Georgia Tech MS Digital Media

# Social Control Via Temporary Messages

Effects of popular social media features and ethical cases of their use in SnapChat

#### Introduction

# Growing effects of technology in relation to social media

Social media has impacted the modern age in profound ways. Around my campus at Georgia Tech you'll find almost every person holding their cell phone as they walk place to place, which is no rare occurrence in 2019. In fact, people are using their phones so frequently while they walk around the National Safety council issued an urge for walkers to keep their "head up, phone down" to avoid injury or death from distracted walking. [18] The rise of the cellphone craze stems directly from its capability to enable connection. Yes, phones bring access to a countless number of news articles, blog posts, or almost *anything* someone could conceive and upload to a webserver somewhere, but the continuous clutching of phones is more often tied to contacting other people on the other end of the screen rather than webservers alone. If you consider texting a means of social media, which *The Oxford Dictionary* would agree<sup>[22]</sup> with due to its definition as: Websites and applications that enable users to create and share content or to participate in social networking, then participating in social media was already the most common use of a cellphone outside calling according to a Pew Research Study in 2011. [20] In 2017 a different study based in the UK states that "calling didn't even make the list" just six years later. [15]

When it comes to our addictions with our phones, should we blame ourselves as the users? Certainly, we could regulate our use of technology and set healthy boundaries. Obviously not everyone is frequently distracted by technology, just *the vast majority*. To shed some light on this we can look toward the creator of the most popular phone series in America, Steve Jobs, and that's precisely what Adam Alter does in his book *Irresistible: The Rise of Addictive Technology and the Business of Keeping Us Hooked*.<sup>[2]</sup>

#### Job's iPad

## Groundbreaking for everyone, excluding his own kids

Alter opens his book by describing Jobs' sales pitch for the iPad. He mentions Jobs boasting about the iPad being easier to use than a laptop and a better experience than a phone, so everyone should get one. Everyone - but his own kids apparently - as Alter quotes that the Jobs family is very keen to "limit how much technology our kids use in the home." Alter continues to rattle off giants in the tech industry such as the creator of *Wired* magazine or the founder of Twitter. Each person in the list agreeing with Jobs and coupled with quotes of their own discussing how actively they limit the use of technology by their families. They know how destructive *it* can be – *it* being the very technologies they created. All this is to say that there is something rather ominous at play. If the iPad does such a fantastic job at improving our lives, then why wouldn't the Job's kids be seen running around with one at home just as many other kids do? The rational lies less with our ability to use technology effectively and more with the design of the software itself.

Greg Hochmuth, a founding engineer for Instagram, told Alter that he realized he had created a platform based in addiction. Anyone who has used Instagram, Facebook, Twitter, or a majority of social media apps has experienced the tactics Hochmuth is referencing – one of which being the bottomless page. When a user opens their feed, they can continue to scroll as content is

seamlessly loaded in the background, creating an endless display of all your friends' posts along with the ads sandwiched between them. The entire process is so effortless that through writing this I realized that I use a third-party program called "Never Ending Reddit," so Reddit will do the same thing for me. However, the extreme convenience is part of the issue. When using a program or device, engagement dips, such as loading times or misunderstood direction, create a friction within the process. We've all experienced an interaction with too high of friction such as a stalled webpage that never seems to load, and it's during these lapses of interaction that we'll be tempted to just quit if the friction gets too high. It's usually only in these lapses in engagement that we are tempted to quit at all barring external circumstances. The bottomless webpage aims to continuously present its users with engaging content, so the user doesn't even have to think about loading the next page. The entire process becomes an autonomous scroll and sifting until the content is no longer new or interesting. That's where I find myself thirty pages and over seven-hundred listings into Reddit when I only meant to browse for a few minutes. Alter references these forms of tactics that are "engineered to be irresistible," and he urges us to expand our definition of an addict beyond simply those with alcohol and drug addictions. He explains that these scientifically crafted experiences are designed to, and successfully, keep all of us "one product or experience away from developing our own addictions."

# SnapChat

# From temporary messages to social foundation

Taking this example into consideration, and rather than attempting to analyze all of technology as a whole, let's look at the most dominant owner of communication cited in 2017 – SnapChat. [5][9] You may not use it frequently because it isn't targeted to shape the current generation, but future ones. Former design ethicist at Google, Tristan Harris, mentioned that SnapChat was the most popular way for teens to communicate back in 2017, and other articles claim the same is still true of 2019. [3]

What features does SnapChat have that makes it unique? In what ways are these features shown to be harmful to users, if at all? What are the ethical responsibilities regarding the users and the creator company Snap Inc.?

SnapChat is a social media communication app created in 2011 by three fraternity brothers, Reggie Brown, Bobby Murphy and Evan Spiegel, who wanted to make a way people could send photos to each other that would only be available for a limited time.<sup>[1]</sup> Initially the app was called Picaboo and that is where SnapChat's ghost icon originated seen in figure 1.



Figure 1 SnapChat Ghost logo.

Initially the app only centered on the original concept of sending or receiving temporary messages. Users could pick how long they wanted the pictures to be on the receiver's screen. This concept on its own was enough to spark some interest, but in order to analyze against an ethical backdrop there are three major components that need to be understood:

- Streaks
- Stories
- Discover



Figure 2 An example of a 17-day streak of my own.

# Streaking

# Anxiety through quantified friendship

A streak in SnapChat is how many *consecutive* days two users have sent each other "snaps" (photo messages) represented by the number and a flame seen in figure 2. While things such as login streaks are popular within realms such as video games, SnapChat seems to be the first social media to make use. This is a trend we'll see in the other features as well. When the users send each other a message their shared number by their name goes up immediately after pressing send. This gives the users an always beloved dose of instant feed and immediate gratification that they have *earned value*, but we'll get into the consequences of enforcing the concept of a friendship as an incrementing number later.

Streaks are a fun way to see how long you and a friend have messaged back and forth on the surface. Even on first consideration the concept could even be beneficial because it encourages people to be less isolated and interact with others more through meaningful dialogue. In practice,

however, that is not the case. Often rather than sending meaningful messages or even just a simple "Hello," teens have been known to frequently send out mass messages of pictures of their ceilings captioned with "streak" just to keep pumping up their numbers. [13] Could you imagine the anxiety a teenager would feel about losing their 500-day streak and the great sense of loss that would occur if they accidentally went outside data coverage for over 24 hours? It may seem silly, but these are realities for teenagers across America and even expanding to other regions. The loss of a streak would be very real for someone willing to invest such a long period of daily devotion.



Figure 3 Example of an older version of the SnapChat stories screen. [16]

#### **Stories**

# Daily reminder for who is actually your friend

The next notable function of SnapChat comes in user stories. SnapChat first released stories in October 2013, [23] and the effect was so pronounced it was cloned by its competitors and can now be found on Instagram and Facebook in an almost identical fashion. Stories are shown in figure 3 through the photo adjacent to the usernames and are simply a compilation of photos and videos posted by that user during a 24 hour period. After taking a picture or video a user has the choice to either select friends to send the video to directly, post the video to their story section, or a combination of both. User stories replicate typical social media feeds in the way that the content posted to them is not directed to any particular user, but rather anyone whom they provided access (private listing so only mutual connections can view or public listing so anyone can view). The big kicker, however, comes in the 24 hour time limit. Because anything a user posts to their story is only available for a 24 hour window, users would be encouraged to check in on the app at least once a day to see all the story content their friends have posted. If they don't then they miss out on the content entirely. While it may not seem that big a deal to some, I have had, "Did you see my story?" directed to me on numerous occasions from a variety of ages or social circles. Most of the time for me it is no big deal to mention that I didn't get around to checking SnapChat, and they don't take it personally. For today's teenagers, however, the idea of caring about someone and keeping up with their story often goes hand-in-hand. This feeling of abandonment is most likely being felt by someone who reached out on a message board to ask "Why [a girl would] stop viewing [their] SnapChat stories." [8]

Without diving too deep into the topic of The Fear of Missing Out (FOMO) that has been the entire focus for many studies, we can see some immediate parallels between SnapChat stories and the psychological effect of FOMO. If you have ever heard someone mention how they, "had such a good time" doing something earlier or making plans for something in the future and you weren't invited or involved so that made you feel bad then congratulations, you've had FOMO before. For those who grew up before the internet, hearing a story from an event you missed out on could be difficult to hear as you wish you were able to participate too, but with modern social media almost all of these FOMO moments become extreme. Kids such as Sadie, a 10<sup>th</sup> grader from New York, are talking about how social media, "makes you feel bad or lonely or sad" when they see posts about an event they didn't attend.<sup>[24]</sup>

Knowing a background on FOMO now, it can be easy to see how it's the fear of missing a funny post or letting a friend down by not seeing their photo that makes stories so popular. SnapChat stories *demands* attention on SnapChat's terms, not when it's convenient to the user.

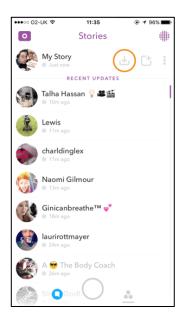


Figure 3 Earlier version of the stories screen.[16]

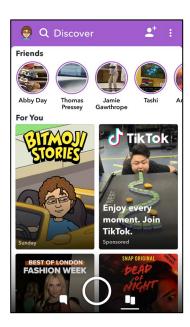


Figure 4 2019 version of the stories screen.

#### Discover

# Force feeding tabloid culture to pre-teens

The last aspect I wanted to bring up more briefly is something that often gets less attention when it comes to SnapChat specifically. Advertisements have become an extremely popular way to release an unpaid platform while still being able to generate revenue. As I mentioned before, other social media sites like Instagram have ads peppered throughout the user's feed, so there is a constant switching between viewing friends' posts and sponsored content. On Instagram at least, whether it always feels like it, the main feed content is still clearly the user posts as a quick count

of my current feed in 2019 shows 6 ads out of 30 posts. However, the same cannot be said about SnapChat.

If we take a look back to the story screen from the last section, we can see exactly what we would expect- user stories. They place the user's story right at the top, followed by all their friend's stories in order of most recent post. Jumping forward today in 2019 and we see a different case entirely. The "Stories" page has since been replaced by the "Discover" page. Because SnapChat's stories were such a large feature, we can still see them listed on the screen, still in order of most recently posted as far as I can tell, but it isn't hard to see why this page is no longer called the "Stories" page. The stories being relegated to an incredibly small top bar, take a backseat to the "grocery stores checkout line" esq display of tabloid news stories. It is a very dramatic change to say the least, but it didn't come overnight. Users such as Matthew Hussey remember update after update over the years slowing being to change the overall presentation of user stories. Hussey wrote an article for "thenextweb" back in 2016 discussing grievances due to the content and size of the ads presented on each user's screen, and just for reference, in 2016 the business related content took of almost the exact amount of screen space we see utilized for user content in 2019. [11]

Just to mention, it isn't simply the size of the ads that are impeding the experience of the users, but the type of content these "news sources" are posting. Malissa Richardson made a stand against this when she started a Change.org petition to "Let Users Opt Out of Sexually Explicit Featured Stories." [17][19] Richardson shares this thought within the petition:

"I do not care to see articles about how to improve my sex life, how to lose my virginity, or what I should know about what guys like in bed. To me, that is offensive and disgusting. What frustrates even me more is that I am not the only person exposed to this pornographic material. I hate to think that my younger siblings, friends, and millions of other young people as young as 13 years old are exposed to this content multiple times a day without the option of blocking it. But that is the current reality. I am at the point where I am considering deleting the app, like many others have, just so I do not have to see the explicit material posted in the unavoidable Featured section of the app on a daily basis."

Also, it is worth mentioning, that the Discover page operates using the "bottomless page" technique mentioned before as a means to capture and hold user attention as long as possible.

# Ethical Understanding *Are we being lied to?*

We can see that the system is fallible. Buchanan argues that ethical products are designed to "serve human beings in their various activities and pursuits," but what is being pursued here?<sup>[6]</sup> Assuming that SnapChat has their user's best interests at heart (as we are led to believe based on their mission statement placed on their company website, "Our products empower people to express themselves, live in the moment, learn about the world, and have fun together."<sup>[21]</sup>), then they created streaks to help empower people. I ask, in what way does sending a photo of your ceiling captured

"streak" assist people in expressing themselves?<sup>[13]</sup> How does consistent anxiety about losing all of your built up "value" help someone to live in the moment if they can't even go without WiFi for 24 hours? We can see a clear disconnect between the stated goals Snap Inc. has for SnapChat and the way it is utilized, but who's fault is that? It either comes down to a poor design by Snap Inc. or it's the users who are misusing the platform. It is in determining the difference that we must consult a variety of ethical frameworks to see how ethical SnapChat is currently from a variety of vantage points. Afterwards, we can use the analysis of the current practices and contrast them to the code of ethics described in their company's mission statement.

#### Libertarian Discussion

If someone would consider SnapChat to be a gross misuse of the user, then they would claim that it isn't the business' fault for what their users do. People in this category would be taking a stand most similar to a Libertarian. Libertarians strive to protect the autonomy of the individual and their ability to interact with the free market. Snap Inc. would be interacting in the free market by creating and publishing SnapChat and if their userbase doesn't use it properly it isn't the fault of the designer. After all, if it harms them, then they are free to stop using their platform. There are a few considerations to this mindset.

Consideration 1: Not all of SnapChat's users can be considered adults.

The Libertarian free market requires consenting informed adults to make autonomous choices. [7] SnapChat's main userbase is a younger audience, and with so many of their users not classified as "adults" because they are under 18, how can they participate in the market designed for informed adults? One could try to argue that the pre-teens are not supposed to be using the platform as they are under the age requirement of 13. [4] Anyone who has been online knows that all it takes to circumvent the age requirement is checking a box stating you are indeed 13. I am not debating the lengths SnapChat should go to verify age, however, 13 and up is still not 18 or over, and all users regardless of age have been targeted by the increasingly aggressive form of SnapChat's marketing strategy.

Consideration 2: *How free is our decision to use SnapChat?* 

Another aspect of the Libertarian argument centers on the ability of individuals to freely interact within the market. However, if our school study and social groups were based within the SnapChat, would our ability to choose to freely use the product be affected? In this case, any user still has the freedom to download and make an account on the app, sure, but in the case of social groups using SnapChat as the main method of communication, to opt out of the apt would consequently opt one's self out of the social group as well. If you aren't on the platform then events planned on the app would be unknown to you, so over time you may find yourself less and less involved in your social circle.

Some may say that someone could find new friends who aren't as dependent on a social media platform or simply find other means to contact people for information about your social group's events. These are alternatives, yes, but there is still more wrapped up in the decision to be on the SnapChat platform beyond a user's relation with the company's product.

We must also consider how free will is influenced through the addictive design of the product.

Consideration 3: If the parents should be in control, how informed are they?

Youth have been marketed to for years, and in the US we can see this because kids TV networks such as 'Cartoon Network' and "Disney Channel' still have commercials tailor made to hook kids on their products. Child marketing still revolves around the assumption of parental guidance. Many ads for websites will request kids logon with their parent just in case they happen to stumble outside of the kid-friendly webpages and into the unfettered World Wide Web. Even with this call for parental guidance, it is still difficult to monitor everything one's child does on their smartphone, and kids have been getting smartphones at an average age of 10.3 since 2016.<sup>[12]</sup> Through this we've seen companies such as Netflix release a kids mode to protect their users from sensitive content, but we have yet to see something like this implemented within SnapChat which, one could argue, could be something the company could do to protect their younger users.

Even assuming there is a parent present every time a kid uses SnapChat. That may help in alleviating unwanted exposure to content, but what of the innate addictive features like creating streaks? How informed are the parents about the addictive features hand crafted within every user experience of the app in hopes of guiding their kids against it? Addictive drug products like cigarettes have to inform users of their addictive qualities, but where are those warnings for tech companies designing for addiction?

#### **Utilitarian Discussion**

The method a Utilitarian uses to consider the ethical consequences of a product revolve around the total benefit caused considering the drawbacks. If the sum of the two parts is positive, then it must be ethical. A common saying with this ethical framework at heart is, "The end justifies the means." Bentham, a famous utilitarian, frames the benefits and drawbacks through the lens of pleasure and pain respectively. If using SnapChat brings me more pleasure than pain, then the social media platform is ethical. We can look at the largest consideration using Bentham's pleasure and pain dialogue.

Consideration: *Short vs long term pleasure* 

Web-based platforms often boil down to clicks and eyeballs. Metrics regarding how many people viewed content, how long were their viewings, how engaged were they through clicking for more information: are all key in having a profitable ad-based platform. SnapChat would fall under this category as its platform is "free" for users monetarily, but the truly "pay" with each moment their attention is captured by sponsored content. Because this is the methodology of the platform, the longer users are interacting with SnapChat, the more profitable it is. As described before, that is the basis for these addictive components found in streaks, stories, and the endless nature of the Discover page.

People use the platform because there is a desire to do so. There is a pleasure in viewing interesting content from friends or public users, however, it is obvious that this pleasure of short-

term engagement pales in comparison to long term fulfillment. We can see this through by the depression often correlated with high usage of social media.<sup>[14]</sup> The low effort nature of scrolling through a social media page can produce enough pleasure to keep someone on the page, but at what cost? The time spent sucked into social media like SnapChat could potentially be spent in pursuit of more long-term fulfilling goals, but the business model of the app makes it more profitable through designing itself to be extremely easy to forgo long-term pleasure for the short-term alternative.

One could argue, maybe while the users don't receive long term pleasure, the companies benefiting from this business model receive more income which increases the pleasure of the stakeholders. Without diving too deep into the danger of corporations profiting off of user abuse, if SnapChat wishes to stay true to its mission statement of empowering its users, this method is incompatible.

## Defining Their Mission Statement – Kantian Ethics

Our products empower people to express themselves, live in the moment, learn about the world, and have fun together

As mentioned before, this is the mission statement displayed directly on the homepage of Snap Inc., and there is an ethical framework relayed within its message. There is no cost benefit analysis we could expect from the Utilitarian. While it is close to the Libertarian, it still doesn't fit it exactly because it doesn't simply convey a freedom of the user, but a concern for improving their lives. A better model has been outlined by Kant, and it's almost a sub-set of the Libertarian stance. Kant's code of ethics discusses the autonomy of human beings but presses beyond a call to respect other's actions with Kant's call to respect people as rational human beings. To do so, Kant calls it unethical to use people as a means to something else, such as a means for a profit, and believes that people are an end within themselves. This can be seen in SnapChat's mission statement as they describe their product, not in terms of its profit margins, but rather in how it adds value to the lives of people. It presents Snap Inc. first and foremost as creators for the benefit of users.

Considering all the features and effects we discussed, is this true?

#### Conclusion

#### Removing the rose-colored glasses

The growing daily use of technology, and developments of the software within them, call forth a constant need to reevaluate our methods of interacting with them. Each iteration is a greater understanding of human nature, and how to profit off it. In Kantian style, similar Snap Inc's mission, Buchanan described the use of purpose of design being to serve humanity. [6] He outlines these aspects through three-part analysis of a product as *useful*, *usable*, and *desirable* depicted in figure 5.

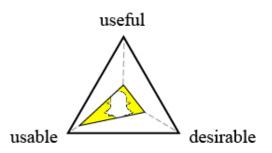


Figure 5 SnapChat placed within Buchanan's ethical product model.

Through the multi-part analysis of SnapChat's features and effects, we can see there is an imbalance among those three parts. Its overall use would call upon a Utilitarian view of which we found a greater, long-term value is staved off through a focus on the short-term pleasure that drives profitability. The application is clearly desirable, as there is a growing user base whom had to be initially interested to download the app in the first place. However, the Libertarian view of a user's freedom to desire the app or not was called in to question with the many social and physiological pressures affecting the user base, and specifically younger audiences. What SnapChat has considered, at a grossly improportionate amount, is the usability. Their entire profit system is based upon it. The imbalance of developing an extremely usable product to maximize profits prays upon the built-in addictive aspects of human nature but fails to provide the necessary desirability or usefulness to fulfill Buchanan's call for ethical design. The negative effects can be seen in the various specific cases.

For-profit businesses inherently strive for profitability. They undergo dramatically varied means to achieve that goal, each with its own ethical consequences. Does SnapChat's model for profits work? Yes, considering their stock value, which has almost doubled in the past year, as a measurement of profitability. However, does SnapChat meet the goals of the Snap Inc. mission statement? *No, it does not.* So why are they still able to claim that their company "empower[s] people to express themselves, live in the moment, learn about the world, and have fun together."? Have we simply become numb to companies promising one thing and consistently delivering another? If the metric for business success is Utilitarian-ly defined as an increase or decrease in profit margins, what incentives does SnapChat, or any company for that matter, have to refrain from building in addictive features that have been proven to generate revenue? Is it not possible to build a social media platform that is both profitable and discourages addicted users?

#### Works Cited

- 1. "A Brief History of Snapchat." Adsoup, 19 May 2018, adsoup.com/a-brief-history-of-snapchat/.
- 2. Alter, Adam. Irresistible: the Rise of Addictive Technology and the Business of Keeping Us Hooked.

  Penguin Books, 2018.
- 3. Anderson, Monica, and Jingjing Jiang. "Teens, Social Media & Technology 2018." *Pew Research Center: Internet, Science & Tech*, 30 Nov. 2018, www.pewinternet.org/2018/05/31/teens-social-media-technology-2018/.
- Bouckley, Hannah. "A Parent's Guide to Using Snapchat Safely." BT.com, 25 July 2019, home.bt.com/tech-gadgets/internet/social-media/what-is-snapchat-a-safety-guide-for-parents-11364052742537.
- 5. Curtin, Melanie. "Are You On Your Phone Too Much? The Average Person Spends This Many Hours On It Every Day." *Inc.com*, Inc., 30 Oct. 2018, www.inc.com/melanie-curtin/are-you-on-your-phone-too-much-average-person-spends-this-many-hours-on-it-every-day.html.
- 6. "Design Ethics ." Encyclopedia of Science, Technology, and Ethics . . Encyclopedia.com. 28 Sep. 2019 <a href="https://www.encyclopedia.com">https://www.encyclopedia.com</a>.
- 7. Flanigan, Jessica. "What About Children?" *Bleeding Heart Libertarians*, 28 Feb. 2012, bleedingheartlibertarians.com/2012/02/what-about-children/.
- 8. Florence. "Why Would a Girl Stop Viewing My Snapchat Stories?" *Quora*, 1 Oct. 2015, Why would a girl stop viewing my Snapchat stories?
- 9. Harris, Tristan, director. How a Handful of Tech Companies Control Billions of Minds Every Day.
  TED, 2017,
  www.ted.com/talks/tristan\_harris\_the\_manipulative\_tricks\_tech\_companies\_use\_to\_capture\_you
  r attention.
- 10. Harrison, Sara. "Teen Love for Snapchat Is Keeping Snap Afloat." Wired, Conde Nast, 23 July 2019, www.wired.com/story/teen-love-snapchat-keeping-snap-afloat/.

- 11. Hussey, Matthew. "Snapchat's Discover Channel Is Quietly Ruining the Social Network." *The Next Web*, 4 May 2016, thenextweb.com/insider/2016/05/04/story-snapchats-confusing-discover-feed/.
- 12. "Kids & Tech: The Evolution of Today's Digital Natives." *Influence Central*, 2016, influence-central.com/kids-tech-the-evolution-of-todays-digital-natives/.
- 13. Lorenz, Taylor. "Teens Explain the World of Snapchat's Addictive Streaks, Where Friendships Live or Die." *Business Insider*, Business Insider, 14 Apr. 2017, www.businessinsider.com/teens-explain-snapchat-streaks-why-theyre-so-addictive-and-important-to-friendships-2017-4.
- 14. Neighmond, Patti. "Increased Hours Online Correlate With An Uptick In Teen Depression, Suicidal Thoughts." NPR, NPR, 14 Nov. 2017, www.npr.org/sections/health-shots/2017/11/14/563767149/increased-hours-online-correlate-with-an-uptick-in-teen-depression-suicidal-thou.
- 15. Person. "REVEALED: Top Uses of Our Smartphones and Calling Doesn't Even Make the List."
  Express.co.uk, Express.co.uk, 13 Mar. 2017, www.express.co.uk/life-style/science-technology/778572/Smartphone-phone-common-reason-use-call.
- 16. Pickering, Andrew. "How to Repurpose Your Snapchat Stories." *Social Media Marketing | Social Media Examiner*, 10 Jan. 2019, www.socialmediaexaminer.com/how-to-repurpose-your-snapchat-stories/.
- 17. Richardson, Malissa. "Sign the Petition." *Change.org*, 2016, www.change.org/p/nothankssnapchat-let-users-opt-out-of-sexually-explicit-featured-stories.
- 18. "Safety at Home." Pedestrian Safety, www.nsc.org/home-safety/safety-topics/distracted-walking.
- 19. Sluis, Sarah. "Snapchat CEO Welcomes Publishers, Shuns 'Creepy' Ads." AdExchanger, 2 Feb. 2016, adexchanger.com/publishers/snapchat-ceo-welcomes-publishers-shuns-creepy-ads/#close-olyticsmodal.
- Smith, Aaron. "Americans and Their Cell Phones." Pew Research Center: Internet, Science & Tech,
   Jan. 2016, www.pewinternet.org/2011/08/15/americans-and-their-cell-phones/.
- 21. Snap Inc., Snap Inc., www.snap.com/en-US/.

- 22. "Social Media: Definition of Social Media by Lexico." *Lexico Dictionaries* | *English*, Lexico Dictionaries, www.lexico.com/en/definition/social media.
- 23. Team, BuyCustomGeofilters.com. "Snapchat's History: Evolution Of Snapchat And Timeline (2019)." BuyCustomGeofilters.com, BuyCustomGeofilters.com, 30 May 2019, www.buycustomgeofilters.com/blog/snapchat-history-and-updated-timeline.
- 24. Wallace, Kelly. "Teen 'like' and 'FOMO' Anxiety." *CNN*, Cable News Network, 7 Dec. 2016, www.cnn.com/2016/12/06/health/teens-on-social-media-like-and-fomo-anxiety-digital/index.html.