GET DEEP:

Improving Your Health and Wellness by Changing Your Mind

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A Brief Overview

Technology has been changing the world, but is it for the better? Many, including executives from big tech companies, are now speaking out about how their lives have been affected by their cell phones and social media. Unlike previous generations, people today are caught in between the pressures of their online life and their real one. On top of this, the workplace has evolved to demand constant attention and accessibility from its workers; balancing professional and personal desires have never been so difficult.

As humans, there is only so much of this intense stimulation we can take. From all of the constant distractions and exposure to toxic online environments, people's brains have begun to break. Cell phones and their deliberately-designed persuasive features keep users hooked in dopamine feedback-loops. Many apps also contribute to the rise of depression and anxiety within young communities due to the pressure to receive likes. On top of that, the average attention span has decreased to 6 seconds and many find it impossible to sit down and read a book anymore.

It is clear that society's health and wellness have taken a back seat in order to pave the way and be ready for the next big technology or innovation. In this paper, the history of this distraction problem will be analyzed and the solution of "getting deep" will be discussed. Although we have become accustomed to these less than optimal circumstances, it is possible to get our brains to function the way they used to, simply by changing our minds.

Where We Begin

Things have changed. The neighborhoods are no longer bustling with youth playing outside, the daily commute on public transit has become a lot quieter, and shopping malls are eerily vacant. More often than not, the person next to you on the bus is nose-deep into their phones carrying five conversations all at once through three or four different apps. These conversations are often silent but intense. Young adults display discomfort when tasked to make a call - the act is often seen as invasive and borderline rude. Although it is stereotypical (and yet accurate) to say the younger generations are absorbed in their screens, this practice is not isolated to just teens. Digital communication and social media have also snagged the attention of older adults, with 65+ being one of the fastest growing demographics on Facebook. Who knew that most people would communicate primarily with their thumbs one day?

Mobile technology, specifically smartphones and wearables, have integrated themselves so seamlessly into our society. Designed to be compact and live close to the body, these devices are rarely forgotten or misplaced; making its ability to function as a proxy for personal identity, presence, and location, extremely successful. While it is invaluable to have a piece of technology be an

entertaining and informative extension of oneself, this luxury is only possible through sacrifices - three of them, in fact.

In order to download and use applications, users must first sacrifice their privacy and hand over their information for the sake of convenience. Contacts, accessibility to the camera, and bank information are some of the most common permissions granted to these third-party companies for them to use and document as they see fit. In most cases, people do not even realize what they have given away until it is too late due to the hidden disclaimers and terms of service. The second thing users sacrifice is their self-worth. On many social media platforms, envy, cyberbullying, and facades run rampant. Instagram, in particular, is noted for exacerbating anxiety and depression within young adults due to the nature (and false reality) of its content. The third and final thing users sacrifice is actually their brain.

Giving up the rights to one's brain sounds extremely dramatic, and almost sci-fi, but it's true! For many years now, big tech companies like Google, Apple, and Facebook have been learning how to keep people stuck in their screens. In Silicon Valley, this method of mentally ensnaring users is known as "brain hacking." By designing programs that elicit a neurological response from the user, companies are learning how to hack into humans and keep them coming back. While persuasive technological design features are not new, they have definitely evolved. With the rise in mobile technology in the past decade, many of these new design features have taken on the fun characteristics of video games. Gamification takes aspects of video games like competition, scoring points, and unlocking levels, and inserts them into apps/digital content to make them more engaging. These virtual rewards, although they often hold no actual value, trigger a neurological response that releases dopamine, a neurotransmitter that helps to control the brain's reward and pleasure centers. Other persuasive design features like pull-to-refresh mechanisms and continuous scroll options rely on variable rewards to suck in users. These two features are often compared to slot machines; not knowing what will pop up on the screen is enough to allure people back and to keep them there for longer.

By engineering apps to target human psychology and emotions, Silicon Valley companies are able to fabricate strong feelings of attachment between people and their technology. When we put our phones down, cortisol – a fight-or-flight hormone originating from the adrenal gland – is released. The release of this hormone causes us to want to pick up our phones because we fear we are missing something important (FOMO), like someone liking our posts or news updates on Twitter. This anxiety keeps us peeping at our phones all day long, regardless of if there is a notification. Our bodies even go so far as creating a "phantom buzz" to try and justify our actions.

Figure 1. A look at how many millions of visitors frequent these popular websites a month

Source: https://citrusbits.com/50-mobile-statistics-facts-and-trends/

After years of this exposure, our minds almost melt; attention spans are dramatically shorter and negative emotions spike. It's scary what technology can do, right?

In this culture of connectivity, where our brains are held captive and all we want is to feel valued, we become extremely selfish. Our vanity skyrockets and suddenly the online experience is not about what you can do for others, but what others can do for you. "Like my status" or "hit that subscribe button" have become infamous phrases in social media communities, squawked out by people vying for attention. In order to "beat" algorithms on platforms like LinkedIn and Instagram, people have resorted to making engagement groups who like each other's content whether or not it has value just so they can get a like back. On top of the of the usual boatload of notifications, this makes users feel like they are constantly harassed.

In the workplace, this trend continues. Employees are buried in notifications and struggling to dig themselves out before the day ends. Distractions like instant messaging software require people to become responsive to other's needs and treat them as a priority. Taking time to immediately answer someone's questions and participating in pointless meetings creates an environment where shallow work, work that does not require intense thought, runs rampant. Specialists are forced to live in their inboxes rather than create, which in turn extends the time it takes to complete projects. In addition to the technological distractions, the workplace has shifted to favor modern open-concept offices. These new offices do not allow for privacy; their noisy wide-open spaces are conducive to constant distraction. External conversations and other office stimuli make it difficult to produce quality deliverables. Often times, people who work in these environments will not have a singular workplace and are forced to hop to and from whatever locations may be available. This lack of consistency creates unnecessary stress and can set a negative tone for the rest of the day. Couple this with the anxiety over your cell phone, email, and growing workload, and it is a recipe for disaster.

As we have seen thus far, today's technology addiction and the workplace culture that comes with it is detrimental to people's health. This technology addiction and its negative offshoots can affect nearly everyone who has an online presence. The people who are getting hit the hardest, in particular, are teens, who are still developing their brains and identity, and working professionals, who are trying to keep their career and personal life together. If this trend continues we can expect that more people, especially those of a younger age, will experience dulled concentration, reduced creativity, and could potentially develop some form of mental illness. In the workplace, employees could also suffer from burnout, a serious state of chronic stress. How did things get to this point?

How Did We Get Here?

How many remember the time that was 2007? Justin Timberlake was one of the hottest artists, Transformers became a live action movie, and the trendy fashion was very, very questionable. While 2007 was a great year for pop culture, it was a landmark year for technology as well. Apple released its very first version of the iPhone. With this release, cell phones became a priority to the public. The iPhone opened up a world where a phone was more than just a device to make calls. In the following years, smartphones increased in their complexity and capabilities. They encompassed things like calculators, weather channels, news alerts, games, and so much more! Anything one could possibly want was condensed down into this portable brick of technology, and with that, things started to dematerialize. Phone booths disappeared, disposable cameras were phasing out, and Walkmans were no longer a thing. Everything was whittled down into radio waves and digital processes to fit comfortably in the palm of a hand.

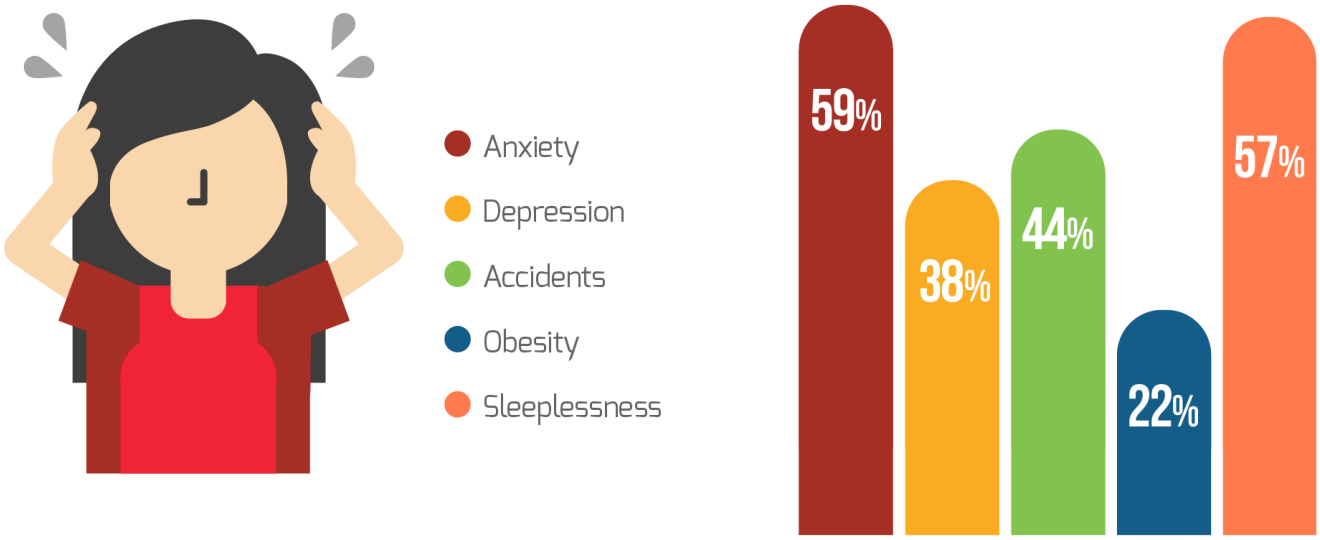

Figure 2. Side affects of smartphone usage as reported by Millennials

Source: http://www.coupofy.com/millennials-smartphone-behavior-report-2016/media/charts/chart11.png

A few years later, it became normal to never turn your cell phone off. The rise of mobile technology and apps encouraged people to keep it by their side 24/7, some even go so far as sleeping with it under their pillow. Social media like Facebook and Twitter were in full swing, slowly working their brain hacking magic. Twitter is exceptionally notable here as it employs the reverse chronological timeline. This timeline is notorious for prioritizing new content over important content. Due to this setup, information became easily disposable as users pulled-to-refresh over and over just to see what would end up at the top. In 2009, engineers Justin Santamaria and Chris Marcellino helped to develop iOS push notifications. Push notifications are the banners that appear on a smartphone's home screen and can be really helpful or just really bothersome. With this development people became used to the constant beratement of their phone. In some cases, they even expect it. For example, if one posts on Instagram, likes should be pouring in throughout

the hour so that the user gets their dopamine fix (and even then, an algorithm controls when we receive that hit of the feel-good hormone).

Speaking of likes, the iconic Facebook like button was rolled out at around the same time as the first iPhone. As priorly mentioned, persuasive design features have developed exponentially due to the integration of smartphones into our daily lives. Designed by Justin Rosenstein Facebook was looking for a way to get people more involved with the platform. After going through ideas, the team decided that the simple click of a "thumbs up" icon would allow people the option to send bits of positive energy to each other. Unlike commenting, liking a post does not require the user to expend effort because it follows the path of least resistance. Over time, this small feature caused engagement to skyrocket and has since become ingrained into our society.

Following its success on Facebook, the like button has transcended into other apps and websites serving as a form of positive feedback. However, for individuals users, especially teenagers, the positive intention of likes has turned into something quite toxic. Users who have more likes are perceived to be more valuable or more attractive. According to Rosenstein, these design features have gone from well-intentioned to disingenuous; and it is extremely ironic to see how these virtual "likes" have actually caused users to like less about themselves.

The final aspect that was crucial to the growth of technology addiction was the introduction of the 24/7 work cycle. With more flexible hours, customers and coworkers demanded accessible support day and night. Due to this, the common person found it very hard not only to get away from their personal notifications but their work ones as well. People had no choice but to pay close attention to their phone. During the technology boom of the late 2000s, it also became popular for companies to automate and outsource jobs. In order to stay relevant and marketable, many concentrated on learning and becoming experts at technology. While a noble idea and an incredible feat, the amount of time spent on the technology did nothing but facilitate negative exposure and help them sink more into the pit of addiction.

Today, it is estimated that adults spend an average of around 3 whole hours on their phone a day. As this is a significant portion of one's waking hours, it is easy to assess the strain it is putting on the mind and body. People who have realized their damage and try to repair and heal often have a very hard time as it is like climbing up an oiled slope. For those reading who might want to try and strengthen their mind and body again, there is one solution that has been proven to help, and that is ***deep work***.

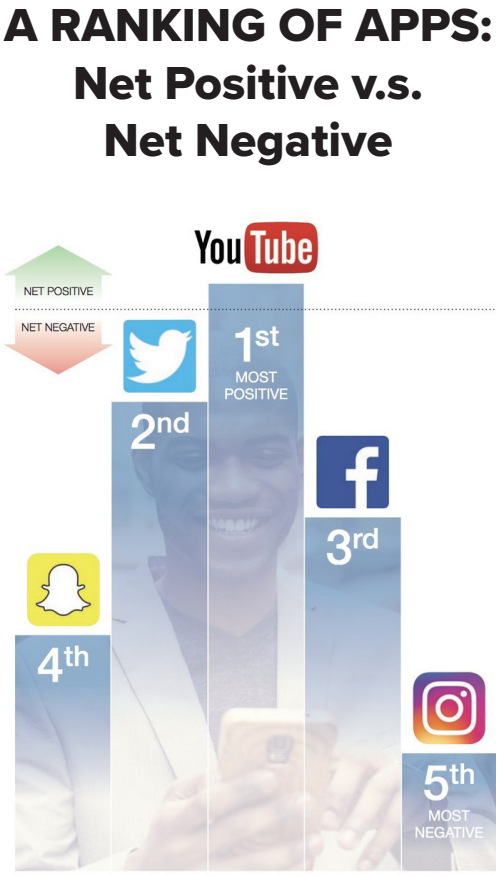

Figure 3. Instagram ranks as having the most negative effect on youth's health and well-being.

Source: https://www.rsph.org.uk/uploads/assets/uploaded/62be270a-a55f-4719-ad668c2ec7a74c2a.pdf

About Deep Work

In his book, *Deep Work: Rules for Focused Success in a Distracted World,* author Cal Newport discusses the concept of retraining your mind so that it is able to work effectively as it did before being inundated by technology. Deep work, as defined by Newport, is any professional activity performed using immense focus that pushes one's cognitive capacity to the limit. Contrary to how the majority of people work today (shallow work), deep work requires distance from coworkers, digital notifications, and sometimes even society itself. Many successful and prolific thinkers, like Carl Jung and Mark Twain, were enthusiasts of deep work even before the digital world had a vice-grip on the way humans function.

Because fully committing oneself to this type of productivity is highly unlikely, there are a couple of ways to introduce deep work into crammed schedules. These so-called philosophies of deep work help to establish a baseline for a new practitioner; here are three philosophies that may be a good fit for the typical office worker. The first, bimodal philosophy, requires dedicated time between regular work and deep work. This can be done by blocking a calendar as "busy" or even simply working from home if there is an option. Regularly scheduled deep work during the week allows for a great balance between administrative upkeep and project production. The second, rhythmic philosophy, involves scheduling a tiny piece of deep work every day so that it adds up to something greater. For example, schedule half an hour when the day begins to write a section of a book. When all those days are combined, eventually a full novel will be produced. The third and final philosophy, journalistic, relies on incorporating deep work into one's schedule whenever it fits. While extremely difficult, this method is great for people who cannot afford to be away from their technology or social life for too long.

In order for deep work to truly be effective, it is recommended that new deep work practitioners first do a digital detox. This involves foregoing your favorite apps and/or pieces of technology for an allotted period of time. For the best and most accurate results, try to commit to surrendering your phone/laptop for at least a week. Do not be surprised if giving up technology is harder than it sounds. On average, an American will pick up their phones at least once every twelve minutes, getting sucked into it around 80 times a day. That's significant! Detoxing, although painful at first, will help minimize digital cravings and heighten awareness by helping the brain learn that it is okay to resist stimuli like notifications and social media. This is often the hardest part as notifications use a trigger color, like red, to grab users' attention. At the end of the detoxing period, take some time to reflect on the changes implemented, the feelings experienced, and the next steps. These realizations will help one make the best-informed decision about how they will approach deep work and establishing boundaries with technology, and its culture, in the future.

Benefits of Deep Work

After committing to deep work, the benefits will begin to show themselves fairly quickly. It is only natural that individuals who push their cognitive capacity to the limit see an increase in quality in their deliverables. Deep work unlocks the brain from its constrained and distracted thinking to allow the practitioner to use the specific parts it needs to in order to complete the task at hand. Multitasking, or what we may perceive as multitasking, actually does not help to get the job done quicker. As stated by individual studies conducted by Clifford Nass and Sophie Leroy, individuals who undergo constant attention switching tasks online are more susceptible to lasting negative effects on the brain. The constant switching weakens the mental muscles responsible for prioritizing the many stimuli vying for attention, leading to attention residue. According to Nass, people who multitask cannot filter out irrelevancy and therefore cannot manage a working memory as they involve numerous parts of their brain that are unimportant to the task at hand. This addiction to multitasking is hard to shake, especially when technology does nothing but contribute to this behavior - but the results from focused thinking are incomparable!

One person who heavily vouches for living a focused life and deep work is behavioral science writer, Winifred Gallagher. After learning about her cancer diagnosis, Gallagher aimed to live happily despite her condition. In her book, *Rapt*, she learned that by focusing on the most positive and productive elements of a situation, one can shape their experience, improve their concentration, and really feel alive while doing so. Deep work and focus helped her maintain her health while undergoing treatment and allowed her to keep active with her job and family. This is because deep work is correlated with a concept called flow, coined by Mihaly Csikszentmihalyi. Flow is when a person's body and/or mind is stretched to the limit in a voluntary effort to accomplish something difficult. Csikszentmihalyi's studies showed that subjects who were able to have more flow experiences in one week were happier and more satisfied with their

work. While deep work is not necessarily needed in order to reach the flow state, combining the two is proven to lead to personal satisfaction.

Another great benefit that deep work produces is the ability to quickly discern potential and extract meaning from your profession. Many workers experience days where they don't even know why they set foot into the office anymore. The work has become bland and they feel utterly purposeless, wouldn't it be nice to know how to get the spark going again? In their book, *All Things Shining*, Hubert Dreyfus and Sean Dorrance Kelly discuss how operating in a state of deep work allows craftsmen to impart "sacredness" to their work. Master craftsmen can easily spy what materials will work best and how to expertly use them to produce a harrowing final product. By practicing and rarifying their approach through deep work, office workers can mimic this skill when working with their "boring" everyday tasks. Who wouldn't love to spice up their work routine and add value at the same time?

The last, and most prominent, benefit deep work brings is drastic improvement to human health. As we have discussed thus far, the shallow and technology-ridden society we live in does great amounts of damage to us, both mentally and physically. Technology and social media environments have dented our self-worth, spiked our anxieties to new levels, and leaves us feeling dissatisfied. Thankfully, by practicing deep work, people can repair the damage done and improve their quality of life. Better sleep, less anxiety, and reduced stress are all great bonuses gained from working deeply. Stepping away from shallow work that involves technology also helps the body mend from conditions like eye strain, migraines, and carpal tunnel. As a highly valuable skill with nothing but potential benefits to the practitioner, I highly recommend trying deep work for yourself.

How to Get Started

To get started with trying deep work, it is crucial to first participate in the aforementioned digital detox. During this detox, it is helpful to track one's personal data. To do this consider downloading Moment; an app that breaks down cell phone usage by day, shows how many times the phone was picked up, and how long each app was used for. From here this data can help identify specific pain points or areas that need improvement. It is always a shock to realize how non-productive the majority of our time on technology actually is.

Another way to get started with deep work is to implement block scheduling and project management strategies. Calling back to the three philosophies one can implement to fit in deep work during a day, these methods were always very deadline and time driven. Implementing block scheduling motivates the practitioner to get

into “deep mode” and really put in the effort. Initially, it is hard to get deep on a whim, but with due time, this level of performance can most certainly be achieved. Investing in project management also assists in mapping out what tasks should be completed within a certain scope of deep work. Consider using popular project management software like Trello, Podio, or Jira to keep track of projects so that each deep work session is productive and has a distinct direction.

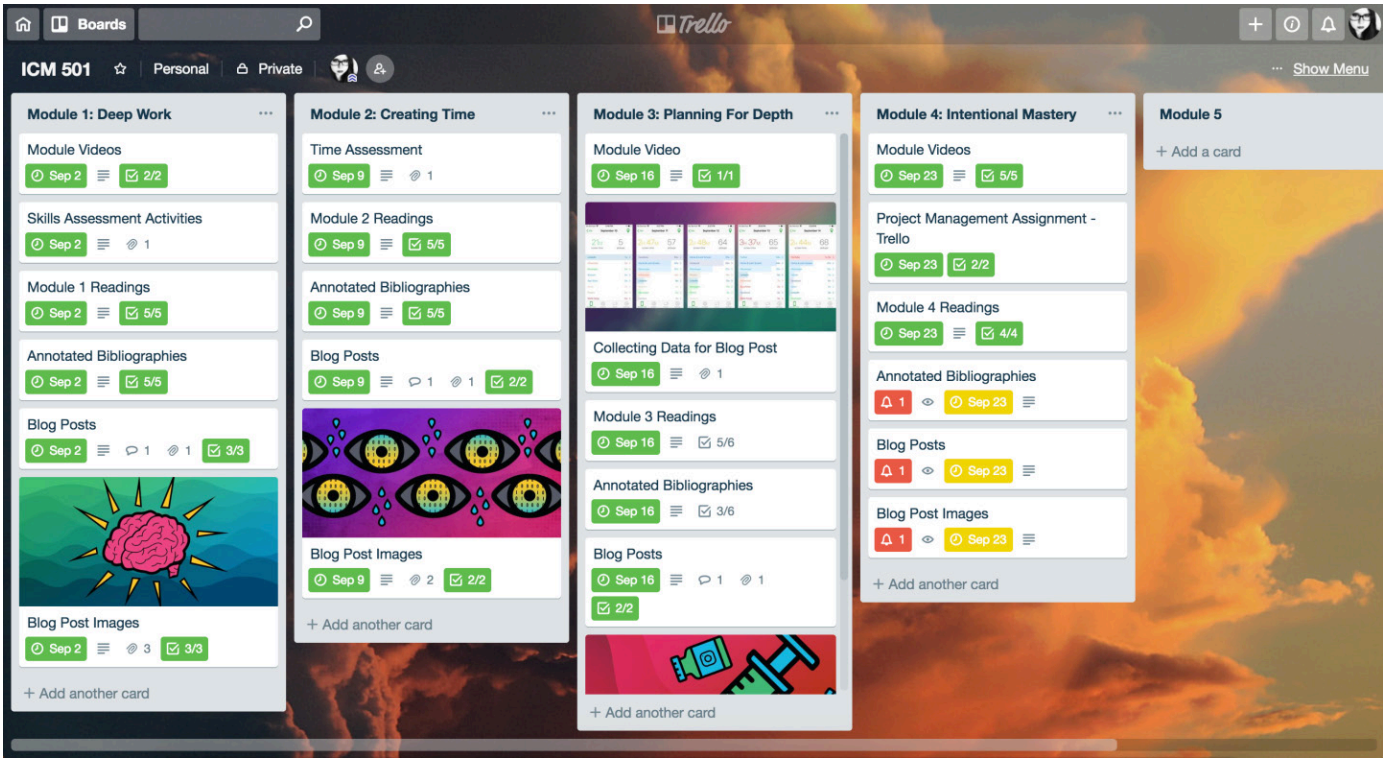

Figure 4. An example of a Trello board

While deep work is all about productivity, it is important to realize that deep work also requires recovery time like any other strenuous exercise. Newport suggests “productive boredom” and “productive meditation” as cooldowns. To the chagrin of many, being bored is an important facet of being creative; boredom allows the mind to be free and explore. Without external stimulation, the brain is able to process complex problems and be more inventive. Unlike the frustrated boredom that comes from being sucked into the Internet, productive boredom acts as a means to put more thought into leisure activities. This not only helps to solidify one’s skills in time management, but it also lets a person indulge themselves in activities that truly mean something to them. Newport also believes that productive meditation can help heal distracted minds. Productive meditation occurs when one becomes lost in thought during a physical activity. Physically occupying the body in monotonous, unfocused action helps to strengthen the brain, as well as the body. While productive meditation can be a means to thinking creatively, be sure to structure this deep thinking to avoid getting stuck in loops.

Lastly, it is important to create rituals for deep work. These rituals could be as simple as filling up a tumbler of water before sitting down at your desk or putting on a favorite song. Rituals can also be used to help shut down the brain after work has been completed for the day - some even like saying “shutting down” out loud to further solidify their completion. In short, rituals help the transition to and from deep work and act as a personal indication of where one is in their process.

After going through and implementing these steps, a novice to deep work can explode with potential. Deep work ties into the act of deliberate practice. Deliberate practice is described as intense dedication in one area of expertise and can be broken down into two components: the first is immense focus on the subject you are mastering and the second, receiving feedback and acting upon it. While this does not appear to be any different than learning a subject for school, deliberate practice requires long, uninterrupted sessions (a basic practice of deep work) for it to be successful. Therefore, deep work is not only a positive practice for human health and development, but it can lead to anyone becoming an expert in their field, as long as they possess the motivation and put the time in. Could this be you one day?

Wrapping it All Up

As we conclude this paper, it is important to remember that the world of technology is what one makes of it. Any tool can be used for good or malicious purposes - that is for the individual to decide. While large tech companies do possess nefarious motives that facilitate acts like brain hacking, there are so many useful sites, apps, and software that can help jailbreak a person from the negativity and workplace chaos. By incorporating the helpful pieces of technology and creating limitations with the ones that aren’t, deep work can be used to improve the quality of deliverables, as well as making big, positive impacts on mental and physical health. All of this can be done by simply changing your mind and saying “yes” to living a focused life. Good luck!

For more visit digitaldaredevil.blog

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