Preface

Thank you for selecting this book. This work is intended to support those with an interest in the use of social media for uses other than mere marketing. Simply put, social media is only one of many tools for effecting communication. These channels can be used to heal or to harm, to comfort or to chastise, to sell or to buy, to connect or to isolate. This book investigates the uses and impacts of social media as we transform to a digital-first world.

A BRIEF HISTORY OF SOCIAL COMPUTING

Communication has always been the primary purpose of networked computing. When the Defense Advanced Research Project Agency (DARPA) created the first version of the Internet, it was meant to support near-instant communication among universities conducting research and development for military programs. The use of simple messaging was sufficient to meet the requirements of communication and information sharing. DARPAnet was never intended to become a platform for social interaction; it was certainly not meant as an avenue for commerce. In 1982 MIT drafted the first known rules of network etiquette (now commonly known as “netiquette”). This first netiquette guide was very clear regarding the purpose of DARPAnet: while using the platform to initiate greetings among colleagues and occasionally make arrangements for in-person meetings, the use of DARPAnet for the primary purpose of social interaction and commerce was not only rude but also illegal. How far the Internet has evolved from its original vision!

Asynchronous forms of communication such as Bulletin Board Services and later email were the standard for text-based communiques among colleagues and friends. As one of the first synchronous chat programs to reach wide adoption, AOL Instant Messenger opened the doors of instant digital communications to everyday users worldwide. In 1992, the Mosaic Browser allowed the Internet to become a myriad of words and images, driving companies to use the Internet as a primary channel for communicating with their customers.

When social media platforms such as MySpace, Facebook, and Twitter started, they sought to expand the communication channel of simple chat clients and rooms to support multimedia messaging. MySpace was meant as a platform of individual expression, enabling the non-technical inhabitants of the Internet community to have personal webpages rich with images, video, and sound. These platforms were not originally meant to change the world; they were meant to support limited use cases. In a 2014 interview with *Fast Company*, Twitter founder Jack Dorsey indicated that he did not have visions of grandeur for his invention; he used it primarily to make sure his mother knew he was eating well. Facebook founder
Mark Zuckerberg built his platform initially as an isolation platform – limiting membership to verified students at Harvard University.

Clearly these use cases expanded far beyond the original vision of their founders. Advances in communications technology drove further evolutions of social media platforms. The ubiquity of high-speed Internet access has transformed high definition multimedia from a luxury for the technocracy to a commodity available to the general public. Social media platforms evolved to support rich content, even providing video streaming and video chat capabilities. YouTube and Vimeo were developed to support the sharing of high quality digital video and opened a whole new line of communications between media companies and their audiences. It also led to the rise of a new brand of celebrity: the video blogger. Video blogging has launched the career of many media celebrities: Justin Beiber’s success was originally attributed to YouTube. When the band Journey sought to replace Steve Perry, they turned to YouTube and found stunning videos of superfan Arnel Pineda singing. Journey hits in karaoke venues; Perry’s vocal doppelganger soon became the new front man for his favorite band.

Mobility computing has overtaken desktop platforms as the primary onramp to the Information Superhighway. As users became unleashed from their desks and were more able to add the digital experience to their physical experience, social media platforms further evolved to align with the rise of mobile computing. Platforms such as Vine and Snapchat were born specifically to be used on mobile devices and provide instant bursts of rich multimedia content. By documenting the images of our experience in real time, we are more able to share experiences across the borders, shrinking the world in a way imagined only in the dreamy visions of Science Fiction writers the likes of Kurzweil and Clarke.

**SCOPE**

Innovation is more than merely using advanced technology never before seen in the marketplace. Innovation requires the purposeful and focused adaptation of technology in a new way to meet an extant business challenge. At times, new technology gives rise to new business challenges, and at others innovative minds find ways to use current technology in new ways to deliver new services. The social media innovators represented in these case studies reflect a broad spectrum of organizations with vastly different challenges.

The scope of this work is to focus on how organizations have used social media platforms in ways other than simple marketing to consumers – hundreds of books already exist on the topic of social marketing. Rather, this work provides case studies on how governments and non-profits have used social media to execute their missions, how social justice organizations use the platform to organize acts of digital and physical protests, and how educators use social media to enhance the student-teacher engagement model. Also, this book provides case studies discussing the darker side of social media, ranging from psychological impacts of social media to the effects of cyberbullying. While social media provides a powerful platform to effect globalization, it also serves to make those who would do harm more effective and efficient.

**STRUCTURE**

This book is organized in three sections, providing case studies from academic researchers across the globe.
Preface

Section 1: Changing the World through Microcommunication

Chapter 1: Social Bootstrapping: Microfunding Major Arts and Nonprofit Projects

This chapter is significant in that it offers a glimpse into how the entertainment and nonprofit worlds use the strengths of social media to start new projects that benefit society. Rather than focus on major benefactors to provide major gifts to a few projects, social media democratizes the arts and nonprofit arenas, allowing for more interesting projects that may not capture the attention of the super-rich but are worthwhile nonetheless. Through massive parallelism and microfunding transactions, projects such as Allegiance, George Takei’s musical about the internment of American citizens during World War II whose only crime was being of Japanese descent. Without the benefit of social media, this dark yet important corner of American History may have died with the last generation to live the tale.

Chapter 2: Social Media – Changing the Way We Teach, Changing the Way We Learn

Social Media provides a new and exciting tool for educators. As a model of communication with students, social media builds new avenues into the daily lives of learners. It also destroys many barriers between educator and learner. In order for educators to take full advantage of social media, they must learn new pedagogical techniques to tailor their message to a new medium. While social media has many strengths in terms of instant feedback and removes many barriers to communication, it also provides new challenges for educators in terms of privacy and filtering. Should an educator “friend” a student? Should students be allowed to post directly to open discussion threads such as Twitter and Facebook? Is the “always on” nature of social media beneficial to learners or is it simply an extension of the classroom into every aspect of life?

Chapter 3: A Study of Two Microfinance Models and Their Suitability in Egypt

One of the most interesting applications of social media in the world of finance and social policy is the application of microtransactions to benefit the public. In this chapter, the authors compare two models where social media is used to multiply the generosity of everyday citizens to benefit developing economies. The authors focus on the economy of Egypt after the Arab Spring to provide financing for citizens to start their own businesses. Similar to how Kickstarter multiplies the small contributions of millions to fund ventures, these microfinance models focus on providing small business loans to those who would not qualify for business loans in their country. The results of the study are interesting in that the loan repayment rate of these microfinance loans outpace traditional business loans by a significant margin.

Section 2: Social Government – Communicating with the Constituency

Chapter 4: Globalisation, the Internet, and the Nation-State – A Critical Analysis

With every new advance in communications technology, our world appears to become smaller. News and culture from around the world are more readily available and access to information is now instant. As the use of social media and the Internet bring the world to our homes, it also raises a question: is
it changing the nature of the nation-state? Political borders are becoming less effective as barriers to information. The only way to control information in the Internet Age is to disable it completely, resulting in the country’s inability to participate on the world stage. This chapter investigates the impact of the Internet and Social Media on the nature and role of the nation-state as a provider of information and services to its citizen base. Is social media the harbinger of doom to the traditional nation-state? How are non-traditional actors using social media to increase their international influence? Non-state actors such as the Islamic State and Al Qaeda are using social media not only as an effective means of gaining influence, but are also using it as a weapon against its enemies, hacking into official social media platforms to expose the weakness of their foes on the international stage.

Chapter 5: Seeking an Online Social Media Radar

Grassroots political movements such as Occupy, Anonymous, and the Arab Spring all used social media to provide a call to action. These groups used social media effectively to coordinate the activity of millions of people across borders and in many cases change the world. When development plans in Istanbul became untenable, citizens turned to social media to coordinate massive rallies to protest government actions. The use of social media to organize political activity is so effective that Turkey banned access to Twitter in that country. Is it possible to mine social media activity to predict the next Arab Spring? The authors of this chapter investigate the potential of using data analysis to predict the effectiveness of social media calls to action. This model would help governments determine the degree of concern they give to some movements and prioritize activity. It would also help predict whether certain nonpolitical events are becoming so popular that additional crowd control may be necessary to protect the population.

Chapter 6: Large-Scale Disaster Response Management – Social Media and Homeland Security

Governments have turned to social media for a variety of interesting use cases. During the response to Hurricane Katrina, the U.S. military used public sources to help coordinate search and recovery activities. These ad-hoc experiences led to the use of social media platforms as a part of how the United States responds to major disasters. The flexible and evolutionary nature of social media provides the idea communications mechanism for disaster response. Telephone lines are down? Power out in a certain area? No problem; Twitter to the rescue. Wildfires in a region? Facebook and Google Earth can provide easy access to information. The U.S. Department of Homeland Security has become particularly adept at taking advantage of the power of social media to develop response plans for major disasters. This chapter reviews a number of use cases where The Department of Homeland Security applied innovative communication techniques to respond quickly and effectively in times of crisis.

Section 3: The Law of Unintended Consequences – Impacts of Social Media

Chapter 7: Cyberbullying Prevention – Some Preventing Tips

As a technology platform, social media is merely a tool for communication. It does not discriminate between beneficial and harmful communications. Just as a hammer can be wielded to build or to destroy, social media can be a tool for good or for ill. Technology provides a virtual mask behind which people
can hide and say things they never would to another’s face. Unlike face to face communications, where a person has to face the pain he or she causes, the inherent disconnect between sender and receiver in this form of communication allows a person to send a message and never have to see the implications of that message. With the increasing popularity of social media has come a new form of causing pain. Termed cyberbullying, this form of communication is particularly painful to its targets. Unlike typical schoolyard bullying, where the target can eventually escape his or her tormentor (at least for a period of time), the words in cyberspace never disappear. The target of cyberbullying is constantly reminded of the pain as others read and comment on the original painful post, causing the message to trend and reappear in the target’s news feed. Ignoring cyberbullying becomes exponentially more difficult. This author discusses a number of tips to identify cyberbullying and offers some ideas on how to avoid it.

Chapter 8: Abuse of the Social Media Brain – Implications for Media Producers and Educators

As with any communication platform, social media can be a source of information or a cacophony of distraction. This author investigates the implications of the “always on” generation using social media in their personal and professional lives for everything from information to entertainment. How must educators and media professionals understand the benefits and drawbacks of social media to tailor their messages for this platform to avoid being lost in the noise?

Chapter 9: Business and Social Media – Collaboration for the Sixth Discipline

In his seminal work *The Sixth Discipline*, Peter Senge investigates how communication becomes the key to optimizing the supply chain in business. Communication is necessary to reduce waste in the system and ensure that the right products and services are available where they are needed, when they are needed. This chapter identifies how social media is bringing about a new form of collaboration to improve communication across the business lifecycle. With mobile ad-hoc networking, near field communications, wearable technology, and pico-processing, this evolution on the Sixth Discipline discusses how social media is rapidly changing the very nature of business operations itself.

Chapter 10: The Social Media “Information Explosion” Spectacle – Perspectives for Documentary Producers

In this chapter, the author considers how media producers can navigate the troubled waters of information to ensure their message is heard. As people are becoming more informed in real time, critical analysis is often reduced to a pithy comment or a sound bite. This information explosion started with the ubiquity of cable news networks and it accelerating with the rise of new social media platforms. Facebook rant that goes on for more than two sentences: TL;DR. Twitter restricts messages to 140 characters, but even that is too in-depth for our Short Attention Span Generation. Don’t have time to watch a Ted Talk on YouTube? That’s not a problem: Vine limits video feeds to six seconds. Instagram and Pinterest limit communications to a single image. The more available information becomes, the less able people are to absorb it and consider it without being enticed to jump to the next topic. This information explosion has significant implications to producers of educational media such as documentaries. How can one
produce a serious and thoughtful analysis of a complex issue in the flashpoint world where even six seconds may be too long?

Chapter 11: Augmenting User interaction Experience through Embedded Multimodal Agents in Social Networking

Can social media be used to drive specific reactions in people? How can producers of a message use multimodal communications to enhance their words to spur others into action? These questions are considered by the authors of this chapter. By using multimodal agents in social media, users can provide an interactive feel to the social media exchange, reinforcing their message with images and video to encourage emotional responses. Studies indicate that the positive or negative nature of social media postings can affect one’s own mood: if your friends are posting generally positive messages, you are likely to be in a better mood overall. If those posts are enhanced with multiple forms of media appropriate to the nature of the message, the e is even more powerful.

Chapter 12: The Increase in Immediate Reply Syndrome through the Popularization of SNSes

The art of letter writing may be dead. This is not because people no longer have time to write. It is because the mode of communication and its main purpose has shifted. One of the consequences of the rise of social media is the notion that a reply is expected immediately. Asynchronous communication is no longer acceptable. The Veruca Salt generation expects immediate feedback and gratification. If someone doesn’t “like” your status or “pin” your creation, you begin to wonder why. Waiting more than a few seconds for a reply can be viewed as an affront. “He just commented on her status. She liked his picture. Aren’t we friends anymore? I’d better post something else to make sure they see me.” This need for immediate feedback is driving an increasing banality into the messages transmitted across social media. This need for constantly updating one’s feed to ensure that others are replying has been popularized by the neo-punk band The Chainsmokers: But first, lemme take a #selfie.

The contributors of this work provided a wide variety of case studies investigating the alternate uses for social media and its implications for society and public policy. This research is invaluable in discussing the utility of social media as a platform for building communities in the digital age.

ALTERNATE USES OF SOCIAL MEDIA

Originally meant for fostering communications among friends, social media was quickly identified as an effective platform for developing communities. Never missing an opportunity to reach an audience of similar interests, marketers found ways to turn social media into a haven for targeted advertising. In the days of Internet banner ads, targeted marketing was limited to personalization through cookies or opt-in profiles within personalization websites. With social media, companies found ways to develop a brand relationship with their customers. The concept of viral marketing took off: accelerating word of mouth advertising through social media channels. The inventors of the GoPro camera knew well the value of viral marketing, encouraging their customers to post videos of their extreme experiences on social media and co-opting these personal videos into their official marketing campaigns.
Preface

Nonprofit organizations realized the value of viral messaging and memetic transfer of content to raise social awareness of issues and raise funds for worthy causes. 2014 was a banner year for Social Media as an agent for change and social justice. The ALS Foundation’s viral fundraising campaign, the #IceBucket Challenge raised a record-breaking amount of donations in just six months. Hewlett Packard encouraged its employees through the #MakeItMatter and #MatterToAMillion social media campaigns, matching their charitable contributions up to a total of $1,000,000. Singer/Songwriter/Actress/Producer Cyndi Lauper founded the #GiveADamn campaign to raise awareness of issues faced by the Lesbian, Gay, Bisexual, and Transgender (LGBT) community, particularly teens.

Organizations also fond social media campaigns as an avenue for seeking justice. In Santa Barbara, California, Elliot Rodger undertook a deadly rampage and posted his misogynistic rants justifying his bloody actions through his video blog rife with derision for women and a sense of entitlement to romantic interactions with women. Publication of his ravings sparked an online conversation about misogyny giving rise to the hashtag #YesAllWomen striving to raise awareness of the universality of sexual harassment and a general culture of violence toward women. During the riots following the decision not to indict Officer Darren Wilson after the fatal shooting of Michael Brown, an unarmed teenager in Ferguson, Missouri, a new hashtag was born: #BlackLivesMatter. Just as #YesAllWomen resulted in a counter hashtag (#NotAllMen), many tried to correct users of #BlackLivesMatter by stating that #AllLivesMatter. When Lynn Fuller, a San Diego, California woman suffered 3rd degree burns over 75% of her body after her boyfriend set her bed on fire, her friends organized a social media campaign to help raise funds for her medical bills raking over $50,000 in just over a month – a grassroots effort that would not have been nearly as successful before social media.

Digital Activists found social media particularly useful to satisfy their aims. The hacktivist group Anonymous took pleasure in threatening to release private documents and personally identifiable information (an act known as “doxing”) through social media to apply pressure to achieve goals of social justice. When the Ku Klux Klan got involved in supporting the Ferguson Police Department during the riots, threatening to shoot violent rioters and looters, Anonymous stepped in by doxxing local members of the KKK unhooding educators, office workers, homemakers, and law enforcement officers. Social media has become such a powerful force in organizing for political activism, Turkey officially outlawed the use of Twitter, blocking access to Twitter from all Domain Name Service (DNS) servers in the country. Not to be outdone, Google responded to this official ban on free speech by publishing the IP Address of its public DNS servers (Keep Calm and 8.8.8.8, 8.8.4.4), implicitly offering to bypass the official DNS servers in Turkey and masking the original IP address and location of the source device.

As the Islamic State of Iraq and the Levant (ISIL) swept into Iraq and Syria, they used social media to spread news of their victories. ISIL also used social media effectively to transmit video messages recorded by hostages as well as executions. ISIL took credit as the Cyber Caliphate for hacking the Twitter and Instagram accounts of the United States Central Command (the joint command responsible for U.S. military operations in the Middle East) to demonstrate their ability to conduct operations in both the digital and the physical worlds. After numerous warnings via social media not to publish videos of executions, Anonymous stepped into the political fray once again by seizing dozens of social media accounts used by ISIL operatives for coordination of activities and distribution of their messages and videos.
CONCLUSION: THE FUTURE OF SOCIAL MEDIA

Predicting the future evolutions of social media is as difficult as predicting the future evolutions of humanity. The real difference is that the pace of this evolution is happening on Internet Time. That said, there are three distinct trends in the use of social media worth investigating (perhaps for a future edition of this work):

Advocacy and Activism

Advocacy groups will find ways to leverage the social media platform beyond simple awareness. Political activists such as Occupy and Anonymous have used social media to organize their efforts. Nonprofits and advocacy groups will continue to value targeted communications with like-minded people. The true value of social media is the ability to shift the control of the message from the organization to the community. By decentralizing the message, advocacy groups can better assess the need and focus their efforts to localities that need their help most. Integrating picture and video content with social media, activists have almost unfettered access to execute their mission and raising awareness. The ASPCA used social media to publish hidden videos exposing abuses by the farming industry.

By placing the power of advocacy directly in the hands of those who need help, those who wish to persecute or otherwise take advantage of the weak lose much of their power and control. Allowing people to communicate their needs directly to organizations means that advocacy groups can deliver benefits exactly where they are needed. Combining this information with data analysis will help organizations provide justification for additional grants based on the true need of the community.

Microtransactions and Digital Payment

A primary benefit of advances in communications technology is that social media can move beyond simple messages and provide multimedia content. As trends toward microtransactions continues, digital payment directly between people will increase. Social media will be the platform of choice for transactions to raise money for social causes, personal transactions, and even small commercial transactions.

The implication of this is that social media is also likely to become the platform of choice for digital crime. The relative anonymity of digital communications provides an ideal environment for thieves and con artists. As our interactions become less personal and more digital, it is vital to maintain vigilance and common sense.

Digital Constituency

As governments seek to improve their services to their constituents, social media becomes increasingly important in strengthening the bond between government and the citizenry.

Governments will continue to evolve the trend of digital activism by soliciting direct support by citizens to provide assistance. Many government organizations have mobile apps for citizens to report public nuisance or safety issues such as potholes, abandoned vehicles, and graffiti. The County of San Diego, California took this a step further with the Pulse program, allowing citizens who are CPR-certified to volunteer as initial responders. When a 911 dispatcher sends official first responders to the scene of
Preface

a heart attack, participants in the area also receive digital alerts in an attempt to get help to the scene in as little time as possible.

By providing direct channels of communications with constituents, government officials can better understand the needs of the citizens they represent. Governments will apply the lessons learned of corporate customer service organizations to improve the services they provide to the citizen base. Combining social media with data and sentiment analytics, governments can transcend mere hashtag trend analysis to a true understanding of how people feel about trending topics. This may have dramatic implications on the polling process. By including real time polling with social media, governments can get instant feedback on their performance. The question that remains is whether this will encourage our elected officials to lead or merely sway to the shifting winds of the electorate.