minutes to one hour, held once to multiple times a week, with total durations of practice spanning from 4 to 24 weeks. [LINK]

West, Otte, Geher, Johnson, and Mohr published a study in the Psychosomatic Medicine journal titled "Effects of Hatha yoga and African dance on perceived stress, affect, and salivary cortisol". This research included stretching as part of the Hatha yoga routine and examined its effects on stress levels. The study found that participants engaging in Hatha yoga, which involves deep stretching and controlled breathing, showed a

significant reduction in the stress hormone cortisol. The findings suggest that the

stretching inherent in yoga can decrease physiological stress indicators, providing

empirical support for incorporating such practices into daily routines to manage stress.

[LINK]

**Actions and Habits** 

Habit 1: Do at least two mindfulness exercises a week.

Habit 2: Laugh & Socialise. If possible, deliberately plan time into your week where you

can meet, laugh, and socialise with other people. The longest study on happiness and

mental health ever conducted finds one thing: Social relationships are the most

important determinant when it comes to happiness or energy levels and one of the

most important determinants when it comes to longevity. If you want to be energised

every day, make sure you spend enough quality time with people you love.

Habit 3: Invest in experiences: Invest in experiences, not in products. For me, the

realization is that experiences matter more than possessions. Spending money on

holidays, wellness and one-day experiences, such as parachuting and hot air ballooning,

is much smarter than spending it on fancy cars or the latest tech gadgets. Whenever

there's some financial surplus, think twice and spend smartly.

Habit 4: Smile: Smiling makes you happy, even in very difficult situations. After difficult

situations, in front of tests or during emotional challenges, take a step back and smile

for half a minute. You'll be amazed by how much this helps.

Habit 5: Choose intentional changes over circumstantial ones: Intentional changes do

affect happiness strongly. Whether you'd like to change your career, your dressing style

or your daily habits. If you're intentional about your changes, happiness is guaranteed.

**Action:** Work mindfulness routines into your daily checklist.

**Summary** 

You might have realised that many themes and activities were mentioned multiple

times in the book. Intermittent fasting, ice bathing, regular exercise, etc. do have

incredible benefits. I hope that this book also establishes a structure and manual that

allows you to stick to those activities long-term. It is not difficult to maintain an

incredibly productive life, fuelled with positive psychological and physical energy.

However, it is very difficult to get there in the first place. This book provides you with a

framework:

1. Set ambitious goals

2. Understand where you are

3. Get excited about the delta between where you are now and where your goals

lead you to

4. Start choosing activities in a way that optimises the function that reduces such

delta over time

5. Do not only focus your time on such delta, but also on activities that foster high

levels of physical and mental energy to sustain working on such delta longer

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I believe that this book covers all content any entrepreneur needs to live the most productive live. Use this book as a guide to overflow with energy, invest your time wisely and work on ambitious goals.

# **About the author**

Daniel is a math nerd, coder, entrepreneur, and investor. He studied at Cambridge University, ETH Zurich, and University of St. Gallen. He has built a machine learning company that helps banks and FMCG companies tune algorithms on no-code post-deployment. Moreover, he has initiated Sigma Squared Society, the world's largest non-profit supporting entrepreneurs under 26. His current company, EWOR, invests in and supports the world's most ambitious entrepreneurs who are eager to build companies valued at 10-11 figures.