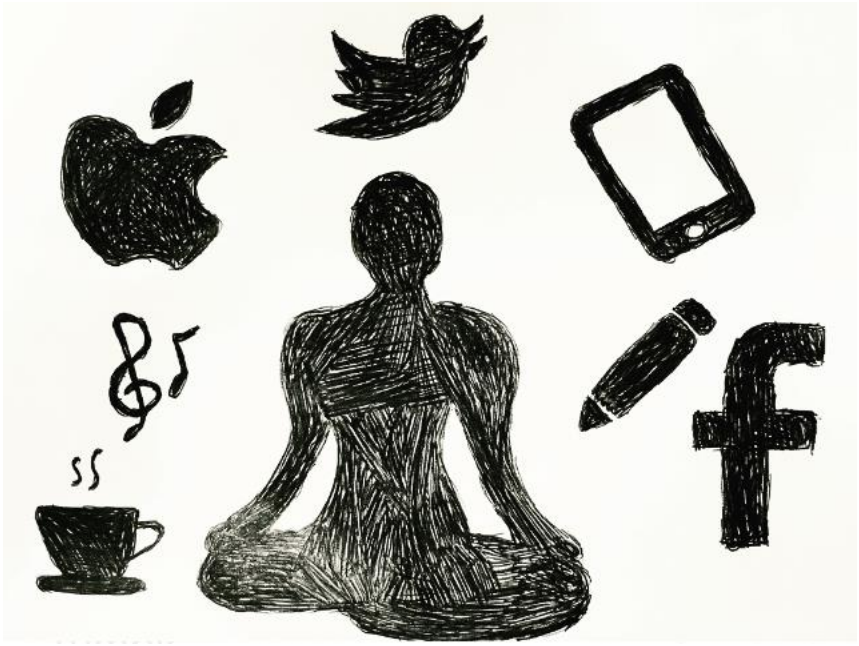
Deeply Distracted: Diving into Deep Work in the Digital Age



(Illustration by Caitlin Trude)

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Introduction

Even in 1854, American Transcendentalist Henry David Thoreau acknowledged the superfluous distractions that consistently interrupt the more important facets of our lives.

"Our inventions are wont to be pretty toys, which distract our attention from serious things," Thoreau wrote in his book *Walden*, a compilation of his reflections during his two-year stint at Walden Pond. "They are but improved means to an unimproved end, an end which was already but too easy to arrive at…"

For most of us, the whispering waters of Walden Pond are replaced by the sounds of text alerts and notifications coming from our pockets. In the Digital Age, the idea of embarking on a Thoreau-like abandonment of one's smartphone seems daunting at best.

Whether it's writing the next great American novel, pursuing a graduate degree, or increasing conversions for an online business, most people have long-term goals that are inhibited by the distractions caused by attention-stealing devices. The main culprits? Social

media and ever-evolving technologies. If Thoreau was alive today, he would likely question the value of these "pretty toys" that too often pervade our focus.

Georgetown University computer science professor and author Cal Newport is well-versed in the art of "deep work" despite living and working in an environment wrought with disruptions, including technology. In his 2016 book, *Deep Work: Rules for Focused Success in a Distracted World,* Newport defines "deep work" as "Professional activities performed in a state of distraction-free concentration, that push your cognitive capabilities to their limit (Newport, 2016, p. 3)".

Like it or not, smartphones, Internet, and social media are here for the long haul. In 2018, we're ushering in a generation of young people who are unfamiliar with a pre-Internet world. Rather than fighting against the inevitable tides of technology, we must find ways for working with and around it. We can start by exploring what the seemingly magnetic pulls to our smartphones are, their psychological and behavioral impacts on us, and what we can do to reclaim our focus.

Everyday Distraction

To better understand how we can regain our focus and move towards deep work, it's important to get an overview of the various ways smart technology seeps into our everyday lives.

Firstly, we must acknowledge the obvious benefits of smartphone ownership. They help us map our way through new cities, connect us with family and friends across the globe, provide weather forecasts, and enable us to do quick Internet searches to answer our burning questions.

But smart technology has also made it so that screens have replaced nearly everything we own. Books have been swapped for Kindles and e-readers, Apple watches have replaced analog watches, and even key and garage door apps have become substitutes for traditional locks and keys. Computers and smartphones have become extensions of our bodies, writes Adam Greenfield in his essay, "The Sociology of the Smartphone." He begins his commentary almost like a love poem, describing our phones as the first thing we look at when we wake up, and the last thing we see before falling asleep. He writes, "We use it so often that we don't see it clearly; it appeared in our lives so suddenly and totally that the scale and force of the changes it has occasioned have largely receded from conscious awareness" (Greenfield, 2018).

Smartphones are, as mentioned above, a source of acute distraction. In general, office jobs and environments that revolve around computers make it all too easy to browse non-work-related websites. Overuse of smartphones and social media can compromise productivity levels

as well as the quality of personal relationships. As a former journalist and public relations associate, and now a content creator for social media, I am always using the Internet. Although it is integral to my work, it can also provide unceasing distractions that makes completing projects a challenge. It proves even more difficult when certain job fields push for technologies aimed at making workflow procedures more "efficient."

Despite the smartphone's role as an "invisible crutch" for most of its users, former Apple executive Tony Fadell believes that the devices themselves cannot be blamed for society's Internet addiction: "That's like saying a refrigerator is addictive . . . The devices are not addictive, but the things they deliver can be addictive" (McCarthy, 2018).

In short, the Internet itself isn't the problem; the issue lies in how we address our habits surrounding it.

What Keeps Us Coming Back?

Given that the average person swipes, taps, or touches their smartphone more than 2,500 times each day (Lewis, 2017), it's unsurprising that former Google and Facebook engineer Justin Rosenstein compares the allure of today's technology to gambling and addictive drugs. In fact, Rosenstein severely limits the amount of time he spends on social media and has abandoned Reddit and Snapchat.

Rosenstein, the creator of Facebook's "like" feature, is familiar with the development of what he calls the "attention economy," an environment in which Internet behavior revolves around the needs of advertising companies. In his interview with The Guardian, Rosenstein addresses the conflict a rising number of Silicon Valley tech engineers are experiencing: their contribution to smartphone users' distracted state of mind.

"It is very common for humans to develop things with the best of intentions and for them to have unintended, negative consequences," he says. "Everyone is distracted, all of the time" (Lewis, 2017).

Tristan Harris, a former Google employee and current critic of the tech industry, notes that the strategies engineers use to draw social media users to Facebook and Instagram are similar to the tactics used by casino games. Like pulling the lever of a slot machine, the chance of receiving a reward keeps gamblers and smartphone addicts addicted to their respective games. In the casino, the reward is money. For Facebook users, the goal is "likes," follows, and affirming comments.

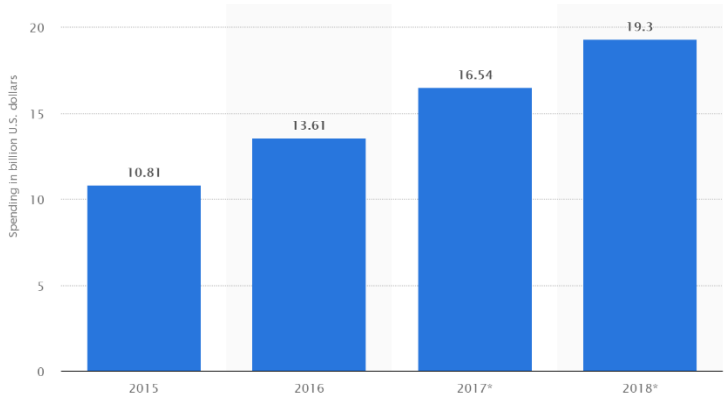
"Each time you're swiping down, it's like a slot machine," Harris says. "You don't know what's coming next. Sometimes it's a beautiful photo. Sometimes it's just an ad" (Lewis, 2017).

In a 60 Minutes interview with Anderson Cooper, Harris refers to the manipulation of algorithms used to keep people constantly logged in to social media as "brain hacking." Through brain hacking, Harris believes that technology is programming its users to spend more time than necessary on social media, buy products and services, and tune into specific news sources.

Aside from money, what the technology and advertising industries want most from their consumers is our attention. Those working in the heart of Silicon Valley have the potential to glue people to their screens. Of course, this may not be the tech companies' intention but nevertheless, they will continue to release the latest and greatest app updates under the guise of improving user engagement.

Creating the best social media platforms is important for data companies, who rely on their consumers' information to generate sales. They'll continue to rely on social media for these sales – Statista reports that social media advertising spending in the United States has nearly doubled since 2015. Three years ago, social media advertising spending was close to $11 billion and is now just over $19 billion.

Social network advertising spending in the United States from 2015 to 2018 (in billion U.S. dollars)



Statista, 2018

As long as capitalism is alive and well, we can reasonably expect profit maximization to trump any care that Silicon Valley engineers might have for their customers' work-technology-life balance. To reverse the negative effects of smartphone addiction, the tech industry would suffer.

Gabe Zichermann, an expert on the topic of gamification, argues that despite the obvious negative impacts of social media addiction, such as poor time management, tech engineers will continue to improve the apps they create in hopes of keeping users logged in for as long as possible.

"Asking technology companies, asking content creators to be less good at what they do feels like a ridiculous ask," he says. "It feels impossible. And also it's very anti-capitalistic, this isn't the system that we live in" (Cooper, 2017).

The Psychology of Smartphone Addiction

As mentioned before, tech engineers can use the information they glean from users' social media habits to tap into their psyches. The same parts of our brains that can become addicted to gambling or alcohol – the areas that drive humans to seek out food, warmth, and companionship – are similarly affected when it comes to smartphone addiction. As we already know, part of the attraction to social media is its ability to provide users short bursts of affirmation that our social media "friends" give us. Knowing that access to such affirmation is just a tap away is a major inhibitor when we try to focus on deep work.

Another problem is, the minds working behind major social media companies know the algorithms that can track when a person feels lonely, depressed, and at their most vulnerable.

Former Facebook vice president Chamath Palihapitiya believes that the platform's two billion active members only solidify the issues of social media addiction. The problem, he argues, is that social media users have a tendency to equate the validation they experience on apps (likes," "thumbs up," and heart emojis) as truths about ourselves.

"We curate our lives around this perceived sense of perfection, because we get rewarded in these short-term signals," Palihapitiya says. "We conflate that with value and we conflate it with truth. And instead, what it is is fake, brittle popularity that's short-term and leaves you even more … vacant and empty before you did it" (Wang, 2017).

Harvard Business Review writers Kristen Duke, Adrian Ward, Ayelet Gneezy, and Maarten Bos conducted a recent study that confirms the impact smartphones can have on a person even when their phone isn't in use. The authors' experiment involved 800 participants who each completed a series of simple math problems, memorization exercises, and completion patterns. The difference between the highest performing participants and those who performed poorly had to do with the location of their smartphone devices. Those whose phones were kept in their pockets or facedown on their desks did not perform nearly as well as those who kept their phones in an entirely separate room. The experiment concluded that even when smartphones are not in use, their presence can be disruptive, negatively impacting one's problem-solving and critical thinking skills.

CNN reporter Sandee LaMotte shares the negative psychological impact of smartphone addiction, using the term "nomophobia," or "no mobile phone phobia" to describe individuals who fear not having constant access to their cell phones. LaMotte cites a study that was performed at Korea University in Seoul, in which the brains of teenage boys who were addicted to their smartphones showed much higher levels of GABA (a neurotransmitter that inhibits neuron activity) than the brains of teen boys who were not addicted to their devices. The increase of GABA slows neurons, resulting in poor focus and proneness to distraction.

Nomophobia Questionnaire (NMP-Q)

Please indicate how much you agree or disagree with each statement in relation to your smartphone.

Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7

1. I would feel uncomfortable without constant access to information through my smartphone.
2. I would be annoyed if I could not look information up on my smartphone when I wanted to do so.
3. Being unable to get the news (e.g., happenings, weather, etc.) on my smartphone would make me nervous.
4. I would be annoyed if I could not use my smartphone and/or its capabilities when I wanted to do so.
5. Running out of battery in my smartphone would scare me.
6. If I were to run out of credits or hit my monthly data limit, I would panic.
7. If I did not have a data signal or could not connect to Wi-Fi, then I would constantly check to see if I had a signal or could find a Wi-Fi network.
8. If I could not use my smartphone, I would be afraid of getting stranded somewhere.
9. If I could not check my smartphone for a while, I would feel a desire to check it.
10. If I did not have my smartphone with me, I would feel anxious because I could not instantly communicate with my family and/or friends.
11. If I did not have my smartphone with me, I would be worried because my family and/or friends could not reach me.
12. If I did not have my smartphone with me, I would feel nervous because I would not be able to receive text messages and calls.
13. If I did not have my smartphone with me, I would be anxious because I could not keep in touch with my family and/or friends.
14. If I did not have my smartphone with me, I would be nervous because I could not know if someone had tried to get a hold of me.
15. If I did not have my smartphone with me, I would feel anxious because my constant connection to my family and friends would be broken.
16. If I did not have my smartphone with me, I would be nervous because I would be disconnected from my online identity.
17. If I did not have my smartphone with me, I would be uncomfortable because I could not stay up-to-date with social media and online networks.
18. If I did not have my smartphone with me, I would feel awkward because I could not check my notifications for updates from my connections and online networks.
19. If I did not have my smartphone with me, I would feel anxious because I could not check my email messages.
20. If I did not have my smartphone with me, I would feel weird because I would not know what to do.

CNN, 2017

LaMotte also highlights the "Nomophobia Questionnaire" (see below), a survey created by Caglar Yildirim, a computer science professor at the State University of New York College at Oswego. The questionnaire gives participants a score representing how attached to their phones they are. A score of 21 to 60 indicates that one is mildly nomophobic, while a score of 61 to 99 means that one likely cannot go long periods of time without checking their phones. A score between 100 and 200 indicates that one probably suffers from anxiety when they cannot access their phone. The 100 to 200 scorers may also suffer from social anxiety and even depression.

There is also scientific evidence proving that people who attempt to multitask while on their phones will find this strategy counterproductive. The brains of multitaskers, Yildirim says, will contain "smaller gray matter area" in the anterior cingulate cortex, the part of the brain that is responsible for top-down attention control (LaMotte, 2017). Essentially, allocating too much brain space to one's smartphone inhibits one's ability to be fully focused; their attention is too divided.

Impacts of Our Internet Habits

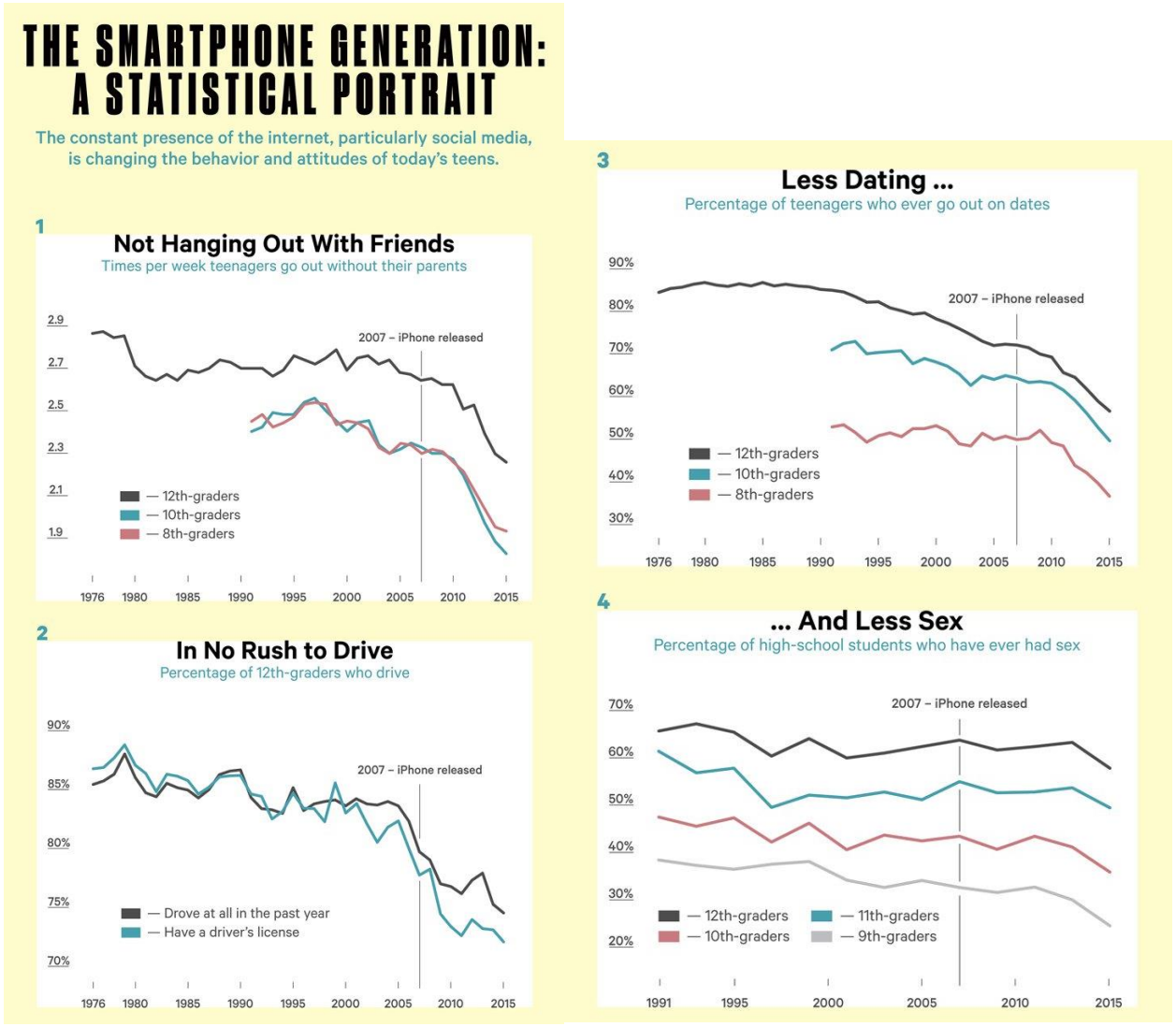
San Diego State University professor of psychology Jean M. Twenge discusses the results of her decades-long study involving shifts in teen behaviors from prior generations. Her article for The Atlantic, "Have Smartphones Destroyed a Generation?" primarily focuses on the smartphone habits of the post-1996 "iGen" generation.

In 2012, she writes, roughly 50 percent of Americans owned a smartphone. In 2017, a survey of 5,000 American teens showed that three out of four of them owned a smartphone. Smartphone ownership and evolving social media platforms have led to major changes in the behaviors of today's teens versus the habits of their parents.

Young people today are working less, dating less, are less sexually active, getting their driver's licenses later in life and are more likely to experience symptoms of depression, according to Twenge. As indicated in the below charts, teens in middle and high school are opting to spend less time with their friends. The sharp decline in this behavior coincided with the release of the iPhone in 2007. There is similarly a steep decline in the number of teens who obtain their driver's license that same year. And while 80 percent of high school seniors went on dates from 1976 to the early 1990s, that percentage starts to fall in 1995, faster still in the mid-2000s.

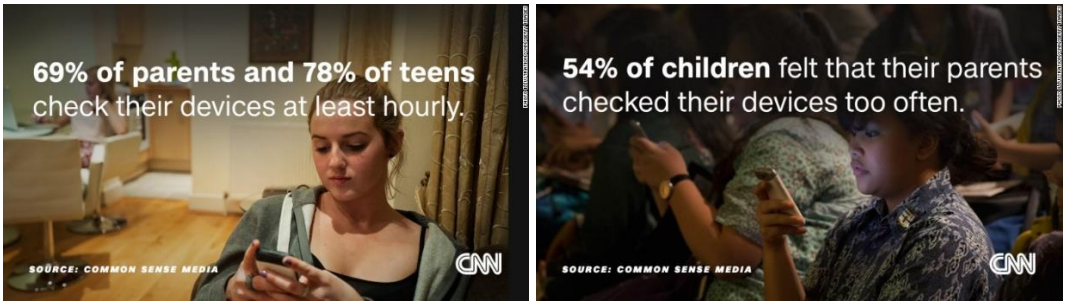
Teens faced with smartphone addiction are also prone to experience "FOMO" (the fear of missing out), feelings of loneliness, cyberbullying, sleep deprivation, and quite likely, emotional distance from family or friends.

Parents aren't always better behaved when it comes to their smartphone use. Eric Andrew-Gee, a writer for The Globe and Mail, argues that smartphones are shaping their users to become anti-social. They reduce cognitive ability, interrupt a healthy work-life balance, and cause family members to ignore each other. Americans spend between three to five hours scrolling through their smartphones every day, Andrew-Gee says, which equates to about seven years of one's life wasted on devices. Moreover, being so connected to our "friends" on social networks makes us pay less attention to the people in our real-life circles.



The Atlantic, 2017

Between 2006 and 2011, a study by The Center for the Digital Future found that the average number of hours American families spent together each month fell from 26 to 18. This is problematic; if parents are spending just as much time on their smartphones as their teens are, there will likely be distance in their relationship. Additionally, the longer parents stay on their phones, the less likely they will be able to respond to their children's needs.



CNN, 2017

"The devices exert such a magnetic pull on our minds that just the effort of resisting the temptation to look at them seems to take a toll on our mental performance," Andrew-Gee says. "The lesson we're slowly beginning to learn, though, is that they're not a harmless vice. Used the way we currently use them, smartphones keep us from being our best selves" (Andrew-Gee, 2018).

The Solution – No Internet Sabbatical Needed

The technology challenges we face today are not going away anytime soon. Just as the inventions of the telephone, radio, and television swept the world post-Thoreau, we can expect that smart technology will only grow savvier. Because I am not a Silicon Valley engineer, I'm not going to propose solutions regarding the user experience design aspect of technology. What I am suggesting is a change in how we create and feed our technology habits.

In their article for Behavioral Scientist, "Remedies for the Distracted Mind," cognitive neuroscientist Adam Gazzaley and psychologist Larry Rosen offer strategies to those working on a deadline in an environment filled with disruptions. The scientists say that when temporarily distracted from their work, it takes the average office employee about 30 minutes to fully re-immerse themselves back into their work routine. An important step in combatting distractions, they believe, is gauging how often one actually spends on the Internet or activities unrelated to work. Helpful apps that can track this include TrackTime, Asana, and Rescue Time. It's very possible that the time we believe we spend on unproductive activities is much greater in actuality.

Secondly, Gazzaley and Rosen recommend people create work spaces for themselves that limits their access to distractions. "A major problem in completing critical assignments, especially on a computer, is the constant availability of the most sought-after commodity: information," they write (Gazzaley and Rosen, 2018).

The solution may be limiting work to a single screen, clearing one's desk of all non-essential items, turning off text notifications, and allocating specific time periods for checking email and making phone calls. And although taking breaks between work will inevitably lead to a longer completion time on an assignment, Gazzaley and Rosen believe "restorative, stress-reducing breaks" will help lessen the boredom of completing a project while reinvigorating one to maintain focus on a task. Some of their break ideas include:

- Exercising
- Taking a break in nature
- Reading a chapter of a fiction book
- Short social interactions (either in-person or over the phone)

The big picture is this: Being successful in the workplace means separating one's priorities from anything that prevents work from being completed. Employing Gazzaley and Rosen's strategies will help address the challenges deep workers face by "improving metacognition, decreasing the accessibility of interruptive technologies, and decreasing your boredom" (Gazzaley and Rosen, 2018).

Some of us want to take it a step further. These days, it seems that the closest most of us get to an off the grid, Walden Pond experience is through temporarily abandoning social media. In the chapter called "Quit Social Media" in his book, *Deep Work: Rules for Focused Success in a Distracted World*, Newport seeks out a healthy balance between embarking on an Internet sabbatical and succumbing to Internet addiction.

Newport argues that one not necessarily need to abandon the Internet entirely in order to conduct deep work. The problem with an Internet sabbatical is that after a weeklong, monthlong, or even yearlong purge of social media, most people will return to their old habits and spend more time than before catching up on all the news updates they missed. It can also be argued that naming smartphones and social media as reasons for our inability to focus is misplaced blame. Just as one cannot blame the delicious taste of cake for causing weight gain, the Internet itself cannot be held responsible for one's inability to conduct deep work. Newport writes, "(Our option is) accepting that these tools are not inherently evil … but at the same time also accepting that the threshold for allowing a site regular access to your time and attention (not to mention personal data) should be much more stringent" (Newport, 2016, p. 184).

While a total unplug may not be practical, Newport strongly recommends that the deep worker distance him or herself from social media. He outlines three solutions for what he calls "Network Tool Selection." He suggests the **Any-Benefit Approach** to network tool selection for

workers who cannot unplug completely from Internet use. This approach allows the worker to use some forms of social media or apps as long as one can identify any beneficial outcomes of its use (Newport, 2016, p. 186). This approach becomes problematic, however, if an individual finds him or herself hopping back and forth from a project to addictive social media platforms. The **Craftsman Approach**, on the other hand, recommends that the Internet user only use tools where the positives outweigh possible negative outcomes.

For Newport, determining which tools will best help one succeed comes down to the **Law of the Vital Few**. This involves narrowing down the number of tools that truly matter and relate to one's work. One strategy Newport outlines is banning oneself from social media for a month, and returning only to the apps that have made a positive difference.

Furthermore, Newport believes in the fixed-schedule productivity tactic, which involves setting deadlines to determine how much quality work one can produce in a given time period, as well as ensure that the time allocated to shallow activities is limited. An example of this would be ending work promptly each day at 5:30 p.m. and making oneself hard to reach during hours of deep work.

Lastly, knowing one's work style will help deep workers adapt to a ritual, ultimately leading to the best chance of success. Newport describes four different types of "depth philosophies" that deep workers can incorporate into their working habits.

The person who takes on the **monastic philosophy**, Newport says, strives to "maximize deep efforts by eliminating or radically minimizing shallow obligations" (Newport, 2016, p. 103). This can mean limiting email correspondence and general administrative tasks from one's schedule. Newport's **bimodal philosophy** involves scheduling long stretches of time for deep work with time in between for other non-work activities.

The **rhythmic philosophy** involves setting aside time each day to perform consistent deep work. The ritual of performing deep work at the same time of each day is ideal for those who prefer routines and structure. Lastly, the **journalist philosophy** of deep work scheduling is what Newport describes as fitting in deep work whenever one's schedule allows, reflecting the unstructured schedule of journalists' days.

Whichever network tool selection or depth Philosophy one chooses, a practical way to create a work setting with as few distractions as possible is to identify the pros and cons of the network tools and routines they employ while completing deep work. Anything – whether it's a cell phone, Twitter, Facebook, or keeping multiple tabs open on a computer – that does not support the overall goals of the deep worker should be left by the wayside.

Conclusion

More than 160 years have passed since the publication of Thoreau's *Walden*, but it's worth observing Thoreau's commentary about distractions and putting them in a modern-day context. Thoreau writes, "We must learn to reawaken and keep ourselves awake, not by mechanical aids, but by an infinite expectation of the dawn, which does not forsake us even in our soundest sleep."

Today, these "mechanical aids" can refer to our cell phone alarm clocks or the presence of our smartphones as a whole. In 2018, we should interpret Thoreau's encouragement to reawaken ourselves as an urging to wean ourselves from the devices on which we've become so dependent.

Smartphones have been major game changers on both personal and professional levels. They help us get from Point A to Point B, store our credit card information, enable us to connect with all our acquaintances, and provide up-to-the-minute news updates. But in the decade that has passed since the release of the first smartphone, we can clearly see its drawbacks, namely our addiction to it. Now that we've reviewed the impact of smartphone addiction, its impact on our habits and behaviors, and strategies to weaken our draw to our devices, we have the tools necessary to retrain our minds to focus deeply on the work and relationships that truly matter.