



21st-Century Narrative Change with Focus on Social Media

**Amy Sprecher and
Aaliytha Stevens**
Co-Founders,
Building CommUnity LLC

April 2023

About the Authors

Amy Sprecher

Amy Sprecher, Co-Founder Building CommUnity LLC, is a multi-award-winning producer and senior manager with a comprehensive background in communications, branding and marketing, and multi-media content. Amy specializes in social mission-focused content and human solutions including strategy and implementation of narrative change, cultural transformation, and DEIB work with the goal of raising awareness and building pathways toward a purposeful and thriving multicultural and multiracial CommUnity. Amy's entire career has been centered on improving the lives, access, and success of children and families of all backgrounds. Fortified with a MPA (2022) from the Colin Powell School of Civic and Global Leadership, and passionate about creating spaces for deep dialogue to overcome divisions and build movement solidarity and unity, Amy was awarded a Changemaker Fellowship for the design of a hybrid workshop series using a unique blend of shared storytelling, revealing, healing, educating, guiding, and communication to help transform culture and narrative, with the belief that together – multicultural collective action – we can build equitable opportunity and prosperity for all. Thru a new organization, Building CommUnity LLC (www.Building-CommUnity.co), Amy and her partner, Aaliytha Stevens, have expanded this work into business, education, community organizations, and activism environments. They are currently undertaking communications and narrative strategy work for the National Collaborative of Health Equity and on an extraordinary initiative, *Truth, Racial Healing, and Transformation*. Amy is also trained in RX Racial Healing (Dr. Gail C. Christopher) and with the Sustained Dialogue Institute. She has owned The Sprecher Company, LLC since 2000 and has worked extensively in live entertainment, programming, production, content development, gaming, acquisitions, home entertainment/digital streaming, licensing, marketing/branding, communications, community outreach and education. Projects/associations include: Producer/General Manager of live/streaming musical *Turning 15 on the Road to Freedom*; Facilitator/Analyst for The Education Trust–New York; Creator/Producer of *Universe of Angels* (multi-platform virtual tween and family brand focused on universal values); General Partner of *Little House on the Prairie, The Musical*; PBS Distribution; Discovery Kids; Sesame Workshop; PolyGram Video; Lifetime Television; USA Home Entertainment; WGBH (Boston PBS Station); Ohmland Holdings (*The Moblees* – health and wellness brand); and more.

Aaliytha Stevens

Aaliytha Stevens, Co-Founder of Building CommUnity LLC, is a seasoned marketing and communications professional with a background spanning over two decades in the vibrant realm of live entertainment. Her expertise lies at the intersection of marketing and audience development, where she has played a pivotal role in shaping the success of numerous projects and organizations. Aaliytha’s unparalleled insights into audience behavior, coupled with her strategic acumen, have been instrumental in enhancing the reach and impact of various live entertainment ventures. With a relentless passion for the arts and a commitment to operational excellence, she continues to be a driving force in the industry, enriching the connections between artists, productions, and their commUnities. She specializes in Audience Development and Operational Strategy (through her consulting firm, Ashé Collective), leveraging her extensive experience to bridge gaps and create connections within the commUnity. Aaliytha’s dedication to fostering commUnity through humanity and the arts is at the heart of her work, which extends beyond the stage. Her commitment to commUnity building is unwavering, as she actively champions causes aimed at overcoming disparities and division. Her dedication to uplifting change makes her a driving force in the mission of building a more inclusive and united society. Alongside Amy Sprecher, she co-founded **Building CommUnity** to dig deep into doing the work needed for humanity to enjoy equity, shared prosperity, and true CommUnity. Aaliytha sits on the boards of the Black Theatre Coalition (BTC), the New Heritage Theatre Group, Theater Works USA, (TWUSA), on the advisory council of The Theatre Leadership Project (TTLP), on the Catalyst 2023 Advisory Committee of the National Black Theatre (NBT), and co-chairs The Broadway League’s Multicultural Taskforce while being a member of the EDI and Business Development Committees. She is also a proud Broadway Women’s Alliance (BWA) and Women of Color in the Arts (WOCA) member. She hails from the Bronx, NY, and holds Mental Health First Aid, CPR, and Google Analytics certifications. Additionally, she completed the Truth Racial Healing and Transformation (TRHT) training and is an alumnus of Cohort 17 of Citizen University’s Civic Saturday Program. In 2022, Aaliytha was awarded an honor by Houses on the Moon for “championing the unheard voice.”

Since its inception, the National Collaborative for Health Equity (NCHE) has dedicated its programs and activities to creating health equity in the United States by ending racial and ethnic health inequities. NCHE's leadership, staff, and consultants always recognized that ending racism requires achieving and sustaining meaningful progress toward this goal. Beginning in 2020, NCHE joined over 150 other nonprofit and philanthropic organizations in leveraging the pillars of the Truth, Racial Healing, and Transformation (TRHT) Framework to inform programs, policy research, and action. These five pillars (Narrative Change, Racial Healing and Relationship Building, Separation, Law, and the Economy) offer a comprehensive and holistic conceptual framework for action to end racism and jettison the deeply embedded belief in a false hierarchy of human values.

NCHE's vision is embodied in our name. We work in collaboration with others to help our nation achieve health equity. NCHE's mission is to promote health equity by harnessing data, developing leaders, and catalyzing partnerships across the many sectors that share responsibility for creating a more equitable and just society. As NCHE continues to collaborate with others, we implement three key strategies: (1) Supporting Leaders, (2) Applying Data Research and Information, and (3) Expanding the TRHT Movement. NCHE equips institutions and leaders to work effectively with and within historically marginalized and excluded communities, providing tools to help improve the social, economic, and environmental conditions that shape health. We help organizations and communities to envision and actualize an America that has faced and redressed historic and contemporary effects of racism in all its forms.

I am pleased to present this new collection of briefs offering insights into each TRHT pillar. Leaders, practitioners, and researchers can utilize these resources committed to overcoming the unique racial history and legacy of the United States.

The original organizations that participated in the design phase of TRHT in 2016 were included in a platform created by the W. K. Kellogg Foundation, *Connected Communities*. Based on preliminary Connected Communities research, these participating organizations and representatives from over 150 nonprofit entities could reach over 189,000,000 people in the United States. A lot has happened since 2016. The momentum continues to increase for the expansion of local and national efforts to address and heal from the historic and contemporary effects of racism.

While the potential of reaching almost 200 million people has yet to be realized, recent surveys suggest that tens of millions are aware of the effort, and the work continues to expand. As the momentum has increased, resistance and backlash to this progress grows. The resources or tools provided in these briefs can help leaders, practitioners, and researchers maintain momentum in the face of resistance.

There are many consequences of chronic exposure to structural racism and racial discrimination. The most insidious consequences are disease and health inequities. Our failure to effectively address and redress America's legacy of racial hierarchy has economic costs that reach well into trillions of dollars for our society. But it is communities of color that bear the lion's share of the burden of the costs of failing to eliminate racism and its consequences. The courageous and dedicated work of leaders in communities across America provides hope that we will succeed in overcoming racism. We offer these resources as support for these ongoing efforts.

Sincerely,



A handwritten signature in black ink that reads "Gail C. Christopher".

Gail C. Christopher
Executive Director
National Collaborative for Health Equity

Table of Contents

1	1. Introduction
3	2. Summary: Narrative Change for Social Change
4	Ways Narrative Can Influence Us
4	Examples of Successful Shifts in Narrative Change
5	Techniques for Implementing Narrative Transformation
5	Groups and Organizations that Can Help Change the Narrative
6	3. Social Media Prioritization of Dissemination of Narrative Change
8	Brief History of Mass Media
11	Narrative Change via Social Media: Pros
15	Narrative Change via Social Media: Cons
20	4. Other Digital/Mass Media Platforms
20	Search Engines
22	Artificial Intelligence, Machine Learning, and Deep Learning
24	Other Mass Media Platforms
26	5. Algorithms – In More Depth
28	6. “Fair Use”
29	7. Digital Platforms –By Category
29	Social Media Platforms
43	Search Engine Platforms
46	Podcast Platforms
53	Blog Platforms
58	8. Best Strategies to Create a Viral and Sustaining Social Movement
60	Strong and Weak Ties, and Simple and Complex Contagions
62	Basic 101 Social Media and Channel Marketing Tactics
62	<i>Words Matter</i> : Know the audience and use language accordingly
63	9. Strategies to Combat Proliferation of Divisive Rhetoric
65	10. Conclusion
67	References
70	Endnotes

1.

Introduction

This report is directed to leaders in the health equity and racial and social justice arenas, providing a foundation for best practices and a basic roadmap for the use of social media and other digital platforms, including information on existing pitfalls and the use of propaganda and disinformation.

Social media and other digital platforms are powerful and influential channels for disseminating 21st-century narrative change. Numerous digital channels are used as positive forces to stimulate social movements. According to researchers Steven Gordon, Rodrigo Sandoval-Almazan, and J. Ramon Gil-Garcia, social movements that are driven by digital channels usually follow a model involving connections between many people who have a common interest, grievance, or experience a specific trigger. These connections lead to both organization and media response followed by a deliberate plan for physical action. Social movements are tools in the continuous fight for social change, which can also mean political change or reform. Social change can occur when a social movement's objective has been met in whole or in part by a change in behavior or beliefs. (Gordon, 2015; Sandoval-Almazan & Gil-Garcia, 2014).

Digital channels can also be used as extremely harmful instruments for the proliferation of propaganda, disinformation, and conspiracy theories designed to continue the spread and solidifying of the false belief in a hierarchy of human value. Propagating this false belief is a centuries-old strategy, one that uses identity politics, racial grievance, and “culture wars” to forge divisions between working-class, middle-class, and low-income Black, Indigenous, and People of Color (BIPOC), on the one hand, and White populations, on the other, for the sole purpose of keeping wealth, power, and control in the hands of the few (that is, prosperous White supremacists).

“Narrative Change” is a foundational pillar of the *Truth, Racial Healing and Transformation™* (TRHT) framework and methodology developed and launched in 2016 by the W. K. Kellogg

Foundation (WKKF) under the leadership of Dr. Gail C. Christopher, formerly Senior Advisor and Vice President for WKKF and TRHT. Dr. Christopher remains a champion of TRHT and, as the Executive Director of the National Collaborative for Health Equity (NCHE), is continuing this critical work alongside WKKF across the United States.

The methodology of TRHT is a “transformational and sustainable systems change” (W.K. Kellogg Foundation, 2023, p 23). The essential foundational pillar of Narrative Change gives space to building a “collective understanding of the truth of a community’s shared history” through storytelling, as well as being deliberate in strategizing and executing a plan(s) to ensure that the broader community is not only aware of these truths, but also believes them to be true. Social media and other digital platforms are integral to expanding the reach of this collective understanding and also *sustaining* belief in these truths.

Collectively, **social media** may be defined, according to the Merriam-Webster dictionary, as “forms of electronic communication (such as websites for social networking and microblogging) through which users create online communities to share information, ideas, personal messages, and other content (such as videos).” Other types of digital platforms that are significant in the dissemination of information, true or false, include **search engines** – defined as “computer software used to search data (such as text or a database) for specified information”; **podcasts** – defined as music or talk content “made available in digital format for automatic download over the Internet”; and **blogs** – defined as websites that are “online personal reflections, comments, and often hyperlinks, videos, and photographs provided by the writer.”¹

2.

Summary: Narrative Change for Social Change

Positive narrative change is the process of “challenging dominant narratives and constructing alternative narratives that promote social justice and equity” (Jenkins, 2018).

Narrative change challenges and transforms the dominant narratives supporting systemic injustices and inequities by creating and sharing narratives that challenge the status quo and promote sensitivity, understanding, and unity in the face of diversity. The implementation of narrative change is an essential instrument for advancing social development.

The strength of narrative lies in its ability to alter our worldview and affect our beliefs, attitudes, and behaviors. Using narratives, we can make sense of complex information and give our lives meaning. Personal experiences, cultural norms, and prevalent societal viewpoints may influence narratives.

Ways Narrative Can Influence Us

Narratives can influence how we think, feel, decide, and act through a variety of means, including those listed here.

- **Shaping our perceptions:** Narratives can alter how we perceive individuals, groups, and issues. For instance, stories portraying certain groups as inherently violent may birth stereotypes and prejudices.
- **Having an emotional effect:** Narratives can elicit strong feelings like empathy, dread, and rage that can alter our attitudes and behaviors. Stories that portray individuals as the victims of inequity, for instance, can evoke compassion and motivate readers to take action to stop injustice.
- **Influencing/guiding our decision-making:** Narratives can aid decision-making by outlining issues and presenting a particular point of view or solution. Stories that depict climate change as a threat to humanity's survival, for instance, can motivate individuals and decision-makers to take action.
- **Establishing cultural norms:** Narratives can create cultural norms by repeating beliefs and ideals. For instance, stories emphasizing independence and hard work can reinforce this behavior so that it becomes a cultural norm.
- **Mobilizing for social change:** Narratives can organize social change movements by enticing group action and advancing a shared long-term objective. Story significantly affects how we perceive ourselves, others, and our environment. As a result, people may be inspired to act and support social change by reading or hearing stories that promote social justice and racial equity.

We must strive to challenge and change dominant narratives by promoting social justice, healing, racial equity, and prosperity for all. "Narrative is one of our best instruments for shaping our worldview, influencing public opinion, and sparking social and societal change" (Hansen, 2020b).

Examples of Successful Shifts in Narrative Change

Following are just five examples of movements that have brought about significant social and policy change in the United States (and beyond) by changing the narrative.

- **Marriage equality:** Over the past 10 years, activists have been successful in shifting much of the discourse regarding same-sex marriage from one of morality and tradition to one of equality, privacy, and civil rights. Legalization of same-sex marriage in many countries was a result of this narrative change.
- **#MeToo movement:** The #MeToo movement reframed the discussion surrounding sexual assault and harassment by emphasizing women's equality, how widespread the problem is, and how important it is to believe and support survivors. By changing the narrative, many local and state governments, as well as the federal government, have been able to persuade people and change laws (i.e., Title IX) governing sexual harassment and assault.
- **Civil Rights Movement:** The Civil Rights Movement of the 1960s was influential in garnering national public support in opposing the dominant narrative of White supremacy and segregation by promoting an alternative narrative of racial justice, equality, fairness, and empathy. Public support helped to drive the enactment of federal policies that decreased discrimination and segregation.
- **Climate Change:** Environmentalists have successfully shifted much of the narrative about environmental problems and climate change over the past few decades from passivity and inaction to urgency and action. With this shift in the narrative, the use of sustainable practices in environmental policy has increased.
- **Black Lives Matter:** The Black Lives Matter movement has changed how racism and police violence are perceived by highlighting the systemic nature of the problem, the importance of addressing structural inequalities, and insistence that systemic racism is part of the conversation in all areas of our lives. This narrative shift has helped to mobilize support for police reform and raise awareness of racial inequity across much of the United States.

Techniques for Implementing Narrative Transformation

Narrative transformation can be implemented using a variety of techniques, including these four:

- **Creating and disseminating alternative narratives:** Narrative change can be supported through fictional works, docudramas and documentaries, mass media (including digital channels), and marketing campaigns that highlight different points of view and experiences.
- **Creating groups and alliances:** Working with individuals and groups from different backgrounds is effective in expanding the reach of narrative change. By establishing coalitions and partnerships, social justice can be pursued with a united voice and common objectives, incorporating and amplifying unheard voices, encouraging healthy dialogue between diverse groups, and ensuring that diverse perspectives are represented in decision-making.
- **Interacting with the media:** Media of all kinds significantly impact public opinion and legislation. Therefore, interacting with media is an excellent way to bolster shifts in the narrative and actively contest dominant narratives throughout their platforms.
- **Using narrative to promote empathy and understanding:** Telling stories can be a powerful tool for fostering empathy, perspective-taking, and understanding among individuals and groups with varied points of view. This can involve sharing personal experiences, creating forums to share insights, and supporting media presenting different perspectives and experiences.

Groups and Organizations that Can Help Change the Narrative

- **Social movements:** Social movements can be powerful drivers of positive narrative change and the creation of new societal norms by organizing large numbers of people around a common cause. Social movements can also fuel the changing of laws, passing new legislation, and backing like-minded candidates for local, state, and federal office.
- **Media Organizations:** By presenting biased viewpoints and false narratives as truth, a number of conservative media organizations are undermining narratives that promote social justice principles. To combat this tactic, other media organizations can prioritize diverse voices and perspectives and create new media channels that broadcast alternative, positive, and true narratives that reflect the voices of underrepresented groups and social organizations.
- **Institutions:** Government agencies, corporations, and educational institutions can sway public opinion and promote change by supporting policies and legislation that uphold social justice ideals. Government agencies can back laws and regulations that challenge the status quo and promote social justice ideals. Corporations, for instance, can promote diversity and inclusion through their culture, hiring practices, and marketing strategies. Educational institutions can do the same by including a range of perspectives and experiences in their curricula.

These are just a few strategies that can be used in real-world situations to promote narrative change. One must be deliberate, strategic, and persistent in challenging dominant narratives and replacing them with narratives that are authentic, compassionate, and persuasive.

3.

Social Media Prioritization of Dissemination of Narrative Change

Traditional mass media has always been a powerful tool for communication and a driver of social change. However, social media can be vastly more powerful for both good and, unfortunately, strategically deceitful agendas.

Social media is a subgroup of digital media, which in turn is a subdivision of mass media. The Oxford Learner's Dictionary broadly defines mass media as "sources of information and news such as newspapers, magazines, radio, and television, *and the Internet* [emphasis added] that reach and influence large numbers of people."² Current thought divides mass media into digital media and traditional media. For our purposes, digital media will signify anything that uses the Internet for distribution, including social media. Traditional media will signify anything that operates on a schedule, including printed newspapers, magazines, books, radio, and television.

There are several significant distinguishing elements between traditional media and social media:

- Social media supports two-way communication while traditional media does not.
- Social media can reach many more people than traditional media.
- Social media is used by billions of people to instantaneously share messages, mobile recordings, live streaming, and other media.
- Social media allows for and encourages user-generated content.

Social media is designed to reach massive amounts of people, hence it is considered a mass medium. Current statistics around social media are staggering. Highlights provided by *Kepios*, a digital data analysis firm, indicate that there are currently 4.76 billion users of social media around the world and an increase of 137 million users in the past year alone.³ According to *Statista*, another well-known data analysis organization, the number of U.S. social media users in 2022 of 302 million almost reaches the number of Internet (digital) users of 307 million⁴ (Petrosyan, 2023a, 2023c). Interestingly, it has only been since 2018 that the usage rate of digital mass media overcame the rate of traditional media (Petrosyan, 2023c). The Covid-19 pandemic undoubtedly accounted for a sharp increase in 2020. Nonetheless, digital media usage is still increasing every year. As of 2023, users engage with digital media almost twice as much per day (8 hours, 20 minutes) as they do with traditional media (4 hours, 75 minutes) (Petrosyan, 2023c).

In regard to the race demographics of users, the Pew Research Center reports that as of April 2021, 69% of the White population in the United States

said they used social media, compared with 77% of the Black population and 80% of the Hispanic population. Further, the research shows that the user percentages based on income are fairly equal across the board, with 69% of people earning less than \$30K, 76% earning between \$30K and \$50K, 65% earning between \$50K and 75K, and 78% earning more than \$75K. Interestingly, the percentages of users by level of education is also similar: 64% of people with only a high school degree using social media, compared with 76% of people with some college and 77% of people with a college degree (Pew Research Center, 2023).

While consumption of each digital and social media channel also depends on specific demographics (discussed in more detail later in this report), these statistics underscore that social media, and all digital media, is the main draw of people's attention today. Further, these numbers imply that social media is not going away anytime soon, if ever. Therefore, for disseminating the narrative change critical to sustaining social movements and creating social change, social media will continue to be priority channels in reaching people worldwide.

Current statistics around social media are staggering. There are currently 4.76 billion users of social media around the world and an increase of 137 million users in the past year alone.

Brief History of Mass Media

To provide context for a better understanding of the power of mass media, it is important to look at a brief timeline of the history of modern mass media in the United States, including a few selected illustrative historical events in which mass media played a pivotal role, both positive and negative.⁵

- **1440:** Johannes Gutenberg invented the printing press in Germany. This moment is widely considered the beginning of modern mass media. Printing was primarily a local enterprise during this period and was instrumental in the development of the daily newspaper.⁶
- **1690:** The first newspaper, *Publick Occurrences*, was printed in the American colonies.
- **Early 1800s:** William Koenig invented the steam-powered printing press, which allowed for the mass production of printed works and the ability to spread beyond local areas (Groom, 2021).
- **1827:** The same year that New York State abolished slavery, the Black Press began with the publication of the first Black-owned and operated newspaper, *Freedom's Journal*, born out of the rampant disparagement of Blacks in the mainstream press. A group of African American New Yorkers, including John Russwurm and Samuel Cornish (editors), founded *Freedom's Journal*.⁷
- **1844:** Inventor Samuel Morse, with funding from Congress, was the first to create a long-distance electric telegraph system, stringing a wire between Washington, D.C., and Baltimore, in hopes of wiring the entire United States. Around the same time, Morse also developed what became known as Morse Code, representing the alphabet and the decimal number system, for messages sent over this electric telegraph. His iconic and prescient first message sent through that first long-distance wire was, "What hath God wrought?"⁸ While many believe that Morse was the inventor of the electric telegraph, in fact, a man named George Louis Lesage invented the first electric telegraph in 1775. However, it used multiple wires and was too unwieldy to have widespread use.^{9,10}
- ◆ **Civil War period (1861–1865).** Newspapers and the electric telegraph were instrumental in getting information out quickly to the public. Notably, the messaging put out in the South and in the North differed markedly in tone and content, including papers in the South falsely reporting battle outcomes and casualty reports. It became clear that newspapers deeply affected public opinion.¹¹
- ◆ **Reconstruction (1863–1877).** Before emancipation, the southern slave states barred enslaved people from reading and banned the publications of any Black Press from being distributed in those states. However, after emancipation many more Black newspapers came into being due to the freed Black population clamoring for education, literacy, as well as the growth of Black communities.¹² During Reconstruction, 16 African Americans were elected to the U.S. Congress and more than 600 held offices in state government, with hundreds more in local governments across the South. Reconstruction inspired the birth of the Fusion Party in North Carolina, which joined Republicans (the more progressive party at the time and the primary party of the Black population) and the Populist Party (predominantly working-class White farmers). These developments culminated in the upward mobility of both Blacks and Whites, including African American government officials, and expansions in basic human rights, voting rights, education, and other opportunities, as well as a reduction in the wealth gap (Faulkner, 2016).
- **The 1870s:** Invention of the telephone (Bell) and phonograph (Edison).
- **1877:** The Compromise of 1877 is considered the end of Reconstruction. In order to get Southern Democrats to vote for him, then presidential candidate Rutherford B. Hayes made an (unholy) agreement with them that he would withdraw all federal troops from the South, thereby ending the protection of the rights of African Americans.¹³
- **1894:** Invention of radio.

- ◆ **Wilmington Massacre (1898).** While the Compromise of 1877 was the official end of Reconstruction, Wilmington, North Carolina, was the largest city in that state and still had a thriving majority Black community. North Carolina had 13 Black elected officials in its House of Representatives and sent four Black Republicans to the U.S. Congress between 1875 and 1899. The Fusion Party had also caused the massive defeat of the Democratic Party in the state elections, including a Republican governor, meaning that the state was now led by a multiracial government of both Black and White working-class citizens with all working-class citizens' power, influence, and wealth increasing.¹⁴

The Democratic Party strategically created a “White Supremacy Campaign” in order to persuade White farmers in the Fusion Party to vote with the Democrats for the purpose of taking over the next election (Faulkner, 2016). Wilmington was their primary target. The Democrats wrote and published a Democratic “Hand Book” to whip up White anger toward the Black population, explicitly promoting fears of being controlled by Black power and claiming that Blacks would take away their White women (Democratic Party (N.C.), State Executive Committee, 1898). In short, the Democrats used the media as their key tool, including *The News and Observer* newspaper, at that time a White Democratic megaphone. With the knowledge that many White farmers were illiterate, the newspaper cleverly ran racist political cartoons throughout 1898, which emulated these two feared themes.

These themes also surfaced throughout the national media. Many believe that the final spark to working-class White anger was when Alex Manly, the owner of Wilmington’s African American newspaper, the *Daily Record*, wrote that “white women who had liaisons with black men did so voluntarily and enthusiastically” (Neuman, 2021).¹⁵ As a consequence, every seat that was up for election that year went to a White person. However, Black economic influence did not end, and several Black men remained in elected government seats.

As part of the White Supremacy Campaign, the Democratic Party also drafted a “White Declaration of Independence”¹⁶ which gave “white men a large part of the employment heretofore given to negroes[.]” The White Declaration of Independence was printed daily in Democratic-controlled newspapers. White men descended on Wilmington, burned down the *Daily Record* building, and proceeded to massacre a multitude of Black citizens while thousands of others fled. They then ousted the democratically elected local government. Democrats printed more cartoons in their newspapers depicting the White Democrats as victorious and the Blacks as the instigators. Jim Crow laws, already spreading throughout other Southern states, and requiring segregation and onerous voting restrictions that prevented Blacks from voting and being in office, became the rule of law in North Carolina. It would be 90 years before another Black Congress member was elected.¹⁷

- **Early 1900s–2000s:** Known as the Golden Age of Television, Radio, and Cinema.
- **1923:** First news magazine – TIME – printed.
- **1943:** First mainframe computer is invented.
- **1950:** First time black and white television is mass distributed.
- **1960:** FM radio becomes popular.
 - ◆ **Voting Rights Act of 1965.** The murder of Jimmie Lee Jackson in Marion, Alabama, on February 26, 1965, by White state troopers prompted Dr. Martin Luther King, Jr., John Lewis, and other civil rights leaders to call for a voting rights march from Selma to Montgomery on March 7, 1965, an event that would become known as Bloody Sunday. On that day, state troopers unleashed tear gas and violently attacked peaceful protesters. Television cameras caught the attack, which major networks broadcast on the news across the country. For the first time, nearly 50 million Americans saw the atrocities with their own eyes. Outraged, thousands of Americans from all backgrounds traveled to Alabama in support of African Americans and joined them on March 21, 1965, for the second Voting Rights March of 1965, also from Selma to Montgomery. With the shift of public opinion and huge pressure from around the country, Congress passed the Voting Rights Act later that year, protecting every U.S. citizen's right to vote without oppression. President Lyndon B. Johnson signed the Act on August 6, 1965 (Lowery, 2015).
- **1969:** Internet prototype (ARPANET – Advanced Research Projects Agency Network) developed by the U.S. Department of Defense (Jennings, 2021).
- **1971:** Ray Tomlinson invents electronic mail (e-mail) for ARPANET (2021).
- **1973:** First cellular phone call made by mobile phone inventor and Motorola engineer, Martin Cooper.
- **1975:** First machine called a personal computer is developed by Ed Roberts.
- **1983:** Cell phones are put on sale to the public for the first time.
- **1990:** World Wide Web invented by Sir Timothy Berners-Lee (*Mass Media in the United States*, 2023; NIMCJ, 2019).
- **1992:** Text messaging invented (Lemzy, n.d.).

First Social Media Sites – Key Dates¹⁸

- **1997:** Social media begins with the launch of Bolt and Six Degrees, the first social networking sites.
- **1998:** Friendster, for online dating, launches (founder: Jonathan Abrams).
- **2003:** Launch of LinkedIn (business networking) and Myspace (friend network). In 2013, Myspace rebranded to become a music social network.
- **2003:** Facebook launches (founder: Mark Zuckerberg).
- **2005:** Reddit (founders: Alexis Ohanian and Steve Huffman) and YouTube (Founders: Steve Chen et al.) launch (Hosch, 2023).
- **2006:** Twitter launches (Founders: Jack Dorsey, et al)
- ◆ **November 4, 2008 – Barack Obama made history as the first African American elected President of the United States.** Obama has been called the “Social Media President.” He was the first occupant of the White House to use the relatively new social media channels to get his messaging out to millions. His campaign’s catchphrases in the 2008 campaign—“Change We Can Believe In” and “Hope” (Blake, 2012)— became widely popular across the country, largely through these social channels, including text messaging, e-mails, social networks, and online video. His social channel reach was staggering compared to his competition. Obama’s numbers during his first campaign as compared to those of his opponent, John McCain:
 - Obama’s website traffic was twice the size of McCain’s, with 8.5 million monthly visitors on MyBarackObama.com and 400 thousand blog posts on 2 million profiles. Obama also had thousands of volunteer groups with their own sites and 70 thousand fundraising hubs.
 - Obama had 5x more Facebook friends than McCain. In addition, he had 5 million friends on 15 social networking sites.
 - Obama had 4x more YouTube viewers than McCain, with 2 thousand official YouTube videos that users watched more than 80 million times plus 442 thousand user-generated videos on the YouTube platform. (*The Social Pulpit, 2009*)Obama also had 13 million people on his e-mail list and 3 million on his text messaging list (*The Social Pulpit, 2009: Barack Obama’s Social Media Toolkit, 2009*)

- ◆ **Donald Trump and Twitter.** During his 2016 campaign for the White House and throughout his presidency, Donald Trump used social media, specifically Twitter, in ways never before seen. During his presidency, Trump tweeted more than 25 thousand times, averaging 18 times per day (Vazquez, 2020). Moreover, President Trump increased his use of Twitter every year he was in office. For example, he tweeted and retweeted 1,415 times in October 2020 alone. In addition, as per the Washington Post’s Fact Checker team analysis from January 2021, Trump made *more than 30.5 thousand false or misleading claims* over the span of his presidency, and the pace of those falsehoods increased dramatically over time, with 10 thousand false and misleading claims made during his last five months in office alone (Kessler et al., 2021).

To different degrees, we have all experienced the consequences of the former President Trump’s capricious authoritarian policies and his unchecked use of Twitter as his megaphone to unleash quick emotional outbursts (Fuchs, 2018). Trump used Twitter to spread conspiracy theories, to promote disproven and unfounded statements about Covid-19 (which he put out as facts), to undercut anyone who angered him, to praise anyone who praised him (including authoritarian leaders of nations hostile to the United States), to whip his supporters into a frenzy, and more. All of this culminated in the January 6, 2021, insurrection and attempted coup of the U.S. Congress, intended to disrupt not only the peaceful transfer of power but also U.S. democracy, imperfect as it is. Trump was suspended from Twitter on January 8, 2021, with a tweet from Twitter Safety, stating “After close review of recent Tweets from the @realDonaldTrump account and the context around them we have permanently suspended the account due to the risk of further incitement of violence” (*Donald Trump and Twitter, 2023*). Until that day, he had more than *88 million followers* who retweeted his tweets many times over to their own followers (Conger & Isaac, 2021)

Much research has been conducted and written about the effectiveness of both negative and positive emotional sharing through social media. The research shows that emotional sharing by our friends influences us greatly and therefore can drive social movements and change the course of historical events (Mayor & Bietti, 2021; Kim et al., 2022; Brady et al., 2017). There is also a sense that social media is a purveyor of classical liberalism in that it allows for the working-class person's voice to be heard and empowered, forcing transparency in the government and by people with power. Classical liberalism's idea of individual freedom and limited government, however, can also be used in the negative as a hallmark of conservative, nationalistic beliefs and policies (Carter, 2018). As a result, social media has become a hodgepodge of many different opinions, facts, "alternative facts," and realities. Further, social media is a capitalistic business. While constructed to allow for many voices, social media is also driven by profit-driven algorithms that decide what stories are told, how they are told, which groups are portrayed empathetically, and which are not.

As a consequence, history itself can be corrupted. There is a more profound and significant ongoing discussion about the prioritization of social media as primary sources for historians and the consequences thereof (Hamilton, 2014). In the past, mass media has undoubtedly influenced our memory of historical facts and continues to do so. Now, using social media as a primary source, with its "patchwork account of reality," a historian's ability to determine what is "reality" is quite problematic (Kalia, 2022). While we can only touch upon this critical area of discussion and research in this report, it is essential to be aware of the issues.

Many tools exist that can help in determining whether or not information being spread is truthful. The nonprofit, nonpartisan, and international RAND Corporation, whose mission is "To help improve policy and decision-making through research and analysis,"¹⁹ is a terrific central resource with a comprehensive database of tools currently available (and more in development) that can help target online disinformation, particularly in social media.

Narrative Change via Social Media: Pros

There have been a number of positive social change events driven by social media in the last couple of decades. Most of these social change events have used #hashtag activism to advocate for various causes by connecting people. Hashtags are a form of metadata tags that have been used since 1988, starting with the instant messaging platform "Internet Relay Chat," for sorting messages, images, and content (e.g., videos) into groups (MacArthur, 2021). It was not until 2007 that a blogger, Stowe Boyd,²⁰ first used the word "hashtag." Then, in 2009, Twitter made this word part of the vernacular when it officially implemented the hashtag in its programming, so that anything beginning with a hashtag is hyper-linked to allow people or businesses to connect by group interests, causes, or merely as a tool to connect with family and friends. Twitter has a section on its homepage called "Trending Topics" promoting the most popular hashtags which, in turn, garners interest among other users to also use those hashtags (MacArthur, 2021).

Twitter is not the only platform on which #hashtag activism is used. Many others, including Google, Facebook, Instagram, YouTube, TikTok, and Pinterest, as well as blogs, have used hashtags to spread messaging and information. These platforms also have social search engines that find words or word phrases – "key words" – to find related content. By way of illustration, the following are summaries of several examples of social movements and social change events driven by #hashtag activism and social search engines.²¹

- **#ArabSpring (December 2010–May 2014):** The Arab Spring, also known by the name Arab Revolution, was a social movement brought on by economic oppression. This movement occurred in a number of Middle Eastern and Northern African countries whose people, primarily young men, used both nonviolent and violent protests against authoritarian governments in favor of more democratic forms of government in which citizens would

have more representation. The protests had varying results, including rulers being ejected from some countries (e.g., Tunisia, Egypt).^{22,23} Unfortunately, the Arab Spring movement did not result in lasting change. Tunisia was the only country that established a long-term democracy, and it, too, fell back into a dictatorship in the last couple of years with its Parliament being suspended and President Kais Saied taking power (Yerkes & Alhomoud, 2022).

Social media platforms were used as primary tools to spread information within and between countries and to facilitate the organization of protests. #ArabSpring was not the only popular hashtag used. For example, each country had its own such as #Tunisia and #Egypt. #Jan25 was used as a call for action in Egypt. “Arab Spring” and “Arab Revolution” was used in social search engines for the same purposes.²⁴

- **#OccupyWallStreet (September–November 2011):** This movement was started in New York City to emulate the methods of the Arab Spring and, as a reaction to the 2007–2008 financial crisis and the subsequent Great Recession, it began as a protest against economic inequality in New York City. Its tagline was, “We are the 99 percent.”²⁵ The founders of the Occupy Wall Street protest were Kalle Lasn, the founder of the magazine *Adbusters*,²⁶ and Micah White, the magazine’s senior editor (Volle, 2022). They registered OccupyWallStreet.org first and then announced September 17th as the protest date by using an email blast, which was then spread on Twitter, Reddit, and many other platforms. An estimated 1,000 people showed up for the initial demonstration. For 58 days, a few hundred people camped out in Zuccotti Park in lower Manhattan. The movement spread to other countries, including Occupy London (Volle, 2022). Many feel that the reason the Occupy Wall Street movement came to an end is that the participants did not have concrete goals past the first organized protest. Others believe that the protest signaled the beginning of a new focus on wealth disparity.

- **#BlackLivesMatter (July 2013):** The Black Lives Matter (BLM) movement was created in 2013 in response to the acquittal of the murderer of Trayvon Martin (murdered on February 26, 2012) in order to affirm the significant value of Black lives. BLM gained momentum after the murder of George Floyd in May 2020 and the many other Black lives that have been destroyed through blatant instances of injustice over the last decades. BLM used and still uses social media to organize productive protests, raise critical awareness of police brutality and racial injustice, and amplify the voices of Black activists and their allies. Social media platforms such as Twitter, Instagram, Facebook, and TikTok have been instrumental in its national organization and in the spread of the BLM movement. The use of hashtags such as **#BlackLivesMatter**, **#IamTrayvonMartin**, **#JusticeForGeorgeFloyd**, and **#SayTheirNames** have helped and continue to help bring attention to the issues of police brutality and systemic racism and to connect people across the globe who are concerned about these issues. Activists and supporters of the movement share videos and images of protests, police brutality, and other forms of injustice, helping to shine a light on the experiences of Black people and other marginalized communities. Social media has also allowed people to share information about petitions, fundraisers, and other ways to support the movement and promote positive social change. In addition to raising awareness and organizing protests, social media has been used to hold individuals and organizations accountable for their actions (or lack of action) regarding issues of racial injustice. Companies have been called out for their lack of diversity and pressured to take action to address these issues. On the other hand, companies that have been taking action have been acknowledged and supported. There is no question that social media’s role in the BLM movement has been essential to its growth and success.

- **#LikeAGirl (June 2014):** The #LikeAGirl campaign was created by the brand Always™, a global leader in feminine products, to send a message that “words matter” to girls’ confidence levels and that girls and women need to continue to fight against “societal limitations that stand in their way.”²⁷ Always originally aired a 60-second video during Super Bowl XLIX; millions saw it and continued sharing it across social media channels to more than 1.5 million people. As of March 2015, the video was viewed more than 85 million times across 150 countries. In addition, Always released another video leading up to International Women’s Day in March 2015 to help continue the movement’s visibility.²⁸ #LikeAGirl is still promoted by Always today, followed by similarly themed campaigns such as #EndPeriodPoverty and #KeepHerPlaying, neither of which has achieved the global awareness that #LikeAGirl has achieved. The catchphrase caught the attention of multitudes because it translated into girl power.
- **#icebucketchallenge (July–August 2014):** There are varying stories of the origins of the #icebucketchallenge, which became an enormous fundraiser for the rare neurological disease, Lou Gehrig’s Disease or amyotrophic lateral sclerosis (ALS). Although some people believe that the challenge began on social media channels before it was associated with ALS, it is widely known that pro golfer Chris Kennedy posted a video of himself dumping a bucket of ice on his head in honor of his cousin’s husband who had ALS. He challenged his social network to do the same. His cousin took it up from there, and another ALS patient, Pat Quinn, a connection in her network, came across the video and continued the challenge. Finally, Pete Frates, a friend of Quinn’s and a young ALS patient and former Boston College athlete, posted his own video that went viral in the athlete community. From the athlete community, the challenge got the attention of celebrities and regular people across the nation and the world. ALS states that the “Challenge generated 17 million social media posts and raised over \$200 million worldwide.”²⁹ Since then, there have been

more fundraisers based on the #icebucketchallenge, including one that helped pay Frates’ medical bills after he passed away at age 35 in December 2019 (Skerrett, 2019).

- **#LoveWins (June 2015):** On June 26, 2015, the Supreme Court ruled that same-sex marriage was legal. Before that moment, the hashtag #LoveWins had already existed, along with #marriageequality and others. The Human Rights Campaign (HRC) promoted #LoveWins on social media in anticipation of the Supreme Court decision, and its online campaign garnered more than 97 million impressions on Facebook (Social Media as Activism and Social Justice, 2020). President Obama used #LoveWins in his first tweet after the High Court’s decision at 10:10 that morning. #LoveWins became the most used hashtag, with 6.2 million tweets in 6 hours (Gonzalez, 2016). Twitter then embedded #Pride into a rainbow heart icon when anyone tweeted #LoveWins (Bonazza, 2015). #LoveWins continues to be used along with #Pride and #LovesLove. Influencers have helped keep engagement flowing with the #LoveWins hashtag. For instance, in September 2016, Pattie Mallette, Justin Bieber’s mother, tweeted out #LoveWins to support the LGBTQ+ community to her 3 million followers, which then caught on and reached 5 million people over four days (Gonzalez, 2016).
- **#WorthSaying (January 2016):** The #WorthSaying movement was a social media campaign that aimed to encourage women to amplify their achievements and accomplishments publicly. The movement was propelled by beauty conglomerate L’Oréal when they launched their campaign with a commercial featuring the hashtag during the Golden Globes. It was designed to challenge gender stereotypes, promote greater gender equality, and empower women to speak up. This movement highlighted how women’s voices are often marginalized or silenced in public spaces. Women from all walks of life used Twitter, Instagram, Facebook, and others to share their stories and accomplishments

using the hashtag. #WorthSaying helped to create a sense of community among women, providing a space for them to connect and share their experiences. In addition, this movement demonstrated the potential of social media to empower marginalized communities and challenge social norms and stereotypes.

- **#TakeAKnee (August 2016):** Colin Kaepernick, a quarterback for the San Francisco 49ers, refused to stand during the national anthem on August 26, 2016, to protest police violence against Black Americans. Instead of standing, he took a knee throughout the anthem. This began the U.S. National Anthem Protest and the #hashtag activism of #TakeAKnee. Many athletes joined him in this ongoing protest, including Megan Rapinoe of Women's National Soccer, who knelt on September 9, 2016, and the entire Dallas Cowboys team, who knelt on September 25, 2017.³⁰ In response, then President Trump declared such kneeling unpatriotic and demanded that NFL owners fire team players who knelt. Many celebrities and athletic teams and players of all races joined Kaepernick in the protest, posting the hashtag #TakeAKnee, and their followers continued to share. Trump's derogatory tweets actually helped bolster the initial surge in the movement. In the first three days, 3.8 million tweets carried the hashtag. With no NFL team willing to sign Kaepernick since the #TakeAKnee movement started, Kaepernick has dedicated his life to activism. Nike, fortunately, has continued to be a strong supporter of Kaepernick and his message to this day (Kubitza, 2022).
- **#MeToo (October 2017):** A social movement against sexual harassment and abuse, the hashtag #MeToo began in 2006 by Tarana Burke, a sexual harassment survivor who also founded the organization *me too* (*Get To*

Know Us, 2020). However, it was not until 2017, with the raising of sexual abuse allegations (and subsequent convictions) against Harvey Weinstein, that the hashtag went viral. On October 15, 2017, Alyssa Milano tweeted, "If you've been sexually harassed or assaulted write 'me too' as a reply to this tweet." By the end of the day, #MeToo was used 200,000 times, and it has grown from there (Razo, n.d.).

- **#NeverAgain (February 2018):** The hashtag activism against gun violence and for gun control, #NeverAgain, emerged in response to the Marjory Stoneman Douglas High School shooting, in which one person killed 17 students and teachers, in Parkland, Florida, on February 14, 2018. #NeverAgain was a youth-led movement begun by Parkland student survivors. Cameron Kasky, one of the survivors, first posted the hashtag three days after the shootings, when they and some of their friends decided they had to do something to stop the violence (#NeverAgain MSD, 2019). They organized a national demonstration, March for Our Lives, and included many other young people of all backgrounds from cities around the country inundated with gun violence and deaths. This gun control movement went viral, seeded by the student survivors' tweets and posts. The group also met with their Congressional representatives with specific requests for legislation, and Oprah Winfrey promoted them and the movement as well. A Florida gun control bill passed in March 2018 that raised the legal age of purchasing a gun from 18 to 21, created a 3 day wait period, banned bump stocks, funded school security including allowing school personnel to be armed, and expanded mental health services and regulations. Twenty other states have also passed similar "red flag" laws.³¹ The Facebook page for March for Our Lives³² is still active, and David Hogg, one of the student survivors and organizers, has continued to be an activist to this day.

Narrative Change via Social Media: Cons

Perhaps this section should have the title, *The Evil Perpetrated by Social Media*. In truth, the concept of social media evil is legitimate. However, we left the words “Narrative Change” in the title because, on their own, the words do not imply a positive or negative. In this case, the words “narrative change” can connote a negative narrative that results from the spread of propaganda, disinformation, misinformation, and conspiracy theories. The overarching “negative cause” that we continue to highlight throughout this report and work to subvert, is the systemic goal of solidifying the false belief in a hierarchy of human value.

Propaganda

The term “propaganda” has developed over time from a relatively benign word stemming from a religious context when in 1622, Pope Gregory XV created the *Congregatio de propaganda fide* (“Congregation for Propagating the faith”), which was an organization meant to promote and implement Catholic missionary work.³³ From there, the use of the word developed to cover the spreading of information, ideas, and stories (e.g., a narrative) that would help *or damage* some kind of cause. It was not until the 19th century that it came to have a primarily negative connotation regarding the kind of information spread, “often false or exaggerated,” to promote a “cause, political leader, a government, etc.”

Propaganda, as it is understood today, is not a new phenomenon. We have already referred to several examples of the use of mass media to spread propaganda earlier in this report. Edward Herman and Noam Chomsky, in their seminal book, *Manufacturing Consent: The Political Economy of Mass Media* (Herman & Chomsky, 2002) show through comprehensive analysis that media supports and propagandizes the

economic, social, and political agendas of the privileged groups that dominate our society over and above the search for truth and the defenders of justice. Herman and Chomsky begin with the fundamental understanding that mass media is controlled by large corporations run by individuals who are in the top 1% of the wealth distribution. The wealthy’s two priorities are to focus on their own agendas and be as profitable as possible. As a result, any news reported is biased. One of the numerous examples used in the analysis is how the Watergate scandal was reported in the early 1970s. News organizations focused on the Nixon administration’s break-in of the Democratic National Committee headquarters in Washington, D.C. However, there was no coverage of the fact that government agencies also illegally spied on the Socialist Workers Party during that time. The authors conclude that the small Socialist Workers Party did not matter to the powers that be because their agenda was only to highlight the harm to the Democratic Party (Herman & Chomsky, 2002). A highly visible and current example of Herman and Chomsky’s theory in practice is what has come to light in the Dominion Voter Systems lawsuit (2023) against Fox News. Uncovering a myriad of emails and texts as well as live testimony, it has become clear that the Murdoch family (the owners of Fox) and a number of the news channel’s opinion star hosts knowingly and continuously lied on the air, promoted disinformation, and continue to do so, in order to, (a) endorse hardline conservative political and social policy by promulgating distrust in government and demonizing moderate and progressive policies; and (b) keep their viewers happy, ratings up, advertisers pleased, and profits increasing. Lying and perpetuating alternative “facts” and realities has not only been extraordinarily damaging to our democracy and created entrenched divisions but has also increased these owners’ and stars’ personal wealth and power substantially.

And then there is the use of social channels to amplify all of these lies and fabrications...

Disinformation and Misinformation

Two terrifying books, Richard Stengel's *Information Wars: How We Lost the Global Battle Against Disinformation* (Stengel, 2019), and Nina Jankowicz's *How to Lose the Information War: Fake News, and the Future of Conflict* (Jankowicz, 2020), delve into the ease with which social media can spread propaganda, disinformation, and misinformation. They also detail how foreign actors (e.g., Russia) have been and continue to be brilliant at taking advantage of social channels to sow division and distrust in government to destabilize the United States and other countries. Further, according to Stengel, there are many more domestic disinformation influencers than foreign ones in the United States that are inflicting damage with catastrophic consequences, both actual and potential (Stengel, 2019).

Richard Stengel is a former Under Secretary of State for Public Democracy and Public Affairs under the Obama Administration and before that the editor of *Time*. In *Information Wars* he defines terms to ensure that we are all speaking the same language. He defines *disinformation* as false and misleading information deliberately spread to deceive people, and *misinformation* as false information that is not created deliberately but by mistake. Stengel defines *propaganda* as true or false information spread to garner "support for a political view or ideology." In his own words, Stengel believes that "Propaganda is a misdemeanor. Disinformation is a felony."

Social media has been championed as a platform for freedom of speech for everyday people—the working class—and in many ways that is what it is. A great example is when brutal police encounters are captured on video by civilians with cell phones and posted for all to see. However, in the realm of social media, each individual is an author and a publisher, and posts are not fact-checked, so they may become fertile beds for both disinformation and propaganda and go viral, reaching millions of people. The more sensational and emotionally

triggering the disinformation, the more views and shares it gets, and the more the social media platforms lift those posts up for greater visibility. Social media's advertising profit margins depend on the number of clicks posts get. Established facts come up for debate and false statements are stated as truth, perpetuated among millions via social media networks. Nefarious actors, whether they be domestic or foreign, love when people fight over "facts," as this enables them to circulate the belief that there is an elitist conspiracy, that education is only for the elites, which morphs into distrust of government, which in turn becomes a belief that the educated think they are better than everyone else and, therefore, should not be trusted, which then turns into an attitude that science cannot be believed, and on and on until everyone is fighting with each other. A divided citizenry can be outmaneuvered, taken down, and made ripe for despots and authoritarian policy-making (Stengel, 2019).

Trolls, Bots, and Botnets

We have all heard about *trolls* and *bots*, so it is crucial to understand what they are. First, trolls are different from bots and *botnets*. A troll is an online account run by a human who writes posts, comments on, reacts to, and replies to actual users' posts to create divisions or conflict or to be inflammatory to a person or persons (Baroan, n.d.). These human manipulators aim to be destructive by creating emotional responses from others and to distract from legitimate discussions. A *bot* is a social media account that is automated and run by an algorithm that can detect and amplify particular hashtags, topics, and users. Botnets are networks of bots that an individual or group manages for greater amplification in hopes of furthering the spread of disinformation and propaganda and triggering "trending" platform algorithms, which will give them even more exposure. Trolls can use bots and botnets to amplify their messages. (Baroan, n.d.)

Nina Jankowicz is a renowned researcher of the intersections of democracy and technology, focusing on Central and Eastern Europe.³⁴ She has been voicing and writing warnings about the Russian disinformation campaigns for years. Her in-depth research on Russia's Internet Research Agency (IRA), infamous for its malignant troll farming, shows how strategic and insidious the trolling is and has been, identifying and exploiting kernels of truth such as the public's real fears, sentiments, and despair, not only in the United States (as has also been written about in detail in Robert Mueller's Special Counsel report, *On the Investigation Into Russian Interference in the 2016 Presidential Election* [OSC Robert Mueller, 2019]) but in a number of other countries, including Ukraine, with the goal of "fomenting large-scale distrust in government and democracy" (Jankowicz, 2020). For years before the 2016 election, the IRT had worked to create like-minded communities online with trolls and bots, and also infiltrated the United States with IRT human operatives to form physical communities. This sophisticated propaganda and disinformation machine meant that not only was malfeasant information being spread by "fake" websites, accounts, and human bad actors, but this disinformation was then shared with multitudes by many unsuspecting U.S. citizens. Even though some of these operatives were recently identified, indicted, and convicted, and the major social media sites have put in place stricter oversight to remove such fake accounts—a response that Jankowicz calls "playing Whack-a-Troll"—the Russians and other nefarious affiliated groups in the United States keep adjusting by creating new accounts and using other platforms with less oversight (Jankowicz, 2020).

As recently as March 6, 2023, David Klepper, a reporter for Associated Press, reported on the discovery by Cyabra, an Israeli tech firm, of hundreds of thousands of bots and botnets that have been created in support of Donald Trump and attacking Ron DeSantis and Nikki Haley, both of whom will most likely run for President in 2024 (Klepper, 2023). Bad actors continue to get better at avoiding any oversight that the social platforms put into effect by creating "cyborg accounts" that occasionally have real people running bot

accounts, making a pattern harder to discover. Another work-around that bad actors employ is to use artificial intelligence (AI) to create lifelike profiles and communications (Klepper, 2023). AI and its subsets will be discussed further, later in this report.

Efforts and Suggestions to Mitigate Disinformation and Propaganda

In April 2022, the Biden Administration tried to stem disinformation by creating a Disinformation Governance Board under the Department of Homeland Security with Nina Jankowicz at the helm. Ironically, there was an immediate outcry from Republicans and conservative outlets that the U.S. government would be the sole arbiter of the truth – a claim that was itself disinformation, since the goals of this Board were clearly described. Unfortunately, due to these relentless attacks, the Disinformation Governance Board was paused a mere three weeks after it was started, and it was completely shut down in August 2022 (Myers & Sullivan, 2022; Lorenz, 2022). As of the writing of this report, the House Judiciary chairman, Jim Jordan, a far-right Republican, has subpoenaed Nina Jankowicz to be deposed in April 2023, tied to so-called investigations into an alleged "weaponization" of federal agencies (House, 2023).

Richard Stengel suggests potential fixes that could work together to stem the proliferation of disinformation (Stengel, 2019, pp. 307-321), which we summarize here:

- Remove Section 230 of the Communications Decency Act of 1996, which states that "online platforms and their users are not considered publishers." This section allows digital platforms to make billions of dollars off of free content provided by all of us. It also gives digital platforms immunity from any false or defamatory content. News organizations are not immune to being sued for defamation, hence the Dominion vs. Fox News lawsuit. Removing Section 230 would make online platforms responsible for the platform content, whether they create it or not.

- Create an online-privacy bill of rights that requires platforms to “obtain consent from users to share or sell their information[.]” In addition, platforms would need to alert people when a “third party uses their private information for online election advertising.”
- Require platforms to explain how their algorithms work (see following section) in regard to relevance and importance, so users can use search engines intelligently. Work on establishing ratings systems has been ongoing to alert users if the information they are seeing or hearing is trustworthy. The Trust Project³⁵ is one such organization doing this work.
- Stengel believes that AI and machine learning (ML) have great potential for identifying and deleting disinformation. However, he also understands that the “bad guys” can also use AI and ML by identifying target audiences and manipulating the AI and ML systems to exploit dangerous agendas.
- Teach media literacy *and* civic literacy. Educators have known for decades that this is an unmet need. The ultra-conservatives have been strategically and systematically destroying public school education for decades. Uneducated people are more easily manipulated.
- Let users know who has paid for online advertising. Since digital revenue outpaced television revenue in 2018, advertising leads the way. Online platforms make it easy for advertisers to target particular audiences by demographics, geography, party affiliations, economic background, and other categories. Nefarious actors take advantage of that feature.
- Suggest that news organizations eliminate paywalls online. Internet users want to get their information for free, so they read trustworthy news sources far less often than disinformation (Stengel, 2019).

Algorithmic Racism, Bias, and Discrimination

Briefly, an algorithm, or more specifically, a computer algorithm, is a set of step-by-step instructions or rules designed by a person or persons to solve a specific problem or accomplish a specific task quickly. For instance, an algorithm can logically and mathematically analyze data to group keywords such as age ranges, type of religion, gender, race, and other categories. Algorithms are the foundation of the way all modern digital technology functions.

The challenging issues that arise stem from who is doing the designing. As of 2021, according to research compiled by Zippia, a career-focused organization, employment demographics for women and people of color in the computer science field are quite dismal, with only 21% female, 4% Black or African American, 7% Hispanic or Latino, 0.5% American Indian or Alaska Native, and 19% Asian (the largest non-White percentage). In addition, 64% of computer science related jobs are held by White people.³⁶ We live in a society in which there is systemic racism. Therefore, not only are data biased (Milner & Traub, 2021; Raji, 2021) but the algorithms designed to analyze those data reflect the biases of the individual or group designing them. There needs to be an awareness of the potential of bias, and deliberate choices must be made to overcome both the biases in data and in the algorithmic design. Public Citizen,³⁷ a nonprofit consumer advocacy organization, developed a report entitled, *Racism In, Racism Out: A Primer on Algorithmic Racism* (Chung, 2021), which is a good analysis of how and why algorithms are worsening racism, bias, and discrimination. A few of the effects of algorithmic racism on Black and Brown communities are (a) patients being denied life-saving care by medical professionals and health insurers due to Black patients being assigned much higher risk scores; (b) harsher sentencing in the criminal justice

system, again due to the assigning of higher risk scores to people of color; (c) credit scores for people of color being lower and therefore auto insurance and mortgages being more expensive; and (d) students of color getting assigned worse grades than other students and screened out of better schools (Chung, 2021).

Social media platforms also have discriminatory algorithms. There has been a significant amount of controversy regarding Facebook's and Instagram's algorithms. Besides reflecting programmers' biases, intentionally or not Meta (Facebook's and Instagram's parent company) is confusing treating groups *equally* with treating them *equitably*. Regarding screening for hate speech, Meta's own research has shown that in 2019 there was a disproportionate share of hate speech targeted to four minority groups: Blacks, Muslims, Jews, and the LGBTQ+ community.

Nevertheless, 90% of the hate speech identified as hate speech and taken down by Facebook's algorithms was directed at White people and men (Dwoskin et al., 2021).

Another recent example of spreading discrimination by social media was brought to light recently with the controversy surrounding popular YouTube megastar MrBeast regarding systemic ableism (Donaldson, n.d.). MrBeast posted a video showing 1,000 people being "cured" of their blindness. The video has been viewed over 124 million times as of February 2023. Using the word "cured" reinforces the false belief that those with disabilities are "less than" those who do not have them.

Algorithmic bias continues the false belief of a hierarchy of human value. Therefore, we must do everything possible to overcome existing bias with positive narrative change.

4.

Other Digital/ Mass Media Platforms

Search Engines³⁸

A search engine is a computer software program that allows users to find information online by typing in keywords and phrases related to the user's query. Search engines use complex algorithms and indexing systems to quickly find and sort relevant information from millions of websites on the Internet. They can provide lists of websites, news, images, videos, and other content that match search terms. Search engine algorithms go through the following three processes:

- **Crawling:** Crawlers, also known as spiders, bots, or automatic programs, are used by search engine algorithms to scan the web and gather data about web pages (URLs). Crawlers begin at a few websites, track links to others, and assemble a significant index of websites.
- **Indexing:** A method for saving and classifying the information gathered through crawling. Search engine algorithms will initially examine the website's text, pictures, and video, and then will classify the website using terms and other pertinent data based on a user's search parameters.

- **Ranking:** Displaying the content that best answers a user's question; in other words, ordering the results from most to least pertinent. Following indexing, the search engine algorithms will order the websites according to several factors, including relevance, quantity, and quality of the content and links embedded within the website. Complex algorithms are also used to offer personalized search results based on a user's search past, location, and other variables. In addition, they use AI and ML to continuously improve their algorithms and provide more relevant search results (How Search Engines Work, 2023).

Search engines are powerful marketing tools because they can help connect users with websites related to their interests, causes, or businesses. The following is a general list of strategic ways to use search engines.

- **Search Engine Optimization (SEO):** Optimizing a website and its content so that it can be readily picked up by search engine algorithms can improve visibility and rankings in search engine results pages (SERPs). Optimization can help to increase organic

traffic and build both awareness of and the reputation of a website, as well as its interests, content, or cause. There are some excellent resources available to help with the optimization of websites and content, including: (1) Moz;³⁹ (2) Google Search Central;⁴⁰ and (3) Search Engine Journal.⁴¹ Optimization is executed in several ways, including:

- First, by conducting keyword research to identify keywords and phrases that people use to search for interests, websites, content, or causes. There are tools like Google Keyword Planner⁴² and SEMrush⁴³ that can help identify keywords that are both low in competition and can result in high-volume traffic;
- By creating high-quality, relevant content incorporating target keywords and phrases, including in the title, headers, body text, and meta descriptions. A meta description is a short summary (150-160 characters) of a web page's content or the content itself that appears in search engine results pages (SERPs) below the page title;
- By using descriptive URLs that reflect your content (this is essential);
- If there are images, by using descriptive alt tags (short descriptions added to images on a website) and file names that search engines can pick up on;
- By adding links from other reputable websites (backlinks) that can help improve the trustworthiness of your website or content, as well as rankings. In addition, you can reach out to other organizations to ask if they would link to your website or content; and
- By adding meta tags. Meta tags, including meta titles and meta descriptions, are codes found in the HTML code of a web page that provide information about the page to search engines and web browsers. Users can access the HTML code by right-clicking on the page and selecting "View Page Source" or "Inspect."

Despite the fact that SEO can be a powerful instrument for improving a website's visibility and ranking on search engines, there are some potential drawbacks and challenges:

- **Optimization can take a long time:** Optimizing a website and its content requires ongoing effort. Consequently, positive outcomes may not be immediately apparent.
- **It can be expensive:** Conducting SEO may be a high-cost expenditure, particularly for start-ups or small businesses. Hiring SEO experts or purchasing tools and software can be costly.
- **The tasks are ever-changing:** Search engine algorithms are updated frequently, so it can be challenging to remain on top of best practices and respond with necessary and timely website improvements. Decreases in search engine traffic and ratings may occur as a result.
- **Results are unpredictable:** A website's ranking on search engine results sites is not guaranteed, even with the best SEO practices. Additionally, keyword competition and algorithmic adjustments can contribute to shifting search rankings and traffic.
- **Reputation may suffer from focus on quantity over quality:** Some SEO tactics, like building low-quality backlinks or keyword and phrase stuffing (using too many or irrelevant keywords), may put a premium on quantity over quality to improve search engine results. As a consequence, the website's reputation and ranking may ultimately suffer.
- **External factors have to be considered:** Modifications to the market or industry, shifts in customer behavior, or updates to search engine algorithms may impact SEO.

Other methods:

- **Pay-Per-Click (PPC) Advertising:** Businesses, organizations or brands can create ads that will appear at the top of search engine results pages for specific keywords or phrases. Organizations only pay when someone clicks on their ad.
- **Sponsoring Content, Websites, or Businesses:** To sponsor, use a search engine platform’s advertising platform (e.g., Google Ads, Bing Ads). Sponsored ads will usually appear toward the top of the search results. Create an ad campaign that sets a daily or monthly budget based on a “maximum cost per click” (Max CPC). For example, if your Max CPC is \$1 and you want to receive 100 clicks, the ads will stop showing once you reach 100 clicks.
- **WARNING – Site Pushing:** *Site pushing* employs aggressive and occasionally immoral strategies to fool search engine algorithms into raising a website’s position and rankings in SERPs. This technique, also called “black hat SEO,” can potentially cause a website to receive a penalty, lose credibility, or even be blocked from search results. Site pushing techniques include:
 - Keyword and phrase stuffing;
 - “Cloaking”—a method that gives search engine algorithms the false impression that a site is carrying content that it actually does not have. An example of cloaking is to use a URL that has no relevance to the content of the site. Most search engines are not sophisticated enough to identify graphics or multimedia content;
 - Buying backlinks from spammy or low-quality websites; and
 - Creating false user reviews and scores.

Artificial Intelligence, Machine Learning, and Deep Learning

The most recent ground-shaking technological news in the digital world was the release of ChatGPT in November 2022 by its parent company, OpenAI. Multiple articles pop up daily about ChatGPT and GPT-4, the allegedly stronger and better AI program from the same company targeted to businesses and other software developers, which launched in March 2023.

Taking a step back, our research shows a variety of definitions of artificial intelligence (AI), machine learning (ML), and deep learning (DL). In the following, we primarily work from definitions developed by researchers at Advancing Analytics (Regunath, 2021) and the Brookings Institution (West, 2022).

Artificial Intelligence

Brookings researcher and author Darrell M. West defines the overarching AI as “machines that respond to stimulation consistent with traditional responses from humans,” including the three qualities of “intentionality, intelligence, [and] adaptability.” AI is made up of algorithms that can make decisions quickly by using real-time data, potentially including information gleaned from sensors, digital data, and even remote inputs. AI combines and analyzes this information and ultimately makes decisions based on insights the algorithms have derived from the analysis.

Machine Learning

ML is a subset of AI that can identify trends and patterns in massive amounts of data. For example, ML can manage school enrollments by combining multiple data points such as location, interests, desired school, and the desired type of learning. Then AI will analyze those data points and match a

student with a school (West, 2022). ML is used in social media to personalize news feeds, target ads, refine search results, and run personal assistants such as Siri and Alexa. ML is also used for face recognition. A potentially controversial use of ML is for video surveillance with the purpose of looking at suspicious behaviors to predict a crime.

Deep Learning

Lastly, DL is a subset of ML that uses artificial neural networks programmed to function like a human brain and make decisions based on mirroring a human's ability to make connections from the information the AI and ML provided. In other words, DL has given AI the ability to look forward by using data analysis (knowledge) to make predictions. For example, DL is used in self-driving cars; in health care for computer-aided disease detection and diagnosis; in composing music; and in streaming platforms to improve their user recommendation engines (West, 2022; Regunath, 2021).

Generative Artificial Intelligence

The recently released transformational ChatGPT and GPT-4 use a combination of ML and DL in what is called Generative Artificial Intelligence. These platforms analyze vast amounts of data assembled from the Internet.⁴⁴ Both programs can produce almost anything someone asks them to produce, from giving simple information to writing study plans, articles, essays, plays, and even suggesting programming code. Reuters™ estimated that ChatGPT had 100 million monthly active users in January 2023, making it the fastest-growing consumer application (Hu, 2023). ChatGPT was initially planned to be open source and free to the public. However, due to the considerable expense of running the AI (including electricity!), Microsoft recently invested \$10 million, and other investors joined in. Now there is still a free version, but ChatGPT Plus charges \$20 monthly for more availability, faster analysis, and priority access to new features.⁴⁵ Open AI's new GPT-4 is much more

powerful than ChatGPT, is multilingual, and can analyze and create images. Software developers are licensing the GPT-4 platform to use as an engine for their own software programs.⁴⁶

Multiple other companies are working on competitive products, including Google. In February 2023, Google made headlines when an advertisement promoting the launch of its AI chatbot BARD showed BARD coming up with the wrong information by stating that the James Webb Space Telescope was the first satellite to take pictures of a planet outside of Earth's solar system when it was actually the European Southern Observatory's Very Large Telescope that had accomplished this. Oops! Reuters was the first to alert Google, and Google instantly lost \$100 billion in market value (Coulter, 2023).

Positives and Negatives in the Use of AI

The *positives* of using AI include, but are not limited to, getting things done faster, having the ability to multitask and facilitate quicker decision-making, and being able to combine human beings' enormous amounts of expertise and capabilities at one time.

The *negatives* of using AI are everything already pointed out in this report on the cons of using digital and social channels. However, with AI, multiply the effect of those cons by...a lot! In addition, adding in DL and predictive analysis based on deeply flawed "data" input can be disastrous. Ezra Klein, in an opinion column he wrote for the *New York Times* entitled, "This Changes Everything," on March 12, 2023 (Klein, 2023), said that in a 2022 survey published by AI IMPACTS,⁴⁷ AI experts were asked by what probability they thought the extinction of the human species would be due to the inability of humans to control future advanced AI systems. Their answer was 10%! Klein then asked his readers the question, "Would you work on a technology you thought had a 10 percent chance of wiping out humanity?"

Efforts and Suggestions to Mitigate Disinformation and Bias from AI

The suggestions Stengel (2019) has written about, summarized earlier in this report, can also be used with AI tech firms such as Microsoft and Google, both of which are trying to get ahead of any implementation of regulatory oversight by creating their own sets of principles and rules (Gold & Fischer, 2023). NewsGuard,⁴⁸ a research and software developer combatting disinformation, is developing tools for training AI to prevent the spread of misinformation and compiling data on top false narratives spreading online. Cybersecurity firms are constantly updating their security programs to combat new daily threats from domestic and foreign bad actors (Gold & Fischer, 2023).

In addition, other suggestions, which come from a variety of source, are these:

- Train and hire people of color and women, which is critical in computer science and technology.
- Spread positive narrative change.
- Increase algorithmic auditing and include people of color, women, LGBTQ+, and other protected classes in the auditing process (suggested by Chung in *Racism In and Racism Out*).
- Develop liability standards for anyone who uses digital platforms, and require transparency and explainability of platform algorithms and systems.
- Recognize that government enforcement of standards and transparency is necessary (Chung, n.d.).

Other Mass Media Platforms

Broadcast, streaming platforms, radio, news outlets and publishing are other mass-media platforms that are excellent channels for spreading positive narrative change and fighting against the false belief of a hierarchy of human value. All have made substantial contributions to the growth of modern society. However, these mass-media platforms have many of the same drawbacks as digital channels:

- **Sensationalism and bias:** The mainstream media frequently favor sensational and attention-grabbing tales, leading to biased reporting and a disregard for more pressing issues.
- **Disinformation, misinformation, and fake news:** The speed at which information is disseminated frequently leaves insufficient time for fact-checking or source verification.
- **Shallow content:** Mass media frequently exchange easy viewing for substance for the purpose of appealing to a larger audience, resulting in superficial or shallow content.
- **Influence on public opinion:** The media has power to influence public opinion and can also be used to reinforce specific ideas and views, leading to confirmation bias or “groupthink.”
- **Privacy invasion:** The relentless pursuit of stories can intrude on people’s personal lives, particularly those of public personalities and celebrities.
- **Lack of diversity in viewpoints:** A dearth of diversity of voices and the potential for conflicts of interest can result from ownership concentration, which occurs when a few corporations own and manage a sizable portion of mass media outlets.

- **Harms to mental health:** A great deal of content that lives on mass media can make people feel anxious, depressed, and low in self-esteem, particularly if they compare themselves to unrealistic high standards and personal expectations portrayed by others in the media (e.g., beauty, success, family).
 - **Stereotype maintenance and reinforcement:** Mass media frequently upholds and reinforces harmful notions, leading to prejudice and some groups' marginalization.
-
- **Short attention spans:** The onslaught of information may shorten attention spans and make it difficult to focus on more challenging topics.
 - **Commercialization:** The desire for ever increasing advertising income, which frequently finances mass media, often results in sensationalized content on mass media platforms that prioritize profit over accuracy or quality.

5.

Algorithms – In More Depth

Algorithms are computer programs used in digital channels, including social media, that analyze user data and use complex mathematical equations and statistical models to create individualized recommendations, content, and advertising positioning.

The following is a list of the basic activities involved in how digital channel algorithms work:

- **Information gathering:** Digital channels compile a great deal of user data, including personal information, behavior, tastes, and contacts with other users and platform content.
- **Data analysis:** Algorithms are programmed to analyze the compiled data by using statistical models that look for patterns and connections between bits of information in order to create user profiles and models, which are then applied to predict user behaviors and preferences.
- **Content selection:** Depending on a user's modeled behavior profile and preferences, algorithms choose which content to display in a user's feed or search results. For example, ranked lists may include content and website recommendations, other expert articles or messages, and advertisements.

- **Feedback loop:** Algorithms track how users engage with content and constantly adapt and enhance their advertising positioning and recommendations to reflect that engagement, resulting in a feedback loop.
- **Ranking:** Algorithms use a variety of factors to determine how to order content, including the popularity of the content, its relevance to the user's interests, and the user's past interactions and behavior.

Digital platforms are active and constantly changing. Frequent algorithm updates aim to improve user experience, increase interaction, and maximize revenue. Depending on the platform and the update's goals, these changes could be minor tweaks or major revisions. The management of digital platforms frequently keep the details of any changes under wraps, because they want to maintain their competitive

advantage over rival platforms. However, users might notice changes in their feed, search results, or ads due to algorithm updates. Algorithms can change depending on several factors, including:

- **User input:** Digital channels, and specifically social media sites, may change their algorithms in response to user feedback, such as complaints about irrelevant or spammy content.

- **Emerging trends:** Algorithms may be updated to consider new user behavior patterns or emerging trends, such as the growing popularity of video content or specific topic matter.
- **Competition pressure:** Digital channels may change their algorithms to compete with other services or to stay current with market trends.
- **Monetization goals:** Algorithm updates may be made to increase profits, including advertiser revenue.

6.

“Fair Use”

Understanding the meaning of “Fair Use” in regard to copyrighted material is vital for anyone posting on or creating content for digital sites and, for that matter, creating any kind of written or illustrative material.

“Fair Use” should not be construed as being *free to use* in any manner, shape, or form. The phrase “*free use*” is usually reserved for giving someone or some group the right to use a space, place, or thing, free of charge. For example, there are free-use permits for the use of an area in a public park, or a group can be given free use of a room to hold a meeting, or children and adults can access digital games that are free to use. In addition, having free use of something usually means that people may not monetize that use.

Free use is often mistaken for the legal concept of “Fair Use,” which permits the limited use of copyrighted resources without requiring authorization from the copyright holder. The doctrine of Fair Use balances the rights of copyright holders and the public interest. It is not an all-encompassing authorization to employ indiscriminately copyrighted items, but instead a situation-dependent justification that depends on the context encompassing the use.

Four essential factors are used by courts to determine if the use of copyrighted material falls under the criteria of Fair Use. All creators of tangible and digital content should be aware of these:

- The character and purpose of the use.
- The nature of the copyrighted work.
- The amount and substantiality of the portion used.
- Most importantly, the effect of the use upon the potential market or value of the work.⁴⁹ In other words, if the use of the piece of copyrighted work is “transformative,” indicating that it has introduced an additional message or purpose, then that use falls under the aegis of Fair Use.

The likelihood of being considered Fair Use is higher for educational, nonprofit, or commentary/criticism purposes, whereas commercial utilization may be more suspect.

7.

Digital Platforms – By Category

A practical guide to key platforms follows, including demographics,⁵⁰ reach, how platform algorithms work, bias status, recommended narrative styles, and best practices to become more visible.

Please note that most social channels have encountered allegations of bias and partiality regarding content moderation and advertising. Most have some sort of content restrictions as well as monitoring algorithms, backed by human

moderators, that remove content deemed inappropriate or damaging with varying success. Platform resistance, on top of systemic issues, has prevented uniform enforcement and allowed bias and prejudice to continue.

Social Media Platforms

Facebook (facebook.com)

Facebook is the largest social media platform globally, boasting approximately 3 billion active users worldwide. Approximately half of the adults in the United States utilize Facebook to obtain news information. It has been estimated that Facebook users collectively view approximately 100 million hours of video content on the platform daily.

ALGORITHMS

Facebook algorithms employ a complex scoring system to determine user interest in each post and rank the posts accordingly on users' "News Feed." Several elements contributing to this ranking include: the post's level of popularity across Facebook, type of content (images and videos are most popular), time watched, and the user's history of engagement with the content producer. Users are more likely to share content

with and from their friends and family. Therefore, algorithms prioritize content from personal connections. Algorithms customarily arrange more recent content over older content to guarantee that users are presented with current and timely posts. Facebook’s algorithms also analyze a user’s removal or nonreaction to certain content and will be less likely to display similar content in the future.

BOOSTING, SPONSORSHIP, ADVERTISING

- **Boosting:** To amplify, or “boost,” the visibility of a post, users can select the “Boost Post” button located beneath the post on their Page and follow the instructions to establish the preferred target audience, budget, and advertisement duration. Promoted posts will be featured in the News Feeds of the target audience with a “Sponsored” label.
- **Sponsorship:** Content generated collaboratively between brands and influencers, celebrities, or other famous figures who advertise a particular product or service on their Facebook profiles or Pages is typically labeled as a “Paid partnership” or “Sponsored” to indicate the commercial alliance between the content producer and the brand.
- **Advertising:** Facebook advertising is more sophisticated than boosting posts, providing users with increased customization and targeting abilities. Facebook Ads Manager provides resources that help in the creation of advertising goals and campaigns, construction of ad creatives (images, videos, or text), specification of target audiences, and the establishment of budget and schedule. Advertisements placed on Facebook can be displayed in multiple areas, including Instagram, Audience Network, and Messenger. Any advertisements or sponsorships must be compliant with Facebook’s regulations.

The general click-through rate (CTR) of advertisements on Facebook ranges between 0.14% and 1.45%. The Cost-Per-Click (CPC) of a Facebook ad typically ranges between \$0.22 and \$1.68, and the Click-Through-Rate (CTR) is approximately 9.11%.

SUGGESTED NARRATIVE STYLE

Videos have been found to have a higher success rate than informative or attention-grabbing links. Narratives that evoke human interest, elicit strong emotions, or are evocative of experiences to which people can relate are recommended. It is essential to utilize easy-to-understand concise language, along with headlines and visuals that captivate the audience. In addition, utilize current events or trends to disseminate timely and relevant information. Performance may be impacted by Facebook algorithms, thus testing and monitoring post-performance is critical.

DEMOGRAPHICS OF USERS

The demographic breakdown of users is as follows: **Gender:** 43% of users are female and 57% male. Interestingly, 78% of Indigenous users are male, and 22% are female. **Age:** 18% are 18-24, 24% are 25-34 (the largest group), 18% are 35-44, and 14% are 45-54. It is estimated that 69% of adults and 51% of teenagers use Facebook in the U.S. (Statista, 2023). **Ethnicity:** 67% are White, 49% are Black, and 72% are Hispanic (Storm & Storm, 2023). **Household income:** Fairly evenly distributed across the income spectrum, with 80-86% of each income group being Facebook users. **Education:** 64% of U.S. adults with high school or less are users, as are 71% of those with some college and 73% of those with college degrees (largest). **Country:** As of 2021, India has the largest market with 417 million users, representing 30% of India’s population; the United States is second in market size with 240 million users, representing 71% of the population; followed by Indonesia with 177 million, representing 64%; Brazil with 139 million representing 64%; and the Philippines with 91 million representing 78% of its population.⁵¹

POLITICAL LEANING

In the United States, among all adults, Facebook is used by 74% of those on the Left; by 80% of those in the Center; and by 80% of those on the Right (Statista, 2022).

YouTube (youtube.com)

Launched in 2005, YouTube has been owned by Google since 2006. YouTube is a global video sharing and social media platform that ranks as the #1 largest video sharing platform and the second largest social media platform (after Facebook) globally. As of Q3, 2022, there were 2.7 billion monthly active users (MAUs) and 2.5 billion in 2021 for the entire year. Revenues for 2022 through Q3 were approximately \$21 billion, with 2021 at \$29 billion for the entire year. There is a free version of YouTube with ads and a subscriber-based Premium version without ads. As of 2023, there are 80 million YouTube Premium subscribers. 720 thousand hours of content is reported to be uploaded on YouTube daily and users consume an estimated 1 billion hours of videos every day. Mr.Beast was the highest earning YouTuber in 2021, earning \$54 million (Ruby, 2023). Approximately 62% of U.S. users access YouTube daily.

ALGORITHMS

YouTube uses an AI-based recommendation algorithm that reflects the preferences of each user. The algorithm factors in viewer personalization (viewer history, what a user watches, and what a user ignores) and video performance (watch times, sharing, likes, comments, and subscriptions) (Ashbridge, 2023).

BOOSTING, SPONSORSHIP, ADVERTISING

YouTube creators are prohibited from including promotions, sponsorships, or advertisers in their videos if YouTube offers a comparable format (e.g., video ads, image overlays and video bumpers).

- **Boosting:** YouTube/Google provides many helpful suggestions of ways to boost videos and channels, including cross-promoting on social channels and websites, allowing embedding so others can distribute your video, using a YouTube API to display a YouTube presence on websites, and using SEO best practices.
- **Sponsorship:** Creators may include paid product placements or endorsements in their videos as long as they follow YouTube's advertising policies.

● **Advertising:**

- YouTube Ads. The way it works:
 - A video creator, business or organization creates a free YouTube channel.
 - Then, the creator, business or organization creates their own video ad. YouTube provides creative tools as well as partner resources that can help video ad creation.
 - For setting up a video campaign and budget, Google and YouTube Ads provide helpful how-to advice.
 - Analytic tools are provided by YouTube to measure results.
- YouTube Partner Program – monetization of a channel by sharing in revenue from YouTube advertising.
 - Eligibility required – minimum of 1,000 subscribers and either 4,000 watch hours over the past year or 10 million views of short-form content over a 90 day period.

SUGGESTED NARRATIVE STYLE

YouTube narratives are entirely videos, of course. Short-form content, which received 15 billion daily views in 2022, is currently a major trend on YouTube. YouTube has also integrated monetization into the short-form content, paying a share of advertising revenue to creators for ads appearing between the videos. Multi-format is also popular by mixing up short-form teasers, long-form videos, short-form videos, memes, and more – because variety keeps viewers' attention. YouTube also suggests using playlists to group content thematically, interacting with viewers by using “shoutouts,” asking questions, asking for comments and ideas, encouraging contests, and speaking directly to the viewers asking them to subscribe.

Video games, comedy, and education are the most popular themes or categories.

DEMOGRAPHICS OF USERS

Gender: Worldwide, 44% of YouTube users are female and 54% are male. However, in the U.S., 51% are female and 49% are male. **Age:** People ages 18-24 are 16% of users, those ages 25-34 are 21%, those ages 35-44 are 17%, those ages 45-54 are 12%, 55-64 are 9%, and the 65+ group

makes up 9% (Aslam, 2023). **Ethnicity:** Based on daily usage reach, 42% are White, 57% are Black or African American, 60% are Hispanic or Latino, and 64% are Asian.⁵² **Household Income:** In the U.S., 76% of the population earning under \$50K are users, 69% of those earning between \$50K and 100K, and 65% of those earning over \$100K. **Education:** Used by 70% of U.S. adults with high school diploma or less, by 86% of those with some college, and by 89% of those with college degrees (largest) (Backlinko, 2021). **Country:** As of 2023, India has the largest market, with 467 million users, followed by the U.S. with 246 million, Brazil with 142 million, and Indonesia with 139 million (Statista, 2023).

POLITICAL LEANING

Share of U.S. Democrats is 85% and Republicans is 79%.

TikTok (tiktok.com/en)

40% of TikTok is currently owned by its founding private Chinese corporation ByteDance, Ltd. The remaining 60% is owned by global institutional investors. TikTok enables users to generate and circulate short-form videos with music or sound effects. Since its launch in 2016, it has seen a marked increase in popularity, especially with the younger demographic. As of 2023, TikTok has an estimated 117 million users in the U.S., reaching approximately 43.9% of the U.S. population. Globally, in 2022, TikTok reported 672 million downloads (Statista, 2023). On average, a given user accesses the TikTok application 19 times daily. According to the TikTok website, the corporate headquarters are now located in Singapore and Los Angeles, CA.

There has also been increasing controversy over Chinese ownership of TikTok, with a concern that China is threatening the national security of the U.S. due to relentless compiling of U.S. citizens' data. TikTok has already been banned on U.S. government devices, and the current administration is trying to force China to sell the platform to an American company.

ALGORITHMS

TikTok algorithms are part of a sophisticated, privately-owned system. Although the specifics are proprietary, certain components of the algorithms are known to impact how content is ranked and recommended. The algorithm

- Analyzes user interactions, such as likes, comments, and saves, for the purpose of presenting analogous content.
- Analyzes user preferences of individual video elements, such as hashtags, captions, and nature of the content. (e.g., music, dance, comedy), to assist in classifying and suggesting content.
- Analyzes device type and account information, including language preference, age and location, to produce customized user experiences.
- Analyzes various video engagement metrics, including completion rate (amount of video viewed), replay rate, and average watch time. Videos with high engagement levels are more likely to be suggested to other viewers.
- Provides users with a variety of engaging content from diverse creators, genres, and topics.
- Factors in the freshness of content, giving more recent videos a greater likelihood of being recommended to users.
- Undergoes regular updates and refinement to optimize the user experience and tackle various issues, such as the circulation of false information or unfavorable content.

BOOSTING, SPONSORSHIP, ADVERTISING

- **Boosting:** Creators can pay to facilitate more visibility of their videos, targeting specific demographics and interests. Typically, the procedure necessitates a budget, selecting a targeted demographic, and determining the timeframe of the advertising campaign. Algorithms do the rest.
- **Sponsorships:** Brands may choose to team up with renowned TikTok creators and influencers to advance the visibility of their products and services through sponsored material. In this

instance, the influencer produces a video that emphasizes the brand's product or service that appeals to their fanbase. The forms of remuneration for sponsorship arrangements can include cash, merchandise, or other forms of consideration.

- **Advertisement:** TikTok provides various promotional opportunities for businesses to target their customers on the platform. Some examples:
 - In-Feed Ads are brief video ads incorporated into users' "For You" feeds. Advertisers can direct their ad campaigns to particular demographics.
 - TopView Ads are full-screen video ads that appear when users first open the TikTok app.
 - Advertisers can implement branded hashtag challenges to motivate users to generate and circulate content related to a particular topic or hashtag.
 - Advertisers can design branded effects such as stickers, filters, and animations, which can be integrated into users' videos.
 - Enterprises must establish an advertisement account, select a budget and target demographics, and determine the timeframe of the advertising campaign. Efficacy of advertising campaigns can be monitored and augmented using the Ads Manager analytics feature provided by the platform.

TikTok generated ad revenue of \$11.65 billion in 4th Qt 2022.

SUGGESTED NARRATIVE STYLE

The style is short-form video storytelling and memes that are entertaining, engaging and stimulating. The most popular content categories are entertainment, dance, pranks, fitness/sports, home renovations, and educational content.

DEMOGRAPHICS

Gender: In the U.S., 54% of users are female and 46% are male. **Age:** 24% of users are below age 18, 49% are 18-29 (largest), 22% are 30-49, and 8% are 50+. **Ethnicity:** In the U.S., 18% are White, 30% are Black, and 31% are Hispanic (Power

Digital Marketing, 2023). **Household Income:** A staggering 40% of TikTok users in the U.S. earn \$100+K, 15% of users earn under \$25K, 11% earn \$25K-\$40K, 12% earn \$40K-\$60K, 7% earn \$60-\$75K, and 14% earn \$75K-\$100K.

Education: In the U.S., 21% of adults with high school or less are users, 24% of those with some college, and 19% of those with college degrees (largest) (Andre, 2023). **Country:** As of 2023, the U.S. is the largest market with 113 million users, followed by Indonesia with 110 million, Brazil with 82 million, and Mexico with 58 million (Statista, 2023).

POLITICAL LEANING

In the U.S., 42% of those identified as Left are users, 39% of those identified as Center, and 41% of those identified as Right (Statista, 2022).

Instagram (instagram.com)

Instagram is a popular social networking app with a focus on sharing photos and videos. Launched in 2010, Instagram has maintained a high level of popularity by adding innovative new features, such as Instagram Stories, shopping, Instagram Reels, and more (Moreau, 2022). The MAU exceeds 2 billion users, and on average each Instagram user spends one minute per day on the platform.

Fun fact: It has been observed that the most commonly used hashtag on Instagram is #Love.

ALGORITHMS

While the precise details of Instagram's algorithms remain undisclosed, certain key factors affect how content is presented in users' feeds and other platform areas:

- "Home Feed" algorithms show users content likely to interest them based on prior engagement. Factors influencing the algorithm may include:
 - Analysis of user interactions, such as likes, comments, and saves, for the purpose of presenting analogous content.

- Frequent engagement with a content creator through liking, commenting, and direct messaging, which will result in that content appearing more often in the consumer’s feed.
 - Recent posts generally receiving higher positioning than older ones.
- “Explore Page” algorithms are designed to help users discover new content and accounts that align with their interests. In addition to analyzing past behavior, the algorithms also consider what content is popular among other Facebook users with similar engagement patterns and interests.
 - “Stories” and “Reels” are presented to users using analysis of past user engagement with types of content as well as other users.

BOOSTING, SPONSORSHIP, ADVERTISING

- **Boosting:** Instagram has a paid feature that allows users to increase the visibility of content, increase engagement, and reach a larger audience. In addition, maximizing the visibility of a profile involves appealing and superior content, regular postings, and active interactions with followers.
- **Sponsorship:** Influencers are able to monetize their account thru remuneration from companies that want their products or brands promoted in the influencers’ postings.
- **Advertising:** Users may increase visibility by converting posts or Stories into sponsored advertisements by utilizing the “Promote” button on a post or within the Instagram business profile. Instagram can automatically target audiences similar to existing followers, or users can manually specify the type of audiences by filtering location, hobbies, age, gender, and other demographics. Users establish a budget and specify the duration of their promotion.

Instagram’s advertising revenue projection for 2023 is \$40 billion, and 75% of American adolescents (ages 15-17) consider Instagram the best platform for finding popular brands.

SUGGESTED NARRATIVE STYLE

Visually appealing content, such as high-caliber photographs and brief videos, is recommended for creators, who are urged to use visuals, captions, and hashtags to bring focus to posts.

DEMOGRAPHICS

Gender: As of 2023, 56% of Instagram users in the U.S. are female and 44% are male (Statista, 2023).

Age: Among U.S. users, 31% of users are age 18-24 (largest), 30% are 25-34, 16% are 35-44, and 15% are 45+.

Ethnicity: 30% are White, 38% are Black, 45% are Hispanic, and 43% are Asian.

Household Income: Instagram is used by 44% of the U.S. population earning under \$30K, 45% earning \$30K-\$60K, 36% earning \$60K-\$70K, 55% earning \$70K-\$80K, 46% earning \$80K-\$100K, and 60% earning over \$100K. **Education:** Used by 21% of U.S. adults with only a high school diploma or less, 24% of those with some college (largest), and 19% of those with college degrees (Andre, 2023). **Country:** India has the largest market, with 239 million users, followed by the U.S. with 143 million, Brazil with 114 million, and Indonesia with 89 million (Statista, 2023).

POLITICAL LEANING

In the U.S., 57% of adults identified as on the Left use Instagram, 52% of those in the Center, and 56% of those on the Right (Statista, 2022).

[Snapchat \(snapchat.com/en-US\)](https://www.snapchat.com/en-US)

Snapchat is a multimedia messaging application well known for transmitting and receiving temporary photos and videos, commonly referred to as “Snaps.” Snapchat was created in 2011 by Evan Spiegel, Bobby Murphy, and Reggie Brown. Snapchat has undergone a transformation in recent years by including more diverse functions, such as allowing individuals to interact, share their routine activities, and access multimedia content. Snapchat has a total of 293 million daily active users around the world with an estimated 210 million Snaps generated daily.

ALGORITHMS

The Snapchat algorithm tailors user experiences across various platform areas, such as “Stories,” “Discover,” and “Spotlight.”

- **Stories:** Upon opening Snapchat, the Stories algorithm presents users with content from their friends and their friends’ accounts. The Stories algorithm also emphasizes recent content, the level of interaction with content creators (e.g., exchanged snaps, chats, and views of each other’s Stories), past behavior and preferences, including repeat viewing of specific users.
- **Discover:** Provides users access to content that features popular and trending content from various sources, including publishers, authors, and prominent personalities. Algorithms rank content that relates to user interactions and preferences, and provide a range of different topics to ensure content diversity.
- **Spotlight:** Showcases user-generated content similar to TikTok by evaluating metrics such as number of views, likes, and shares, considers the quality of content, and favors unique and creative content.

BOOSTING, SPONSORSHIP, ADVERTISING

- **Boosting:** Unlike other social media platforms, Snapchat does not possess the capability of “boosting” posts.
- **Sponsorship:** Corporate sponsorship with creators and influencers is possible. Photos and video content showcasing the brand’s product or service are integrated into Snaps in exchange for some kind of payment. Snapchat influencers earn an estimated \$10 per 1,000 followers for sponsored posts.
- **Advertising:** A wide range of advertising options are available for businesses, organizations, and brands to target specific users:
 - Snap Ads are full-screen, vertical video-based advertisements that can be seen between Stories in the user’s feed or the Discover section. Snap Ads can be a maximum of 10 seconds in duration and may contain a call to action, such as connecting to a website or an application installation.

- Collection Ads allow marketers to present multiple products in one advertisement, thus enabling users to tap on each item to acquire more information or complete a purchase.
- Users can apply brand sponsored and created filters or lenses to their Snaps to increase visibility and consumer engagement with the brand. Filters are considered static overlays, while lenses are dynamic and may comprise of animations or augmented reality components.
- Story Ads are branded tiles that appear in the Discover sections. When the user taps these tiles, they are directed to a series of full-screen advertisements, typically presented as a narrative created by the brand.
- Businesses are required to establish an account on the Snapchat Ads Manager platform to promote their brand, allowing them to create a budget, target a specific demographic, and craft advertisement creativity. Advertising campaigns can be monitored and improved by utilizing Snapchat’s Ads Manager analytics.

Advertising revenue was \$4.6 billion in 2022.

SUGGESTED NARRATIVE STYLE

The Snapchat platform is designed to facilitate quick and brief consumption of content.

Users can

- Post short video clips, images or graphics that effectively convey an intended message. Filters, text, stickers, or drawings can be applied to supplement the message.
- Begin with an engaging introduction aimed at attracting the audience’s attention. The intro could be an interrogative, a daring proclamation, or an enticing teaser that prompts curiosity and motivates viewers to continue engaging.
- Ensure the cohesiveness of content by maintaining a consistent theme throughout the narrative. For example, users can employ a consistent palette of colors, styles, or tones.
- Employ Snapchat’s distinctive filters, lenses, and geo-filters to increase engagement and interactivity.

- Remind viewers that content will only be available for 24 hours to generate a sense of urgency. Urge them to take action, such as responding to a query, browsing a website, or engaging in an event.
- Communicate legitimate activities and feelings to emphasize authenticity.
- Incorporate traditional storytelling strategies, such as the establishment of a conflict, the creation of suspense, and then offering a conclusion.
- Explore available content formats on Snapchat, such as Stories, Spotlight, and Snap Map to ascertain which format is the most suitable for a particular narrative.
- Encourage interaction by posing queries, seeking feedback, or asking followers to share material connected with the narrative.

DEMOGRAPHICS

Gender: Snapchat U.S. users are 52% female and 48% male. **Age:** Snapchat has a penetration rate of over 78% among GenZers and Millennials in the U.S. It is used by 48% of those ages 15-25 (largest), 30% of those 26-35, 18% of those 36-45, and 16% of those 46+. **Ethnicity:** 28% are White, 24% are Black, 34% are Hispanic, and 32% are Asian. **Household Income:** Used by 32% of the U.S. population earning under \$30K, 33% of those earning \$30K-\$60K, 31% of those earning \$60K-\$70K, 42% of those earning \$70K-\$80K (largest), 39% of those earning \$80K-\$100K, and 39% of those earning more than \$100K.

Education: 24% of U.S. adults with high school or less, 31% with some college (largest), and 26% of those with college degrees.⁵³ **Country:** India has the largest market, with approximately 144 million users, followed by the U.S. with 108 million users, France with 25 million, and Pakistan with 22 million (Statista, 2023).

POLITICAL LEANING

In the U.S., the share of Democrats using Snapchat is 27%, and among Republicans it is 21% (Vogels et al., 2021).

Twitter (twitter.com)

Twitter users post short messages, called “tweets,” that may contain up to 280 characters apiece. In 2022, there were a total of 450 million users on Twitter globally, with an estimated 500 million tweets sent daily (Statista, 2023).

Please note that the information below is in flux due to the recent acquisition and privatization of the platform by Elon Musk on October 27, 2022. There has been an enormous amount of upheaval at Twitter, with staff firings and resignations. Platform algorithms, regulations, and pricing for boosting are also changing frequently. As a result, information is more unstable than usual. Of further note, Reuters has reported that advertisers slashed spending by 42% to approximately \$53.8 million during the last two months of 2022 over concern about Twitter’s reputation (DiNapoli, 2023).

Twitter has also admitted a form of bias into its algorithms that gives greater visibility to tweets from right-wing politicians and news outlets than to those from left-wing sources (Barrett, 2023).

ALGORITHMS

Twitter’s algorithms, mostly undisclosed, are instrumental in deciding what material appears on users’ timelines and the order of tweets’ prioritization:

- The “Home” timeline is the default view for users. Twitter’s algorithms prioritize:
 - Tweets from followed accounts and posts.
 - Newer tweets, which are typically given higher precedence.
 - Tweets with heightened levels of engagement, such as likes, retweets, and replies, which are more likely to be positioned prominently.
 - Tweets based on users’ prior behavior, including prioritizing content from accounts that users interact with most, through rankings and selection.

- The Explore tab employs a curatorial approach to present material based on users' interests, prevailing trends, and well-known topics:
 - Algorithms analyze user behavior, interests, and affinities to recommend applicable content, including topics, hashtags, and accounts.
 - Location is taken into consideration when looking at local trends and content.
 - The algorithm considers the degree of popularity of tweets, which includes the number of retweets, likes, and levels of engagement.
 - Over time, the algorithm becomes more adept at customizing content recommendations based on user interactions within the Explore tab.
 - Users' past searches of terms, hashtags, and other users are analyzed to determine ranking of future search results.
 - Tweets achieve higher search result rankings when they accrue higher levels of engagement with retweets, likes, and replies.
 - Search results prioritize current tweets.

BOOSTING, SPONSORSHIP, ADVERTISING

- **Boosting:** Advertisers pay to extend the reach of their typical tweets. These messages appear on the advertisers' followers' timelines, search results, and profile pages and are categorized as "Promoted" to differentiate from organic content. Promoted Tweets can be targeted to a particular audience according to the geographical area, interests, keywords, and demographic information.
- **Sponsorship:** Businesses can partner with influencers, creators, or organizations to promote their brand through tweets, events, or campaigns. Sponsorship can extend a brand's reach to new demographics, boost legitimacy, and create content attractive to the desired audience.
- **Advertising:** Numerous advertisement options are available to facilitate promotion of content:
 - Advertisers may leverage the 'Who to Follow' section to promote their accounts.
 - Brands can promote a hashtag at the top of the "Trends" list, encouraging user interaction and hashtag use in their own tweets.

- In-stream Video Ads are brief advertisements that appear before, during, or after video content from Twitter's premium content suppliers.
- Website Cards generate traffic to an advertiser's website by displaying a summary of the webpage content within a tweet and enabling a user-defined call-to-action button.
- App Cards promote mobile applications. They typically showcase the app's logo, ratings, and a personalized call-to-action button to motivate users to download or interact with the app.
- The Twitter Ads feature helps advertisers construct campaigns, specify desired targeting criteria, and select the best ad format that meets their goals.
- Twitter offers analytics and reporting services to help refine campaigns.
- Blue check marks were a visible indication that an account was verified by Twitter as "authentic, notable, and active," but under Elon Musk, as of April 1, 2023, users will be required to subscribe with a monthly fee to retain the mark.

SUGGESTED NARRATIVE STYLE

- Maintain brevity due to 280 character limit per tweet.
- Use relevant hashtags to engage in continuing discourse and popularized topics.
- Interact with followers through retweeting, responding, and posing queries.

DEMOGRAPHICS

Gender: Twitter users in the U.S. are 37% female and 63% male. **Age:** 7% of those ages 13-17 are users, as are 17% of those 18-24, 39% of those 25-34 (largest), 21% of those 35-49, and 17% of those 50+. **Ethnicity:** 30% are White, 28% are Black, 31% are Hispanic, and 35% are Asian. **Household Income:** 38% of the U.S. population earning under \$30K are users, as are 44% of those earning \$30K-\$60K, 40% of those earning \$60K-\$70K, 52% of those earning \$70K-\$80K, 49% of those earning \$80K-\$100K, and 53% of those earning over \$100K (largest). **Education:** 14% of those with only a high school diploma or less, 26% of those with some college, and 33% of those with college degrees (largest). **Country:**

The U.S. has the largest market with 77 million users, followed by Japan with 59 million users and India with 24 million users (Statista, 2023).

POLITICAL LEANING

In the U.S., 34% of adults on the Left use Twitter, 29% of those in the Center, and 37% of those on the Right (Statista, 2022).

Pinterest (pinterest.com)

Pinterest is all about visuals and bookmarking, enabling users to discover, save, and arrange ideas and content in the form of images, GIFs, and short videos, commonly referred to as “Pins.” Launched in 2010, Pinterest has emerged as a widely used platform for exploring creative inspiration, organizing plans, and sourcing concepts across a diverse range of subjects including but not limited to fashion, interior design, culinary arts, and do-it-yourself projects. On a global basis, MAUs reached 478 million.

A study of Pinterest’s platforms revealed an unequal distribution of resources among creators, suggesting a bias in status. Available resources for a Pinterest account vary depending on geographic location. For example, “Conceptual Pins” are only available in 37 countries after more than two years, “Connections” in Conceptual Pins are only available for some accounts and “Monetized Idea Pins” (aka Creator Rewards) are only available for some accounts (Aslam, 2023a).

ALGORITHMS

- The Home Feed (Smart Feed) curates content tailored to users’ interests, recent activity, relevance, and followed accounts by analyzing users’ past behavior, including Pins saved, boards created, and accounts followed. Pins with higher levels of interactions are more likely to be featured in the Home Feed. Newer Pins and content tend to be positioned higher.
- A Pin’s quality is analyzed for priority positioning, including visual, description, and affiliated website, as well as the ranking of the visual’s source, if any.

- Search result rankings are determined by:
 - Pins that accurately correlate to the query and are likely more relevant to the user.
 - Pins with higher levels of user engagement, which appear higher in search results.
 - Quality of the Pin and its source, similar to the Home Feed.
- “More Ideas” and “Related Pins” are algorithm-generated recommendations based on users’ interests and their interactions with Pins, boards and accounts.

BOOSTING, SPONSORSHIP, ADVERTISING

- **Boosting:** Users can increase visibility by creating vertical images, linking to their website, and building a Pinterest Business Account that provides space to highlight a user’s work or company and includes a subscription button. The account also includes analytic features that give users detailed information about how their profiles are performing. Integrating shareable “Pin Save Buttons” onto users’ personal or business websites is also helpful (Naylor, 2018). Users can include relevant keywords in the descriptions and titles of their boards so that they appear more often on the Home Feeds. In addition, consistently producing new content and interacting with other users will cultivate a robust presence on the platform.
- **Sponsorship:** Includes collaborating with influencers or producers to advance a brand/product using their Pins or boards.
- **Advertising:** There are several options for advertisers:
 - Standard Promoted Pins are static Pins that advertisers can purchase to extend their reach to broader audiences.
 - Video Promoted Pins are enhanced Pins for purchase.
 - Carousel Ads are another form of Promoted Pins that allow advertisers to display multiple images and products in a single advertisement. This format is well-suited for displaying a compilation or narrating a visual story, as users can easily scroll through the carousel images.

- Shopping Ads, another type of Promoted Pin, containing detailed product information, like pricing and availability, is embedded inside the Pin itself.
- An Ads Manager is provided that will help advertisers build advertising campaigns. There are also analytic tools to assess campaigns' efficacy.

SUGGESTED NARRATIVE STYLE

Images, infographics, and top-notch photos are popular. Vivid, high resolution and brighter images are repinned 20x more than images that are dark. Images and images without faces get 25% more repins. Do-it-yourself projects, cooking, apparel, and interior design are recommended themes. If text is used, make sure it is easy-to-read.

DEMOGRAPHICS

Gender: In the U.S., Pinterest users are 77% female and 23% male. **Age:** 31% of those ages 18-29 are users, 31% of those 30-49, and 38% of those 50-64 (largest). **Ethnicity:** 34% are White, 35% are Black, and 18% are Hispanic. **Household Income:** 29% of the U.S. population earning under \$30K are users, 33% of those earning \$30K-\$50K, 29% of those earning \$50K-\$75K, and 40% of those earning \$75K+ (largest). **Education:** 22% of those with high school degrees or less are users, 36% of those with some college, and 37% of those with college degrees (largest).⁵⁴ **Country:** The U.S. has the largest market with 85 million users, followed by Brazil with 28 million, and Mexico with 19 million (Statista, 2023).

POLITICAL LEANING

In the U.S., 38% of Democrats use Pinterest and 32% of Republicans (Vogels et al., 2021).

Reddit (reddit.com)

Reddit functions differently from other social media platforms. The platform is a news aggregator and discussion forum where content is curated by users themselves through up-and-down voting. The name Reddit comes from “I read it.” Reddit describes itself as the “home to

thousands of communities, endless conversation, and authentic human connection. Whether you're into breaking news, sports, TV fan theories, or a never-ending stream of the internet's cutest animals, there's a community on Reddit for you.”⁵⁵ Communities are called “subreddits” and users are called “redditors.” Content is organized by topics and redditors can post text posts, images, and links to any number of items such as articles, interviews, and videos, which can be commented on and shared. Reddit is also known for privacy and anonymity; no personal information is required.

There are approximately 430 million MAUs and over 100 million active subreddits. Reddit offers a free option and an ad-free subscription-based option that has access to members-only subreddits (*Homepage*, n.d.). An advertising-driven business, Reddit's total revenue in 2021 was \$468 million (Statista 2023).

The most popular type of subreddit is an AMA, which stands for “Ask Me Anything,” in which redditors can ask questions directly to someone involved. Barack Obama posted an AMA during his presidency that was hugely popular. Additional examples: The National Institutes of Health (NIH), Bill Gates, and Don Lemon have all posted several AMAs.

ALGORITHMS

In addition to the up-voting and down-voting factor, Reddit's algorithm also factors in time so that popular but decaying news posts are ranked lower. Redditors are also given a Reddit Karma rating on their postings, which reflects how many up-votes, down-votes, and comments a redditor receives. There is also an awards program built in.

BOOSTING, SPONSORSHIP, ADVERTISING

- **Boosting:** Increasing Karma by posting quality, interesting, interactive, emotional, and frequent content. Content that receives a great deal of Karma is rewarded with more Reddit advertising and a lifetime of Reddit Gold, which is both a premium membership and attracts more post engagement.

- **Sponsorship:** An enigma...
- **Advertising:** Businesses, organizations, and brands can advertise (known as *Promoted Posts*) using Reddit Ads and Reddit for Business (redditforbusiness.com/advertise).

SUGGESTED NARRATIVE STYLE

A Reddit post is limited to 40,000 characters for a post and 10,000 for a comment. Brief posts are recommended. Create posts that are conversational and newsworthy. As stated earlier, AMAs are popular for engagement.

DEMOGRAPHICS

Gender: In the U.S., 36% of Reddit users are female and 64% are male. **Age:** 36% of those ages 18-29 are users (largest), 22% of those 30-49, 10% of those 50-64, and 3% of those 65+.

Ethnicity: 17% are White, 17% are Black, and 14% are Hispanic. **Household Income:** 26% of those earning \$75K+ are users (largest), 20% of those earning \$50K-\$75K, 17% of those earning \$30K-\$50K, and 10% under \$30K. **Education:** 9% of those with only a high school diploma or less are users, 20% of those with some college, and 26% of those with college degrees (largest).⁵⁶

Country: The U.S. has the largest percentage of all Reddit users, with 47%, followed by the United Kingdom with 8%, Canada with 7%, and Australia with 4% (Statista, 2023).

POLITICAL LEANING

In the U.S., 41% of users are on the Left, 38% are in the Center and 21% are on the Right (Statista, 2023).

Truth Social (truthsocial.com)

Launched in May 2022, Donald Trump’s social media platform is proving popular among male, college-educated millennials. Research has revealed that Reddit users and e-sports fans are the predominant users of the Truth Social network, which has more than 513,000 daily active users. The network has approximately 2 million MAUs.

Truth Social secured approximately \$37 million in funding, primarily from Republican political contributors, and is expending an estimated \$1.7 million each month, as reported by William Wilkinson, a former executive at Trump Media & Technology Group, the parent company of the social network. Approximately \$1.3 billion of necessary funding is under threat due to two federal inquiries.

An article in The New York Times dated Jan 27, 2023, under the headline “On Trump’s Social Network: Ads for Miracle Cures, Scams, and Fake Merchandise” examines the proliferation of dubious promotions on the former President’s social media platform, which has struggled to attract large brands. An analysis of hundreds of advertisements revealed that the ads were primarily for alternative medicine, diet pills, gun accessories, and memorabilia bearing the likeness of President Trump. Postings regarding conspiracy theories and right-wing complaints dominate (Thompson, 2023).

ALGORITHMS

There is limited information available on Truth Social’s algorithms. An article published by Pew Research Center observed that despite its self-identification as nonpartisan, several notable Truth Social accounts demonstrate a right-wing or pro-Trump inclination (Forman-Katz & Stocking, 2023).

ADVERTISING

Rumble, the video streaming platform utilized by Truth Social to manage advertising, has not reported on Truth Social’s advertising revenue.

DEMOGRAPHICS

Statistics are slim. According to *Statista*, approximately 3% of the U.S. population is registered on Truth Social; 5% of the male and 2% of the female population are users. Further, 3% of millennials, 6% of college graduates, and 9% of Reddit users are Truth Social users.

POLITICAL LEANING

Roughly 66% of those who habitually consume news from Truth Social self-identify as Republicans or express some affinity for the Republican Party (Statista, 2023).

LinkedIn (linkedin.com)

Founded in 2003, LinkedIn is known as a “professional” or “business” social media site, and its *meta description* (posted under the website name in the Google search results) is: “750 million+ members|Manage your professional identity. Build and engage with your professional network. Access knowledge, insights, and opportunities.”

Approximately a quarter of the adult population in the United States utilizes LinkedIn. The platform is available in more than 200 countries with 50 million listed companies and 24 languages. Globally, the total number of users is 900 million. The weekly active user count reached a total of 49 million (Statista, 2023).

ALGORITHMS

LinkedIn’s home feed algorithm presents users with a curated selection of content that considers users’ connections, professional experience, interests, and engagement.

- To diversify the content of LinkedIn feeds, users can follow various individuals or organizations with contrasting views, participate in groups that offer a wide range of perspectives, and engage with content that covers a broad spectrum of topics and opinions.
- The algorithm gives preference to content from users’ social contacts, emphasizing those with stronger relationships or more frequent interactions.
- LinkedIn’s algorithm prioritizes quality and relevant content including informative articles, beneficial advice, and interactive media such as images or videos.
- Newer posts are generally given priority over older posts.
- LinkedIn offers users suggested connections, groups, jobs, and other items based on factors such as profiles, interests, engagement history, user’s skills and expertise, career sector, and location.

- LinkedIn is also a popular search engine. (See “LinkedIn” under Search Engines, below.)

BOOSTING, SPONSORSHIP, ADVERTISING

- **Boosting:** Users can boost a post by turning it into an ad that appears on the LinkedIn feed of a new audience they want to target. In addition, listing specific skills within a user’s profile will help possible employer’s find that user. Users can also subscribe to a Premium Membership, which allows for more internal messaging with other users.
- **Sponsorship:** Sponsored Content is a type of paid advertising that allows companies to deliver page posts beyond their current LinkedIn page followers. Targeted LinkedIn page posts are free and visible on the LinkedIn page or in the feed of existing followers only.
- **Advertising:**
 - Sponsored InMail sends personalized messages to desired receivers.
 - Display Ads are on the right of the LinkedIn homepage news feed or other LinkedIn pages. Images, text, or some combination thereof can be utilized to endorse a particular brand or product.
 - Dynamic Ads can provide a more engaging and relevant ad experience by personalizing ads with the user’s profile picture and name.
 - Text advertisements are basic, cost-effective solutions on the right side and at the top of the LinkedIn home page. They are composed of a title, synopsis, and optionally an image.
 - The LinkedIn Audience Network allows advertisers to extend their online presence beyond the confines of the LinkedIn platform by displaying their Sponsored Content and Display Ads on external websites and applications that are part of the LinkedIn network.
 - LinkedIn Campaign Manager can be utilized to create campaigns, specify targeting criteria, and select the ad format that best suits objectives.
 - LinkedIn offers analytics and reporting capabilities to gauge effectiveness of campaigns.

SUGGESTED NARRATIVE STYLE

The recommended style is to focus on issues pertinent to the professional realm, such as accomplishments in one's career, insights derived from experience, and thought leadership. Disseminate informational articles, stories, and news relevant to your sector or professional concerns. It is advised to adopt a more formal tone and style when using this platform compared to other social media platforms.

DEMOGRAPHICS

Gender: LinkedIn users are 45% female and 55% male. **Age:** 22% of those ages 18-24 are users, 33% are 25-34 (largest), 20% are 35-44, 8% are 55-64, and 5% are 65+. ⁵⁷ **Household income:** 17% belong to low-income households, 29% to middle-income households, and 53% to high-income households (largest). **Country:** The U.S. has the largest LinkedIn membership with 171+ million users, followed by India with more than 69 million and China with 51 million. (Statista, 2023)

POLITICAL LEANING

In the U.S., 26% of LinkedIn users are on the Left, 20% are in the Center, and 21% are on the Right (Statista, 2022; Bradshaw, 2022).

DISCORD (discord.com)

Launched in 2015, Discord is a communication platform that provides text, voice, and video chat services. The platform also facilitates virtual communities, known as "servers," wherein participants may communicate with one another in real time. This social platform was originally created for gamers to interact, hang out together, and have fun playing games. Gaming is still its main focus. As an example, the largest server on Discord is a Fortnite community of 845,000 users. However, Discord welcomes other communities such as book clubs, study sessions, dance classes, and digital conventions. The user experience on Discord is considerably affected by the dynamics of the server's community, its participants, and the activities that transpire between them. To the writers of this report, Discord feels like part WhatsApp, part cell phone, and part Zoom.

There is a free-level and two paid-premium levels that give users access to more servers (communities) and customizations. In the premium levels, like gaming, users can level up and get Gifs avatars, access to high-quality video, custom emotes, and more. There are public servers and private servers which allow for large conventions and small private get-togethers with close friends. As of January 2023, Discord had an estimated 500 million registered users and 154 million MAUs. It is estimated that Discord users exchange 4 billion messages per day and 124 billion messages per month. In app purchases, in Q4 of 2022 Discord reached over \$53 million in revenue. (Statista, 2023).

ALGORITHMS

In contrast to other social media platforms, Discord does not depend on content-ranking algorithms to assemble a collection of posts and updates for users. However, Discord does employ algorithms and machine learning for additional objectives:

- To identify and eradicate spam or abusive messages or any other form of content that contravenes Discord's terms and conditions. Server administrators can employ automated moderation tools, such as bots, to facilitate their community's regulations.
- To suggest new friendships or servers based on the users' interests, activities, and affiliations.
- To provide search capabilities within servers, which enables users to identify particular messages, files, or content based on keywords or other search criteria.

BOOSTING, SPONSORSHIP, ADVERTISING

- **Boosting:** "Nitro" users can "enhance" any given server, allowing the server access to more expansive options such as a higher sound quality for voice channels, a custom server banner and invitation background, and additional customized emojis. Augmentation of the server experience does not explicitly advertise a brand or content.
- **Sponsorship:** Corporate sponsorship exists through the promotion of text or voice channels, events sponsored by third parties, and branded content circulated within the server.

- **Advertising:** Discord does not have an advertising feature akin to other social media platforms. Nevertheless, server administrators can establish customized advertisements within their servers to advance their products, services, or associated brands. These advertisements can be disseminated through designated channels, integrated into announcements, or included in other server content. All advertisements must follow the server's regulations and the community's preferences.

SUGGESTED NARRATIVE STYLE

Anything goes. As Discord is designed for speaking, chatting, or live video streaming with one another in real time, a narrative style would be based on what activities users want to engage with while on their servers.

Search Engine Platforms

Google (google.com)

Google is by far the most popular of all search engines and, according to Statista, has a worldwide market share of close to 85% as of January 2023.⁵⁸ Google is popular for several reasons, including its speed, having the largest number of indexed sites and the fastest ability to pick up new sites, content, and news. It also has very high brand recognition. Google's advertising engine is exceptionally sophisticated and has the ability to offer demographic targeting so that advertisers can target specific groups such as users by age, by gender, by location, by interests, by household income, and by education. Google also has some secondary search engines, such as Google Flights and Google Books (Abj, 2022).

DEMOGRAPHICS

Gender: 42% of Google users are female, 58% are male. **Age:** 24% of users are 18-24, 30% are 25-34 (largest), 19% are 35-44, 9% are 55-64, and 5% are 65+.⁵⁹

DEMOGRAPHICS

Gender: 35% are female and 65% are male. **Age:** 22% of those aged 16-24, 42% of those 25-34 (largest), 21% of those 35-44, and 15% of those 45+ **Ethnicity:** 14% are White, 16% are Black, and 31% are Hispanic. **Country:** The U.S. has the biggest percentage of Discord users, with 30%, followed by Canada with 5% and the United Kingdom and Germany with 4% each.

Google Scholar is also notable as it focuses entirely on searching academic resources such as books, research papers, journal articles, case law, conference proceedings, and more.

Bing (bing.com)

Microsoft Bing holds the second-largest worldwide market share among search engines, at close to 9%, far below Google's share. However, Bing does have some unique and higher quality features, including the best image search function, which includes the ability to search different image layouts such as tall, wide, or square. In addition, Bing's filter options are easier to find than Google's, such as licensing information for images. Furthermore, even though Google owns YouTube, Bing's video search is thought to be of better quality because it is presented as a grid of thumbnails from which users can view the videos without having to leave the grid.

One of Bing's unique features is its loyalty program, Microsoft Rewards. Every time you use Bing search, you get points that can be redeemed for gift cards to various outlets, including Starbucks and Amazon. Bing Ads can also target specific demographics.

DEMOGRAPHICS

Gender: 43% of Bing users are female, 56% are male. **Age:** 73% of users are under age 45. **Education:** 34% of users have a college diploma. **Marital status:** 54% of users are married. **Household income:** 36% of users earn \$100,000 or more. **Sexual orientation:** 3% of users identify as LGBTQ+. **Disabilities:** 18% of users are people with disabilities.⁶⁰

Yahoo (yahoo.com)

Yahoo has the third-largest worldwide market share among search engines, at 2.6%. Yahoo is also known for being an aggregator of information under several different search categories, such as Yahoo Finance, Yahoo News, Yahoo Sports, Yahoo Entertainment, and Yahoo Shopping.

DEMOGRAPHICS

Gender: 43% of users are female, 57% are male. **Age:** 19% of users are 18-24, 26% are 25-34 (largest), 19% are 35-44, 12% are 55-64, and 10% are 65+.⁶¹

Duckduckgo (duckduckgo.com)

DuckDuckGo has a worldwide market share of 0.83%.⁶² It is known for its privacy and security because it does not track users' history or collect any personal information, including I.P. addresses. It does have ads, but as it does not share any information outside of the search engine itself, searches are not reflected on other platforms.

DEMOGRAPHICS

Gender: 27% of users are female, 73% are male. **Age:** 19% of users are 18-24, 26% are 25-34 (largest), and 9% are 65+ (Akers, 2023).

Several social media sites also have popular search engines. A few are listed below:

YouTube Search

YouTube is also a popular search engine. There are three main elements that YouTube's search algorithm takes into consideration when ranking results of user search queries:

- **Relevance:** Based on video title tags, descriptions, and use of keywords and phrases.
- **Engagement:** Watch time – the longer users watch a video, the higher that video appears in the results positioning.
- **Quality:** Somehow, YouTube's algorithm can analyze a video or channel's trustworthiness, significance, and expertise (Ashbridge, 2023).

DEMOGRAPHICS

(See under Social Media Platforms.)

LinkedIn

LinkedIn Search is robust and allows for advanced filters such as location, industry, job title, company size, and more so that users can find and connect with others who meet specific criteria. In addition, LinkedIn Groups allows users to search for and join groups related to their industry or interests. LinkedIn also has an enormous job board, through which users can search for specific types of jobs with a number of filtering options.

DEMOGRAPHICS

(See under Social Media Platforms.)

Reddit

Primarily known as a social media site, Reddit also has an internal search function that allows users to search four main content types: posts, comments, and communities (i.e., Subreddits) to find groups and people with similar interests.

DEMOGRAPHICS

(See under Social Media Platforms.)

Mastodon (mastodon.social/explore)

Mastodon is designed to be an alternative to Twitter, Facebook, and Instagram, which have all been criticized for their lack of privacy. Mastodon has no central server that stores user data. Instead, users create their own servers (“instances”), which are connected to a network of other instances. Users can choose which instance they want to join. Each instance is independently owned and operated, and each instance community moderates itself by setting up its own rules and guidelines. Users can report and block other users who violate the rules. Mastodon’s search engine is interesting as users can “explore” instances and search for content using keywords or hashtags.

DEMOGRAPHICS

Gender: 31% of Mastodon users are female, 69% are male. **Age:** 23% of users are 18-24, 34% are 25-34 (largest), and 19% are 35-44, 8% are 55-64, and 5% are 65+.⁶³

Medium (medium.com)

Medium is a popular online publishing platform known for high-quality articles, essays, and other long-form content. Medium also has a paywall feature, so authors can earn money from their work. Medium’s search engine is also popular for users to search for content of interest by keywords, authors, tags, and date range. It is known to be left-leaning.

DEMOGRAPHICS

Gender: 33% of users are female, 67% are male. **Age:** 25% of users are 18-24, 36% are 25-34 (largest), 19% are 35-44, 6% are 55-64, and 4% are 65+.⁶⁴

Gab (www.gab.com)

Gab is a favorite far-right social media site known for its commitment to “freedom of speech” with no content policies and as an alternative to Facebook and Twitter (Ray, 2022). According to Pew Research, 1% of U.S. adults get their news regularly from Gab (St Aubin & Stocking, 2023). The site is known for allowing hate speech and

extremist content and providing a safe haven for neo-Nazis and White supremacists. It has been associated with the 2018 Pittsburgh synagogue shooting and other violent incidents. However, its search engine is quite sophisticated and can filter results by text, images, video, conversations, information, and other users.

DEMOGRAPHICS

Gender: 26% of users are female, 74% are male. **Age:** 17% of users are 18-24, 23% are 25-34 (largest), 16% are 35-44, 16% are 55-64, and 13% are 65+.⁶⁵

Rumble (rumble.com)

Another favorite far-right social channel, Rumble, is known for being a video-sharing platform committed to “free speech” and hosting conservative and right-leaning content. 2% of U.S. adults regularly get their news there (St Aubin & Stocking, 2023). Rumble has been criticized for spreading disinformation, misinformation, and conspiracy theories, and is famous for promoting false and misleading information about Covid-19 and the 2020 U.S. Presidential election. Rumble’s search function is helpful in finding specific videos, creators, and content of interest.

DEMOGRAPHICS

Gender: 28% of Rumble users are female, 72% are male. **Age:** 18% of users are 18-24, 24% are 25-34 (largest), 16% are 35-44, 15% are 55-64, and 13% are 65+.⁶⁶

Several chat messaging services also have popular search engines. A few are listed below:

WhatsApp (whatsapp.com)

According to its About page, WhatsApp is an extremely popular worldwide chat messaging app that is used by over 2 billion people in over 180 countries. It is owned by Facebook but runs separately. The app supports encrypted text, photos, videos, documents, location, and voice and video calls. The search engine can be used to search chats for messages, photos, videos links, GIFs, audio, and documents.

DEMOGRAPHICS

Gender: 47% of What's App users are female, 53% are male. **Age:** 33% of users are 18-24 (largest), 27% are 35-44, 20% are 45-64, and 11% are 65+ (Statista, 2022).

Telegram (telegram.org)

Known for being a go-to messaging app for far-right groups involved in planning the January 6, 2020, insurrection, Telegram has since that time cracked down on QAnon and right-wing militias and now has a strict privacy policy (Ray, 2022). Popular for its encrypted calls and texts, Telegram had 700 million

MAUs as of November 2022.⁶⁷ (*Telegram Global MAU 2022 / Statista, 2022*). Telegram Search is popular for searching for groups and channels with similar interests that users may want to explore and join. Russian brothers built Telegram but Russia has no involvement in the platform. Telegram's headquarters are in Dubai in the United Arab Emirates.

DEMOGRAPHICS

Gender: 43% of users are female, 57% are male. **Age:** 31% of users are 25-34, 30% are <24 (Statista, 2023).

Podcast Platforms

General Information on Podcast Hosting and Directories. A podcast host is an online storage platform that podcast creators upload their finished podcasts onto. Links to the hosting platform to access the podcasts may work through a directory, the creator's personal website, or both. Two examples of hosting platforms are *Buzzsprout* and *PodBean*. A directory is an app or website from which one can listen to podcasts. Two examples of podcast directories are Spotify and Apple Podcasts.

General Narrative Style

Podcasts are classified as digital audio content, often including episodic series revolving around a particular topic, subject, or style. Typically, audio recordings are pre-recorded and can be streamed or downloaded for listening at the user's discretion. Podcasts encompass a wide variety of genres, ranging from news, interviews, and instruction, to self-development and story, to music or spoken word, to comedy and gaming, and indeed to many others.

Comedy is the most popular genre in the U.S., making up 22% of podcasts, with news following at 21%, true crime at 18%, and sports at 17%.⁶⁸ Podcasters strive to produce high

caliber, stimulating material that will resonate with their listeners and provide exclusive content, rewards, or events to foster loyalty and increase their following.⁶⁹ The two most common reasons listeners tune in to podcasts is to learn new things and to be entertained.⁷⁰

Some podcast distributors simply allow creators to publish on their platforms (e.g., Apple Podcasts, Spotify), while other podcast distributors are both content creators and publishers, creating their own content as well as publishing the work of independent creators (e.g., Stitcher, NPR).

General Podcast Demographics

The demographic segmentation of individual podcasts differs depending on the topics and intended audiences. *Statista* estimates there will be 100 million podcast listeners in the U.S. in 2023. **Gender:** As of 2022, 46% of listeners were female, 53% were male, and 1% identified as nonbinary. **Age:** 50% of listeners are ages 12 to 34.⁷¹ **Ethnicity:** 57% are White, 16% are Hispanic, 13% are African American, 4% are Asian, and 10% are "other."⁷² **Education:** Approximately 68% of podcast listeners have a postgraduate degree (Schaffer, 2023). Demographics for specific platforms are provided where found.

The following is a selected group of podcast distributors.

Apple Podcasts **(apple.com/apple-podcasts)**

Apple Podcasts launched in 2012 and is the #1 platform with 37% of the market of podcast listeners as of February 2023, with close to 49 million downloads (*Buzzsprout, 2023*) and 65.1 million episodes on the platform. Apple Podcasts is accessible on iOS devices, Mac, and Windows via iTunes. In the rankings of genres of podcasts on Apple Podcasts, the most popular is Religion and Spirituality, followed by Society and Culture and then Education (Gul, 2023).

REACH

There are 28 million registered users as of March 2023, with the U.S. having the largest percentage of the market at 75%.⁷³

KEY FACTS

- Apple Podcasts are hosted by iTunes.
- The platform has both free-to-use and subscription-based services.
- Approximately 2.6 million podcasts are listed on Apple Podcasts.
- 96% of podcast hosts choose Apple Podcasts as their platform.
- 62% of the content is spoken word and 38% is music.
- Podcasters receive 70% of the subscription price of their podcasts with an annual fee to the service.

ALGORITHMS

Apple Podcasts' algorithms tailor recommendations to users' past behavior, preferences, and interests. Apple keeps its ranking algorithm a secret. However, research shows that a key factor is the number of subscribers a podcast acquires per day. To rank on the "top 100" charts, a podcast needs 200 new subscribers in a day (Land, 2020).

BOOSTING, SPONSORSHIP, ADVERTISING

Apple Podcasts provide a medium for circulation, and any endorsement contracts and marketing are handled independently of the platform itself by the podcaster. However, Apple does provide assets to help podcasters promote their shows and use the Apple brand.⁷⁴

DEMOGRAPHICS

The average listening age of Apple Podcasts is 35-54 years old.

EMPLOYEE DEMOGRAPHICS FOR APPLE OVERALL

Gender: Globally, Apple employees are 20% female, 80% male. **Ethnicity:** In the U.S., 54% of Apple's technology jobs are held by White workers, and 23% by Asian workers. Including non-tech jobs, Apple's workforce is 11% Hispanic and 7% Black.⁷⁵

Spotify (open.spotify.com)

Launched in 2006 in Sweden, Spotify is the #2 most-listened-to podcast platform, with 28% of all podcast users and over 35 million downloads (*Buzzsprout, 2023*). The most popular genre on Spotify is Society and Culture, with Comedy, Lifestyle & Health, Arts and Entertainment, and Education ranking next in order. Spotify publishes a number of podcasts focused on LGBTQ+ voices (Shepherd, 2023).

REACH

Spotify reaches 33 million listeners per month. In 2022, there were 456 million active users worldwide.

KEY FACTS

- Spotify has two tiers: free (ad supported) and paid premium.
- 236 million MAUs are on the free ad-supported tier.
- Ad revenue was \$109 million in 2021 and is estimated to reach \$414 million in 2024.⁷⁶

ALGORITHMS

Spotify's algorithms compile the listening habits of hundreds of millions of listeners, including grouping podcasts by genre category, country, repeat listens, high follower-to-listener ratio, playlist adds, outside shares, and more. Then that data is compared to a viewer's personal listening habits and the results are shown in individualized recommendation lists.⁷⁷

BOOSTING, SPONSORSHIP, ADVERTISING

Creating great content, a publishing schedule, and self-promoting are key strategies for boosting a podcaster's listeners. Spotify also provides personal analytics to understand audience demographics and retention (*How to Achieve a Spot on Spotify Podcast Charts*, n.d.). Spotify also has a self-serve ad platform that has flexible pricing options and real-time reporting, which also includes a sophisticated user help-desk.⁷⁸

DEMOGRAPHICS

Gender: As of March 2018, 56% of Spotify users were males in the U.S. **Age:** Users are predominantly ages 25-34, making up 29% of users in the U.S. (Shepherd, 2023).

EMPLOYEE DEMOGRAPHICS

Ethnicity: As of 2022, 55% of employees are White, 22% are Asian, 9% are Black, 9.5% are Hispanic, 4% are mixed race, and 0.2% are Native American.⁷⁹

Google Podcasts (podcasts.google.com)

Launched in 2018, Google Podcasts is the #3 platform for podcast listeners in the U.S. (TrueList, 2023).

REACH

Google downloads totalled approximately 2.2 million in 2021. Google Podcasts is pre-installed on many Android devices and those numbers are not included here (Moreno, 2021). In 2023, Google stopped listing Google Podcasts in its search engines, which will most likely decrease the amount of listeners.

KEY FACTS

- Google Podcasts is hosted by Google Play.
- Google Podcasts Manager is free to use and to sign up; it requires a Google Account and a podcast feed.
- The Joe Rogan Experience (a conservative leaning podcast) and Ted Talks Daily are the two top-ranking Google Podcasts.⁸⁰

ALGORITHMS

Google Podcasts algorithms generate personalized recommendations of podcasts for users, considering their historic listening behavior, preferences, and interests. These algorithms are based on various indicators, such as podcast popularity, user ratings, and the similarities between podcasts.

BOOSTING, SPONSORSHIP, ADVERTISING

Google is an expert at optimization, and Google Podcasts uses the same capabilities. Ensuring that a podcast website is well-optimized with accurate metadata can assist in enhancing its presence in Google search results. Podcasts can be supported through partnerships with sponsors or advertisers, whereby sponsored content, product placements, and/or ad spots are integrated into the podcast. The terms of these alliances are generally decided directly between the podcaster and the sponsor. Google Podcasts provides an avenue for distribution, while any sponsorship agreements are administered independently of the platform. Podcasters may also monetize their content by engaging in strategic partnerships with advertisers, or by utilizing ad networks or platforms specifically designed for podcast advertising.

DEMOGRAPHICS

Google Podcasts demographics are not broken out from Google's demographics. (See under Search Engine Platforms.)

Patreon (patreon.com)

Founded in May 2013, Patreon is a subscription-based platform that offers its creators (a.k.a. podcasters) an opportunity to generate revenue from their content and establish a more direct relationship with their fanbase.

REACH

As of March 2023, Patreon has in excess of 8 million active patrons (a.k.a. members) per month and approximately 223,000 creators.

KEY FACTS

- Patreon's total valuation as of 2021 is \$4 billion.
- Creators have collectively made over \$3.5 billion since Patreon was launched through the 2nd Quarter of 2022. The 2022 payout to creators was close to \$291 million, and the monthly total payout to creators is approximately \$26 million as of March 2023.⁸¹
- Video makes up approximately 40% of creator content, earning monthly payouts of over \$6 million, followed by podcasts with a monthly payout estimated to be \$3.7 million and then adult games at approximately \$2 million.
- *True Crime Obsessed* is the most popular podcast with the highest patron count at more than 48,000 and \$250,000 in earnings annually (Susic, 2023).

ALGORITHMS

Patreon does not utilize algorithms to organize or recommend content. Creators promote and market themselves through their podcasts, websites, social media accounts, and other channels to build their audience base.

BOOSTING, SPONSORSHIP, ADVERTISING

Patreon enables creators to expand their revenue potential by providing a variety of membership levels, each with a customized range of add-ons and fees. By providing exclusive content or other incentives to patrons with higher membership

levels, podcasters can motivate their audience to boost their support and contribute more financially. Podcasters may also collaborate with sponsors or advertisers and include sponsored material, advertisements, and product integration during their podcasts. Patreon does not supply an advertising platform. However, the platform has a payment processing system that can handle fee collection in exchange for a tiered percentage of each creator's monthly earnings.

DEMOGRAPHICS

Age: Approximately 60% of Patreon creators are in their 20s, and over 67% of its patron members are also in their 20s. As of 2020, 40% of creators were based outside of the U.S.

EMPLOYEE DEMOGRAPHICS

Ethnicity: As of 2018, 60% of Patreon employees were White, 15% Asian, 5% Black, 7% Hispanic, and 11% mixed race. The company committed that year to increasing diversity among its employees. In 2019, 12% of senior leadership were Black; BIPOC employees increased by 11% in the technical teams; and 43% of all employees were women (Roberts, 2022).

iHeart Radio Podcasts

Launched in 2008, iHeartRadio is a digital platform that offers users access to a broad selection of radio stations, music, and podcasts. iHeartRadio provides an extensive selection of podcasts spanning a broad range of genres and topics, which enables it to target a diverse audience with a variety of interests.

REACH

iHeart Radio has over 150 million registered users as of 2021 and 250 million MAUs.⁸²

KEY FACTS

- Annual revenue in 2021 was \$3.6 billion.
- As of 2021 the platform had 860 radio stations and 160 markets.

ALGORITHMS

iHeartRadio algorithms generate personalized recommendations of podcasts and radio stations for users, based on past listening activity, interests, and other user-defined preferences.

BOOSTING, SPONSORSHIP, ADVERTISING

iHeartRadio does not possess a built-in boosting mechanism. However, podcasters utilize social media, their own websites, and other marketing strategies to become more visible. Podcasters can also use sponsors and advertisers that are contracted directly between the parties. iHeartRadio utilizes an advertising-based model for its free subscription level, which incorporates promotional materials or advertisements within podcast and radio streaming services.

DEMOGRAPHICS

Gender: 44% of users are female and 56% are male. **Age:** Primary age of users is 25-34.⁸³

EMPLOYEE DEMOGRAPHICS

Gender: 51.2% of employees are female. **Ethnicity:** 40% are Black, Indigenous, and People of Color (BIPOC) (iHeartMedia, 2023).

Pandora

Launched in 2005, Pandora is the #1 online music streaming service in the U.S. The service also provides users with curated playlists and podcasts.

REACH

In 2022, Pandora hosted approximately 2 million sessions per month and had 47.6 million MAUs and 6.2 million paid subscribers. Pandora's reach has been decreasing over the last couple of years. In 2021, it had 52.3 million MAUs (Statista, 2023a).

KEY FACTS

- Advertising is the main source of revenue with approximately \$1.6 billion in revenue in 2022.
- Total revenue between paid membership and advertising in 2021 was \$2.1 billion (Statista, 2023).

ALGORITHMS

Pandora's algorithms facilitate personalized recommendations of podcasts and music stations through user-specific listening histories, preferences, and interests. Pandora also implements its Music Genome Project and Podcast Genome Project, which compile many statistics including MPAA ratings, production and content type, and host identification, and combine those statistics with listeners' own preferences to create recommendation lists.⁸⁴

BOOSTING, SPONSORSHIP, ADVERTISING

Podcasters market themselves through social media and websites. They can also form partnerships directly with sponsors and advertisers and use product placement within their podcasts. Pandora has a free, advertiser-based tier and a subscription-based tier without ads.

DEMOGRAPHICS

Age: 28% of Pandora users are 23-35; the next largest age demographic is 55+ at 22% (Ferjan, 2023).

EMPLOYEE DEMOGRAPHICS

Gender: 72% of employees are female, 28% are male. **Ethnicity:** 58% of employees are White, 11% are Black, and 20% are Hispanic or Latino (Ferjan, 2023).

SoundCloud Podcasts

SoundCloud Podcasts was launched in 2015. SoundCloud overall is the #2 music streaming platform (Gilbert, 2023).

REACH

SoundCloud Podcasts has 175 million MAUs.

KEY FACTS

- SoundCloud Podcasts has a free tier as well as a subscription plan for \$12 per month (paid annually) or \$16 per month (paid monthly).
- Content is shareable. Collaborating and commenting are also features that give this platform a social networking feel.

- SoundCloud was saved from bankruptcy in 2017 with a \$170 million influx of funding from New York investment bank Raine Group and a Singapore wealth fund, Temasek. Thereafter it was valued at \$500 million the same year (Gilbert, 2023)

ALGORITHMS

SoundCloud uses an algorithm that analyzes individual preferences by past history, searches, and repetition.

BOOSTING, SPONSORSHIP, ADVERTISING

- **Promote on SoundCloud:** This promotional option allows creators to pay for promotional campaigns for their tracks and podcast episodes. It is possible for podcasters to extend their reach through their own social channels, websites, and other outlets. SoundCloud also has an analytics feature for tracking the number and demographics of listeners.
- **SoundCloud Premier:** This monetization program is tailored to eligible creators, and through it they can generate profits from the advertisements played in their content. Podcasters participating in the program integrate ads into their episodes. These ads are heard on SoundCloud’s free, ad-supported tier. The platform also provides an ad-free listening experience through its subscription tier, SoundCloud Go+.
- **Other Sponsorship and Advertising:** Creators are also able to partner with an advertising network and place ads in their podcasts themselves. They can also sell sponsorships to businesses or organizations and provide paid exclusive and “special event” content.

DEMOGRAPHICS

Age: 35% of users are between the ages of 18 and 34.

EMPLOYEE DEMOGRAPHICS

Gender: 24% of employees are female, 76% are male. **Ethnicity:** 65% are White, 10% are Black or African American, and 9% are Hispanic or Latino.⁸⁵

Stitcher

Stitcher is a podcast listening platform and app. It was launched in 2008 and then purchased by SiriusXM in 2020 for \$325 million. Stitcher is known as the top podcast-only publisher and network in the U.S.⁸⁶

REACH

Stitcher has 14.5 million MAUs, and the app has been downloaded 12 million times as of November 2021 (Smith, 2023).

KEY FACTS

- The top category of content genre is News and Media publishers, followed by Computers, Electronics and Technology.
- Stitcher allows for short-form audio clips that listeners can share to their social channels.

ALGORITHMS

Stitcher’s algorithms encourage listeners to try new shows with their proprietary recommendation features and its algorithms are unique because they do not only base recommendations on a show’s number of users. Stitcher also uses AI and ML to recommend podcasts of interest.

BOOSTING, SPONSORSHIP, ADVERTISING

Stitcher provides analytics to see who and where a podcaster’s audience is coming from. Stitcher also offers ad placement within podcasts so creators can earn revenue (Scheerbarth, 2023).

DEMOGRAPHICS

Gender: 42% of users are female, 58% are male. **Age:** 19% of users are 18-24, 31% are 25-34 (largest), 10.4% are 35-44, 14% are 45-54, 10% are 55-64 and 7% are 65+.⁸⁷

EMPLOYEE DEMOGRAPHICS

Gender: 76% of users are female and 24% are male. **Ethnicity:** 68% are White, 6% are Black or African American, 15% are Hispanic or Latino, and 9% are Asian⁸⁸ (Smith, 2023).

National Public Radio (NPR) Podcasts

NPR Podcasts was launched in 2005 with approximately 170 programs created by NPR national and member stations. NPR is a nonprofit media organization that produces and disseminates news, talk, and entertainment programming – including podcasts – across multiple media outlets. NPR Podcasts is the #2 publisher of podcasts after Stitcher.⁸⁹

REACH

Downloads of podcasts from NPR have tripled since 2014, with 7.12 million downloads in the U.S. (Statista, 2023). During the height of the Covid-19 pandemic, there were 57 million listeners.

KEY FACTS

- NPR Podcasts has a Podcast Start-up Guide (Weldon, 2021).
- NPR Podcasts can be found in many places. They can be aired on NPR member stations. They are also found on the NPR.org website, on the NPR APP, iTunes, Google Play Music, Google Podcasts, Spotify, Apple Podcasts, Stitcher and others.

ALGORITHMS

At NPR Podcasts, experienced news producers, and story editors curate the podcasts and list their recommendations. The podcasts are also categorized by story subject matter so that listeners can sort by their interests. And, finally, there is a personalized algorithm that analyzes a listener's listening behavior in conjunction with the library of podcasts to come up with recommendation lists.

BOOSTING, SPONSORSHIP

- **Boosting:** NPR uses its large network of radio stations, websites, apps, and social media channels to increase the visibility and exposure of its podcasts. Podcasters may further increase the visibility of their shows via their own social media channels, websites, and other promotional channels.

- **Sponsorship:** NPR Podcasts may incorporate sponsorships through underwriting or content collaborations. Sponsorship underwriting entails a benefactor extending monetary endorsements in return for exposure in the podcast. Content collaborations may necessitate the formation of content in cooperation with a sponsor. NPR typically manages these partnerships, which must adhere to its sponsorship regulations.

NPR, as a nonprofit organization, obtains financial support from private benefactors, corporate sponsors, and grants. NPR audio programs may feature sponsor messages or acknowledgments of underwriting, which are comparable to advertisements but generally have a more delicate and less commercialized appearance. NPR strictly adheres to established standards in regard to its sponsor messages in order to preserve the trustworthiness of its content, evade any potential conflicts of interest, and retain its nonprofit status.

DEMOGRAPHICS FOR NPR OVERALL

Gender: 45% of listeners are female, 55% are male. **Age:** Most listeners are 35+, 50% are between the ages of 25 and 54; interestingly, there are more older men listening than women, but in the younger demographic, the split is 50/50. **Ethnicity:** 61% are White, 39% are BIPOC (up from 28% in 2018). There was a large increase of BIPOC listeners during the Covid-19 pandemic. In addition, 75% of the stories on NPR in 2021 were race-related, up from 42% in 2013 (NPR, 2022). **Household Income:** Average income among NPR listeners is approximately \$103,000 per year, with 10% earning between \$50,000 and \$75,000 and 80% earning over \$75,000 per year.

Additionally, 75% of NPR listeners identify as voters (Clark, n.d.).

Blog Platforms

Blogs are a type of website, in which the content is presented chronologically, with the most recently posted placed first. Blogs can also be thought of as digital diaries. They can be part of a larger website that has multiple Blogs (e.g., Medium) or a distinct separate element in a corporate or organization's website (many are found as a pull-down menu item), or else a blog can be a singular, stand-alone offering housed on its own website. Blogs can be run by a business, an organization, a group, or an individual, and the writing in them is usually conversational. Businesses and organizations may use blogs to provide information or raise awareness. Social movements can use blogs to influence public opinion and give information on upcoming events, legislation and directions on how to engage (Balkhi, 2022). The most popular blog types are food, travel, health and fitness, lifestyle, and fashion and beauty. Music, sports, finance, and politics are also prevalent types (Sernoff, 2023).

The top paid bloggers⁹⁰ are:

- HuffPost (\$500 million per year), focused on current affairs.
- Engadget (\$48 million), focused on tech and venture capitalism.
- Moz (\$45 million), focused on field marketing and also a Search Engine Optimization (SEO) community and service provider.
- PerezHilton (\$41 million) (*not* Paris Hilton), run by a man named Mario Armando Lavandeira Jr., who is a celebrity blogger.
- Copyblogger (\$35 million), focused on how to be a great blogger.
- Mashable (\$35 million), covering tech, science, and social good. "Amplify," one of its content series, focuses on racial equality and is "devoted to raising awareness, spotlighting issues, and taking action."

GENERAL BLOGGER DEMOGRAPHICS

Gender: According to *Zippia*, 67% of bloggers are female and 33% are male. **Ethnicity:** 75% of bloggers are White, 6% are Black or African American, and 8% are Hispanic or Latino. **Education:** 78% have college degrees (*Zippia*, 2023).

The following are several blogging sites and platforms, some of which, in addition to hosting their own blogs, also function as content management systems (CMSs) that allow users to create and manage their own blogs and websites.

WordPress.com and Wordpress.org

WordPress is the most widely used CMS for both building and managing websites and blogs. Individuals, groups, businesses, and organizations all use the WordPress platforms. The demographic composition of a given blog is determined by its content, intended readership, and marketing and advertising quality.

WordPress.com is known as the best free blogging platform that is easy to use. The platform also functions as the hosting provider and will provide all the management and security for the blogger's site. It provides very clear step-by-step instructions on how to build your own blog as well as how to market and manage the blog through its analytics feature. It also offers plenty of additional resources, such as daily webinars and blog posts that illustrate how to use a variety of WordPress assets and new marketing ideas.

The WordPress.com platform also has a built-in "Reader" that automatically connects you and your blog to the entire community of WordPress bloggers and readers, so that your blog can be found, followed, and shared to millions. And you can find, follow, and share other creators' blogs on any topic. WordPress.com also has a tiered

pricing system that includes additional assets and allows plugins from external sources (Pines, 2023). Over the three-month period beginning with November 2022, traffic to the site had over 850,000 visits.

BLOGS

“Discover” (<https://wordpress.com/discover-wordpress/>) is the home of the WordPress.com Blogs, which is curated by the WordPress editorial team. When using this link, the Discover section is found on the top menu strip. (Please note that Discover is confusing to find. If you go to the wordpress.com site without the Discover add-on, you will not see this menu option. Discover does appear on the WordPress mobile app if you have a WordPress blog.) Once you are in the Discover section, it is quite impressive.

- **Editors’ Picks:** Includes both top blogger posts as well as newly discovered bloggers.
- **Inspiration:** Curated section highlighting WordPress resources, book reviews, thematic areas such as Pride and Black Lives Matter, and more.
- **Topics:** There are two sections of “Topics.” The first is an archive of several topics that are Editor’s Picks. The other is an extremely comprehensive “All Topics” archive that is categorized alphabetically.

BOOSTING, SPONSORSHIP, ADVERTISING

- **Boosting:** Bloggers must market through their own social channels utilizing best SEO practices.
- **Sponsorships:** One of the cons of using WordPress.com is that an individual cannot have her or his own sponsorships or advertising from 3rd parties and will get reported and possibly suspended for having such. Also, WordPress “Sponsored Posts” can appear on a blog, though as a blogger you can opt out of them if you like.
- **Advertising:** WordPress.com does offer a program, called WordAds, that bloggers

can partake in for a cost. WordAds will find advertisers and place ads on bloggers’ sites automatically. In addition, WordAds uses algorithms that show visitors ads that are based on their browsing history and are relevant to them. Plus, bloggers receive revenue from every ad that is seen by their visitors.

SUGGESTED NARRATIVE STYLE

WordPress gives straightforward recommendations as to how best to get featured on Discover (<https://wordpress.com/support/getting-featured-on-discover/>). These recommendations are good for all bloggers.

- Publish original content and make sure credit is given when using others’ material, and of course, do not plagiarize.
- Offer a strong point of view.
- Embrace an individual voice and style.
- Use images where possible and make posts easy on the eyes with breathing space, a readable font, and a clear design.
- Make sure to add relevant tags and categories with a great headline.

DEMOGRAPHICS

Gender: 46% of the WordPress audience are female, 54% are male. **Age:** 27% of the audience are 18-24; 31% are 25-34 (largest), and 18% are 35-44 (*Similarweb*, 2023).

WordPress.org is targeted to more serious bloggers because it is “open source.” While it uses the great WordPress software code, it is completely self-hosted, meaning bloggers have complete control over their blogs and can choose to host them anywhere they choose, which could be less expensive. It also allows bloggers to create their own themes and use any plugins with no limitations. There are no restrictions on the type of content bloggers can create, other than following state and federal laws, and bloggers can edit at will without any of the limitations that are found using the WordPress.com platform.

BLOGS

WordPress.org blogs do not automatically have access to the WordPress Reader community, especially if the created blog has a different hosting provider than wordpress.com. However, an “RSS” plugin is available to connect a self-hosted blog into the Reader once bloggers register for it under wordpress.org. We know—it is a bit confusing, but worth the exposure.

BOOSTING, SPONSORSHIP, ADVERTISING

Simply put, as a self-hosted blog, a blogger can do anything they wish on their site. Beyond promoting through all personal social channels using SEO best practices, sponsorships and advertising are completely under a blogger’s control. In addition, WordPress.org provides bloggers with the proper plugins to accommodate any sponsor or advertiser they have.

Medium Blogs (medium.com)

Founded in 2012, Medium is a web-based platform that enables users to create, distribute, and share digital publications on various topics. Medium draws a broad demographic mix and reach due to its extensive range of featured topics. The platform is also growing quickly. In a recent three-month period, Medium had over 500,000 visits and approximately 300,000 subscribers.⁹¹

ALGORITHMS

Medium employs a recommendation algorithm to present articles to readers according to their interests, past readings, and interaction with other pieces.

BOOSTING, SPONSORSHIP, ADVERTISING

- **Boosting:** Bloggers must market through their own social channels and website, employing SEO techniques.
- **Sponsorship:** It is generally impermissible to utilize sponsored content or advertising on Medium. However, authors may collaborate with external sponsors or advertisers to

generate sponsored content, such as product reviews or affiliate marketing, provided it complies with Medium’s content regulations.

- **Advertising:** Medium does not have a traditional advertising feature. Bloggers may participate in the Medium “Partner Program” as an alternative. They can receive remuneration depending on the level of engagement their articles attract from members with active subscriptions.

SUGGESTED NARRATIVE STYLE

Top interest categories of visitors are Computers, Electronics and Technology, Programming and Developer Software, and News. Bloggers find that Medium is also great for longer, more thoughtful pieces.

DEMOGRAPHICS

Gender: 33% of the Medium audience are female, 67% are male. **Age:** 25% are 18-24, 36% are 25-34 (largest), and 19% are 35-44 (Similarweb, 2023).

Wix (users.wix.com)

Launched in 2006 and known to be a great resource for beginner bloggers, Wix offers hosting (technical and security management) and blog-building capabilities, allowing users to generate and maintain blogs via customizable templates and drag-and-drop features. The Wix Blog is a resource that has helpful illustrative blog posts for bloggers to use when building their own site.

BLOGS

Unfortunately, Wix does not include a hosted blog site that captures Wix-created blogs for more reach and community. However, Wix does have a member only community that allows bloggers to interact with each other and follow, share and comment on each other’s posts. When a blogger signs up for the Wix Blog Community, *only* members can see their blog. This may provide a good resource for beginner bloggers as they learn, and one can opt out at any time.

BOOSTING, SPONSORSHIP, ADVERTISING

- **Boosting:** Bloggers must market through their own social channels and website and employ SEO techniques. Wix does offer resources that help develop email marketing campaigns and social media graphics.
- **Sponsorship:** Bloggers can have sponsor relationships on their site.
- **Advertising:** Wix offers a feature that helps bloggers create Facebook Ads. Bloggers can also have advertising on their site by creating their own advertiser relationships. In addition, Wix offers a direct program with Google AdSense that provides a way to earn revenue on personal blog sites for the cost of customizing an ad campaign and earning revenue based on blog traffic.

SUGGESTED NARRATIVE STYLE

Similar to WordPress, high-value, stimulating and genuine content concerning the target population is fundamental for achieving success.

DEMOGRAPHICS

N.A.

Tumblr (tumblr.com)

Founded in 2007, Tumblr is a microblogging and social networking platform that enables bloggers to generate multimedia short-form content and post frequently alongside many other bloggers. Tumblr is known as a site for edgy pop-culture and visual posts that showcase an eclectic selection of blogs, including socio-political causes, celebrity followers, off-the-wall topics such as goblin illustrators, as well as some exquisite photography.

As of February 2021, Tumblr had 518+ million blogs(!), 32 million bloggers in the U.S. alone, and was publishing close to 13 million blog posts a day (Eira, 2023).

ALGORITHMS

Tumblr's algorithms utilize a user's interests, browsing history, and followed blog posts to provide tailored content recommendations. Recommendations are not posted chronologically, although there are "Trending" and "Staff Picks" categories on the home page. A user can also set preferences under settings to customize post selections, including finding content through hashtags.

BOOSTING, SPONSORSHIP, ADVERTISING

- **Boosting:** Tumblr Radar is a curated space that features posts that are considered interesting and popular on user dashboards. It is tough for a blogger to be noticed, as most of the selected posts are those that have already garnered a lot of traffic. Bloggers can add the hashtag #RadarPlz to help get attention from the Tumblr algorithm.
- **Sponsorship:** "Sponsored Posts" are arranged directly between advertisers and Tumblr. Bloggers may also form collaborative relationships with sponsors or advertisers to produce sponsored content, including sponsored posts, product reviews, or affiliate marketing. The agreements between bloggers and sponsors are typically negotiated directly.
- **Advertising:** Tumblr Radar also allows bloggers to pay to "Pin" and "Highlight" their posts with selected brands. However, this is quite expensive and is mostly used by bloggers that already have a large following. Bloggers are welcome to integrate third-party advertising (e.g., Google AdSense) into their blogs. Tumblr provides Ad-Free Browsing in exchange for an auto-renewed subscription.

SUGGESTED NARRATIVE STYLE

Short posts mostly comprising images, GIFs, and videos. Tumblr is a great place for artists and photographers.

DEMOGRAPHICS

Gender: Tumblr users are 50/50 female/male.

Age: Tumblr appeals to a broad range of users, with a notable proportion of the platform’s audience made up of Gen-Z (40%) and Millennials (30%) between the ages of 18 and 34. **Household Income:** While users tend to be young, most have jobs and live in urban areas; 27% of users earn \$100,000+ (largest), followed by 25% earning \$80,000-\$100,000 and 24% earning \$70,000-\$80,000 (Eira, 2023).

Traffic has been decreasing since Tumblr banned porn and adult content in December 2018. *Statista* reported that the site had approximately 292 million visits in May 2022 (Statista, 2023).

Other well-known blog platforms include:

Drupal (<https://www.drupal.org/>): An open-source CMS that allows users to create, edit, and manage blogs and works similarly to WordPress. org and Wix.

Squarespace (<https://www.squarespace.com/>): An open-source CMS known for its design features. Squarespace does have an internal curated Blog that showcases trending topics, as well as how-to career and blogging advice. Compared with other internal blogs it is limited.

LinkedIn Blog (<https://blog.linkedin.com/>): Known for thought leadership, the LinkedIn blog is internally curated and is specifically targeted to business and organization professionals and people starting out in their careers. The subtitle is “Your source for insights and information about LinkedIn.” The site has a featured crawler on the top of the page and then chronological postings of articles of interest.

Weebly (<https://www.weebly.com/features/start-a-blog/>): An open-source CMS, known best as an e-commerce blog (and website) builder. Weebly has a terrific SEO resource and blog templates all have built-in RSS and social sharing features to enable access to other channels.

8.

Best Strategies to Create a Viral and Sustaining Social Movement

A huge question discussed repeatedly by racial and social justice change makers, executives, and researchers, is wondering what the *secret sauce* is to build social movements so that sustained social change will happen. Not only is awareness of an issue or cause necessary, but this awareness needs to transform into positive changes of behavior. The ultimate goal is that once a change of behavior is achieved, that behavior does not fade away. Instead, the behavior change continues to be augmented to maximize results. The answer to the *secret sauce* question has become more complex with the proliferation of digital social channels and social media, and now with all of the new AI innovations we are increasingly living in an environment in which immediate gratification is continuously sought and patience is thin.

A great deal of research has been done on how social networks and movements are formed and how effective they are. Two independent researchers, Gal Beckerman and Damon Centola recently released excellent and compelling books, 2022's *The Quiet Before* (Beckerman, 2022) and

2021's *Change; How to Make Big Things Happen* (Centola, 2021), respectively, that focus on the question of how to create lasting social change and what type and function of social networks are necessary. Both researchers analyzed a number of social movements and social change before and after the birth of digital social channels and social media. Both fundamentally believe that having the time and the space to brainstorm, plan, and organize with other like-minded people and local communities is essential for a movement and for change to last.

Gal Beckerman is drawn to Saul Alinsky's theory of using the metaphor of a three-act play to describe the recipe for a successful social movement. In his book, *Rules for Radicals* (Alinsky, 1972), which has served as a handbook for activists since the early 1970s, Alinsky describes Act I as being an introduction to the plot and characters. Act II develops the plot and characters. And Act III is when there is a final dramatic showdown between good and evil, out of which comes the resolution. Beckerman follows Alinsky's belief that Act I

and Act II are when the ideas of a movement are “*incubated*” in a quiet, nonchaotic space where ideas can be proposed, ideology defined and refined, goals argued over and planned out, and also, significantly, engagement and enlistment of others can happen.

Beckerman goes on to say that social media discourages the first two acts because it is designed to elevate posts that trigger strong emotions such as fury, horror, and other big feelings. As a result, much of the time social media will light a blazing fire which leads to an immediate protest that can be large and last over a number of days, but then the fire dies out and people go back to their daily lives. Interestingly, Beckerman is not saying that incubation cannot happen on social media. He uses the example of White supremacists, militias, and alt-right and neo-Nazi groups, who have had a “slow gathering of power” due to their need to go underground for decades because their rhetoric was too inflammatory for the mainstream. They incubated their ideas and ideology and painstakingly planned actions, all on alternative platforms. They started on 4chan, and when they were chased off of that platform, they went to 8chan, and then on to other platforms, such as Gab. When then-President Trump welcomed these groups and gave them credence, the moment was ripe to come out of the shadows. These groups were ready with their plans of action and goals, were able to attach themselves to a willing Republican Party, grew exponentially through social media, and have proceeded to execute their plans to great effect (Beckerman, 2022, pp. 4-7).

One case study that Beckerman has been exploring is #Black Lives Matter (BLM), which first appeared in July 2013. Summarizing an extremely complex and lengthy journey, many BLM activists have become increasingly exhausted from all of the ups and downs of the movement, which over the years has mobilized in national waves triggered by the continual murders of Black men and women but resulting in little real change. Some BLM chapters across the country began to understand that

social media-driven social action was not working and that they needed to get off social media and think – to incubate. Two such chapters are the Dream Defenders in Miami (Rachel Gilmer and Phillip Agnew) and Black Visions in Minneapolis (Miski Noor). Both organizations took a step back and realized that the problems of racism, discrimination, and racial inequity they are fighting against, and their goals, such as ending police brutality and violence in general that targets Black people, were too complex to be captured and disseminated within the Twitter character limit. They realized in essence that “hard power,” adapted from the concept of political scientist Joseph S. Nye, Jr. (Nye, 1990), needed to be created by listening much more to the community and building grassroots consensus. They began to look at transformative justice as a slower, more methodical way of working toward changing the police system by, for example, electing like-minded political leaders and lobbying for legislation. Social media is “soft power” which can be used to get the story out, light metaphorical fires, and acquire “influence” power. When George Floyd was murdered in 2020, both groups worked hard to use the immense nationwide rage and grief, the “soft power” that drives strong influence and voting power, and focused on getting activities that had already been underway for 2-3 years over the finish line, including winning more elections and having Congress pass the Justice in Policing Act of 2020, making it easier to prosecute police. These groups have become convinced that both hard and soft power are necessities, and that soft power alone does not work (Beckerman, 2022, pp. 237-258).

Damon Centola, in his 2021 book, *Change; How to Make Big Things Happen*, explores a number of the same case-study landmarks as Beckerman. Centola, however, goes deeper in his analysis by looking at the differences in the *quality of connections* between people who come together to achieve (or not achieve) sustainable change. While there are many concepts brought forth in Centola’s book that make it worth the read, four key strategies are highlighted below:

- Debunking several myths of pathways that allegedly lead to sustaining social change solely by themselves, including influencer and viral movements.
- Discussion of Strong and Weak Ties, and Simple and Complex Contagions.
- Relevance and the Snowball Strategy.
- Seven Fundamental Strategies for Change.

Combination of Debunking Myths

A case study that Centola uses to break down the influencer and viral movement myths is the false story of Twitter’s origins – that Twitter started in 2009 when Oprah opened a Twitter profile on her show and sent her first tweet live in front of millions of viewers, at which point Twitter went viral. In truth, Twitter had been launched in March 2006, and it spread slowly.

The founders first promoted Twitter at a hugely popular tech and media conference, South by Southwest (SXSW) in 2007. The attendees, having a passion for latching on to the next cool thing, pounced on Twitter. The use of Twitter spread slowly at first, starting with the techies in Silicon Valley sharing it with colleagues, family, and friends, which then caused a regional spread throughout the San Francisco and broader Bay area. From there, Twitter use jumped across the country to Boston, Massachusetts, spreading among all the universities there that had numerous technology-minded students. These students had strong connections to those in the Bay area even though they were far away, and they also wanted to try the new innovation. Not only were these first groups connected with “wide bridges” to strong connections across the country, but all of these first groups were on the periphery of the Twitter movement.

In reality, Twitter was growing faster, percentage-wise, before Oprah boosted it. Oprah got involved *because* Twitter had already caught on – she did not originate it. Her followers then continued the rampant growth into the rest of the country and beyond (Centola, 2021, pp. 16-18).

Strong and Weak Ties, and Simple and Complex Contagions

While Oprah has millions of followers, most are examples of what are called “weak ties,” connections to people who are only casual acquaintances. Weak ties in social media are great at driving a *simple contagion*, such as a viral meme or hashtag. A good illustration of weak ties are people that one comes into contact with in a bar or in a theatre. This type of weak tie is good for spreading another simple contagion, such as the flu, which can easily be transmitted to someone that you are in close contact with but do not know.

“Strong ties” are connections with close family, friends and colleagues. Centola and others have found that for a *complex behavior* to spread, such as using a new platform like Twitter, or believing in a new policy, a higher percentage of strong ties—people that one knows personally—is necessary, rather than a higher percentage of people who are aware of the behavior change but are not yet partaking in it.

Centola uses two wonderful visuals to illustrate weak ties (a fireworks display) and strong ties (a fishing net). The fireworks display comes from a central point that can ignite sparks that shoot out quickly and create new connections and spread ideas, but just like fireworks, this type of spread can be short-lived. By itself, it does not have a great impact on positive change. The fishing net visual is useful to illustrate strong ties, where each person represents a knot in the net that is strongly connected by threads to other knots or people. These connections can reinforce behaviors and have a longer-lasting impact on positive social behavior change within a social network. Centola believes that both types of ties are critical to use for long-lasting and wide-ranging positive change; the fireworks spread awareness farther and wider, and the fishing net strengthens behavior changes and convictions (Centola, 2021, pp. 89-92).

Relevance, the Snowball Strategy, and the Need for 25% Population Buy-in

Centola believes that a potential change having relevance to an individual's life plays a huge part in that individual's willingness to change a behavior or beliefs (complex contagions). In other words, along with strong ties reinforcing that change in behavior or belief, it also helps a great deal if the change is relevant to the individual's own experience and values. For example, if an individual's strong ties are people who vote for a policy change that they believe will give them more affordable quality health care, and the individual also needs better health care, that individual will be even more likely to vote for the policy. On the other hand, simple contagions do not need to have relevance to an individual's life, as they only need passive exposure and do not require much, if any, active reinforcement (Centola, 2021, pp. 137-157).

Centola's "snowball strategy" refers to the type of marketing solution he believes reinforces lasting positive social change (complex contagions) over and above the use of a "shotgun strategy" or a "silver bullet" strategy. A shotgun strategy targets a few people as change agents in each of many locations with the goal of creating a bunch of viral movements that will affect some kind of change of behavior or belief. A silver bullet strategy targets one person—an influencer—in hopes that through their followers, a viral movement will occur. The snowball strategy is much less dramatic. It targets *special places* instead of special people. These places have their own social networks in which ideas, behaviors, and beliefs can be incubated, and consensus can be built, with community members repeatedly listening, sharing, and speaking with one another (mass redundancy) which then leads to a critical mass of changed behavior. Centola went on to research how much of a critical mass of changed behavior was needed to "tip over" the entire social network, and he found that it was 25% of that population (Centola, 2021, pp. 186, 210-219).

Seven Fundamental Strategies for Change

Centola sums up his theory of change in the form of seven priority recommendations for effective change making:

- 1.** Do not rely on contagions being simple. Changes of behavior or beliefs are most likely complex contagions that need "strong tie" support.
- 2.** Protect the early adopters by limiting their exposure to deep-seated resistance. Centola believes that there needs to be enough strong ties, including wide bridges, to distant strong ties for the early adopters to be effective in spreading the behavior change or belief.
- 3.** Use network peripheries. The best way to protect early adopters and give them the space to incubate is to use targeted social clusters in the periphery of the social system.
- 4.** Reinforce the wide bridges between strong ties or subgroups to establish trust and credibility.
- 5.** Create relevance so that people can believe that a change of behavior or belief will make their lives better.
- 6.** Use the Snowball Strategy.
- 7.** Design team networks that are diverse and sensitive to unconscious bias with the shared goal of reducing bias. It is critically important to protect all members from influences that support the status quo (Centola, 2021, pp. 295-301).

Basic 101 Social Media and Channel Marketing Tactics

- Establish a clear brand persona and consistency.
- Have a clear goal for a social media and social channel campaign.
- Include compelling and simple hashtags.
- Post frequently, as this helps to increase traffic.
- Include emotional content to capture attention that is easily shareable.
- Be aware of different platform demographics and customize content to those specific audiences.
- Encourage interactions in posts, such as through calls to action, games, or transactional offerings (giveaways, prize drawings).
- Include keywords, phrases, and metadata for search purposes.
- Include links to brand websites, other like-minded websites (and vice-versa), blog posts, and graphics.
- Create marketing partnerships that focus on Narrative Change for maximum penetration:
 - Artists and musicians
 - Theatres
 - National parks
 - Cultural institutions
 - Education organizations
 - Sports teams and players
 - Publishing (books, news)
 - Activists
 - Corporations
 - Influencers

Words Matter: Know the audience and use language accordingly

A critical marketing tactic is to consider that language is often used inequitably. Literacy in the U.S. and worldwide is used to separate the privileged from the nonprivileged or disadvantaged, and the powerful from the powerless. Therefore, language can be used as a tool of oppression, intentionally or not. As a stark example, according to the U.S. Department of Education, 54% of U.S. adults read below a 6th grade level. That is approximately 130 million people (Nietzel, 2020). Another example is that 25% of adults in New York City cannot speak English.⁹² Any official document or social media post meant to relay information that is written in a form of English that uses vocabulary and sentence structure at a college level or above—another word for that is *bureaucratese*—cannot be understood properly, if at all. All of this means that it is critical to know the target audience for whatever is being done and to make sure that anything that is printed or spoken can be understood. Otherwise, the message that is being sent is one of exclusion.

There are a number of resources that can be used to ensure the use of inclusive language that helps to create safe spaces and trust in people of all races and ethnicities, as well as becoming more aware of possible triggers (Riserbato, 2020). For example, the American Psychology Association (APA) has created guidelines for inclusive language (AA, 2021). Be aware that the use and response to language changes frequently. Words can also have different meanings depending on generations, gender, race, and cultures.

9.

Strategies to Combat Proliferation of Divisive Rhetoric

The proliferation of divisive rhetoric can provoke anger and prejudice between groups of people and is regularly utilized to exploit political, social, or cultural disparities for the purpose of maintaining the false belief in a hierarchy of human value. This report contains a number of suggestions on how to stem the flow of divisive rhetoric and disinformation on social media and other digital channels. We also know that a great deal of the work has to be done prior to an individual posting on social media. The following strategies are not exhaustive and are familiar to many of us. Using these strategies is critical to foster positive narrative change as well as create pathways toward transforming our society:

Promote education. Foundational elements in fostering positive change include the acquisition of language and reading literacy and critical thinking competencies, as well as exposure to *all* American history, to literature, art, and theatre created by people of all races and cultures. They also include disseminating genuine data,

learning to identify implicit and explicit bias, and enriching civic and media literacy.

Foster civil dialogue and respectful debate.

Facilitate conversations characterized by listening well, transparency, honesty, and respect, creating an atmosphere that encourages individuals to articulate their perspectives.

Foster empathy and understanding between diverse groups.

Healing work involving all races and cultures is a huge part of fostering empathy and understanding. The racial healing methodology developed by Dr. Gail Christopher and captured in her book, *RX Racial Healing*, is an excellent model (Christopher, 2022). Beginning in the early years, developing Social Emotional Language (SEL) skills in school and at home is also foundational in human development. Several of these skills include:

- Perspective taking: The ability to put yourself in the other person's shoes and see their

perspective as distinct from your own.

- Understanding common bonds and values, as well as differences: Common bonds and values connect people. Understanding that differences are positives, and *not* justification for a hierarchy of human value, is also vital.
- Forging connections: An important skill that can be developed by learning to give, asking for help, showing love, and providing positive affirmation to others.
- Conflict resolution: It is the nature of all human beings that there will be conflict in relationships at times. Developing skills such as cooperating, negotiating, taking turns, sharing, being fair, and finding win-win solutions is important in all aspects of life, personally and professionally.

Cultivate appreciation and tolerance.

Expanding on the above strategy, foster inter-faith and intercultural dialogue, thus enabling individuals to connect with and gain knowledge about other cultural perspectives. Encourage individuals to embrace their humanness and work toward dismantling the barriers caused by suspicion and fear.

Take a firm stance against hate speech and false information. It is imperative to condemn and reject hate speech immediately, even if it is not directed to you personally, while concurrently displaying peaceful and respectful behavior; back up strong arguments that refute inflammatory language; and verify facts.

Engage in productive behavior. Engaging in proactive advocacy that fights against the underlying causes of divisive rhetoric such as systemic racism, inequities in health, education, and wealth, economic and food insecurities, partisan polarization, and others. Actively supporting new and pending legislation, joining nonviolent demonstrations and assemblies, volunteering for community organizations or local businesses, and giving funds to entities that support social justice and parity are only some of the ways that can effect change and motivate positive transformation.

Establish partnerships. Work with diverse organizations, groups, and individuals with the same objectives and perspective to eradicate divisive rhetoric with the goal of fostering respect and solidarity.

Provide a model of behavior. Being a model can stimulate others to emulate your behavior.

10.

Conclusion

Digital channels, and social media specifically, have become the central core of our functioning daily lives. We cannot walk back from this reality, even if some of us wish we could. The astonishing speed of digital development—under 20 years!—has given many of us whiplash, sometimes with giddiness and joy, but also with the awful feeling that the world is spinning out of control.

In gaining more insight into the tremendous energy that digital channels have poured into the zeitgeist in such a short time, both positive and negative, optimism (surprisingly enough) is growing. Digital channels are simply tools. It is how we use them and control them that matters. We need to embrace these channels and exploit all that is good about them. They can and have been used brilliantly as channels for positive narrative change. At the same time, we cannot depend on other people to save us from destructive forces that are also using these tools brilliantly to pull apart the fragile stitches that hold democracies together. Social media has made it easier and faster for these forces to become stronger and more deadly. The unvarnished truth is that there will always be those who insist on the false belief in a hierarchy of human value because of their insatiable desire for power, wealth, and

control. Many are smart, calculating, instinctual, and strategic in manipulating and propagandizing masses of people to join them to do their dirty work. What they are doing is ugly, destructive, and can certainly be debilitating.

Yet it is possible to harness the power of these digital tools to direct and amplify narrative change. Grab on to the great work people are already doing. One example comes out of Taiwan. A new and ingenious social media platform has come to light there, called Polis (<https://pol.is/home>). It was born out of an uprising in 2014, in which Taiwan’s citizens were furious about the government pushing through a trade deal with China without listening to the will of the people. In that situation, many citizens stormed the Parliament, insisting that the trade deal be stopped. But the question of how to get governments to truly *listen* to their constituents, openly and deeply, became a cause. It is everyone’s right to have a say in legislation and decisions that will affect them. People need to have all of the information *unfiltered*, not just what people in power want them to hear, in order to make informed decisions. A group of young computer programming gurus, wonderfully called “civic hackers” (Miller, 2020), developed an ingenious social

media site called “vTaiwan” that was built on the platform Polis. The Polis algorithms do not reward emotional triggering, divisive rhetoric, sensationalism, and corresponding likes, shares, and comments to capture attention. Instead, the civic hackers gamified “consensus.” Users come into this virtual space to debate a political question and politicians can listen to that debate before making decisions. Everyone can share, comment, agree or disagree the same way they can on other social media sites. This time, however, the Polis platform uses machine learning to identify groups of users—“knots”—of disagreement and agreement. Comments that find some sort of consensus are prioritized and made visible, and not just within a group’s own echo chamber but to other knots as well. The algorithms ignore divisive, trolling and baiting posts. Instead, users find things that they have in common with each other and consensus is rewarded in the site, not divisions. In effect, this enterprise is gamifying consensus rather than dissension. Refreshing, no? Several governments other than Taiwan’s have used the program on a number of issues. An excellent article by Carl Miller, entitled *Taiwan’s Crowdsourced Democracy Shows Us How to Fix Social Media*, is worth the read (Miller, 2020).

Another recent event that gives some hope, and which has not been given the media space it deserves, is the Summit for Democracy that took place March 28-30, 2023, in Zambia. Zambia, the U.S., Costa Rica, Netherlands, and the Republic of Korea acted as hosts of a live, fully virtual, leader-level conference involving numerous countries. Topics included “Democracy Delivering Economic Growth and Shared Prosperity,” “Spotlight Interventions by Civil Society Groups and Figures,” “Democracy Delivering Justice for All,” “Democracy Delivering Inclusion and Equality,” and more. Mass media should be trumpeting this event and unpacking the important topics discussed, instead of delivering the click-bait we are seeing.

Telling our stories is without doubt the way to open people’s minds and hearts to truth, and to learning from those truths. Changing the narrative is critical and we need to get people to be *open to listening* to the narrative. Messaging is a key ingredient. Digital channels and social media are, and will continue to be, instrumental in spreading the messaging and helping us succeed in changing the narrative.

References

- Abj, A. (2022, December 19). 7 Best Search Engines in the world in 2023 - Adcore Blog. Adcore Blog - Digital Marketing Blog & Articles. <https://www.adcore.com/blog/2022-top-7-best-search-engines-in-the-world/>
- Akers, B. (2023, February 25). DuckDuckGo stats on revenue and user data statistics (2023). SEO by Sociallyin. <https://seobysociallyin.com/duckduckgo-stats-revenue-and-user-data/>
- Andre, L. (2023, March 15). We've come a long way in how we define our social media experience. Before, it was all snappy statuses. *Financesonline.com*. <https://financesonline.com/tiktok-statistics/>
- APA (Ed.). (2021). Inclusive language guidelines. *American Psychological Association*. <https://www.apa.org/about/apa/equity-diversity-inclusion/language-guidelines.pdf>
- Ashbridge, Z. (2023, February 21). How the YouTube algorithm works: What marketers need to know. Search Engine Land. <https://searchengineland.com/how-youtube-algorithm-works-393204>
- Aslam, S. (2023a, March 28). 51 Pinterest statistics you need to know in 2023—Omnicores. Omnicores Agency. <https://www.omnicoreagency.com/pinterest-statistics/>
- Aslam, S. (2023b, March 15). YouTube by the numbers (2023): Stats, demographics & fun facts. Omnicores Agency. <https://www.omnicoreagency.com/youtube-statistics/#>
- Backlinko. (2021, September 7). How Many People Use YouTube in 2023? <https://backlinko.com/youtube-users>
- Barojan, D. (n.d.). Understanding bots, botnets and trolls. International Journalists' Network. <https://ijnet.org/en/story/understanding-bots-botnets-and-trolls>
- Barrett, P. (2023, February 10). The Twitter bias hearing point to favoritism, but not for liberals. *The Hill*. <https://thehill.com/opinion/technology/3852594-the-twitter-bias-hearings-point-to-favoritism-but-not-for-liberals/>
- Beckerman, G. (2022). *The Quiet Before: On the Unexpected Origins of Radical Ideas*. Crown
- Blake, A. (2012, July 10). Obama: The man of many slogans. *Washington Post*. https://www.washingtonpost.com/blogs/the-fix/post/president-obama-a-man-of-many-slogans/2012/07/10/gJQAF8UlaW_blog.html
- Bradshaw, R. (2022, March 24). LinkedIn users by country and statistics. Apollo Technical LLC. <https://www.apollotechnical.com/linkedin-users-by-country/>
- Brady, W. J., Wills, J., Jost, J. T., Tucker, J. A., & Saxe, R. (2017). Emotion shapes the diffusion of moralized content in social networks. *Proceedings of the National Academy of Sciences of the United States of America*, 114(28), 7313–7318. <https://doi.org/10.1073/pnas.1618923114>
- Buzzsprout.com. (2023, March). Podcast statistics and data. <https://www.buzzsprout.com/blog/podcast-statistics>
- Carter, Z. D. (2018, August 19). For fancy racists, classical liberalism offers respect, intrigue. *HuffPost*. <https://www.huffpost.com/entry/racists-classical-liberalism-classic-rock-fraud>
- Chung, J. (2021, August). Racism in, Racism out. *Public Citizen*. Retrieved February 15, 2023, from <https://www.citizen.org/wp-content/uploads/Racism-in-Racism-out.pdf>
- Conger, K., & Isaac, M. (2021, January 12). Trump's Twitter account permanently suspended. *The New York Times*. <https://www.nytimes.com/2021/01/08/technology/twitter-trump-suspended.html>
- Coulter, M. (2023, February 9). *Alphabet shares dive after Google AI chatbot Bard flubs answer in ad*. Reuters. <https://www.reuters.com/technology/google-ai-chatbot-bard-offers-inaccurate-information-company-ad-2023-02-08/>
- Democratic Party (N.C.), State Executive Committee. (1898). *The Democratic Hand Book*. 1898. Prepared by the State Democratic Executive Committee of North Carolina. (N.C.)
- DiNapoli, J. (2023, January 20). Here's what Twitter lost in advertising revenue in final months of 2022. *Reuters*. <https://www.reuters.com/technology/heres-what-twitter-lost-advertising-revenue-final-months-2022-2023-01-19/>
- Donald Trump and Twitter. (2023, February 28). *Tweet Binder blog* (2009 / 2022 analysis). <https://www.tweetbinder.com/blog/trump-twitter/>
- Donaldson, J. (n.d.). MrBeast—YouTube. Retrieved March 18, 2023, from <https://www.youtube.com/watch?v=TJ2ifmkGGus>
- Dwoskin, E., Tiku, N., & Timberg, C. (2021, November 21). Documents show that Facebook's race-blind practices around hate speech come at the expense of Black users. *Washington Post*. <https://www.washingtonpost.com/technology/2021/11/21/facebook-algorithm-biased-race/>
- Edwards & Broughton. (1898). *The Democratic Hand Book*; electronic transcription available at <https://docsouth.unc.edu/nc/dem1898/dem1898.html>
- Eira, A. (2023, February 16). How many Tumblr blogs are there? Tumblr reports it has over 518.7 million blogs on its website as of February. *Financesonline.com*. <https://financesonline.com/number-of-tumblr-blogs/>
- Faulkner, R. W. (2016, March 16). Fusion politics. North Carolina History Project. <https://northcarolinahistory.org/encyclopedia/fusion-politics/>
- Forman-Katz, N., & Stocking, G. (2023, February 23). Key facts about Truth Social. Pew Research Center. <https://www.pewresearch.org/fact-tank/2022/11/18/key-facts-about-truth-social-as-donald-trump-runs-for-u-s-president-again/>
- Fuchs, C. (2018). *Digital Demagogue: Authoritarian Capitalism in the Age of Trump and Twitter*. Pluto Press. <https://doi.org/10.2307/j.ctt21215dw>
- Get To Know Us | History & Inception. (2020, July 16). Me Too Movement. <https://metoomvmt.org/get-to-know-us/history-inception/>
- Gold, A., & Fischer, S. (2023, February 21). Chatbots trigger next misinformation nightmare. *Axios*. <https://www.axios.com/2023/02/21/chatbots-misinformation-nightmare-chatgpt-ai>
- Gordon, S. M. (2015). Fostering social movements with social media. *Social Science Research Network*. <https://doi.org/10.2139/ssrn.2708079>
- Groom, A. (2021, March 8). *Koenig and Bauer's steam-powered printing press—Age of Revolution*. Age of Revolution - 1775 - 1848: Making the World Over. <https://ageofrevolution.org/200-object/koenigs-steam-powered-printing-press/>

Gul, E. (2023, March 2). 23+ Apple Podcast statistics you should know about. Weshare. <https://www.weshare.net/statistics/apple-podcast-statistics/>

Hamilton, J. F. (2014, September 1). Social media as primary source: The narrativization of 21st-century social movements Uga. https://www.academia.edu/7534149/Social_Media_as_Primary_Source_The_Narrativization_of_21st_Century_Social_Movements_link_to_PDF_of_article_to_download_

Hansen, H. (2020b). Narrative Change: How Changing the Story Can Transform Society, Business, and Ourselves. Columbia Business School Publishing.

Herman, E. S., & Chomsky, N. (2002). Manufacturing Consent: The Political Economy of the Mass Media. Pantheon.

Hines, K. (2022, November 8). The history of social media. *Search Engine Journal*. <https://www.searchenginejournal.com/social-media-history/462643/#close>

Hosch, W. L. (2023, February 26). YouTube: History, founders, & facts. *Encyclopedia Britannica*. <https://www.britannica.com/topic/YouTube>

House, B. (2023, March 6). Jim Jordan issues subpoenas to investigate 'weaponization' of federal agencies. Bloomberg.com. <https://www.bloomberg.com/news/articles/2023-03-06/house-republicans-subpoena-former-disinformation-board-director?>

How search engines work: Crawling, indexing, and ranking—the beginner's guide to SEO. (2023). Moz.com. Retrieved March 20, 2023, from <https://moz.com/beginners-guide-to-seo/how-search-engines-operate>

Hu, K. (2023, February 2). ChatGPT sets record for fastest-growing user base—analyst note. *Reuters*. <https://www.reuters.com/technology/chatgpt-sets-record-fastest-growing-user-base-analyst-note-2023-02-01/>

iHeartMedia. (2023, March 16). Working at iHeartMedia: Employee reviews and culture. <https://www.zippia.com/iheartmedia-careers-27029/>

Jankowicz, N. (2020). How to Lose the Information War: Russia, Fake News, and the Future of Conflict. Bloomsbury Publishing.

Jenkins, A. (2018, April 18). Shifting the narrative: What it takes to reframe the debate for social justice in the U.S. Other and Belonging Institute. <https://belonging.berkeley.edu/shifting-narrative>

Jennings, V. P. (2021, September 28). A brief history of email: Dedicated to Ray Tomlinson. *Phrasee*. <https://phrasee.co/blog/a-brief-history-of-email/>

Kalia, S. (2022, April 12). Social media is shaping our memory of wars, pandemic. What will that mean for history? *The Swaddle*. <https://theswaddle.com/social-media-is-shaping-our-memory-of-wars-pandemic-what-will-that-mean-for-history/>

Kessler, G., Rizzo, S., & Kelly, M. (2021, January 24). Trump's false or misleading claims total 30,573 over 4 years. *Washington Post*. <https://www.washingtonpost.com/politics/2021/01/24/trumps-false-or-misleading-claims-total-30573-over-four-years/>

Kim, D., Park, C., Kim, E., Han, J., & Song, H. (2022, May 27). Social sharing of emotion during the COVID-19 pandemic. *Cyberpsychology, Behavior, and Social Networking* 25(6), 369–376. <https://doi.org/10.1089/cyber.2021.0270>

Klein, C. (2020, July 8). How Selma's "Bloody Sunday" became a turning point in the Civil Rights Movement: The assault on civil rights marchers in Selma, Alabama, helped lead to the Voting Rights Act. *History*. Retrieved March 11, 2023, from <https://www.history.com/news/selma-bloody-sunday-attack-civil-rights-movement>

Klein, E. (2023, March 13). Opinion: This changes everything. *The New York Times*. <https://www.nytimes.com/2023/03/12/opinion/chatbots-artificial-intelligence-future-weirdness.html>

Klepper, D. (2023, March 6). On Twitter, thousands of pro-Trump bots are attacking DeSantis, Haley. *PBS NewsWire* (from Associated Press). Retrieved March 6, 2023, from <https://www.pbs.org/newshour/politics/on-twitter-thousands-of-pro-trump-bots-are-attacking-desantis-haley>

Kubitza, S. (2022, December 1). Why did Nike eventually sign Colin Kaepernick to a new contract? Revisiting iconic brand's dealings with ex-49ers Q.B. *Sportskeeda*. <https://www.sportskeeda.com/nfl/news-why-nike-eventually-sign-colin-kaepernick-new-contract>

Land, C. (2020, August 5). Apple Podcast algorithm bizarre simplicity cracked. *Improve Podcast*. <https://improvepodcast.com/apple-podcast-algorithm/>

Lemzy, A. (n.d.). When was texting invented: The history of texting - TextMagic. *TextMagic*. <https://www.textmagic.com/blog/the-history-of-texting-from-telegraphs-to-enterprise-sms>

Lorenz, T. (2022, May 18). How the Biden administration let right-wing attacks derail its disinformation efforts. *Washington Post*. <https://www.washingtonpost.com/technology/2022/05/18/disinformation-board-dhs-nina-jankowicz/>

Lowery, L. B. (2015). *Turning 15 on the Road to Freedom: My Story of the 1965 Selma Voting Rights March*. Penguin.

Mayor, E., & Bietti, L. M. (2021). Twitter, time and emotions. *Royal Society Open Science* 8(5), 201900. <https://doi.org/10.1098/rsos.201900>

McLeod-Simmons, L. (2023). *Mass Media in the United States* [Video]. <https://study.com/academy/lesson/development-of-the-mass-media-journalism-in-the-united-states-history-timeline.html>

Milner, Y., & Traub, A. (2021, May 17). Data capitalism and algorithmic racism. *Demos*. Retrieved March 18, 2023, from <https://www.demos.org/research/data-capitalism-and-algorithmic-racism>

Moreau, E. (2022, April 10). What is Instagram, and why should you be using it? *Lifewire*. <https://www.lifewire.com/what-is-instagram-3486316>

Myers, S. L., & Sullivan, E. (2022, July 6). Disinformation has become another untouchable problem in Washington. *The New York Times*. <https://www.nytimes.com/2022/07/06/business/disinformation-board-dc.html>

Naylor, T. J. (2018, August 28). 5 ways to use Pinterest to boost your brand. *Social Media Today*. <https://www.socialmediatoday.com/news/5-ways-to-use-pinterest-to-boost-your-brand/531054/>

Neuman, S. (2021, November 10). A North Carolina city begins to reckon with the massacre in its white supremacist past. NPR. <https://www.npr.org/2021/11/10/1053562371/1898-wilmington-coup-massacre>

#NeverAgain MSD: From outrage to movement for gun control. (2019, July 1). *Diggit Magazine*. <https://www.diggitmagazine.com/articles/neveragain-msd-outrage-movement-gun-control>

NPR (2022, July 20). Our news source tracking. (2022, July 20). <https://www.npr.org/about-npr/1112347180/our-news-source-tracking>

OSC (Office of Special Counsel) Robert Mueller. (2019). *Report on the Investigation into Russian Interference in the 2016 Presidential Election* (Mueller Report). Washington, DC: U.S. Department of Justice. <https://www.govinfo.gov/app/details/GPO-SCREPORT-MUELLER>

Petrosyan, A. (2023a, January). Media use in the U.S. – statistics & facts. *Statista*. <https://www.statista.com/topics/1536/media-use/#topicOverview>

Petrosyan, A. (2023b, January). Time spent with digital vs. traditional media in the U.S. 2011-2023. Statista. <https://www.statista.com/statistics/565628/time-spent-digital-traditional-media-usa/>

Petrosyan, A. (2023c, February). United States: Number of online users 2018-2027. Statista. <https://www.statista.com/statistics/325645/usa-number-of-internet-users/>

Pew Research Center. (2023). Social media fact sheet. Internet, Science & Tech. March 2. <https://www.pewresearch.org/internet/fact-sheet/social-media>

Power Digital Marketing. (2023, February 27). How to use TikTok demographics: A guide. *Power Digital Marketing*. <https://powerdigitalmarketing.com/blog/how-to-use-tiktok-demographics-a-guide/>

Raji, D. (2021, January 21). How our data encodes systematic racism. *MIT Technology Review*. <https://www.technologyreview.com/2020/12/10/1013617/racism-data-science-artificial-intelligence-ai-opinion/>

Ray, S. (2022, April 14). The far-right is flocking to these alternate social media apps — not all of them are thrilled. *Forbes*. <https://www.forbes.com/sites/siladityaray/2021/01/14/the-far-right-is-flocking-to-these-alternate-social-media-apps---not-all-of-them-are-thrilled/>

Razo, V. (n.d.). Understand the versatility and necessity of hashtag activism. <https://learn.g2.com/hashtag-activism>

Regunath, G. (2021, December 16). Understanding the difference between AI, ML, and DL: Using an incredibly simple example. *Advancing Analytics*. <https://www.advancinganalytics.co.uk/blog/2021/12/15/understanding-the-difference-between-ai-ml-and-dl-using-an-incredibly-simple-example>

Ruby, D. (2023). YouTube statistics (2023) — trending facts & figures shared! *Demand Sage*. <https://www.demandsage.com/youtube-stats/#>

Sandoval-Almazan, R., & Gil-Garcia, J. R. (2014). Towards cyberactivism 2.0? Understanding the use of social media and other information technologies for political activism and social movements. *Government Information Quarterly* 31(3), 365-378.

Schaffer, N. (2023, March 2). The top 25 podcast statistics you need to know in 2023. <https://nealschaffer.com/podcast-statistics/>

Shepherd, J. (2023, February 23). 23 essential Spotify statistics you need to know in 2023. *The Social Shepherd*. <https://thesocialshepherd.com/blog/spotify-statistics#>

The Social Pulpit: Barack Obama's Social Media Toolkit. (2009, March 26). Issuu.com and Edelman. https://issuu.com/edelman_pr/docs/social_pulpit_-_barack_obamas_social_media_toolkit

Spotify Advertising. (n.d.). <https://ads.spotify.com/>

St Aubin, C., & Stocking, G. (2023, February 23). Key facts about Gab. Pew Research Center. <https://www.pewresearch.org/fact-tank/2023/01/24/key-facts-about-gab/>

Statista. (2022). *Telegram Global MAU 2022*. <https://www.statista.com/statistics/1344013/telegram-messenger-mau-by-country/>

Statista. (2023, January 10). *NPR: number of podcast users 2014-2020*. <https://www.statista.com/statistics/653079/npr-number-podcast-users/>

Statista. (2023a, February 7). Number of Pandora's monthly active users 2020-2022. <https://www.statista.com/statistics/787687/mau-pandora/>

Stengel, R. (2019). *Information Wars: How We Lost the Global Battle Against Disinformation and What We Can Do About It*. Atlantic Books.

Storm, M., & Storm, M. (2023, March 13). 14 Facebook demographics you need to know in 2023. *WebFX*. <https://www.webfx.com/blog/social-media/facebook-demographics/>

Study.com. *Mass Media in the United States*. (2023). Retrieved March 7, 2023, from <https://study.com/academy/lesson/development-of-the-mass-media-journalism-in-the-united-states-history-timeline.html>

Susic, P. (2023, February 22). 41+ Patreon statistics: patreon's cut, users, revenue, valuation ([year]). *HeadphonesAddict*. <https://headphonesaddict.com/patreon-statistics/>

Thompson, S. A. (2023, January 27). On Trump's Truth Social: Ads for miracle cures, scams and fake merchandise. *The New York Times*. <https://www.nytimes.com/2023/01/27/technology/trump-truth-social-ads.html>

TrueList. (2023, January 7). *Podcast Statistics 2023 - TrueList*. <https://truelist.co/blog/podcast-statistics/>

Vazquez, M., Hickey, C., Krishnakumar, P., Boschma, J. (2020, December 18). Donald Trump's presidency by the numbers. *CNN*. www.cnn.com/2020/12/18/politics/trump-presidency-by-the-numbers/

Vogels, E. A., Auxier, B., & Anderson, M. (2021, April 7). Partisan differences in social media use show up for some platforms, but not Facebook. Pew Research Center. <https://www.pewresearch.org/fact-tank/2021/04/07/partisan-differences-in-social-media-use-show-up-for-some-platforms-but-not-facebook/>

West, D. M. (2022, March 9). What is artificial intelligence? *Brookings*. <https://www.brookings.edu/research/what-is-artificial-intelligence/>

W. K. Kellogg Foundation. 2023. *Truth, Racial Healing & Transformation Implementation Guidebook*. <https://wkkf.issuelab.org/resource/truth-racial-healing-transformation-implementation-guidebook.html> (Original work published 2016). P 23

Zippia. (2022, September 9). Blogger demographics and statistics; Number of bloggers in the US.. <https://www.zippia.com/blogger-jobs/demographics/>

Endnotes

- 1 Definitions of boldfaced terms in this paragraph are from the *Merriam-Webster online dictionary, 2023*. <https://www.merriam-webster.com>.
- 2 *Oxford Advanced Learner's Dictionary* at [OxfordLearnersDictionaries.com](https://www.oxfordlearnersdictionaries.com) (n.d.).
- 3 *Global Social Media Statistics – DataReportal – Global Digital Insights*. (n.d.). DataReportal – Global Digital Insights. <https://datareportal.com/social-media-users>
- 4 *Topic: Social media usage in the United States*. (2022, July 8). Statista. <https://www.statista.com/topics/3196/social-media-usage-in-the-united-states/#topicOverview>
- 5 NIMCJ (National Institute of Mass Communication & Journalism), *Timeline of the Evolution of Mass Media*, published on the NIMCJ website, dated January 23, 2019. <https://www.nimcj.org/blog-detail/timeline-of-the-evolution-of-mass-media.html>
- 6 *The Evolution of Media*. 1.3 Pressbooks, University of Minnesota Libraries Publishing (2016, March 22). <https://open.lib.umn.edu/mediaandculture/chapter/1-3-the-evolution-of-media/>
- 7 *Freedom's Journal*. (n.d.). http://www.pbs.org/blackpress/news_bios/newbios/nwsprr/freedom/freedom.html
- 8 What Hath God Wrought, in *Today in History-May 24*. (n.d.). The Library of Congress. <https://www.loc.gov/item/today-in-history/may-24>
- 9 Georges Louis Lesage, in *Encyclopedia.com*. (n.d.). <https://www.encyclopedia.com/science/encyclopedias-almanacs-transcripts-and-maps/georges-louis-lesage#>
- 10 Samuel Morse, in *Lemelson* (n.d.). <https://lemelson.mit.edu/resources/samuel-morse#>:
- 11 *Treasures of the McDonald Collection – Special Collections & Archives Research Center*. (n.d.). <http://scarc.library.oregonstate.edu/omeka/exhibits/show/mcdonald/civil-war/war/>
- 12 *The Black Press: Too Long Have Others Spoken for Us*. (n.d.). <https://www.pbs.org/blackpress/>.
- 13 Compromise of 1877. *History.com*. Retrieved March 11, 2023, from <https://www.history.com/topics/us-presidents/compromise-of-1877>
- 14 When white supremacists overthrew a government [video]. Part of the video series, *Missing chapters*, produced by Vox.com (2019, June 20) and made available through YouTube at <https://www.youtube.com/watch?v=LVQomlXMeek>
- 15 When white supremacists overthrew a government [video].
- 16 *1898WhiteDec*. (n.d.). <http://people.uncw.edu/schmidt/Misc/1898/1898WhiteDec.html>
- 17 When white supremacists overthrew a government [video].
- 18 Except where otherwise sourced, key dates, events, and players between the years 1997 and 2006 are derived from Hines (2022).
- 19 *RAND at a Glance*. (n.d.). RAND. <https://www.rand.org/about/glance.html>
- 20 *Stowe Boyd*. (n.d.). Tumblr. <https://stoweboyd.com/>
- 21 The focus of these summaries is on social media usage, so they do not go into great detail on all of the events within each movement.
- 22 Arab Spring. *Encyclopedia Britannica*. <https://www.britannica.com/event/Arab-Spring>
- 23 *#ArabSpring and Mobilisation through Social Media – #MoveMe* (April 12, 2020). <https://moveme.berkeley.edu/project/arab-spring/>
- 24 *#ArabSpring and Mobilisation through Social Media – #MoveMe* (2020).
- 25 *Occupy Wall Street | NYC Protest for World Revolution*. (n.d.). <http://occupywallst.org/>
- 26 *Adbusters Media Foundation | Journal of the Mental Environment*. (n.d.). <https://www.adbusters.org/>
- 27 *Our Epic Battle #LikeAGirl*. (n.d.). Always.Com. Always®. <https://www.always.com/en-us/about-us/our-epic-battle-like-a-girl>
- 28 Always®, *Together with Millions of Girls Around the World, Including Olympic Hockey Star Hilary Knight, Determined to Make #LikeAGirl Mean Amazing Things: Releases New “Always #LikeAGirl–Stronger Together” Video in Celebration of International Women’s Day*. (2015, March 3). *Business Wire*. <https://www.businesswire.com/news/home/20150303005176/en/Always%C2%AE-Together-with-Millions-of-Girls-Around-the-World-Including-Olympic-Hockey-Star-Hilary-Knight-Determined-to-Make-LikeAGirl-Mean-Amazing-Things>
- 29 *Challenge Me to Finish What Was Started*. (n.d.). ALSA.org. http://webgw.alsa.org/site/PageNavigator/GW_12_challenge_me_071619.html
- 30 *#TakeAKnee – #MoveMe*. (2020, January 23). #MoveMe. <https://moveme.berkeley.edu/project/takeaknee-2/>
- 31 *Red Flag Laws States 2023*. (n.d.). <https://worldpopulationreview.com/state-rankings/red-flag-laws-states>
- 32 *Facebook*. (n.d.). <https://www.facebook.com/marchforourlives>
- 33 *Propaganda*. (n.d.). In *Merriam-Webster.com thesaurus*. Retrieved March 16, 2023, from <https://www.merriam-webster.com/thesaurus/propaganda>
- 34 *Nina Jankowicz*. (n.d.). *Wilson Center*. <https://www.wilsoncenter.org/person/nina-jankowicz>
- 35 *The Trust Project – News with integrity*. (n.d.). <https://thetrustproject.org/>
- 36 *Computer Scientist Demographics and Statistics [2023]: Number Of Computer Scientists In The US*. (2022, September 9). <https://www.zipppia.com/computer-scientist-jobs/demographics/>
- 37 *About Us – Public Citizen*. (2023, March 15). *Public Citizen*. <https://www.citizen.org/about/>
- 38 *How Search Engines Work: Crawling, Indexing, and Ranking: The Beginner’s Guide to SEO*. *Moz.com*. Retrieved March 20, 2023, from <https://moz.com/beginners-guide-to-seo/how-search-engines-operate>

- 39 *SEO Marketing for Smarter Marketing*. (n.d.). Moz.com. Retrieved February 15, 2023, from <https://moz.com>
- 40 *Google Search Central (formerly Webmasters) | Web SEO Resources | Google Developers*. (n.d.). Google Developers. <https://developers.google.com/search>
- 41 Search Engine Journal. (n.d.). *Search Engine Journal - Marketing News, Interviews and How-to Guides*. <https://www.searchenginejournal.com/>
- 42 Choose the Right Keywords with Our Research Tools - Google Ads. (n.d.). *Choose the Right Keywords with Our Research Tools - Google Ads*. Choose the Right Keywords With Our Research Tools - Google Ads. <https://ads.google.com/home/tools/keyword-planner/>
- 43 *Semrush - Online Marketing Can Be Easy*. (n.d.). Semrush. <https://www.semrush.com/>
- 44 Neither ChatGPT nor GPT-4 are connected to the Internet. As a result, both have limited knowledge of events and the world after September 2021, when data collection ended.
- 45 ChatGPT. (2021, April 13). *ChatGPT: Revolutionary Chatbot by OpenAI*. ChatGPT - Advanced AI Chatbot by OpenAI. <https://chat-gpt.org/>
- 46 *GPT-4*. (n.d.). <https://openai.com/product/gpt-4>
- 47 *2022 Expert Survey on Progress in AI* (2022, September 27). AI Impacts. https://aiimpacts.org/2022-expert-survey-on-progress-in-ai/#Extinction_from_AI
- 48 *NewsGuard - Combating Misinformation with Trust Ratings for News*. (2023, March 15). NewsGuard. <https://www.newsguardtech.com/>
- 49 Fair Use | Columbia University Libraries. (n.d.). <https://copyright.columbia.edu/basics/fair-use.html>
- 50 Demographic information for digital and social channels is difficult to find beyond binary gender (female/male) and age demographics. Some employment demographics by race have been included where possible.
- 51 Facebook Users by Country 2023 (n.d.), at <https://worldpopulationreview.com/country-rankings/facebook-users-by-country>
- 52 *YouTube Demographics to be Aware of in 2023*, at 99firms.com (n.d.), <https://99firms.com/blog/youtube-demographics/#gref>
- 53 Snapchat Demographics. (n.d.). Connect Plus. <https://connectplus.nz/pages/snapchat-demographics#:~:text=Snapchat%20education%20demographics,who%20graduated%20college%20use%20Snapchat>
- 54 *Who uses Twitter, Pinterest and Snapchat* (Pew Research Center: Internet, Science & Tech, April 8 2021), at <https://www.pewresearch.org/internet/chart/who-uses-pinterest-snapchat-youtube-and-whatsapp/>
- 55 Homepage. (n.d.). Reddit. <https://www.redditinc.com/>
- 56 *Who uses Twitter, Pinterest and Snapchat* (2021).
- 57 LinkedIn.com Traffic Analytics & Market Share, similarweb.com (2023, January), retrieved March 17, 2023, from <https://www.similarweb.com/website/linkedin.com/#demographics>
- 58 *Global search engine desktop market share 2023 | Statista*. (2023, February 24). Statista. <https://www.statista.com/statistics/216573/worldwide-market-share-of-search-engines/>
- 59 google.com *Traffic Analytics & Market Share*. (2023, January). similarweb.com. Retrieved March 17, 2023, from <https://www.similarweb.com/website/google.com/#demographics>
- 60 *Microsoft Search Network data*. (2022, October 13). Microsoft Advertising. <https://about.ads.microsoft.com/en-us/insights/planning-tools/microsoft-search-network-data>
- 61 Yahoo.com *Traffic Analytics & Market Share*. (2023, January). similarweb.com. Retrieved March 17, 2023, from <https://www.similarweb.com/website/yahoo.com/#demographics>
- 62 *Global search engine desktop market share 2023*.
- 63 *Mastodon.social Traffic Analytics & Market Share*. (2023, January). similarweb.com. Retrieved March 17, 2023, from <https://www.similarweb.com/website/mastodon.social/#demographics>
- 64 medium.com *Traffic Analytics & Market Share*. (2023, January). similarweb.com. Retrieved March 17, 2023, from <https://www.similarweb.com/website/medium.com/#demographics>
- 65 gab.com *Traffic Analytics & Market Share*. (2023, January). similarweb.com. Retrieved March 17, 2023, from <https://www.similarweb.com/website/gab.com/#overview>
- 66 rumble.com *Traffic Analytics & Market Share*. (2023, January). similarweb.com. Retrieved March 17, 2023, from <https://www.similarweb.com/website/rumble.com/#overview>
- 67 *Telegram Global MAU 2022*, Statista, 2022.
- 68 *Podcast Statistics and Data [March 2023]*. <https://www.buzzsprout.com/blog/podcast-statistics>
- 69 *Creativity powered by membership | Patreon*. (n.d.). Patreon. <https://www.patreon.com/>
- 70 *TrueList*. (2023, January 7). *Podcast Statistics 2023 - TrueList*. <https://truelist.co/blog/podcast-statistics/>
- 71 *US: podcast listeners 2017-2024 | Statista*. (2022, February 23). Statista. <https://www.statista.com/forecasts/1123105/statista-amo-podcast-reach-us>
- 72 *Podcast Statistics and Data [March 2023]*.
- 73 *The Most Surprising Apple Podcast Statistics And Trends in [year] • GITNEX*. (2023, March 21). GITNEX. <https://blog.gitnux.com/apple-podcast-statistics/>
- 74 *Elevate your marketing assets - Apple Podcasts for Creators*. (n.d.). <https://podcasters.apple.com/support/868-featured-elevate-your-marketing-assets>
- 75 *Apple Employee Diversity Report Shows White and Asian Men Take Majority of Top Jobs*. (2020, May 19). Business Chief North America. <https://businesschief.com/leadership-and-strategy/apple-employee-diversity-report-shows-white-and-asian-men-take-majority-top-jobs-1>
- 76 *How to Achieve a Spot on Spotify Podcast Charts*. (n.d.). <https://riverside.fm/blog/spotify-podcast-charts#>
- 77 *How to Achieve a Spot on Spotify Podcast Charts*. (n.d.).
- 78 *Spotify Advertising*. (n.d.). <https://ads.spotify.com/>
- 79 *Spotify Equity & Impact Report 2022*. (n.d.). <https://www.lifeatspotify.com/reports/Spotify-Equity-Impact-Report-2022.pdf>
- 80 *Google Podcasts: Top Podcast Charts—Top Podcasts (Updated 2023-03-27)*. (n.d.). <https://chartable.com/charts/google-podcasts/top>
- 81 *Patreon Creators Statistics: Graphs + Analysis*. (n.d.). Graphtron. <https://graphtreon.com/patreon-stats>
- 82 *iHeartRadio Celebrates 150 Million Registered Users!* (2021, May 24). iHeart Blog. <https://blog.iheart.com/post/iheartradio-celebrates-150-million-registered-users>

- 83 *Challenge Validation*. (n.d.-b). <https://www.similarweb.com/website/iheart.com/#demographics>
- 84 *TechCrunch is part of the Yahoo family of brands*. (2018, December 6). <https://techcrunch.com/2018/12/06/pandoras-podcast-genome-project-goes-live-for-all/>
- 85 *SoundCloud CEO and Leadership: Executives and Demographics*. (2022, November 18). Zippia. <https://www.zippia.com/soundcloud-careers-1421889/executives/>
- 86 *Stitcher's 2021 Podcast Report Unveils Shifts in Listener Demographics*. (2021, July 7). Business Wire. <https://www.businesswire.com/news/home/20210707005296/en/Stitcher%E2%80%99s-2021-Podcast-Report-Unveils-Shifts-in-Listener-Demographics>
- 87 *Challenge Validation*. (n.d.-c). <https://www.similarweb.com/website/stitcher.com/#traffic>
- 88 *Stitcher Demographics and Statistics [2023]: Number Of Stitchers In The US*. (2022, September 9). <https://www.zippia.com/stitcher-jobs/demographics/>
- 89 *Stitcher's 2021 Podcast Report Unveils Shifts in Listener Demographics*, 2021.
- 90 *Our Analysis of 10 Top Paid Bloggers 2020 | Target Internet*. (n.d.). *Target Internet*. <https://targetinternet.com/resources/our-analysis-of-10-top-paid-bloggers-2020/>
- 91 *Medium.com Traffic and Engagement Analysis*. (n.d.-e). <https://www.similarweb.com/website/medium.com/#traffic>
- 92 *Language Access - DCP*. (n.d.). <https://www.nyc.gov/site/planning/about/language-access.page>



NCHE
National Collaborative
for Health Equity

nationalcollaborative.org